SYSTEMIC SCHOOL IMPROVEMENT INTERVENTIONS IN SOUTH AFRICA

SOME PRACTICAL LESSONS FROM DEVELOPMENT PRACTITIONERS

Edited by Godwin Khosa

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JET EDUCATION SERVICES

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CONTENTS

DEDICATED TO THE MEMORY OF
NELSON ROLIHLAHLA MANDELA (1918 TO 2013),
A GREAT TEACHER:

Education is the most powerful weapon
which you can use to change the world.

FOREWORD

Many practitioners from non-governmental organisations, academic and government sectors spend a formidable amount of time between and in schools and classrooms in the endeavour to improve education. During and after these experiences, many write about their successes and failures in relation to the intended outputs and outcomes of their efforts. Their write-ups are mostly confined to accounting to the funders about the resources invested, inputs made and outputs achieved. These reports about school improvement are therefore mostly theoretical and project management-oriented and do not capture the rich practical lessons that the practitioners gather. In addition, experiences that are not educational in nature but have a bearing on educational processes are often left out of the reports. For instance, the practical experience of how after-school teacher training is not practical for a significant number of rural teachers who commute over long distances to and from schools is under-recorded, because the reporting of lessons learnt in school improvement interventions has been limited in its perspective.

This book records the experiences of the JET practitioners involved in school improvement. It focuses, in particular, on the systemic improvement test programmes implemented in Mthawelanga circuit in the Eastern Cape and Retladirela circuit in the North West Province. It captures the models and approaches that the two projects adopted, narrates the experiences the project staff encountered in pursuing the partnerships to improve the educational outcomes in the two circuits, sheds light on what works and what does not work in school improvement, confirms and dispels assumptions about the conditions in South African schools and districts, and offers some recommendations on the school improvement journey going forward. It captures the experiences of working with school improvement theory, funders, unions, government officials, school teachers, school communities and learners.

We hope that the book will be useful to others who want to take similar school improvement journeys with schools, circuits and districts, helping them to navigate their way.

For these lessons we thank the two provincial departments of education and the respective districts, circuits and schools for their willingness to work with JET on the trial projects. Alongside the departments, the two teachers' unions, NAPTOSA and SADTU, played a supportive role in the implementation of the projects, in particular in providing joint oversight at the project steering committee level and guiding the design and implementation of teachers' knowledge assessments that formed part of the teacher development component. A special gratitude goes to Murray and Roberts, DG Murray Trust, Michael and Susan Dell Foundation and Impala Bafokeng Trust for having funded the projects. And finally, our thanks to the CEO and his staff for having taken the time to reflect on and record their experiences.

Nathan Johnstone
Chairman
JET Education Services

SECTION ONE
INTRODUCTION

1

The key message from these projects points to the growing importance of systemic approaches to school improvement. Central to the concept of systemic school improvement is a realisation that sustainable school improvement will happen if school interventions aim to change the schools and the subsystem in which they operate. In South Africa this subsystem is the district level, from which schools receive the key support inputs of curriculum, institutional development and resourcing.

CHAPTER 1

THE SYSTEMIC SCHOOL IMPROVEMENT MODEL

GODWIN KHOSA

1. BACKGROUND

The belief that education matters in emancipating people from poverty and its associated social ills, such as exposure to disease and dehumanising activities such as crime, is shared by many countries. However, how to educate nations effectively remains a complex challenge. Many nations have increased spending on education substantially over the past three to four decades, but the quality of educational outcomes has not matched the investments made. In an effort to overcome this problem and improve the quality of public education, South Africa adopted an action plan in 2011 aimed at mobilising the different levels of the system and stakeholders.

Since its founding 20 years ago, JET Education Services (JET) has played a supportive role to government in its quest to improve education. In the past 18 years JET has been directly involved in over 13 school improvement projects that took the form of comprehensive school or systemic improvement projects, or component-specific projects such as teacher development projects. Comprehensive school improvement projects included support to a range of school functions such as teaching and learning, management and resourcing, while component-specific projects focused on one of these functions. JET's involvement in these projects was as lead designer and implementer, project management agency or evaluation agency. It is estimated that these projects involved over 10 000 of the 26 000 government schools nationally. A summary profile of these projects is presented in Table 1.

The key message from these projects points to the growing importance of systemic approaches to school improvement. Central to the concept of systemic school improvement is a realisation that sustainable school improvement will happen if school interventions aim to change the schools and the subsystem in which they operate. In South Africa this subsystem is the district level, from which schools receive the key support inputs of curriculum, institutional development and resourcing.

In their research on school improvement Adelman and Taylor of the University of California Center for Mental Health in Schools present two imperatives to systemic interventions: widespread replication and large-scale diffusion of improvement projects. These authors maintain that "most personnel who are expected to act as change agents in districts and schools have relatively little specific training in facilitating major systemic changes" (Adelman and Taylor, n.d.: i).

The features of systemic intervention approaches are outlined overleaf.

The notion of systemic interventions emphasises the complexity of education systems by portraying the interdependencies within the overall system and subsystems. It also provides a holistic view of education systems. Systemic education intervention, therefore, puts high on the list of intervention design principles the need for comprehensiveness and alignment across a series of components all aimed at improving schooling.

JET's first test of the systemic improvement approach was in the Khanyisa Education Support Programme, implemented from 2003 to 2009, where the intervention was designed jointly with the Limpopo Department of Education as a programme envisaged to be led by the department's management and implemented through departmental structures. While Khanyisa provided an excellent testing opportunity and lessons regarding systemic interventions, the intervention model could not be consolidated as its design was changed midway into the project. It was for this reason that JET designed a smaller-scale systemic improvement model aimed at implementing further intensive trials at circuit level. The design of this model and some overall lessons learnt from the implementation of the model are presented here and in the following chapters.

These are based on:

- the Bojanala Systemic School Improvement Project (BSSIP) in the North West Province, 2009–2013
- the Centres of Excellence Project (COEP) in the Eastern Cape, 2010–2014.

This book is intended to capture and reflect on the experiences of the practitioners who were involved in the design and the implementation of the projects. It draws on field data that is often not available to researchers and presents lessons that can be used to improve the design and implementation of similar education improvement projects.

2. KEY LESSONS FROM PREVIOUS SCHOOL IMPROVEMENT WORK

There are lessons to be heeded in respect of every phase of a school improvement project, from the conceptualisation to the winding up stages. Most of the lessons of school improvement projects that remain under-recorded and therefore unknown have to do with the processes followed and relationship dynamics encountered. This book endeavours to address this gap and record these practical lessons.

2.1 Design phase

In South Africa, several school improvement projects of the post-1994 era were implemented without clear models and programmes. This practice can be traced back to the school improvement movement of the 1990s, which saw the process of school change as an open-ended journey rather than a structured predetermined

Features of systemic intervention approaches

- **Advocate more *coherent district-wide goals and policies***
- **Presuppose a *geographic connectedness* of schools or teachers making up a subsystem**
- **Are based on *ecological systemic change thinking***
- **Emphasise the roles that national-level and district-level agencies play in supporting local schools**
- **Recognise *multitier and integrated systems* made up of supra-systems and peers**
- **Take a function-structure lens, which highlights the connectedness of inputs, processes and outputs**
- **Emphasise the importance of the *goals of a system* and how the key functions of the system are used to attain those goals, and the specific subsystems (or components) that are used to carry out those functions**
- **Recognise that schools, and their learning processes, are couched within broader *social and political milieus***

Table 1: JET Education Services school improvement projects: 1997 to 2012

Name of project	Target schools	Province	Investment	Project timelines
DESIGNED AND IMPLEMENTED				1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014
Imbewu I	All 6000 schools	E. Cape	R55m	
Quality Learning Project	550 high schools	All	R140m	
Khanyisa	780 primary schools	Limpopo	GBP10m	
Centres of Excellence Project	34 schools	E. Cape	R31m	
Bojanala Systemic Improvement	27 schools	N. West	R31m	
RedCap Project	5 schools	KZN	R5.9m	
MANAGED ON BEHALF OF CLIENT				
Mveledzandivho	27 schools	6 provinces	R29m	
Kagiso Trust	10 high schools	Free State	R6m	
EVALUATED				
Bitou 10	10 schools	W. Cape	R24m	
WCED	508 schools	W. Cape	R14m	
APLLC	All primary and high schools	Gauteng	R142m	
Mastec	160 teachers	Limpopo	R12m p/a	
Cape Teaching and Leadership Institute	180 teachers	W. Cape	R1.2m	

course. Such projects resulted in unfocused, insufficient or even conflicting interventions. Over the years of implementing school improvement projects, JET has learnt that each design should cover the following steps.

STEP 1 Profiling the challenges and prioritising interventions

Key challenges or development problems that the intervention needs to address should be identified. Schools and districts face many challenges and it is important that an intervention carefully defines what the challenges are, which ones it will address and why. For example, the initial design that the Khanyisa Education Support Programme adopted in its first year sought to address too many challenges in the system. This approach may have been encouraged by the broad and inconclusive intervention assessment that preceded the project and resulted in the project resources being spread too thinly over too many courses.

STEP 2 Articulating a theory of change

A coherent set of ideas needs to be developed that defines what the change should be, how a change process occurs, and what makes it happen. The theory of change needs to describe what has to happen for the intended outcome to be reached, who needs to be involved, whose interests are at stake and what the outcome of the change process should be. A theory of change as an approach is particularly crucial for planning change processes that are multi-layered and non-linear, that involve multiple stakeholders, and that require deep and system-level change (Walters, 2007).

STEP 3 Developing a specific intervention matrix

An intervention matrix must be drawn up detailing the set of activities in respect of the key change levers adopted by the project. An example of an intervention matrix is presented in Table 2.

STEP 4 Stipulating the planned 'dosage' per unit of intervention

Often, projects stipulate the planned activities but do not determine precisely how many hours of assistance each target person, category of beneficiaries and level of the system will receive. At JET, we have observed that the completion of a dosage table enables the project designer to establish objectively whether the extent of exposure of the beneficiaries to the intervention is sufficient or whether the beneficiaries would be overburdened by the intervention. Examples of dosage tables are presented in Chapters 3 and 5.

STEP 5 Developing a logical framework

Once the theory and conceptual frameworks have been set out, it is important for the project design team to tabulate in a logframe format

Table 2: An intervention matrix

Change Levers	Teaching and Learning	Management Development	Parent Involvement
Development of relevant strategies and procedures	Assessment procedures	Time management	Parent involvement programme
System development	Assessment system	Curriculum management system	Quarterly and annual reporting system
Planning and programming	Annual/monthly assessment process	Annual/monthly curriculum management process	Annual/quarterly parent involvement plan
Skills and expertise development	Content training Teaching large classes	Managing the curriculum	None
Resources	Assessment resource banks	Management handbook	Parent booklets, reading cards

the purpose and aims, outcomes, activities, success indicators and conditions of each of the components that make up the project design. Logframes form a basis for monitoring and reporting and help to keep the project implementation true to the design.

STEP 6 Outlining the delivery model

A delivery model must be drawn up indicating how the project will be directed and rolled out and who will be involved at the various levels. This step is important in that it enables the project planners to determine how much internal (within the education system) and external capacity will be required and what targets will be set for individuals involved.

STEP 7 Presenting a budgeted implementation plan

A budgeted implementation plan should be drawn up as a guide for the day-to-day activities and the allocation of resources.

Comprehensive planning that comprises all these features forces the project designer to make key decisions and to approach the project implementation in a theoretically sound, logical and coherent manner.

Comprehensive planning that comprises all these features forces the project designer to make key decisions and to approach the project implementation in a theoretically sound, logical and coherent manner. Without this type of approach, interventions cannot be held accountable to a particular course, outputs or outcomes.

2.2 Engagement phase

The engagement phase of a school improvement project forms the foundation of the intervention. Its success determines the quality of the project partnership and it should serve to establish appropriate governance structures. It is important that the engagement phase should:

- Involve thorough stakeholder analysis and open discussions among the stakeholders about who they are and the roles that they play.
- Lay an inclusive basis for planning and implementing the intervention. In this regard it is ideal that education officials, teachers' unions and funders are involved in the design, the governance, monitoring and – where possible – the delivery of the interventions. Leaving out any of the stakeholders can create a breeding space for obstructive energies.
- Create and maintain a strong shared vision. Interventions survive if one or more vision bearers are actively involved throughout the life of the project.
- Put measures in place to prevent a weakening of support for the project over time. Project enthusiasm tends to wane over time and stakeholders' support needs to be sustained.
- Identify project champions. It is ideal to have project champions for the key components of the intervention in every institution and at every level. Champions have to be chosen on the basis of their abilities, interest and the respect they enjoy among their peers.
- Identify principles and areas of project integration.
- Minimise the use of an intermittent consultancy approach, which does not promote relationship building.
- Engage a dedicated coordinator who is experienced and able to build and maintain relationships among the stakeholders and beneficiaries. The intervention coordinator should ideally have a sound understanding of education systems and dynamics and should ideally spend his or her time with the beneficiaries to appreciate the challenges they face.

Many school improvement interventions implemented in South Africa over the past two decades were designed envisaging only a minimal role for government in school improvement. They were designed as an end in themselves rather than as a means to an end, with no vision of how schooling or the education system might continue after the project. They largely followed a *project approach* rather than a *programme approach*.

Project or Programme Approach?

A *project approach* takes a view of a distinct intervention designed to achieve specific outputs and outcomes that are not necessarily integrated within the broader operations of the system.

A *programme approach* seeks to design interventions as part of the system and to use or leverage existing system capacity such as policies, human resources, materials and systems. It is traditionally an approach used by government to plan and implement its operations. This approach is premised on the understanding that the primary responsibility of delivering public education lies with government and, therefore, any externally established interventions should support government and should not assume primacy of responsibility. A programmatic approach should be based on the following understanding and values:

- **Approaching the intervention as a support partnership rather than a competition or take over;**
- **Respecting the authority and systems of government;**
- **Committing to breaking new ground and changing practices that don't work (courage);**
- **Fostering engagement within government itself and among key stakeholders (including funders, unions, officials and experts).**

Although the interventions considered in this book are described as projects – the BSSIP and COEP – in that they are distinct interventions designed to achieve specific outcomes, they are each, importantly, conceived and implemented within the respective district systems. The interventions are in fact, projects which pilot the programmatic approach in circuits.

2.3 Implementation phase

The implementation phase marks the real testing ground for any intervention. Often in implementation the conditions and dynamics anticipated during the design and planning stages do not pan out as expected. This phase requires the intervention managers to stay focused, monitor continually, question the initial assumptions, and consistently look for ways in which necessary adaptations to the plan can be made or the original designs revised if they prove problematic. Successful implementation requires that:

- A high premium is put on the standardisation of project inputs such as the materials, resources and human resources;
- A simple, effective communication strategy is put in place that disseminates the project vision and plans as well as lessons learnt during implementation; and
- High levels of accountability are maintained through structures that represent key stakeholders.

2.4 Monitoring and evaluation

The role of monitoring and evaluation should be understood to go beyond ensuring project accountability – to capturing lessons and contributing to the education knowledge base. The design of the monitoring and evaluation component should optimise its utility by making sure that it responds to the questions relevant to the implementers and the project directors. It should also ensure that reports are produced regularly and efficiently in order to inform any necessary changes during project implementation.

One of the key lessons from JET's many school improvement projects is the importance of basing project decision making on a reliable evidence base. Central to this lesson is minimising reliance on self-reported information, which in most cases provides skewed views about project or system achievements. The most reliable monitoring and evaluation data is that based on changes in practices and knowledge gains,

as captured through the analysis of documents (such as learners' written work and educators' records) and learner and teacher assessments. The sections below and chapters that follow present lessons on how teacher assessments, for instance, have been introduced into the projects considered in this review.

3. MODELS FOR SCHOOL IMPROVEMENT

Among educationists there are various views about how change can be effected in schools and the challenges to be addressed.

Michael Barber (in Whelan, 2009: 6) observes that, "successful countries are moving from a series of *ad hoc* initiatives to a coherent, dynamic set of aligned strategies which combine three big components: *the professionalisation of the teaching force, citizenship empowerment and strategic leadership* at all levels of the system."

While Barber identifies the above three components, other educationists propagate many different strategies for school improvement, as shown in Figure 1.

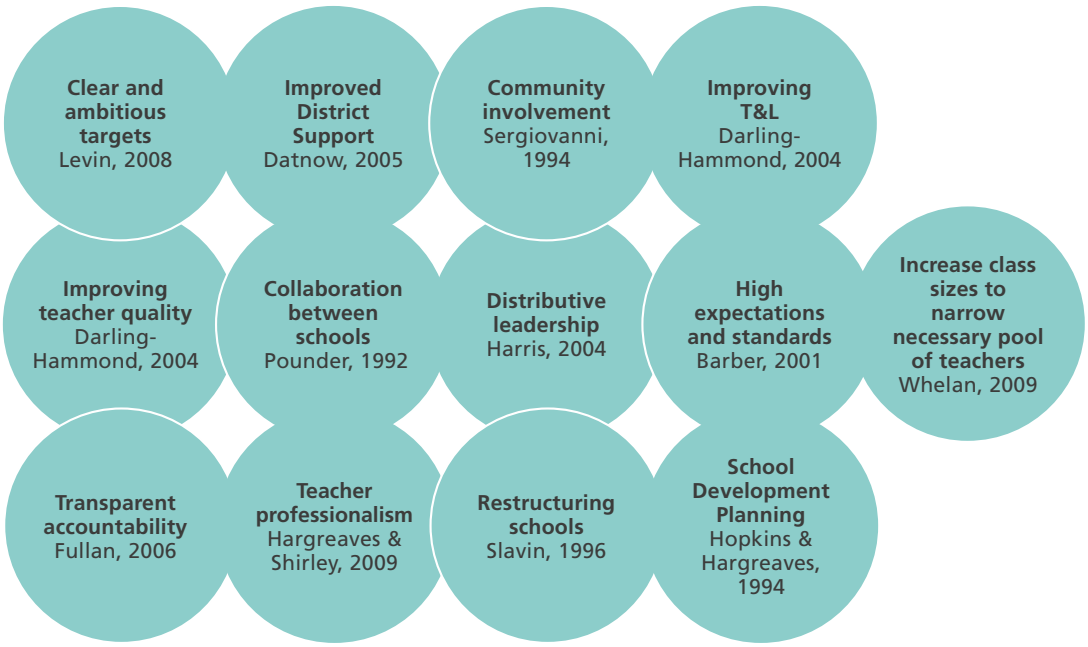
The key message in most of these strategies appears to be the need for school improvement modelling to include a combination of technical systems development and socio-political development interventions that involve stakeholders from outside the school. It is also important that interventions should be informed by the challenges faced by the system or the targeted subsystem.

In JET's 20 years of experience in education we have identified a range of interconnected challenges to improving the quality of education in South Africa. These challenges exist at the district, school, classroom and household levels and are summarised overleaf.

4. JET'S SYSTEMIC SCHOOL IMPROVEMENT MODEL

It is against these observations that JET designed a Systemic School Improvement Model to be implemented in two specific circuits, nested in two distinct rural districts. The Bojanala Systemic School Improvement Project (BSSIP) is located in the Retladirela Circuit in the North West Province. The Centres of Excellence Project (COEP) is located in the Mthawelanga Circuit in the Eastern Cape.

Figure 1: Various strategies for school improvement



Key but changeable obstacles to the provision of quality education in South Africa

- **SCHOOL LEVEL:** Most schools are not functional organisations. They are failing to transform time, teaching, physical and financial resources into learning outcomes.
- **CLASSROOM LEVEL:** Curriculum delivery is inadequate in schools in that teachers don't complete the curriculum and they pitch their teaching at levels lower than those demanded by the curriculum.
- **TEACHER LEVEL:** Teachers' content knowledge is low and their levels of professionalism and work ethos are poor.
- **DISTRICT LEVEL:** District support and monitoring functions are inadequate because of the dearth of requisite expertise and inappropriate staffing.
- **HOUSEHOLD LEVEL:** Community support of schools and household involvement in children's learning are non-existent in most cases.

Table 3: Profile of project circuits (2012)

	BSSIP Retladirela Circuit	COEP Mthawelanga Circuit
Number of schools	**25**	**31**
Primary	17	4
Middle/Combined	3	22
High	5	5
Number of small schools (<150 learners)	14	11
Number of Learners and School: Learner ratios	**3 861 (1:154)**	**5 782 (1:187)**
Primary	2 474 (1:146)	525 (1:131)
Middle/Combined	371 (1:124)	4 062 (1:185)
High	1 016 (1:203)	1 195 (1:239)
Number of Teachers and School: Teacher ratios		
Primary	109 (1:6.4)	21 (1:5.1)
Middle/Combined	13 (1:4.3)	200 (1:9)
High	41 (1:8.2)	66 (1:13.2)
Distance from nearest service town	74 km (Rustenburg)	60 km (Butterworth)
Key economic activities	Mining and tourism	Unknown

Notes about the schools and circuits

- The number of schools changed over the project implementation period as some schools were closed down during this time.
- Primary schools start at Grade 1 and continue to Grade 7; combined schools start at Grade 1 and continue to Grade 9; and middle schools teach Grades 7 to 9.
- Both circuits have an anomalous school type: combined or middle schools, typical of small schools. These are more evident in the Mthawelanga circuit than in the Retladirela circuit.
- The average school sizes in both circuits are small, although more so in the Retladirela circuit where the average enrolment per school is 154 learners.
- The teacher numbers and average ratios of teachers per school show a very low average teacher complement, which means multi-grade teaching is required in most of the schools.

- While there are more teachers per school in the high schools, and in the combined schools in the Mthawelanga circuit, teacher provision is actually more constrained in these schools given that the schools have more subject streams than the primary schools. This means that the high schools in the two circuits are not necessarily better off than the primary schools, in terms of teacher provisioning.
- A "service town" is defined as a town that teachers visit for major banking, shopping and health services.

4.1 Purpose and objectives of the Systemic School Improvement Model

The purpose of the model is to assist the target districts to improve the learning achievements of the learners in their schools. The objectives of the project are to test and refine a systemic school improvement approach that can be replicated by the target districts and provinces. The replication envisaged here is in respect of the components and aspects of the model that work and not necessarily the whole model.

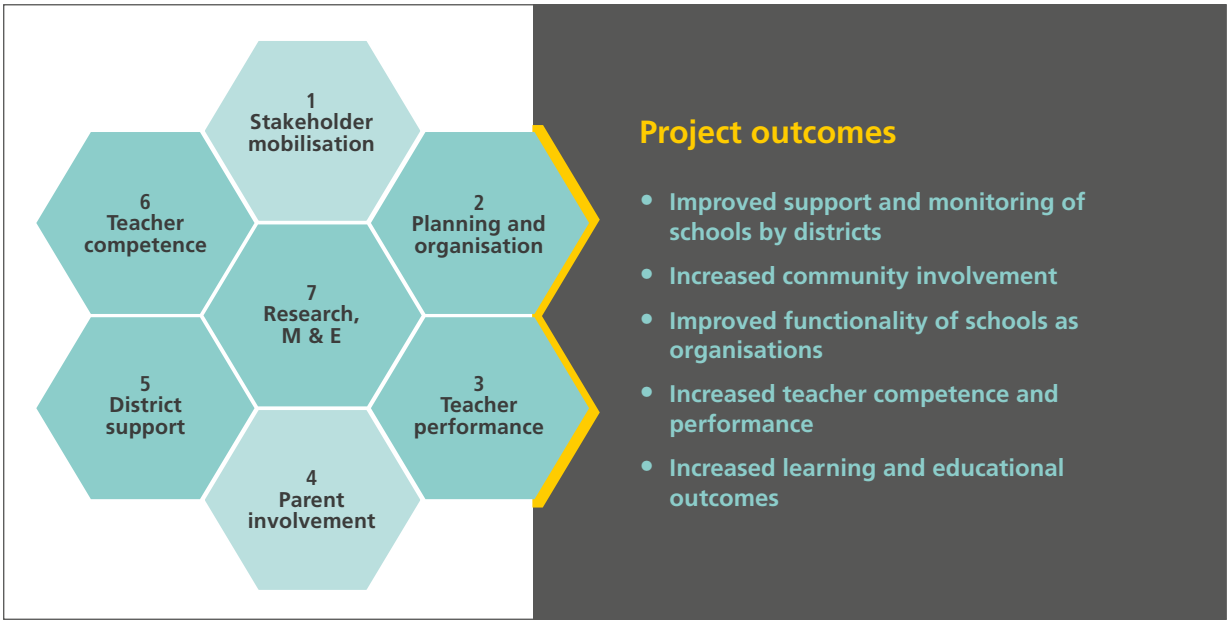
4.2 The conceptual framework

The model is made up of seven components as presented in Figure 2. The key philosophical assumption underlying the model is that educational outcomes at school level will improve if teachers are effective and the teaching and learning environments are supported by effective school organisation and community involvement. The model further assumes that the district office provides guidance, support and monitoring.

The key concepts entailed in the intervention philosophy (educational outcomes, effective school organisation, community involvement and district support) are complex and often carry more than one meaning. These are described in the sections below. In particular, "educational outcomes" refers to the skills, aptitudes, knowledge, behaviours, attitudes and values expected of learners from their engagement in schooling.

The seven components of the intervention, the assumptions behind their implementation and the implementation approaches adopted are set out in brief below, with specific reference to the BSSIP and COEP.

Figure 2: Systemic School Improvement Model



4.2.1 Stakeholder mobilisation: getting all concerned to support the schools and the project

According to the Development Bank of Southern Africa (DBSA) (2009), socio-economic and spatial inequalities in the South African development landscape call for a paradigm shift in the way development is carried out. The DBSA further asserts that it is crucial that a coalition of the community and all development practitioners is forged for the development processes to shift from planning *for* people to planning *with* people.

Following this assertion and a pilot study carried out by JET in the BSSIP, the Development Charter Methodology advocated by the DBSA was adopted in the implementation of this project for one year. However, despite its high potential, the Charter Methodology proved not to work in improving stakeholder involvement, especially at school level. The methodology prioritises the facilitation of a common view and commitment from various stakeholders (*an outside-in approach*), which led to a long list of activities and a diffused sense of stakeholder involvement, particularly at school level. After this trial of the methodology, the project reversed its approach to stakeholder involvement from an *outside-in* to an *inside-out* approach. The inside-out approach takes the school performance needs as the starting point and uses these to identify the support required from stakeholders. More light is shed on the use of this inside-out approach and the advantages it offers in later chapters of this book. It was especially valuable in the parental involvement components of both projects.

One aspect of the stakeholder involvement component that worked very well was the multiple stakeholder steering committee. In the BSSIP this drew the participation of the two teachers' unions,[1] three funding agencies,[2] the provincial department, the district office and the implementing agents. The steering committee met quarterly and created a forum for troubleshooting both project management and education challenges. It also created a space for educational dialogue. It provided an important medium for stakeholders to refine a common vision continually. This improved the chances of effective implementation and the sustainability of the project.

4.2.2 Planning and organisation

The planning and organisation component seeks to improve the functioning of schools as organisations. In dysfunctional school environments, effective teachers and talented learners have little chance of engaging in meaningful learning. The planning and organisation component targets the school management team (SMT), which is viewed in this model as the hub of curriculum delivery activities in the school and the broader social developmental elements outside the school. This component is thus concerned with the management of the technical operations of the school. In the proposed intervention model, it is subdivided into three sub-components: curriculum management, school strategic planning and financial management.

In the BSSIP, the financial management sub-component was implemented only in the first year. It started with an audit of the finances and financial management capacity of each school, developed a basic financial management system and trained the principals to use this. However, as the project schools receive an average of R61 000 per year and raise hardly any additional funding on their own, this sub-component was discontinued.

Table 4: School budgets

Total school budget per circuit 2010/2011 (29 schools)	Highest budget	Lowest budget	Mean	Median
R1 774 956	R184 715	R21 000	R61 205	R45 792

1 South African Democratic Teachers' Union and National Professional Teachers' Association of South Africa.

2 Murray and Roberts Group CSI, Michael & Susan Dell Foundation and Impala Bafokeng Trust.

The intervention revealed that improving financial management was a weak point of leverage to achieve the intended project outcomes. The other aspects of the planning and organisation component are presented in the table below.

Table 5: Aspects of planning and organisation

Planning and Organisation Framework	
Curriculum management sub-component	**School strategic planning sub-component**
• Leadership and regular monitoring of curriculum delivery and assessments; • SMT educator development and support mechanism; • Identification of the gaps/deficits in the schools and provision of support by the districts and SMTs; • Districts and SMTs set curriculum delivery targets according to the work schedules, common assessments, etc.	• Creating individual school improvement profiles and outlining school performance; • Developing individual school improvement plans outlining actions and activities; • Building school-level planning and monitoring capacity.

4.2.3 Teacher performance

Teacher performance is a complex phenomenon. It is influenced by a wide range of factors which include teachers' characteristics (knowledge, skills, ethos and motivation), learners' characteristics and features of the classroom and the school. This component of the intervention model is concerned with the classroom environment and seeks to ensure that teachers:

- Are aware of the teaching goals that they need to pursue;
- Embrace their role in the learning process, as teaching is an "intentional and reasoned act" (Anderson, 2004:33);
- Focus teaching on learning outcomes;
- Have access to efficient curriculum delivery systems and resources for achieving the teaching goals; and
- Are excited about teaching.

To achieve the goals of the teacher performance intervention, Mathematics, Science and English Language teachers were provided with curriculum planning and delivery materials and were supported via school visits and cluster level activities. The curriculum materials provided included learning programmes, work schedules, lesson plans and assessment tasks. It is hoped that through these interventions a new, efficient and effective curriculum delivery system will be institutionalised in classrooms, which will, in turn, assist teachers to improve their classroom practice.

The envisaged outcomes of this component are that:

- All targeted teachers implement an effective curriculum delivery system that achieves full implementation of annual work schedules and common assessments;
- All schools cover the curriculum set out for each year and the required amount and quality of written work for the learners;
- Teachers reflect daily on the effectiveness of their teaching of the curriculum; and
- Teachers monitor and assess learner performance as per the curriculum policy.

4.2.4 Teacher competence

Teacher competence refers to the knowledge and skills that teachers use to facilitate learning. Without the basic knowledge and skills teachers cannot effectively facilitate learning, even if all the required school, classroom and learner factors are in place.

A series of seminal studies conducted in the United States found that "…students taught by an effective teacher would make three times as much progress over the course of the year as students taught by the least effective teacher" (Whelan 2009:31).

Figure 3 presents a set of characteristics of effective teachers.

The intentions of the teacher competence component were consistent with the five principles that underpin the national Department of Basic Education's Integrated Quality Management System (IQMS):

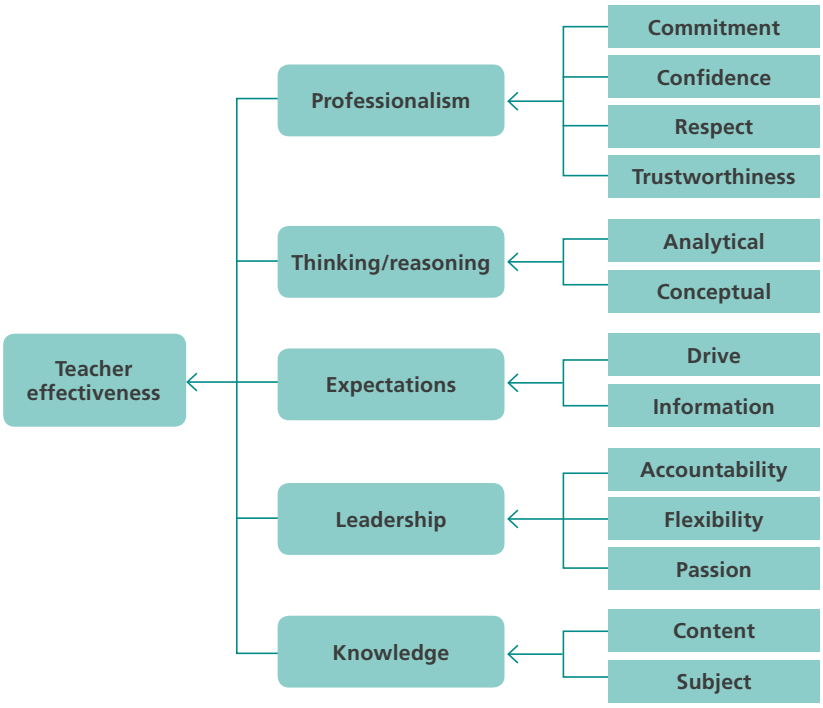
- To determine competence;
- To assess strengths and areas for development;
- To provide support and opportunities for development to ensure continued growth;
- To promote accountability; and
- To monitor an institution's overall effectiveness.

The implementation of the teacher competence component was one of the most rewarding activities of the projects. Teachers content knowledge was successfully profiled and responsive teacher development interventions were designed.

Although the DBE has more recently introduced the Integrated Strategic Planning Framework for Teacher Education and Development, 2011–2025 (ISPFTED), which allows for the delinking of the IQMS from teacher appraisals for teacher development (as opposed to teachers' remuneration and salary progression) the IQMS principles of assessing teacher competence remain applicable.

The implementation of this component was one of the most rewarding activities of the projects. Teachers' content knowledge was successfully profiled and responsive teacher development interventions were designed. In addition, this component enabled a better understanding of the ethics of the teacher assessment process, which included understanding the views and concerns of the teachers and their unions. In the end, it was teachers who demanded the assessments and, as a result, over 400 teacher competence records were generated. This achievement is significant, particularly given that the new ISPFTED plans to introduce teacher assessments of this nature.

Figure 3: Teacher effectiveness variables (adapted from Anderson, 2004:21)



4.2.5 District support

The role of education districts in school improvement is to support schools with relevant resources, systems and professional development. Districts are also expected to monitor the schools, although the way this role is interpreted differs from province to province. The district support component of the model was intended to provide additional strategic capacity in the planning and programming of school support and monitoring activities. It also sought to coordinate and integrate project activities with those of the district.

The anticipated outcomes of the district support component are:

- Improved district operations in terms of school support and monitoring;
- Improved communication and cooperation among the education stakeholders in the circuit;
- Effective implementation of the project;
- Mobilisation of additional financial and non-financial resources from the partners; and
- Achievement of the project outcomes.

4.2.6 Parental involvement

There is a perception that parental involvement has diminished since the introduction of school governing bodies and the consolidation of "community schools" into state schools. Before the Schools Act was passed in 1996, parents used to contribute towards the building of schools and the provision of other forms of resources which reinforced their involvement in schools. In the new democratic era, there has been much talk about parents' inability to contribute to their children's education because of high levels of illiteracy among them. The parental involvement component of JET's school improvement model aimed to achieve:

- Improved involvement of parents in their children's education, demonstrated by increased monitoring of home study, number of completed homework exercises, school visits by parents and parents' interest in school reports; and
- Improved learner behaviours at school and after school in respect of learners' conduct and specifically how they manage their after-school time, homework, study and reading for enjoyment.

The implementation of this component demonstrated how parents continue to be minimally involved in the education of their children. In particular, it showed that learners from poor, rural households attend schools with much less parental support than their middle-class counterparts whose parents make significant additional inputs into the education of their children. Our key learning here is that the rural schools are generally not as strong as urban schools and are unable to compensate for the lack of parental involvement to an extent that would enable learners from poor, rural households to compete with urban middle-class learners. More needs to be done to encourage poorer, rural households to monitor and support their children's schools and learning activities.

4.2.7 Research, monitoring and evaluation

The research, monitoring and evaluation component was designed as the central driving force of the model. It served as the compass and gauge of the programme as it provided the research information required to design the intervention and provided data on how the intervention was implemented. It is a key change lever and is required to supply constant relevant information to stimulate change among the participants, upholding the principle of evidence-led change.

The research activities carried out during the lifespans of the two projects are shown in Table 6.

Table 6: Research and evaluation activities	
	Between 2009 and 2012
Baseline Learner Assessment	Learner assessment and classroom practice evaluations carried out at the beginning of the projects in 2009 and 2010 respectively
Baseline Teacher Assessment (FET)	
Diagnostic assessments	Carried out with teachers annually
Standardised Teacher Assessments	
Diagnostic assessments	Carried out with General Education and Training teachers at two intervals – in 2010 and 2012
Research Studies	
Parental involvement	Research on the effectiveness of homework groups
Output to Purpose Reviews	Independent teams of experts evaluate the projects annually to determine whether they are moving towards achieving the outcomes

Table 7: Project partners and stakeholders and their roles

Category	Partners BSSIP	Partners COEP	Roles and responsibilities
Implementers	NW Dept of Education (NWDoE)	Eastern Cape Dept of Education (ECDoE)	• Key partner. Provides human resources and other resources to support the schools and leads the partnership.
	JET Education Services	JET Education Services	• Provides technical capacity to design and implement the project.
	Teachers' unions/ associations (SADTU and NAPTOSA)	SADTU	• Enter into a memorandum of understanding with JET and the provincial department to support and play an active role in the design and the implementation of the project. • Allocate provincial/district-level official to serve on the project steering committee. • Assist in monitoring and reporting on the non-negotiables.
Funders	• Murray and Roberts • Michael and Susan Dell Foundation • Impala Bafokeng Trust • JET Board of Directors	• DG Murray Trust • National Lotteries Board • JET Board of Directors	• Contribute to total funding of R30 million for each of the projects. Disbursement of the funding was channelled via the JET Board of Directors.
Clients	29 schools	34 schools	• Commit to the non-negotiables. • Allocate and spend their budget on project-related overhead costs (printing, travel, catering etc.). About R1.5 million from each circuit over the 5 years.

4.3 Project partnerships

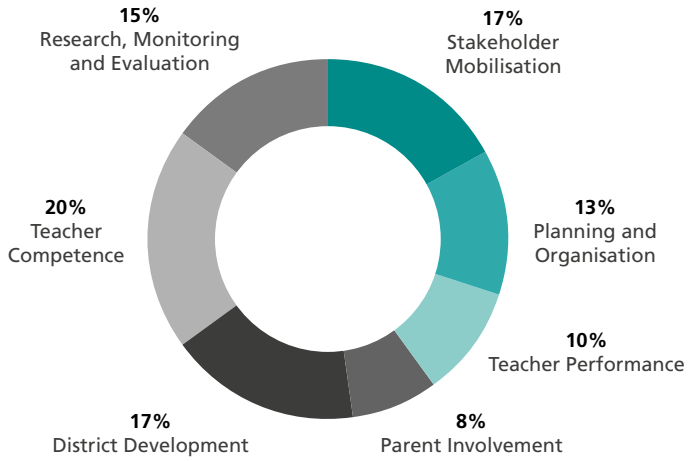
In each of the projects the model was implemented in partnership with the respective provincial departments of education, the respective district offices, the funders and teachers' unions. The districts and, in the North West the provincial level of the department, and JET prepared the project design and took responsibility for obtaining funding and identifying social partners to contribute to the delivery of the programme.

4.4 Project funding and budgets

The budget required to implement the model was calculated at R28 204 580 per circuit. The allocation of the budget across the components is presented in Figure 4. Schools were expected to contribute R1 500 837 or 5.3% of the total budget towards aspects of the projects but, owing to the lack of clarity about transfers of funding to the schools, this proposition did not materialise as planned. However, schools and teachers themselves contributed in different ways. For example, they covered

transport costs in some cases, and gave up their time to complete exercises related to the projects.

Figure 4: Allocation of project budget



By 2012, R22.5 million (80% of the original budget) had been raised for the BSSIP and R14.3 million (or 50.7%[3]) for COEP. The funding for the BSSIP was raised from Murray and Roberts, Michael and Susan Dell Foundation, Impala Bafokeng Trust and the JET Board of Directors. The contributions from each of the first three funders averaged R6.7 million in total and about R1.3 million per year.

For COEP, funding was raised from the DG Murray Trust, the National Lotteries Board and the JET Board. COEP funding was more difficult to raise because of two factors: the lack of industries around the project location and low public confidence in the Eastern Cape provincial government and the education department in particular. The funding situation for COEP presents interesting lessons about the fundamentals that government needs to have in place before funding is provided by the private sector.

It is worth noting that the financing model used for each of the projects made the funding burden lighter for individual funders.

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3 R16.8 million or 59.6% of the total in January 2013.


MAOLOGANE
PRIMARY SCHOOL

SECTION TWO
LESSONS LEARNT IN TEACHER DEVELOPMENT

2

OVERVIEW

Teacher development, often referred to in the literature as continuous professional teacher development (CPTD), covers various types of interventions, including: teacher testing, content training workshops, classroom mentoring and support, self-directed learning, professional learning clusters, multi-grade teaching and teachers' book clubs. Each of these types of interventions is explained in the following chapters.

This section is divided into four chapters, starting with an overview of JET's approach to teacher development in Chapter 2. This chapter includes a brief background to teacher development in South Africa, the logical framework pertaining to teacher development as a component of the Systemic School Improvement Model, assumptions and risks in the component, JET's conceptual model of teacher development, and the subjects in which JET intervenes in the participating schools.

In each of the subsequent chapters, practical lessons learnt from the implementation of specific aspects of the teacher development intervention in the Bojanala Systemic School Improvement Project (BSSIP) are presented. Chapter 3 looks at the implementation of the teacher development intervention within the General Education and Training (GET) band, Chapter 4 reflects on the teacher testing implemented within the GET band, and Chapter 5 looks at the implementation of the teacher development intervention in the Further Education and Training (FET) band.

It is important to note that there are some differences in the implementation of each of the teacher development interventions between the GET band and the FET band. These result from a number of factors, two of the main factors being:

- *Different funders and the different amounts of funding available for each of the bands; and*
- *Differences in the numbers of participating schools and teachers in each of the bands.*

Generally, there are more participating schools and therefore more teachers as participants in the GET band than in the FET band. The fact that the GET band is split into three phases (Foundation Phase, Intermediate Phase, and Senior Phase) adds further to the differences.

CHAPTER 2

JET'S APPROACH TO TEACHER DEVELOPMENT

CHIMWEMWE KAMANGA

1. INTRODUCTION

In education, South Africa has fallen behind other countries with similar socio-economic conditions and continues to do so. This finding has been made by international systemic assessments such as the Progress in International Reading Literacy Study (PIRLS) (Howie, van Staden, Tshele, Dowse and Zimmerman, 2011; and van der Berg and Low, 2006) and the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) Project (Department of Basic Education, 2010; and Moloi and Strauss, 2005). Results from assessments such as these have led some commentators on South African education to claim that it is evident that the funding that has been spent on the reform agenda since 1994 has not resulted in the anticipated gains. However, it is important to note that over this period the South African education system has been expanded by almost 100%, which also has an impact on the system.

A number of factors contribute towards the effectiveness of any education system, its schools, and the performance of its learners. JET acknowledges that one of the main factors behind the results cited above is that teachers – especially those from schools in marginalised communities – face multiple constraints in delivering lessons and this impacts on learner performance. It is self-evident that teachers play a critical role in contributing to improved learner performance. An abundance of literature describes how much teachers matter in learner performance.

Among the constraints facing South African teachers are poor subject content knowledge, low command of innovative teaching methodologies and an inability to make effective use of the resources available to them, including learning and teaching materials. A lack of proficiency in English, poor assessment skills, ineffective classroom management skills and an inability to plan lessons are further constraints. Such factors affect the quality of teaching and learning. For this reason, teacher development occupies a central position in the Systemic School Improvement Model that JET has used in implementing its projects.

Teacher development initiatives in South Africa have historically been characterised by many challenges, including inequality, fragmentation, duplication of effort, waste of resources, lack of relevance, and poor quality. These challenges are sufficiently chronicled in the literature. The report of the Ministerial Committee on Teacher Education (Department of Education, 2005: 16) notes the following about the teacher development landscape:

> *"There is a great deal of activity in this field, and considerable resources are devoted to these activities. However, such interventions tend to be* ad hoc *and driven by immediate needs and, overall, the field is haphazard, not clearly focussed, and directionless. Each activity is likely to be driven by good intentions, but there is no regulatory system to steer CPTD activities, focus them on effective professional development, and provide a well-constructed reward system for teachers."*

Continuous Professional Teacher Development is of increasing importance in teacher education – and is especially so because of the legacy of apartheid. It is widely acknowledged that inspired forms of teacher education, specific transformation goals, and an evolving school curriculum are needed.

Literature on teacher education and development shows that there is a wide range of approaches through which the enterprise can be implemented (see for example, Fullan, 2007; Gaible and Burns, 2005; and An Agenda of Possibilities: National Policy on Teacher Supply, Utilisation and Development: A Stakeholder Response, Department of Education, 1997). The literature demonstrates that teachers' practice and professionalism can be strengthened through, among other things, collaboration among teachers, mentoring, action research, workshops, professional course work, professional reading, peer coaching, and reflection. However, there is a tendency to polarise these approaches unnecessarily. In this regard it should be noted that, since the beginning of democratic rule at least, standardised teacher development has been over-emphasised at the expense of other categories of development. This continues to be the case to date. The result of such an approach is "...singular interventions where teachers are exposed to opportunities for tinkering with [new curriculum policy]..." (Hooker, n.d.). The biggest challenge, however, is that in most instances the people who are responsible for teacher development do not know what to do or how to go about transcending the usual, externally run one-day or two-day cascade workshops and implementing other approaches in a practical way.

JET recognises that the different approaches to teacher development cited in the literature are not mutually exclusive categories or models, but can be combined in creative ways to achieve various objectives of teacher development.

Through organisations such as JET, there is a new policy thrust that recognises the need to employ approaches that are creative but, most importantly, will deepen teachers' professional development and enable them to contribute to shaping the direction it takes. JET's overall philosophy and approach to teacher development is that various innovative modes of education and training should be employed to achieve critical skills, knowledge, values and attitudes among teachers. JET recognises that the different approaches to teacher development cited in the literature are not mutually exclusive categories or models, but can be combined in creative ways to achieve various objectives of teacher development. As Hooker (n.d.) points out, "there needs to be a continuous cycle of reflection, discussion, application, and knowledge building, through which teachers grow professionally and their students gain deeper knowledge". The teacher development model presented here does this by implementing a battery of interventions that combine different approaches in interesting ways.

All the various aspects of the teacher development model are aimed at increasing teacher competence and improving teacher performance. The interventions focus on both the GET and FET bands and pursue separate but interdependent outcomes, activities, and dosages. The model considers a number of critical aspects of teacher development and answers key questions such as the why, what, how, how much, when, at what costs, and using what level of resourcing. The answers to these questions are complex. Consequently, teacher development requires good planning, negotiating space and time, and strategic employment of limited resources. A great deal has been achieved through the implementation of this teacher development model, but there is a lot that still can be done to improve the situation further.

2. THE LOGICAL FRAMEWORK FOR TEACHER DEVELOPMENT

In designing the logical framework for teacher development, the challenges and constraints that teachers face, as noted above, are taken into consideration. The logical framework has been designed to capture the essential strategic objectives and success indicators of the intervention.

The strategic objectives for teacher development are:

- To increase teacher competence, and
- To improve teacher performance.

The success indicators for the achievement of these objectives are structured to ensure that:

- The participating teachers demonstrate improvement in subject specialist knowledge (content, teaching methodology and assessment methodology);
- The participating teachers and subject advisors design and implement common work schedules and common assessments;

and the participating teachers:

- Monitor and assess learner performance as per the curriculum policy and design appropriate remediation;
- Create a positive learning environment;
- Practice effective classroom management;
- Communicate about improvement through seminars, newsletters, learning briefs and articles; and
- Carry out regular 'reflective practice' in relation to the teaching of the curriculum.

3. ASSUMPTIONS AND RISKS

There are a number of assumptions that are made with a view to achieving the objectives of the teacher development component and implicit risks arise with these. Some of the major assumptions and risks are outlined below, together with the strategies adopted to avert the risks.

- It is assumed that there is buy-in from all beneficiaries, but some people may not buy into the projects, or their buy-in may wane over time. Various strategies are put in place to encourage and sustain participation. For instance, some money was set aside to motivate the teachers involved in the FET component, teachers' travel costs were paid for, and there have been continued negotiations between the implementation team and the participants with regard to both intrinsic and extrinsic motivation.

- It is assumed that the teaching cohort that participates in the programme will be stable over the years of the projects, but this may not be the case. Although JET appealed to the districts to ensure that the cohort of participants is kept stable, some teachers have been moved to other posts due to changing circumstances in the schools.

- It is assumed that the teachers who participate in the programme will teach in their subjects of specialisation. However, some teachers may be allocated subjects for which they are not specialised. This occurs when there are too few teachers to cover all the specialised subjects.

- While it is assumed that teachers will agree to write the tests, some teachers may not want to write any or some of the tests. Lobbying for teacher testing was conducted with various stakeholders including teachers and their unions, in order to encourage teachers to participate. However, recognising the dynamics around buy-in, lobbying for teacher testing is a continuous process in the projects.

- It is assumed that there will be consistency across the teacher tests in terms of formulation. The risk is that there might be some inconsistencies in some or all levels of the tests. In order to maintain the same levels of formulation for the tests, guidelines have been drawn up and test designers are advised to adhere strictly to these guidelines. In addition, the tests are taken through external review and, in FET, the programme includes tests that are designed by experts external to the project.

- While it is assumed that the required dosage will be implemented, some of the planned activities might not be accomplished. In order to minimise avoidable time losses, JET engages in a joint planning exercise with the respective district so that the schedules that are put together do not disadvantage teachers unnecessarily and lead them to miss some of the interventions.

- It is assumed that subject advisors will participate in all activities, but some subject advisors might not participate in some or all of the project activities for various reasons. To minimise this possibility, subject advisors are incorporated into the planning process for all the project interventions. The programme of activities is therefore designed in a manner that accommodates their schedules.

The teacher development model is conceptualised to develop the teacher in terms of both subject knowledge and classroom practice, that is, to increase teachers' competence and improve their performance.

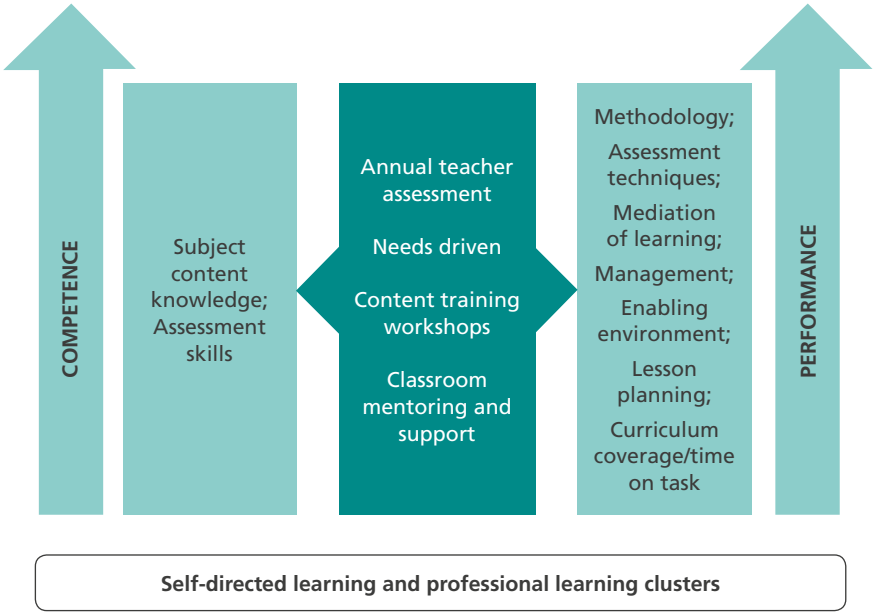
4. THE TEACHER DEVELOPMENT CONCEPTUAL MODEL

JET's approach to teacher development resonates with the principles for professional development identified by Darling-Hammond, Wei, Andree, Richardson and Orphanson (2009) who posit that professional development should:

- Deepen teachers' knowledge of content and how to teach it;
- Help teachers understand how learners learn specific content;
- Provide opportunities for active, hands-on learning;
- Enable teachers to acquire new knowledge, apply it to practice, and reflect on the results with colleagues;
- Be part of a systemic school reform effort;
- Be collaborative and collegial; and
- Be intensive and sustained over time.

The teacher development model itself is conceptualised as a three-pronged approach to improving learning outcomes. The model aims to develop the teacher in terms of both subject knowledge and classroom practice, that is, as noted previously, to increase teachers' competence and improve their performance. The intervention activities are therefore designed to cover testing, content training and classroom mentoring and support. The teacher development conceptual model is illustrated in Figure 1.

Figure 1: The teacher development conceptual model



4.1 Design characteristics of the model

There are four important defining features of the teacher development conceptual model which are discussed below.

4.1.1 The interventions are needs driven

The teacher development interventions are needs driven. The model provides for continual review of the profiles of the schools and teachers in order to keep up with changes that occur during the course of the project. The teacher development team together with the research team continually carry out needs analyses to ensure that the general needs of the schools as well as the needs of individual teachers are properly profiled. The process of analysing the needs of the teachers is widespread and ongoing because the needs change from time to time and differ from individual to individual (teacher, subject and school, among other factors) over the course of the project. The needs identified inform the teacher development conceptual model in general as well as the specific interventions. The following avenues are used to determine the teachers' needs.

- **Teacher tests** These are conducted to determine teachers' areas of need in terms of competence and performance in the subjects of the intervention. A baseline test is conducted before administering the first dose of the project interventions to the teachers. Subsequently, follow-up tests are administered at given intervals to determine progress achieved over time.
- **Content training workshops** During content training workshops, which are geared towards addressing predetermined gaps, further enquiry is made into the status of those gaps already known and new ones that emerge.
- **Classroom mentoring and support** As teachers are taken through classroom mentoring and support, members of the teacher development team also explore the status of known gaps and investigate other gaps that emerge in the course of the project interventions.
- **Personal professional reflection** During classroom mentoring and support visits to individual teachers, the mentors afford the teachers an opportunity to engage in reflection on their personal development as professionals. In this process, teachers are assisted to explore their personal professional needs and to set up personal goals that would address those needs.

Through this rigorous process, the teacher development team stays informed about both generic and specific needs of the schools and the teachers in the project. The needs that teacher development seeks to address through its interventions can be generalised in the following categories: subject-specific content needs; subject-specific assessment needs; and subject-specific teaching methodology needs. Figure 2 illustrates the connection between needs and design.

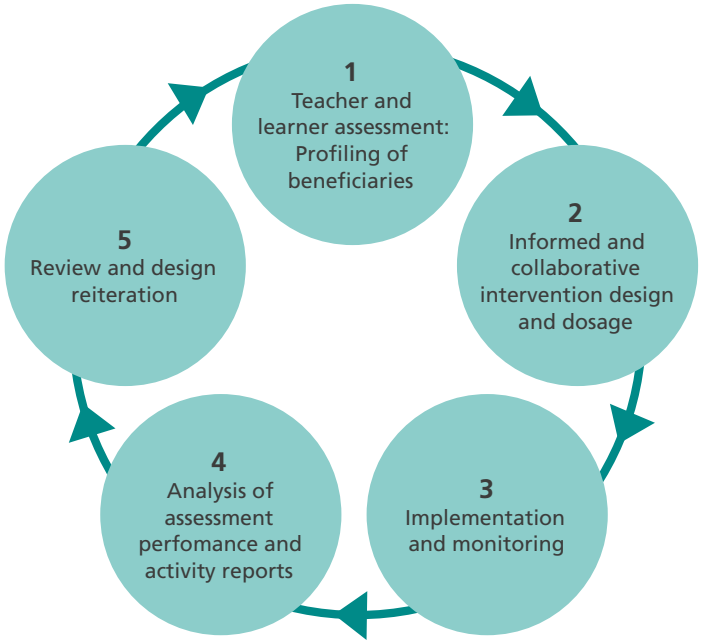
4.1.2 Theory and policies are contextualised

The decisions that are taken about the design of the intervention are grounded in theory and current research. And, in order to avoid a 'black box' approach, care is taken to fit the intervention into a contextualised understanding of teachers' needs to ensure that the activities are relevant and appropriate throughout the lifespan of the project. Contextualisation of theory and policy is particularly important in rural locations, as with the projects where the Systemic School Improvement Model is currently being implemented, because they present situations that are totally different from what is perceived to be the norm in other areas, for example, urban areas. The Systemic School Improvement Model has been designed specifically to tackle the challenges associated with sustainable reform in rural education.

4.1.3 Interventions are interactive and collaborative

Although policies such as the Action Plan to 2014: Towards the Realisation of Schooling 2025 (Department of Basic Education, 2010) and Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011–2025 (Department of Basic Education and Higher Education and Training, 2011)

Figure 2: Cycle of the needs based approach to teacher development



frame the activities selected, the beneficiaries themselves are involved via the collaborative and interactive nature of the development activities. This practice is beneficial because while policy guides implementation, interaction and collaboration on the policy are important to adapt it to the specific contexts in which the projects are implemented.

4.1.4 Interventions are iterative and dynamic

The activities of teacher development are always iterative and dynamic. Iterative design is an essential element of the model as it ensures that the activities are addressing relevant and identified needs. The iteration of the activities is informed by, among other factors, the test reports, facilitators' content training workshop reports, mentors' reports, teachers' feedback on workshops and mentoring, planning meetings, internal review meetings, and external output to purpose reviews (OPRs).

5. TEACHER DEVELOPMENT INTERVENTIONS

It is important to reiterate here that the teacher development model employed by JET comprises a range of interventions which combine various approaches to teacher development in interesting ways. All of the interventions are aimed at increasing teacher competence and improving teacher performance. It is also important to reiterate that these interventions focus on separate but interdependent objectives, intended outcomes, activities, and dosages. More detail about each of the interventions conceptualised as part of the model is provided below.

5.1 Teacher testing

The model proposes that teachers undergo periodic testing of their content and pedagogical knowledge in different teaching subjects. In GET, teachers undergo standardised tests, which also cover English language proficiency. The tests in FET are not standardised, but they are formulated following a uniform structure. The results of these tests are used to inform the teacher development model. Further information on teacher testing in the GET band is presented in Chapter 4.

5.2 Content training workshops

It was intended that, as a standard, three content training workshops of two

days each would be held during the school holidays preceding the start of the first, second and third terms. The fourth term is excluded because it is standardly the busiest of the school year. The content covered during the workshops is informed by common work schedules and common assessments as well as input from the subject advisors and the teachers. The results of teacher testing are also incorporated. Specially commissioned content modules that complement the NCS and CAPS are used in the training. Teachers receive copies of these modules for their own use. During the workshops, content is taught in a way that demonstrates good teaching methodologies and teachers are given the opportunity to practise these methodologies by designing lessons and through practice teaching sessions.

Teachers formulate their own personal professional goals at the end of the first workshop each year and track their progress at the end of each subsequent workshop and during mentoring sessions. Where available, Learning and Teaching Support Materials relevant to the content of the workshops are provided to teachers to use at their schools. Following each workshop, a report is generated and made available to relevant people.

During the workshops, content is taught in a way that demonstrates good teaching methodologies and teachers are given the opportunity to practise these methodologies by designing lessons and through practice teaching sessions.

The workshops are conducted in order to:

- Enhance the use of common work schedules
- Enhance the use of common Learning and Teaching Support Materials
- Enhance the use of common assessments.

The workshops focus on:

- Subject-specific content
- Subject-specific teaching methodology
- Subject-specific assessment methodology
- Common assessments
- Common work schedules.

5.3 Self-directed learning

In order to maximise the limited contact time that content training workshops provide for, teachers are given self-directed learning tasks for them to consolidate the content covered in the workshops. The self-directed learning tasks serve firstly, as a follow-up to the content covered, and secondly, as part of the preparation for content that will be covered during subsequent workshops. The tasks are set to be done by teachers during their own time outside of the workshops.

5.4 Classroom mentoring and support

Following the content training workshops, mentors visit each teacher at his or her school. As a standard, each teacher is visited once a term in the first, second and third terms. Each mentoring session takes at least three hours during which the mentor responds to the individual needs of the teacher. Mentoring may combine any of the following:

- A mentor observes a teacher during a lesson
- A mentor demonstrates teaching, if required by a teacher
- A mentor tutors a teacher in any aspect of the curriculum in which they need assistance
- A teacher plans and teaches a lesson together with a mentor
- A mentor monitors the delivery of the curriculum.

In the mentoring process, the mentor monitors each teacher's progress towards their professional goals. A mentoring report is generated for each teacher for each session and made available to relevant people. The mentor discusses each report with the respective teacher to provide the teacher with feedback and the teacher is given a copy of each of his or her mentoring reports.

5.5 Professional learning clusters

In line with the Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011-2025 (Department of Basic Education and Higher Education and Training, 2011), the teacher development model provides an opportunity for teachers to meet in small subject clusters to share their experiences in the teaching of their subjects. These meetings are intended to provide a forum for teachers to discuss curriculum and methodology issues and are referred to as professional learning clusters (PLCs) or communities of practice.

5.6 Teachers' book clubs

Teachers' book clubs are informal gatherings where teachers discuss different reading materials. This intervention is included in the teacher development model in order to cultivate a culture of reading (which is reported to be dying in South Africa, as in many other parts of the world) among the teachers and, in turn, among the learners as well. It is envisaged that as many teachers' book clubs as possible would be formed and as many reading materials as possible would be read and discussed. With time, learners' book clubs would be formed following the same format.

In the course of the implementation of teacher development, the participants are profiled according to the three levels of the teacher development trajectory… with the overall aim of the model being to move all the teachers to the level of excellence.

5.7 Multi-grade teaching training

This intervention was specifically commissioned to address the challenges of multi-grade teaching encountered during the course of the projects. Experts from the Cape Peninsula University of Technology (CPUT) facilitated two workshops of two days each in 2011 for 25 teachers. Following the training, the experts visited the teachers twice during the year. Teachers wrote an examination at the end of the training. The multi-grade teaching training course is accredited and teachers who completed the course successfully earned credits towards the Advanced Certificate in Education. JET will continue to mentor these teachers using the foundation laid by the CPUT programme.

6. THE SUBJECTS OF INTERVENTION

JET's teacher development interventions are undertaken in the gateway subjects. In GET, support is provided in English First Additional Language (EFAL) and Mathematics in the Foundation Phase (FP), and in EFAL, Mathematics and Natural Sciences in the Intermediate Phase (IP) and Senior Phase (SP). Initially, support was also provided in Technology in both IP and SP, but this has been discontinued due to the changes that have recently taken effect with the introduction of CAPS. In FET, support is provided in EFAL, Mathematics, Mathematical Literacy and Physical Science.

In the course of the implementation of teacher development, the participants are profiled according to the three levels of the school improvement – or, more specifically, the teacher development trajectory, that is: emergent, functional or excellent. The teacher development model aims to move all the teachers to the level of excellence.

7. CONCLUSION

In this chapter the general approach that JET uses in implementing teacher development has been set out. In the chapters that follow, the progress registered in the projects against these planned activities is presented, drawing out the lessons learnt through the implementation of the teacher development model.

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Until teachers are competent in terms of the content they are supposed to teach and ways of teaching it, common work schedules may serve only as a reminder of their own inadequacies. Teachers therefore need to be assisted in teaching the whole curriculum within one school year.

CHAPTER 3

TEACHER DEVELOPMENT INTERVENTIONS IN THE GET BAND

CHIMWEMWE KAMANGA

1. INTRODUCTION

The implementation of teacher development work in the BSSIP started with Education Station, the service provider contracted by JET to deliver the component in the GET band in 2009 and 2010. Education Station worked in Foundation Phase Literacy and Numeracy and in Intermediate and Senior Phase English First Additional Language (EFAL), Mathematics and Natural Sciences. Its main focus was on the delivery of the curriculum in these subjects. The participating teachers were provided with detailed work schedules and common assessment tasks. Content training workshops were held in line with the work schedules.

The work done by Education Station played an important role in informing the design of the teacher development interventions that have been used beyond 2010. Among other things, most of the challenges facing teachers generally in the South African education system were confirmed to be evident in the project schools. Some of these challenges were that:

- Teachers lacked content knowledge;
- Teachers lacked knowledge and skills in teaching methodology;
- Teachers' proficiency in English was inadequate to deliver the curriculum with English as the language of instruction;
- Teachers needed specialised training in multi-grade teaching;
- Teachers complained of poor learner discipline;
- Teachers lacked teaching resources, particularly in Mathematics and Natural Sciences; and
- Teachers had challenges with the implementation of common work schedules and common assessment tasks. Teachers were unable to keep up with the pace necessary to teach the curriculum in one year. This led to learners writing common assessment tasks on content that they had not been taught. In one term, the common assessment tasks were abandoned altogether because too little content had been covered.

From the observations reported above, it can be argued that the lack of content knowledge and sound teaching methodologies were at the root of the problem of low achievement of learning outcomes in the project schools. Until teachers are competent in terms of the content they are supposed to teach and ways of teaching it, common work schedules may serve only as a reminder of their own inadequacies. Teachers therefore need to be assisted in teaching the whole curriculum within one school year.

The conceptual model for teacher development presented in Chapter 2 came into full application following the work done by Education Station. After the 2010 end-of-year review of the component, the following recommendations were advanced with the aim of ensuring that the implementation of GET teacher development interventions in 2011 and beyond would run more smoothly.

- Workshops were to address both content training and teaching methodologies;
- English proficiency was to be developed;
- Existing work schedules were to be used as guidelines until CAPS was introduced in 2012;
- Specialised training was to be provided for multi-grade teachers; and
- The lack of LTSM was to be addressed in all subjects.

It was envisaged that an improvement in these aspects would not only increase teacher competence and improve teacher performance, but would also assist in improving learner discipline.

This chapter covers the implementation of teacher development interventions in the GET band in the BSSIP, focusing on content training workshops, self-directed learning, and professional learning clusters, and touching briefly on the other aspects of the intervention: classroom mentoring and support, and multi-grade teaching. The dosages used are outlined and progress registered against the planned activities and dosages is presented. The successes, challenges and lessons learnt from the implementation are incorporated in the discussion, highlighting those aspects of the teacher development model that have worked and those that have not.

2. DOSAGE OF GET TEACHER DEVELOPMENT INTERVENTIONS

JET has developed a practice of preparing appropriate 'dosages' for interventions that are designed to respond to identified needs. The term dosage refers to the type, intensity and frequency of the activities that are implemented in a particular intervention.

Tables 1 and 2 below outline the dosages for each of the interventions in the GET teacher development component in the BSSIP for 2011 and 2012. There are different dosages for the Foundation Phase on the one hand and the Intermediate Phase and Senior Phase on the other, and different dosages for each year. The dosages are presented in terms of the total number of hours that each teacher is expected to spend on each of the interventions per term and in total per year. It was anticipated that if a teacher participated in the full planned dosage, the improvement in their

Table 1: Dosage for teacher development interventions, Foundation Phase (hours)

Interventions	Dosage for 2011					Dosage for 2012				
	Term One	Term Two	Term Three	Term Four	Total	Term One	Term Two	Term Three	Term Four	Total
Testing	0	0	0	5	5	0	0	0	0	0
Content training workshops	14	0	14	0	28	14	14	14	14	56
Professional learning clusters	0	0	0	0	0	4	4	4	4	16
On-site mentoring	0	3	3	0	6	9	9	9	9	36
Self-directed learning	0	0	0	0	0	12	12	12	12	48
TOTALS	**14**	**3**	**17**	**5**	**39**	**39**	**39**	**39**	**39**	**156**

Table 2: Dosage for teacher development interventions, Intermediate and Senior Phases (hours)

Interventions	Dosage for 2011					Dosage for 2012				
	Term One	Term Two	Term Three	Term Four	Total	Term One	Term Two	Term Three	Term Four	Total
Testing	0	0	0	5	5	0	0	0	0	0
Content training workshops	14	0	14	0	28	14	14	14	0	42
Professional learning clusters	0	0	0	0	0	4	4	4	4	16
On-site mentoring	0	3	3	0	6	3	3	3	0	9
Self-directed learning	0	0	0	0	0	12	12	12	12	48
TOTALS	**14**	**3**	**17**	**5**	**39**	**33**	**33**	**33**	**16**	**115**

competence and performance would be higher, and the resulting impact on learning would be observed through improved learner performance.

The dosages were increased sharply from 2011 to 2012 with the following changes made.

- The contact time for content training workshops was increased by 28 hours in the Foundation Phase and by 14 hours in the Intermediate and Senior Phases;
- Classroom mentoring and support was increased by 30 hours in the Foundation Phase, and by 3 hours in the Intermediate and Senior Phases; and
- A total of 48 hours of self-directed study and 16 hours of professional learning, which were not included in 2011, were introduced in 2012.

3. PROGRESS AGAINST PLANNED ACTIVITIES

3.1 Standardised teacher testing

The first standardised teacher test was conducted in 2010 and a follow-up test in 2011. Tests were successfully conducted in all the subjects of intervention. Following the release of the results of the tests, feedback was given to the teachers in their subject and phase groups and in individual sessions with each teacher on his or her own performance.

3.2 Content training workshops

All the workshops that were planned for 2011 and 2012 were conducted successfully, although a number of challenges were encountered in the process. Some of the major challenges and the remedies that were applied to mitigate the situation are presented below.

In 2011, each workshop ran for two days starting on a Friday at 11h00 and ending on a Saturday at 16h00. The workshops were held at various venues: at selected project schools, at the Mabeskraal Area Office, at Twelaagte Teacher Centre, and at Tlhabane Resource Centre. The teachers were commuting from within a range of 10 to 80 kilometres from the venues so they received a stipend of R100 per day to cover their travel expenses.

In the implementation of the teacher development interventions through 2011, it was found that the contact time that the facilitators and mentors had with the teachers was inadequate and, similarly, that the contact time that the teachers had with the content delivered via the workshops was inadequate. This became especially evident in light of the fact that the teachers' needs for development spanned the entire curriculum. The challenge of finding adequate time for the interventions was compounded by various factors, including the following.

- The content training workshops could only happen on Fridays and Saturdays because those were the days agreed upon with the relevant stakeholders. There are of course only a certain number of Fridays and Saturdays in a given period.
- Although the project had initially envisaged that holidays would be used for the content training workshops, it was later indicated that the workshops could not happen during holidays because holidays were the teachers' free time.
- The content training workshops could not happen on or around payday because teachers do their monthly shopping at this time.
- In order to minimise the number of teachers being taken out of school at any point for the workshops, it was imperative to minimise the number of workshops taking place at the same time. This meant that:
  a) Content training workshops for different subjects in the same phase could not happen at the same time;
  b) Content training workshops for the same subject in different phases could not happen at the same time.
- In order to avoid clashes, the teacher development activities needed to

accommodate national, provincial and district activities. This required rigorous engagement between the project team and the relevant department officials and, in some cases, the process consumed a lot of time which impacted on the implementation of the activities.

Despite all these challenges, the project sought to maximise the number of teachers participating in the activities and to maximise the contact time that the teachers would have with facilitators and mentors and with the material covered in the workshops. In this regard, during the 2011 end-of-year review of the teacher development component the following changes were made.

- The number of workshops per subject was increased from two to three and the number of days per workshop was increased from two to three. Each workshop started at 16h00 on a Thursday and ended on a Saturday at 16h00. Thus the number of workshop contact hours increased from 28 in 2011 to 56 in 2012 for Foundation Phase teachers and from 28 to 42 for Intermediate and Senior Phase teachers.
- Residential workshops were adopted in 2012 in place of the non-residential workshops used in 2010 and 2011. Due to the switch to residential workshops, the travel stipends that teachers had received in 2011 were discontinued. Instead, teachers were transported to and from the workshops. The money that would have been paid in the form of stipends was used to pay for the accommodation and transport of the teachers.
- The first two series of 2012 workshops were conducted in residential mode but, as result of challenges encountered, there was a change back to the non-residential mode.
- Two additional interventions were introduced into the teacher development programme: self-directed learning, allocated 48 hours, and professional learning clusters, allocated 16 hours.

Some of the practical difficulties encountered in the process of delivering the content training workshops are outlined below.

3.2.1 The venue for the residential workshops

Teachers did not like the venue that was used for the residential workshops. It was reported to be far from their homes, even though transport to and from the workshops was provided. The venue was also reported to be not easily accessible, either electronically in terms of cell phone connectivity or physically in terms of public transport. In addition, the teachers did not like the arrangement of sharing rooms, which had been settled for in order to minimise costs.

3.2.2 Unavailability of subject advisors

Subject advisors were unable to attend some of the workshops due to other commitments. For instance, in the first series of 2012 workshops, they were reported to be attending a CAPS orientation workshop. It should be noted, however, that when the subject advisors did attend the workshops, their presence made a big difference: teachers appeared to be inspired to participate with confidence and to attend the next series of workshops. Furthermore, there was immediate transfer of skills from the workshop facilitators to the subject advisors, which is a necessary condition for the sustainability of the project interventions.

3.2.3 Attendance

Teachers' attendance at the content training workshops has not met the project team's expectations, even when various mechanisms have been put in place to maximise attendance. For instance, communication channels were changed from, initially, going through principals, to communicating directly with individual teachers as well. The low levels of attendance saw some teachers miss an entire workshop while others would attend on one day and miss another. In some cases, teachers left a workshop early, and in others they attended intermittently. The most common

reasons given for absence from workshops were other official commitments, sickness, leave and other personal reasons. There are, however, a lot of nuances around the reasons for teachers' absence from workshops and a lot of caution is required in dealing with this topic – it is one to be 'handled with care'.

3.2.4 Saturdays

Saturdays presented a particular challenge in relation to teachers' attendance at the content training workshops. While it was agreed in the project steering committee (PSC) and area working group (AWG) meetings that the project should make use of Saturdays for the workshops, this proved to be problematic in implementation. For some teachers, Saturday is the Sabbath and, for many, it is traditionally the day when funerals, weddings and other traditional ceremonies take place. Hence, teachers' attendance on Saturdays was often poor. However, it has been reported that some government-initiated workshops are held on Saturdays and even Sundays and they register good attendance. Strategies used by the government officials to ensure maximum attendance have not been established as yet, but the information may be helpful.

Teachers' attendance at the content training workshops has not met the project team's expectations, even when various mechanisms have been put in place to maximise attendance… There are, however, a lot of nuances around the reasons for teachers' absence from workshops.

3.2.5 Loss of time in term 1

Looking at the number of 'standing' activities in the school calendar, the first term appears to be the least crowded. During this term the schools are more amenable to accommodating the project activities, whereas in the other terms the school schedules are much tighter. Unfortunately, the project has not been able to take advantage of the relative flexibility of the first term. This can be attributed to two main reasons. In 2011, the first term was lost due to teachers' strike action and in 2012, due to threats of teachers' strike action. In addition, project activities start only after the budgets are approved and this happens only in March. Furthermore, the months of April and May are committed to circuit, district, provincial and national music competitions, which affect a large number of teachers.

3.3 Classroom mentoring and support

In the GET teacher development programme, classroom mentoring and support took place only in 2011. The intervention started with a briefing session for the mentors to standardise the approach to be used and for quality assurance purposes. Subsequently, two mentoring sessions per subject were conducted with the teachers. In 2012, only one mentoring session was conducted in the Foundation Phase, but mentoring did not continue in the Intermediate and Senior Phases because there was no funding available for this aspect of the intervention.

A number of challenges were encountered in the implementation of classroom mentoring and support in 2011.

3.3.1 Shortage of time

One of the major challenges was that there was not sufficient time for the mentors to visit all the teachers the required number of times. In addition, the time that the mentors spent with the teachers was not enough for the mentors to address adequately the problems that were observed and to monitor the progress or lack of progress after the visits. The two mentoring sessions that were conducted add up to a possible maximum of only 18 hours a year per teacher, since each session lasted for a minimum of three and a maximum of nine hours.

The challenge of time was aggravated by other related factors, such as distances between schools, the poor condition of the roads and the cars used; individual teachers' timetables and the availability of teachers; a shortage of funding; and the number of schools and teachers in relation to the number of mentors. With the long distances between schools and the short school day (roughly from 08h00 to 14h00), it was difficult to conduct more than two mentoring sessions in one day. In terms of availability of teachers, despite all the measures that were put in place to ensure that every teacher participated fully in the mentoring programme, some

teachers missed some of the planned mentoring sessions. In some cases, teachers simply thwarted the mentoring process. In order to maximise the contact time between mentors and teachers, a plan was made to employ full-time mentors to ensure that more mentoring could take place in 2012. However, that did not materialise due to lack of funding.

The project has demonstrated that face-to-face mentoring is a very expensive exercise. It is important, therefore, that other means of conducting mentoring and support should be explored. Perhaps 'remote mentoring' through lesson plans and video recorded lessons could be an alternative but this possibility has not yet been explored further.

3.3.2 Teachers' discomfort with mentoring

Another major challenge is teachers' discomfort with the mentoring process. Some teachers, generally those who require the most support, tended to feel uncomfortable about being observed teaching. In some instances, these teachers appeared to feel 'comfortable' only when they taught lessons for which they considered they had prepared thoroughly. In other instances, the teachers simply recycled lessons: they taught lessons that they had already taught before.

It may be argued that this strategy was adopted to create the impression that teaching was taking place effectively. However, in such instances, the real challenges faced by the teachers remained hidden from the mentors. This may be referred to as the observer paradox – when the presence of the mentor destabilises the 'normal life' of the classroom. It may in part be connected to the legacy of the apartheid era. Some teachers have not forgotten the discriminatory inspectorate system of the South African education system during the apartheid years, so mentoring brings about uncertainties that cause the teachers to feel uncomfortable.

Further, teachers' uncertainty around mentoring emanates from its perceived likeness to performance monitoring and appraisal. As much as these are accepted as some of the necessary tools for improving education in the country, they invoke bitter reaction among some stakeholders. When mentoring is perceived in a similar light, it may not be received as well as it should be in order for it to have a positive effect. It seems that teachers need to be assured and reassured about mentoring to make them feel at ease with the process. This would allow for the real challenges of the teachers to be brought to the surface and appropriate support mechanisms could then be identified and implemented.

3.3.3 Lesson plans

A third major challenge that was experienced in classroom mentoring and support is that in some instances, teachers did not have lesson plans. The lesson plan is one of the main tools that mentors would use in supporting the teachers, at both theoretical and practical levels and in the workshops as well as the classroom mentoring and support sessions.

By definition, a lesson plan is a detailed but concise description of the various teaching, learning and assessment activities (including an outline of resources) that a teacher wishes to employ in the course of mediating a selected collection of knowledge, skills and values in a particular lesson. The lesson plan benefits the teacher and the learners by acting as a clear guide to teaching and learning, and it provides the mentor with significant insights into the teacher's competence and performance. Such insights make it easier for the mentor to provide appropriate support to the teacher.

Whatever format a lesson plan takes, it answers specific questions about a lesson, regardless of the subject being taught. The answers to these questions enable the mentor to get a glimpse of a teacher's thought processes in designing a lesson for his or her learners and of how a lesson is likely to unfold. This in turn assists the mentor to work out appropriate ways through which to support the teacher.

One important observation made during mentors' interactions with teachers in both the workshops and mentoring sessions is that teachers find the structuring of lessons challenging, even though this is such an important skill for a teacher to have. Generally, while the need for teachers to prepare lesson plans appears to be clear, there are different schools of thought regarding the concepts *lesson plan* and *lesson planning* among teachers and other education practitioners, including government officials, curriculum advisors and others. These different schools of thought interpret the practical realities of the lesson plan and lesson planning in various ways, some of which are complete misconceptions, such as the belief that according to CAPS, teachers are not expected to prepare lesson plans. It is important that one common understanding of the lesson plan and lesson planning is agreed, so that the teachers, government officials and mentors are on the same page in this regard.

One important observation made during mentors' interactions with teachers in both the workshops and mentoring sessions is that teachers find the structuring of lessons challenging, even though this is such an important skill for a teacher to have.

3.4 Multi-grade teaching

In the multi-grade teaching intervention, two workshops and one classroom mentoring and support visit were conducted. A final assessment was done at the end of the programme. All the teachers who participated in this programme performed well. No major challenges were reported regarding the workshops, but the initial mentoring trip was not successful because of logistical problems as a result of a break-down in the communication process. During the follow-up trip, teachers were brought together at one venue instead of two, to reduce time loss.

3.5 Self-directed learning

Self-directed learning is one of the additional activities that were introduced in the teacher development intervention from the start of 2012. While it was envisaged that the activity would increase teachers' contact time with the material covered during workshops, the experience in the GET intervention showed this to be unattainable. Out of the 48 hours that were planned per teacher per subject, only two hours were achieved in each subject. When progress was checked after the activity had been introduced, the teachers reported that they did not have time to complete these tasks. Workloads were cited as the major hindrance.

In a bid to circumvent this problem, a decision was taken to incorporate the self-directed learning tasks into workshops. However, this took up time from the workshops. It was then decided that the activity should be suspended until it could be implemented effectively, and that has not happened yet. Plans were made to adopt the approach that was taken in the FET teacher development component – to incorporate self-directed learning into teachers' day-to-day work. However, this was not possible because mentoring, which would have been used as a platform for reinforcing the intervention, did not take place. Nonetheless, teachers were urged to complete the SDL tasks that were drawn up as the initiative was intended to assist them in their professional growth. One conclusion that may be drawn from this experience is that teachers' personal motivation for professional development would seem not to have reached the threshold point to propel self-directed learning.

3.6 Professional learning clusters

Professional learning clusters were the other additional activity introduced to the teacher development intervention from the start of 2012. It was envisaged that this initiative would provide an opportunity for teachers to meet in small subject clusters to share their experiences in the teaching of their subjects. These meetings were intended to create a forum for teachers to discuss curriculum, methodology and other issues pertaining to their work so that the observed good practices could be spread across the project schools and beyond.

No progress was registered in this initiative. When it was introduced to the teachers, they reported that they were not going to be able to meet in the suggested clusters because of transport and time challenges. An attempt was made to incorporate the professional learning meetings into the residential workshops, but this also meant

taking up time from the workshops. The PLCs were therefore set aside until there is an opportunity to implement them effectively.

4. LESSONS LEARNT AND STRATEGIC CONSIDERATIONS

Some of the major lessons that have been learnt through the implementation of the GET teacher development intervention in the BSSIP are outlined below, together with some strategic considerations that could contribute to facilitating the implementation and effectiveness of systemic school improvement projects.

4.1 Systemic issues

A number of systemic issues stand in the way of improving learners' educational achievements, even when strategic and well-planned interventions like the teacher development model or, indeed, the Systemic School Improvement Model employed in this project are put in place. These include:

- The post provisioning model, especially for small schools – the ratio used in the post provisioning model does not work well for small schools like those in this project;
- Heavy teacher workloads – which are caused largely by the need to cater for all the subjects across the curriculum;
- 'Lack of respect' for teachers' specialisations – also caused largely by the need to cater for all the subjects across the curriculum; and
- Instability of teachers in schools – that is, the movement of teachers across subjects or their redeployment to other schools, either within or outside the project, during the course of its implementation.

Challenges such as these have destabilised the project. In some cases, it has been difficult to measure progress between one point of the project and another due to the changes in the cohort of teachers. In order for a project of this nature to run smoothly, there is a need to negotiate a commitment from the department to ensure that systemic issues that affect teacher development, such as those cited, do not impact on its implementation.

4.2 Time

The activities of the teacher development component of the project require sufficient time to register effective progress. There are a number of circumstances that work against the project in terms of time and, overall, the time available for the intervention is extremely limited in relation to the amount of content that is to be mediated.

4.3 Generalisation

There is a need for some caution in interpreting the results of the interventions in teacher development, taking account of factors surrounding the interventions. The results cannot be generalised solely on the basis of the prescribed dosage being completed, but should rather be interpreted in terms of individual cases. Teachers should be encouraged to participate in the complete programme of interventions for them to gain maximum benefit.

4.4 Unravelling teachers' challenges in teaching

Some of the challenges experienced by teachers in the classroom may remain hidden even from appointed mentors because some teachers tend to feel uncomfortable being observed in their teaching practice, unless this takes place in lessons for which they consider themselves to have prepared thoroughly. In this way, teachers expose only their strong sides. There is a need for intensive mentoring and support in order to unravel the hidden realities in teachers' classroom practices. In addition, there should be, ideally, a systemic mechanism to encourage teachers to participate freely in the classroom mentoring and support initiative and one which ensures that the teachers prepare and provide to mentors fresh and authentic lesson plans.

4.5 The lesson plan and lesson planning

Various understandings of the lesson plan and lesson planning are in circulation among different stakeholders. For instance, one school of thought holds the opinion that lesson plans are provided by the department, while another holds that the department only provides guidelines for lesson preparation. There are a lot of nuances that need to be unpacked regarding the lesson plan and lesson planning so that a common understanding can be reached among the teachers, government officials and mentors. This means, for example, that there should be one common lesson plan template to be used by all stakeholders.

4.6 The cost of face-to-face mentoring

Face-to-face mentoring is a costly exercise. This calls for an exploration of alternative means of conducting mentoring and support. 'Remote mentoring' through lesson plans and audio and video recordings of lessons could offer an alternative. This has the potential to address many of the challenges that are experienced in face-to-face mentoring as well as the problem of funding. However, face-to-face mentoring remains important and necessary. If remote mentoring were to be adopted, an advocacy campaign could be instituted to ensure that all stakeholders, including government officials, the schools, teachers and the unions buy into this new idea.

There appears to be a 'gestation period' that needs to be allowed to run its course before the fruits of teacher development are seen at the level of learner performance.

4.7 Measuring the impact of interventions

While increased achievement in learning and educational outcomes is the ultimate objective of this project, measuring successes in teacher development interventions against learners' performance in examinations can be a challenge. The correlation between the two is not as obvious as might be thought. There appears to be a 'gestation period' that needs to be allowed to run its course before the fruits of teacher development are seen at the level of learner performance. More accurate measures of correlating learner performance and teacher development activities need to be formulated.

4.8 Project fatigue

In a relatively long-term project of this nature, there is a need to factor in initiatives to deal with project fatigue. While stakeholder commitment is essential for any project to run (smoothly), it remains one of the most difficult aspects to maintain. The levels of commitment that people hold at the start of a project tend to dwindle as the project moves forward.

One way of ensuring that teachers' commitment to teacher development initiatives is maintained is to employ a process of screening the participants and selecting only those who are really committed to participate. Screening could be conducted continually, at progressive intervals throughout the project. The participating teachers' commitment could be reinforced by periodic incentives linked to performance. Accreditation is also a key factor in this regard.

5. CONCLUSION

A lot of work has been carried out in the GET teacher development component since the inception of the BSSIP. Important strides have been made towards the success indicators of the logical framework, within the parameters of the priority to improve teachers' content knowledge and to improve their performance in the classroom. The standardised tests clearly pointed out the areas in which the teachers in the project need strengthening in terms of their content knowledge and the interventions were formulated to address those specific areas. In respect of the interventions in GET, the teachers have developed substantially in both their competence and their performance.

Although the teacher development component has experienced some challenges, most of these have been dealt with during the course of the intervention. Those that have not been addressed are not insurmountable but present new opportunities and further potentially valuable lessons for future teacher development interventions.

Teacher testing provides projects with indications of teacher-specific needs so that training can be customised to the needs of the teachers, as opposed to following the one-size-fits-all approach. It is on this premise that the Bojanala Systemic School Improvement Project (BSSIP) undertook to test all General Education and Training (GET) teachers in the project schools in English and Numeracy/Mathematics.

CHAPTER 4

STANDARDISED TEACHER TESTING IN GET

ROELIEN HERHOLDT

1. BACKGROUND

Teacher testing has been a controversial topic in South Africa over the years. Due to past experience of teacher testing, teachers tend to associate testing with punitive measures or negative feedback. Within this context, teacher testing needs to be handled with caution. An emphasis on advocacy, stakeholder participation and the developmental use of results are of utmost importance to ensure the success of any teacher testing campaign. However, the biggest factor in persuading teachers, the main stakeholders, of the good intentions of researchers is the action of the researchers. By adopting a voluntary participation process, protecting individuals' right to confidentiality and using the test results developmentally, the researcher earns the trust of teachers and with it, access to rich data that has the potential to change the focus of teacher training.

2. NATIONAL FRAMEWORK

Teacher testing is by no means new in South Africa. It is, however, only recently that it has been incorporated into strategic plans and policies driven by the Department of Basic Education (DBE).

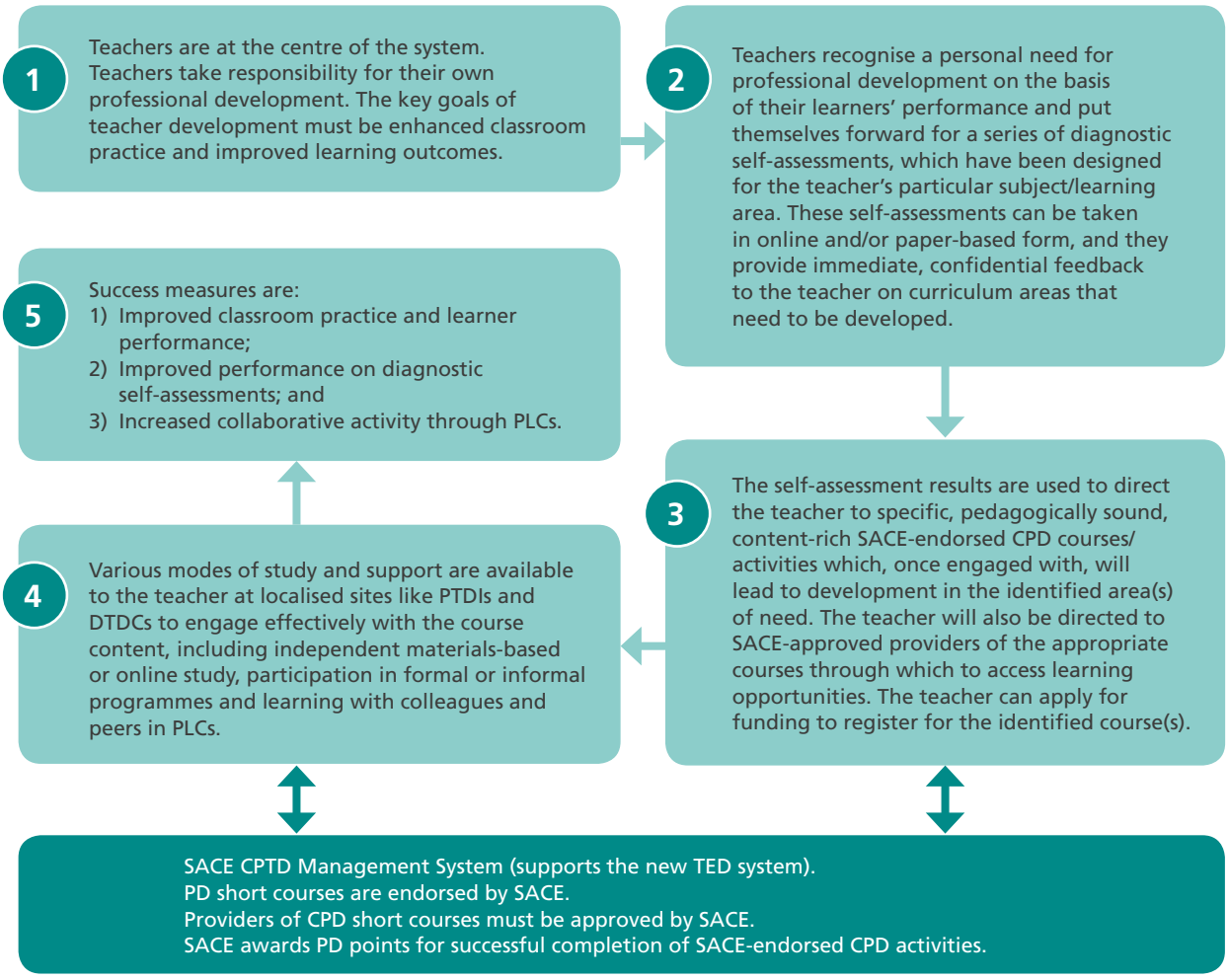
The Teacher Development Summit, held in July 2009, led to the development of the Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011–2025 (ISPFTED) (DBE, 2011). The ISPFTED acknowledges that the ultimate responsibility for teacher development lies with the government and thus must be operationalised and coordinated from within the two national education departments. However, teachers are seen as essential contributors to the implementation of any teacher development strategy and therefore take substantial responsibility for their own development. But they are not left to fend for themselves. Teachers are supported by the DBE, the Department of Higher Education and Training (DHET), teachers' unions, the South African Council for Educators (SACE) and the Education, Training and Development Practices Sector Education and Training Authority (ETDP SETA).

Another valuable contribution from the ISPFTED is the delinking of the Integrated Quality Management System (IQMS) from teacher development. Thus, teacher appraisals for development are no longer part and parcel of teacher appraisals for remuneration and salary progression. This delinking allows for teacher appraisals, including testing, to be purely developmental processes and goes a long way in addressing teachers' fears of teacher testing results being used punitively.

The ISPFTED describes a number of outputs. Output 1 involves the identification of teachers' development needs and addressing these needs through a National Institute for Curriculum and Professional Development (NICPD) to be established by the DBE. One of the main tasks of the NICPD is the development of a non-punitive system of diagnostic self-assessments for teachers. These self-assessments of content and pedagogical content knowledge will enable teachers to identify their own learning and professional development needs as well as provide system-wide

data on the development needs of teachers. The development of a national system for testing teachers that is easily accessible to all teachers, that guards individual confidentiality, but also allows for the data to be used developmentally on an individual and national level, is no easy feat. Figure 1 outlines the envisaged process of teacher testing.

Figure 1: A system for identifying and addressing teachers' developmental needs through diagnostic self-assessment



(DBE, 2011: 8)

Within the national context and the ISPFTED, JET decided to conduct teacher testing in several of its school improvement projects. Even though JET's testing did not constitute self-assessment and was not purely diagnostic in nature, the testing process dovetails with the developmental purpose of teacher testing as described in the ISPFTED.

3. WHY JET DID TEACHER TESTING

As Mourshed et al (2010) indicate, quality education for our learners is one of the most important factors for determining the wellbeing of our future world. The leaders in the South African education system who are genuinely trying to improve the quality of education, including teacher competence and learner achievement, require a structured, well-defined plan for systemic improvement that is based on informed decisions. However, in order to make informed decisions regarding the most effective ways to achieve this, those leaders need information regarding the current state of affairs in the education system.

Mourshed et al (2010) further note that leaders are often advised on a route for educational improvement based on what has worked in other education systems,

without considering the point in the educational improvement process at which the specific system finds itself. It is not surprising that interventions (such as highly flexible curricula) that proved to work in well performing systems do not necessarily work in systems found at the lower end of the performance scale. Therefore, it seems advisable first to establish the status quo in terms of each component in the system, including information on the level of knowledge teachers possess in the subjects they teach. This has largely been acknowledged as an important factor in teacher competence, yet has almost uniformly been ignored or opposed in school and system evaluations in South Africa.

William (2011) points out that for many years the prevailing view was that as long as an education system provided education of a relatively good quality, it did not need to be adaptable to the needs of learners. He indicates that when some learners struggled, the locus of the problem was considered to reside within the learner and thus the learner was "streamed", often to less academic pursuits.

The same seems to apply to teacher training. It seems to be assumed that "blanket training" of teachers during an INSET developmental programme would address the needs of all teachers equally well. Consequently, evaluations of INSET programmes for teachers (at least those undertaken by JET) show little or no significant gain in uptake of the programmes, sustainable implementation of the programmes, or improvements in teachers' pedagogical content knowledge (PCK).The assumption then tends to be that there is something "wrong" with certain teachers. However, no time is taken to evaluate how well the training programme fits the needs of the teacher who finds her/himself in a specific context at a specific time.

It appears that we are stuck in a closed system wherein training programme evaluations seem to confirm the need for INSET for teachers, in this case specifically in PCK, which leads to more training programmes, and more evaluations indicating the need for such programmes. This could be termed a negative feedback loop that keeps driving the system forward on its current path, even though this seems not to be equally beneficial for all teachers. There is something fundamentally wrong here. The problem seems to be twofold:

- Programme evaluations of teachers' PCK do not provide us with the information or feedback needed to identify the specific needs of teachers, and/or
- When that information is available we are not using it adequately to inform actions – in this case, designing INSET programmes for teachers that could effect positive change in the system.

Furthermore, using simple common sense, teacher testing makes economic sense. A more intense focus of limited resources on those who need it most would be more effective in achieving the greatest possible positive impact on learner achievement than spreading the same limited resources thinly across the whole population of teachers, resulting in inadequate support for teachers who need it the most. Either not getting enough support or getting support when it is not needed, is frustrating for teachers, it is a waste of limited resources, and leads to even lower levels of motivation and higher levels of resistance towards interventions.

Teacher testing provides projects with indications of teacher-specific needs so that training can be customised to the needs of the teachers, as opposed to following the one-size-fits-all approach. It is on this premise that the Bojanala Systemic School Improvement Project (BSSIP) undertook to test all General Education and Training (GET) teachers in the project schools in English and Numeracy/Mathematics. After the first round of teacher testing was done and the information regarding teacher achievement was communicated to the project implementation team, the responsibility shifts to the project managers to ensure that the information is used to its full potential to shape the training programme. This was one of the fundamental challenges in the project.

In essence, it was assumed that if we want to improve the content knowledge and PCK of teachers, we need to find a reliable, practical and cost-effective way of establishing the current level of teachers' PCK, as well as of making the information available in an accessible format to both teachers and teacher trainers. Further, this was to be done without breaching the confidentiality of individual teachers' results or instigating the use of this information as an accountability measure to be used against teachers.

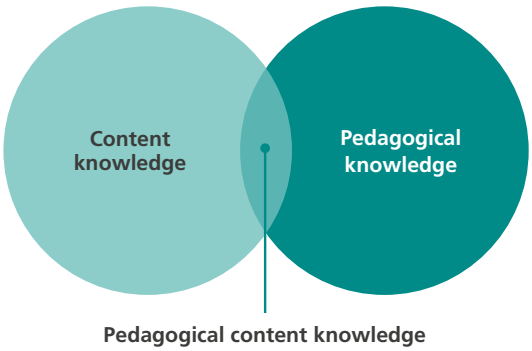
4. WHY TEST TEACHERS' PCK AND NOT ONLY CONTENT KNOWLEDGE?

The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (DBE, 2011) acknowledges that teachers' poor content and pedagogical content knowledge are important factors in the quality of education in South Africa.

Shulman (1987) argues that teachers need to have the ability to understand and use subject-matter knowledge to carry out the tasks of teaching. Pedagogical content knowledge (PCK) is one such tool that can be used to transform subject matter to content for teaching. It refers to the subject knowledge used to teach children and involves a deep understanding of the principles that underpin the subject matter, as well as of how learners best learn this content.

This understanding enables the teacher to transform the subject matter into a form that is more accessible to the learners. A powerful example, analogy or diagram is used so that the knowledge transferred becomes embedded in the learners' cognition. In short, PCK exists at the intersection of content and pedagogy (see Figure 2). PCK is similar to what some writers refer to as content knowledge for teaching mathematics (CKT-M). Common sense would suggest that increased PCK, or CKT-M in the case of mathematics, should lead to increased learner achievement.

Figure 2: Pedagogical content knowledge



Hill et al (2005) found just that, at least for mathematics. They found that a teacher's CKT-M was a significant predictor of gains in learner achievement in mathematics. Further, they found that CKT-M was a stronger predictor than teacher background variables such as certification and methods or content courses attended, and than average time spent per day on teaching mathematics. They also found that CKT-M is as strong a predictor of Grade 3 learner achievement as learner socio-economic status (SES) is.

Most significantly, Hill et al (2005) found that the effect of increasing CKT-M on learner achievement in mathematics was the strongest for teachers with the lowest CKT-M scores. Thus, the biggest impact on learner achievement can be made by focusing content-specific teacher development activities on the teachers with the lowest CKT-M scores.

However, to identify the teachers that would benefit most from development activities, the instruments must be available and teachers must be willing, or be

persuaded through consultation, advocacy or incentives, to be tested. Taking it one step further, there should be measures in place to ensure that the development programmes are available and address the needs of the teachers, and that their effects on CKT-M, as well as on learner achievement can be measured.

With regard to whether or not PCK is positively related to increased learner achievement in language studies, Podhajski et al (2009) found that a professional development programme based on the structure of the English language, how to teach reading explicitly and how to transform this knowledge into classroom practice, had a positive effect on learners' achievements in reading, especially in the lower socio-economic groups. Therefore, it seems at least worthwhile to explore further the relationship between teacher PCK and learner achievement in language teaching.

Interestingly, Spear-Swerling and Brucker (2004) report that there is a substantial gap between teachers' self-evaluation of their knowledge of reading instruction and their actual knowledge of reading. This situation is aggravated since teachers who believe that they possess adequate knowledge of reading instruction are less likely to seek out professional development opportunities.

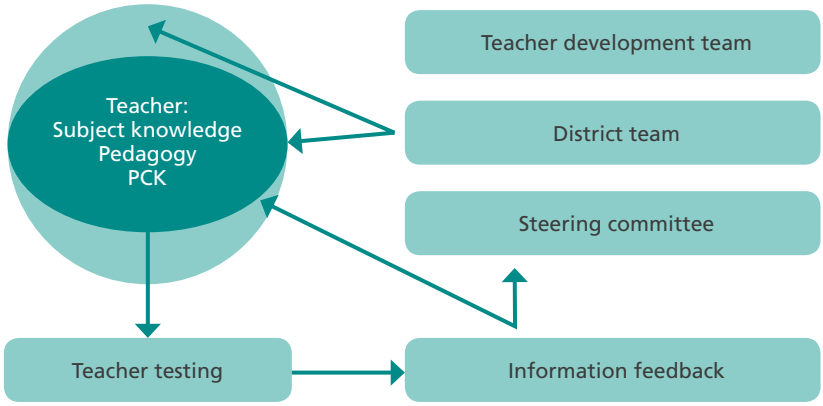
In conceptualising the teacher development model that is used in the BSSIP, it was assumed that providing teachers with a more accurate measure of their own knowledge through testing their PCK could increase teachers' motivation to participate in developmental activities or, at the very least, make them aware that they would benefit from development in specific areas.

5. THE MODEL USED

A very simple model consisting of various feedback loops was used for the teacher testing programme. The linchpin of the model is the teacher, who possesses specific knowledge regarding pedagogy, the subject as well as pedagogical content knowledge (PCK), and who functions within a specific community of teachers.

The teacher testing aimed to establish the individual teachers' as well as the community of teachers' levels of PCK. This information was fed back to the various stakeholders in different formats. Each teacher received a confidential detailed report of his/her own performance on the test. This individual report was also made available to the trainer/mentor of the specific teacher under a confidentiality agreement with the trainer/mentor. The trainer/mentor was charged with the responsibility of using this information to structure an individualised support programme with the teacher and for the teacher. The district team and the project managers received a broader report on the performance of the community of teachers, detailing the group's weaknesses and strengths. The district and project management team were then to use this information to structure the support from the district and to guide the broader project.

Figure 3: Teacher testing model



However, one of the principal challenges in this project lay in the definition of feedback adopted by the research team. Feedback was defined in the words of Ramaprasad (1983):

> *Feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way.* (Ramaprasad, 1983: 4)

And further defined through the words of Sadler (1989):

> *…information regarding the gap between the actual and reference levels is considered as feedback only when it is used to alter the gap. If the information is simply recorded, passed to a third party who lacks either the knowledge or the power to change the outcome, or is too deeply coded (e.g. a summary grade given by the teacher) to lead to appropriate action, the control loop cannot be closed, and "data dangling" [is] substituted for effective feedback.* (Sadler, 1989: 121)

The flow of information was only considered as effective feedback if it led to the information being used to change the current state of teacher knowledge, although this did not happen in all instances.

The research team bound itself to a definition of feedback where communication of information was not considered to be enough. The flow of information was only considered as effective feedback if it led to the information being used to change the current state of teacher knowledge, although this did not happen in all instances.

6. THE TESTING PROCESS

6.1 The tests

With the focus on targeted teacher development, JET developed the following teacher tests in 2009 and 2010.

- Foundation Phase Numeracy Teacher test
- Intermediate Phase Mathematics Teacher test
- Senior Phase Mathematics Teacher test
- Foundation Phase English Teacher test consisting of the Primary Proficiency test and the Foundation Phase Curriculum test
- Intermediate Phase English Teacher test consisting of the Primary Proficiency test and the Intermediate Phase Curriculum test
- Senior Phase English Teacher test consisting of the Secondary Proficiency test and the Senior Phase Curriculum test.

The numeracy and mathematics tests consist of a mixture of pure subject knowledge items and pedagogical knowledge items in a ratio of roughly 70% to 30% respectively. The pedagogical knowledge items require the teacher to demonstrate his/her problem-solving skills and a deeper understanding of the principles underlying the concepts, possible misconceptions as well as how to teach the content.

Approximately 60% of the items in the mathematical tests are pitched at the phase in which the teacher teaches. The balance of the items are pitched one grade level above the phase in which the teacher teaches.

Each of the English tests consists of two distinct tests, the proficiency test and the curriculum test. The proficiency items test the teacher's own knowledge as well as reading and writing skills in English, either at the primary or secondary school level. This test thus focuses on subject matter, rather than PCK. The curriculum items test the teacher's pedagogical knowledge and application of concepts found in the English curriculum of the specific phase.

The items in all the above tests were developed by subject experts and quality assured by departmental officials and/or teacher trainers in the specific subjects. The primary school tests and the Grade 9 mathematics test were piloted in May 2010 in Sedibeng East in Gauteng, testing Grade 3, 6 and 9 teachers from a range of schools.

Details regarding the piloted tests are shown in Table 1 below. The reliability estimates indicate that the testing process had high to very high reliability in a mixed sample of teachers from all school types. Items with item discrimination indices below 0.20 were either revised or discarded before being used in this project. However, JET subscribes to the idea that test development is an ongoing process and thus acknowledges that these tests are still being refined further to better test teachers' content and pedagogical content knowledge.

Table 1: Number of teachers and reliability estimates per test piloted in May 2010

Test	Number of teachers	Reliability estimate
Primary English Proficiency	31 Grade 3 teachers	0.84
FP English Curriculum	31 Grade 3 teachers	0.83
Primary English Proficiency	32 Grade 6 teachers	0.92
IP English Curriculum	32 Grade 6 teachers	0.84
FP Numeracy	38 Grade 3 teachers	0.87
IP Mathematics	35 Grade 6 teachers	0.91
SP Mathematics	22 Grade 9 teachers	0.81

6.2 The sample

In the GET teacher testing carried out in the BSSIP, the sample of teachers consisted of all the Grade 1 to 9 teachers teaching Mathematics and/or English. The number of teachers per test group ranged from six to 24 teachers, as shown in Table 2.

Table 2: Number of teachers tested in 2011

Group	Number of teachers	Response rate
FP Mathematics	24	43.2%
FP English	15	34.1%
IP Mathematics	15	Unknown
IP English	9	53.3%
SP Mathematics	7	41.2%
SP English	6	37.5%

7. WHAT WORKED AND WHAT DID NOT

7.1 Advocacy

In implementing the teacher testing a strategy of persuasion rather than compulsion was used. This decision was taken in light of the political and historical context in South Africa, as well as with the belief that persuasion encourages stakeholders to take ownership of the intervention and thus feel more encouraged to internalise the results and strive for improvement.

Advocacy was one of the key processes used to promote voluntary participation of teachers in the testing process. Although the need for extensive advocacy resulted in a slower pace of implementation, it also contributed to higher response rates in the initial baseline assessment and mitigated the risk of stakeholder resistance. Advocacy meetings targeting teachers directly proved far more effective than relying on principals to cascade the information down to the teachers. The participation of the unions and district representatives in the advocacy meetings was essential to ensure buy-in from teachers and principals alike.

7.2 Response rates

Important factors that affected the response rates were the time of the testing and clashes between the testing and activities at school level. The decision on whether or not to test within school hours is best taken in consultation with all stakeholders, including union and district officials. The provision of transport becomes an important factor when a test is scheduled outside school hours.

Since the teacher testing relies on voluntary participation of teachers, it is essential that teachers are not unduly inconvenienced by the testing. It is therefore important that, in consultation with the project coordinator, any clashes with other project activities, whether driven by the Department of Education, unions, or JET as the implementing agency, should be minimised.

7.3 Collection of biographical information on teachers

The biographical data about teachers that was collected by the test administrators through a questionnaire showed various inconsistencies when verified against other data sources. A detailed, accurate project population list recording teachers' biographical data should be compiled by the project coordinator and administrator through a separate administrative process and is essential to ensure easy access to this information.

7.4 The testing methodology

The teacher tests were designed for use as large-scale standardised tests and thus suffer from what Looney (2011) describes as the central drawbacks in standardised testing, namely:

- Standardised testing is designed to ensure that the testing process is reliable, valid and generalisable in order to make valid comparisons and claims regarding the effect/impact of the intervention. Thus, standardised tests cannot capture the minutiae of performance on complex tasks such as problem solving. Standardised testing can provide some diagnostic detail, but not nearly as much as formative assessments.
- Feedback loops in standardised testing generally suffer from a time delay of several months, whereas formative testing requires almost immediate feedback.
- There is a strong association between standardised testing and high-stakes consequences.

Since the teacher tests were developed as standardised tests, various strategies had to be implemented to counteract the general concerns regarding these, as outlined above. These strategies proved highly effective in making the tests more formative and thus more acceptable to the teachers.

- The provision of as much diagnostic detail as possible regarding teachers' achievement on questions ranging from simple knowledge to open-ended reasoning questions.
- Every effort was made to shorten the time delay between the testing date and providing feedback.
- The teachers' identities were guarded throughout the testing and feedback process to prevent the use of the results for punitive purposes.

Although the teacher tests can be used to identify areas of need for specific teachers (as recorded in the individual teacher reports) and for a group of teachers (as reported in the overall report), the need for error analyses remained. The use of teacher tests in conjunction with formative assessments done by trainers/mentors addressed this need in some instances.

7.5 Content and pitch of teacher tests

Although most of the items in the Mathematics teacher tests were pitched at the

highest grade of the phase in which the teachers teach, most of the teachers tested failed to answer 50% of the questions correctly (Ramasodi & Herholdt, 2011). Further, although the achievement on content knowledge items was poor (on average below 50%), it was significantly better than teachers' achievement on the pedagogical content knowledge questions.

Pedagogical content knowledge requires an understanding of the content of a subject and the general pedagogical process as well the assimilation of this knowledge in such a way that an understanding of how learners learn, understand and misunderstand a particular subject and how best to teach that subject, emerges. If teachers lack the content knowledge required at a specific level, it is unlikely that they will develop the necessary pedagogical content knowledge. However, content knowledge does not automatically translate into pedagogical content knowledge. This brings to mind the fallacy in George Bernard Shaw's reasoning when he wrote: "He who can, does. He who cannot, teaches."

Pedagogical content knowledge requires an understanding of the content of a subject and the general pedagogical process as well the assimilation of this knowledge in such a way that an understanding of how learners learn… and how best to teach that subject, emerges.

7.6 Feedback cycles

As can be seen in the model illustrated in Figure 3 above, several feedback loops were incorporated to ensure the effective flow of information between the researcher, the teacher development team, steering committee, district and the teachers.

Probably the easiest of these feedback loops to manage was the feedback to the higher management levels, that is, the steering committee and district. This was mainly due to the "reporting" nature of the feedback and the aim of the feedback to structure the broader policy decisions.

The more formative nature of the feedback to the teacher development team and the teachers made this aspect not only more difficult to manage but also significantly more time-consuming, yet possibly the most effective. Feedback to teachers consisted of three interlinked activities: a presentation of the group's performance to respective subject and phase groups, and individual written reports and a fifteen-minute discussion of results with each teacher. The group presentations that were attended by project staff, curriculum advisors and trainers/mentors were more successful in reaching a common understanding of the strengths and weaknesses as well as the needs of teachers in terms of support and training. Unfortunately, due to their workloads, curriculum advisors, trainers and mentors were not always able to attend the presentations. The discussions with individual teachers focused on the teacher's own results and personal objectives were agreed with each teacher.

The most difficult feedback loop to manage was the feedback to the trainers. This was mainly due to the logistics of arranging a feedback session for all trainers at one time and at a central venue. A further complicating factor was that the researcher did not have direct control over how the information was translated into changes in the training and mentoring support given to teachers. This relates to what Sadler (1989) calls data dangling. Close monitoring of the training and mentoring programme is strongly recommended to ensure that the information generated through teacher testing is used to its full potential.

7.7 Monitoring and recognition of teachers' progress in class

As in any project starting off on a journey of improvement, one of the major obstacles faced by this project was teacher motivation. Here, setting clear improvement targets and recognising achievement of the targets are essential. However, practically, the use of the teachers' results to set clear achievement goals was not monitored by the GET project managers and this led to different levels of usage by different trainers/mentors. The need for a more structured approach to internal monitoring and inclusion of the goal-setting process as a key deliverable in contracts with trainers/mentors became evident. Furthermore, teachers who reach targets set should be rewarded. The recognition of voluntary participation in the testing through certificates was welcomed by the teachers.

7.8 Teacher training and mentoring

The need for communication on how the results of the teachers' testing were used by the trainers to customise the training programme was central in achieving buy-in from teachers and to sustaining the high response rates that distinguished the initial baseline assessment. However, as this aspect was not addressed through the internal monitoring systems, consultants did not consistently highlight how the training workshops were adapted to suit the needs of the teachers. Again, this pointed to the need for a more structured internal monitoring approach to be incorporated as a key deliverable in contracts with trainers.

One of the benefits of the teacher testing is the possibility it affords for working with teachers according to their individual needs and for the identification of stronger teachers who can serve as co-facilitators and peer mentors.

One of the benefits of the teacher testing is the possibility it affords for working with teachers according to their individual needs and for the identification of stronger teachers who can serve as co-facilitators and peer mentors. However, the extent to which trainers/mentors made use of this strategy remained unknown as there was no systematic monitoring and evaluation of the training methodology used and the internal monitoring records (the training records) did not address this issue. This emphasises further the need for a more structured internal monitoring approach as well as the need to make the inclusion of evidence of the adaptation of the training methodology to suit the needs of the teachers a key deliverable in trainers' contracts.

8. LESSONS LEARNT REGARDING TEACHERS' KNOWLEDGE

8.1 Teachers' results and teachers' qualifications

No indication was found in any of the groups tested that there is a correlation between teachers' results and their qualifications. This finding raises questions regarding level of qualification as a measure of competency in teaching, as well as the consistency and quality of teachers' training.

It was found that there is often a clearer relationship between teachers' subject specialisation in pre-service and post-graduate studies and their results, with teachers who had the specific subject at a third-year level in pre-service training or as a major in post-graduate training doing better in that subject than teachers who did not have the subject at that level. However, it should be noted that the data was collected predominantly through a self-reporting questionnaire and then verified against what the same teacher said about his/her subject specialisation in the previous year or in another test.

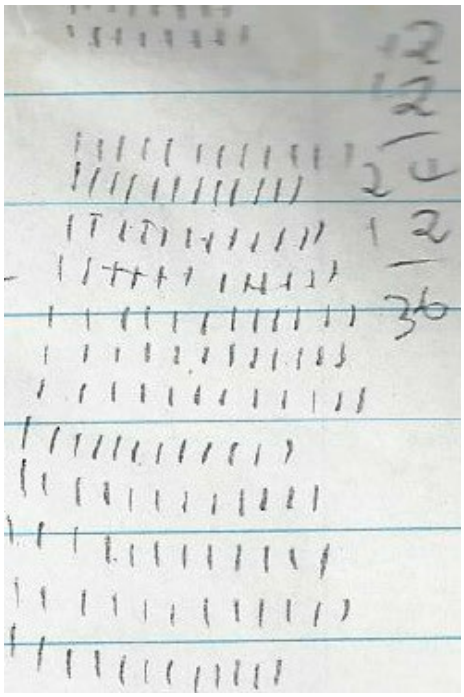
8.2 Teachers' results and learners' results

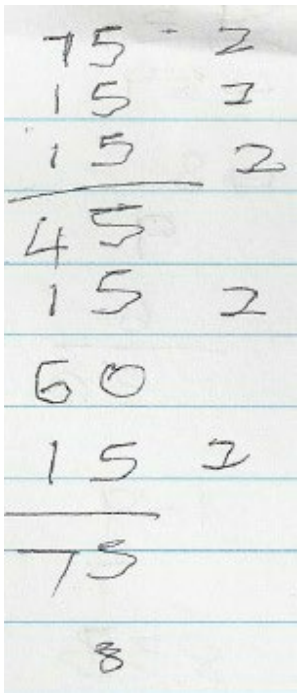
As can be expected, there seems to be an association between teachers' and learners' patterns of achievement across content areas within subjects. Some examples are presented below.

In FP Mathematics there were notable similarities in the patterns of achievement between the learners' test results and those of teachers. The results showed that learners as well as teachers battled particularly with patterns and measurement. More alarmingly, problem solving strategies popular with FP learners were also found in teachers' rough work. For example, use of "stick counting" was found in three of the 24 teachers' rough work (see Figure 4) and the use of repeated addition instead of multiplication was found in all teachers' rough work. This is an indication that at least some FP teachers need support to progress to a more abstract level of dealing with mathematical problems.

Interestingly, with the exception of the IP Mathematics teachers' achievement in numbers, operations and relationships, the trend of achievement matches that of the Grade 6 learners, namely highest in patterns, shape and space, and lowest in measurement and data handling (Ramasodi & Herholdt, 2011).

Figure 4: Problem solving strategies used by teachers





In FP, IP and SP, English teachers' lower achievement on vocabulary items corresponded with the lower achievement of learners in the vocabulary section of the learners' tests in the respective phases. The learners' and teachers' low scores on vocabulary items are especially worrying as one of the most persistent findings in reading research is that the extent of children's vocabulary knowledge strongly relates to their reading comprehension and overall academic success (Baumann, Kame'enui & Ash, 2003).

To obtain meaning from what they read, learners need both a great many words in their vocabularies and the ability to use various strategies to establish the meanings of new words. For beginning readers, evidence indicates a link between vocabulary knowledge and phonological awareness. Young children who have a large number of words in their oral vocabularies may more easily analyse the representation of the individual sounds of those words (Metsala & Walley, 1998). In addition, vocabulary knowledge helps beginning readers decode or map spoken sounds to words in print. If words are not in a child's oral vocabulary, he/she tends to have trouble reading the words and comprehension is hindered. Furthermore, the teacher's own vocabulary sets the limits for the vocabulary he/she is likely to teach in class.

Like the SP English teachers, Grade 9 learners also battled most with completing an unstructured writing task (Ramasodi & Herholdt, 2011). Lack of planning and poor use of punctuation and grammar contributed to teachers achieving lower scores for the writing task and the same was found with the learners.

9. CONCLUSION

The biggest challenges that faced the teacher testing component all related to control of the use of the data.

In terms of the operational definition of feedback adopted in this project, feedback was considered to be effective only if it led to changes in the gap between the levels of knowledge expected of teachers and the teachers' actual knowledge. This implied that the trainers and mentors had to use the information provided in the teachers' test results to work with individual teachers:

- to set goals for that teacher;
- to monitor and report progress against these individual goals;
- to adapt the training content and methodology to suit the needs of the teachers; and
- and to make these changes known to teachers.

As the internal monitoring of this process fell outside the realm of the teacher testing component, use of the teacher test data was inconsistent and dependent on the individual trainer or mentor. This points to a need to formalise the requirements for data use by incorporating them as key deliverables into the contracts of trainers and mentors. The strengthening of the internal monitoring systems, as already advocated above, should also address the need to ensure that the teacher testing data is used optimally.

The procedural challenges encountered in the teacher testing component related mainly to the best way to tackle the cumbersome process of advocacy, the collection of biographical data, devising the most accessible format for providing feedback and limiting the turnaround time between testing and providing feedback on the test results.

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This chapter presents the lessons learnt through the teacher development intervention as implemented in the Further Education and Training (FET) phase in the five FET schools in the Bojanala Systemic School Improvement Project (BSSIP).

CHAPTER 5

TEACHER DEVELOPMENT INTERVENTIONS IN THE FET BAND

PATIENCE VOLLER

1. INTRODUCTION

This chapter presents the lessons learnt through the teacher development intervention as implemented in the Further Education and Training (FET) phase in the five FET schools in the Bojanala Systemic School Improvement Project (BSSIP). In this project the model has been fully implemented and was focused on four subjects: Mathematics, Mathematical Literacy, Physical Science and English First Additional Language, which is the medium of instruction.

The chapter does not include lessons from the Centres of Excellence Project (COEP) in the Eastern Cape where the intervention covers three subjects as opposed to four in the BSSIP. Mathematical Literacy is not taught in the COEP schools and sitting for Mathematics in the NCS final examination is mandatory. In addition, the mentoring component of the intervention is less frequent and professional learning clusters proved to be impractical to implement.

In the BSSIP, the number of teachers involved in the project fluctuated, ranging from 26 in 2010 to 32 in 2011 and 21 in 2012, an average of 26 teachers across the five schools that benefitted from the project. However, only 14 teachers out of 26 benefitted consistently through the life of the project. Despite teachers' continued desire to participate in the programme, a number of involuntary withdrawals occur each year. These are attributed to a sequence of events: migration of families to villages closer to the city and around the mines has led to a steady decline in learner numbers; learner attrition at schools in turn leads to the enforcement of the post provisioning model which determines the pupil to teacher ratio; the result is the termination of temporary contracts or redeployment of educators to schools in another district.

At the onset of the project a teacher development needs analysis was conducted. This was done in the form of baseline assessment tests which were completed by the individual teachers in the focus subjects of the intervention. The Rapid Baseline Assessment Tests (RBATs) assessed the teachers' subject knowledge at matric level and their needs in relation to the curriculum content. These tests were conducted as a precursor to any training or development being implemented. The results, which determined individual levels of competence, served to inform and guide the design of an appropriate intervention strategy.

2. DOSAGE OF FET TEACHER DEVELOPMENT INTERVENTIONS

The term 'dosage' describes the types of intervention, their intensity and frequency. The FET teacher development intervention was designed initially to comprise three sub-components: content training workshops, on-site mentoring and support, and teacher assessments.

As set out in Table 1 below, the total intervention planned for 2010 amounted to 48 hours of professional development per teacher and included three weekends of content training workshops followed by three school/on-site support visits.

Table 1: BSSIP FET Teacher Development Dosage 2010 and 2011 (hours)									
	2010				2011				
	Term 2	Term 3	Term 4	TOTAL	Term 1	Term 2	Term 3	Term 4	TOTAL
Content development workshops	14	14	14	42	15	15	15	15	60
On-site mentoring and support	2	2	2	6	2	2	2	2	8
Teacher assessment						6		6	12
Total hours per year, per teacher				**48 hours**					**80 hours**

This dosage was decided following the RBATs which had been conducted at the start of the project.

The implementation of the intervention got off to a stuttering start as a result of a national public servants' strike which occurred in the latter part of 2010. It was further impacted by the district's post-strike recovery plans which naturally took priority. To compensate for this time delay, the dosage for 2011 was subsequently increased with the number of workshops increased to four and the hours extended slightly from 14 hours per workshop in 2010 to 15 hours in 2011. In addition, two diagnostic tests were included in 2011, increasing the total hours of the intervention to 80 hours.

Prior to any teacher testing being conducted, JET sought support and advocacy at all levels (from the unions, district, circuit and teachers themselves). Although the participants were initially suspicious of the intentions behind the tests, after reassurances and promises that all the tests and the results would be handled ethically, the teachers agreed that the tests would benefit them professionally and understood that they would not be used punitively.

The tests conducted in 2011 provided information on the knowledge gains achieved through the workshops and mentoring, as well as gaps still to be addressed. The results of the first assessment indicated that marginal progress had been made by individual teachers. After the second assessment had been written, it became evident that the dosage design for 2011 was inadequate in terms of the hours committed to refining subject content knowledge at workshops and the hours on-site interacting with mentors. Although the test results showed marginal improvements by some teachers, it was clear that the target group still had some way to go to become effective mediators of their subjects.

In order for the intervention to register a greater impact, it was decided that the dosage would have to be increased and the project would have to deliver an extended and more focused programme. To achieve this, two innovative sub-components were introduced, namely, self-directed learning (SDL) tasks and professional learning clusters (PLCs). In addition, contact time at workshops and through mentoring was increased significantly. Because the workshops were residential they began at 16h30 on a Thursday afternoon and allowed for two productive evening sessions. The revised dosage now stood at 396 hours per teacher per year and included five sub-components. Table 2 compares the dosage for 2011 and for 2012.

One of JET's principles is to work collaboratively and transparently to establish awareness and support advocacy among all stakeholders in project interventions. It was therefore important to proceed with advocacy meetings before such a radically revised dosage could be implemented. Discussions were held with the teachers and district officials at a teachers' seminar in January 2012. There were mixed reactions to the increased dosage, mainly on the grounds that teachers' workloads would prevent them from taking on the additional activities, some of which they described as an added burden.

Regarding the proposed professional learning clusters, teachers were sceptical of these because:

- Using time for them within the school day would be difficult as teachers taught at schools which were far apart;
- Using time after school would be difficult due to transport. No more than five of the project teachers owned cars and the others depended on the public transport system, which was a solitary bus or the more frequent but costly taxi. (The case study overleaf illustrates some of the difficulties teachers face in relation to public transport, among other things.)

The teachers' concerns were resolved by including PLCs as a session on the first evening of the workshops.

Regarding the self-directed learning tasks, it was agreed that these would be relevant to the lessons to be taught at school. Hence teachers would not have to spend additional hours seemingly taking up valuable time which should have been devoted to lesson preparation.

Regarding the increased time devoted to mentoring, discussion revealed the anxieties teachers had about being observed in their teaching practice. Subject advisors were also uncertain about their role in the mentoring and support of teachers, and whether the mentor would replace the subject advisor. These fears were resolved after discussion of the roles of the mentor/mentee, the type of mentor required and the fact that advisors would not be reporting to mentors.

A further concern, regarding the workshops, was that teachers were unfamiliar with starting a workshop after a hard day at school and working into the night.

3. IMPLEMENTATION

3.1 Content training workshops

As reflected in Table 1, the initial dosage provided for two-day workshops, each covering 15 hours of contact time. In 2011 four such workshops were conducted. In 2012 the workshops were extended from two to three days, increasing the total contact time at workshops from 60 to 80 hours. Each workshop was a structured session delivered by a subject expert. Subject content was taught and tested, teaching methodologies were discussed and useful teaching strategies presented and implemented.

At the inception of the teacher development programme all the subject modules designed for use at the workshops were aligned to the Department of Basic Education (DBE) Curriculum and Assessment Policy Statements (CAPS). The subject

Table 2: BSSIP FET Teacher Development Dosage 2011 and 2012 (hours)

2011	Hours	2012	Hours
4 x 2-day residential contact sessions	7.5 hours x 2 days x 4 sessions = 60 hours	4 x 3 days residential contact sessions	20 hours x 4 = 80 hours
		Self-directed learning tasks between workshops	4 x 35 hours = 140 hours
4 x 2-hour on-site mentoring sessions	8 hours	3 x 6 hrs on-site mentoring sessions per month (8 months)	18 hours x 8 months = 144 hours
–	–	Professional learning clusters	2 sessions x 2 hours x 8 months = 32 hours
Assessment	12 hours	Final assessment	
Total	**80 hours**	**Total**	**396 hours**

modules constituted the main workshop resource. They were supplemented by facilitator-designed material and were used in conjunction with the requirements of the quarterly work schedule. Teachers' needs and requests for assistance with selected items from the quarterly work schedules were also considered when compiling the content for each workshop session. For example, if a teacher was required to teach the 'Visual Literacy of Advertising' and requested assistance with the topic, the facilitator would include relevant content and teaching methodologies in the workshop programme. In this way teachers were assisted directly with content in their work schedules.

3.1.1 Selecting a workshop venue

Several factors had to be considered when planning the location and timing of the training workshops. Ideally training venues would be selected based on proximity to the participants' places of residence and/or work. However, less than 50% of the participants resided within a 30 km radius of the schools at which they taught and the others lived further away, either in surrounding farmlands or in Rustenburg, the nearest town, which is 80 km from the closest project school. (Teacher Mbonambi* who is referred to in the case study opposite represents a classic example of a project teacher and the circumstances of distances, transport and travel time that teachers face on any typical working day.) In addition, the participants' schools were in extremely rural communities and amenities in these areas were not always conducive to high-level facilitation and discourse. A lack of network accessibility in the area would also have impacted negatively on the workshop delivery.

Because the participants were largely dependent on an unreliable public transport system, as illustrated in the case study, additional factors which would affect workshop attendance and punctuality were travel time and costs. It was therefore decided that in order to achieve maximum attendance, workshops should be convened at a suitable guest house, in the vicinity of Rustenburg CBD, that could provide the requisite amenities. Experience had shown that higher and more consistent attendance could be achieved if workshops were residential and in the town or city where most educators reside. The small number of participants per subject also made it feasible to keep the workshops residential. Participants were therefore accommodated at the guest house for the duration of each workshop.

The case study opposite provides a brief glimpse of the kind of constraints that a teacher in the project area faces and hence the kind of challenges that the implementing team had to accommodate.

3.1.2 Attendance

Despite efforts to optimise accessibility to the workshops, 100% attendance was never guaranteed. Attendance fluctuated from one workshop to the next and was influenced by personal and domestic issues such as illness, family obligations and attendance at funerals on weekends, as well as contextual issues, primarily excessive workloads. Because of the post provisioning model applied at the schools, a teacher often taught his/her specialist subject to all the grades in the school, plus one or two additional 'filler' subjects. For example, an FET Mathematics teacher would be responsible for teaching Mathematics to Grades 10, 11 and 12; Mathematical Literacy to Grades 10, 11 and 12; and perhaps even Physical Science to one or two grades. A teacher in this position would be required to prepare lessons for and teach seven grades, set seven test or examination papers and memoranda, and manage the marking and assessment of all these grades. Table 3 shows the workloads and workshop attendance of the Mathematics teachers.

Free time in a teaching day was rare for most project teachers and the mathematics teachers were no exception. As the table below indicates, workshop attendance by the mathematics teachers was most erratic and reached lows of 50% on several occasions. The lowest attendance figures for mathematics teachers were recorded over the period corresponding with the mid-year examinations, when teachers'

Case Study

Maria Mbonambi is a 42 year old mother of three and resides in Mogwase village, roughly 88km away from Rustenburg CBD. She teaches English at a high school in Magong village 54.6 km away from her home.*

Her daily commute to work includes a 31 km stretch of gravel road. Maria's husband owns a 1.3l, 1994 Toyota Tazz which she drives on occasions, such as when Mr Mbonambi is not at work or if he is working nightshift. Because of the car's age it is often not very reliable and, rather than risk breaking down on a gravel road, Maria prefers to use the public transport available to residents of the area. Besides, daily fuel and maintenance costs on a car this age usually exceed the costs of daily public transport.

Although there are taxis in Mogwase where she resides they do not travel as far as Magong which is regarded as a deep rural area. She will therefore travel 19 km by taxi to the shopping centre in the village where she can board the Bojanala bus to complete the remaining 35.6-km journey to Magong. Taxi fare is R9 per trip. The single bus which services this route and costs R25.50 per trip, departs at 06h30 every morning and should reach Maria's school in Magong around 07h45.

Maria has finally reached her classroom almost two hours after setting out at 05h45 that morning to board her first taxi. The bus will continue along its route dropping off the remaining commuters at homes, schools or the rare business along the way and will park at the last stop when it reaches the end of the route. Maria considers herself more fortunate than three of her colleagues who have travelled more than 90 km from the Rustenburg CBD.

At 13h45 the bus resumes its journey, taking its weary passengers home. A visibly exhausted Maria boards the bus once more at 14h20. Before being lulled to sleep by the motion of the bus, she mulls over the day's events: eight periods on the trot with a 40-minute break midway; Grade 9 and 10 Social Science to start the day, "I wish the principal could reallocate these classes to someone trained to teach it"; English Oral to Grade 11; Poetry to Grade 12; Advertising to Grade 10; belligerence, frustration; shouting; bell…

Maria awakens to the pressure of her colleague's hand on her shoulder, surprised at how soon the journey has ended. The taxi fills up quickly and at 16h30 she walks the last few metres to her gate with thoughts of the evening meal on her mind. She may manage to complete some of her daily preparation this evening. Thank goodness for the one free period tomorrow – some space to compare SDL activities with Thandi before Thursday's workshop.

**not her real name*

Several factors had to be considered when planning the location and timing of the training workshops as less than 50% of the participants resided within a 30km radius of the schools at which they taught and the others lived further away.

Table 3: Mathematics teachers' workloads and workshop attendance				
Teacher	**2012 Workload**	**Summary**	**Attendance**	
			Expected	**Actual**
Teacher A	Phy. Sc Gr 12 and Maths Gr 9, 10, 11, 12; Maths Lit Gr 11, 12	7 subjects	12 days	10 days
Teacher B	Phy. Sc Gr 12 and Maths Gr 9, 10, 11, 12	5 subjects	12 days	11 days
Teacher C	Phy. Sc Gr 10, 11, 12 and Maths Gr 10, 11	5 subjects	12 days	9 days
Teacher D	Maths Gr 8, 9, 10, 11, 12 and Maths Lit Gr 11	6 subjects	12 days	6 days
Teacher E	Maths Gr 12 and Maths Lit Gr 11, 12	3 subjects	12 days	9 days

Table 4: Workshop attendance 2012			
Subject	**No. of teachers**	**Workshop days**	**Average attendance**
English	7	12	86%
Physical Science	6	12	82%
Mathematical Literacy	6	12	78%
Mathematics	5	12	71%
TOTAL			**79%**

workloads are intensified. Table 4 shows the average attendance of teachers per subject for the 2012 academic year.

Although attendance levels improved over the course of the intervention, the pressure of workloads and the day-to-day difficulties that teachers face, particularly in such rural areas, represent a significant challenge to teacher development.

3.1.3 Incentives for teacher participation

The contextual and personal issues highlighted above could not be ignored as they had the potential to hinder the effectiveness of the intervention. It therefore became important to keep teachers motivated to continue their participation in the development programme. Various incentives, direct or indirect, were included to sustain teachers' interest and commitment.

For example, the accommodation provided for workshops was comfortable, without being extravagant. As teachers were away from home and family for two nights, this helped to make that sacrifice more palatable; it even provided some welcome time out from the demands of everyday life – as some teachers themselves commented.

In addition, teachers travelled great distances at great cost in order to participate in the workshops and it was important that this should not impose an additional financial burden on them. They therefore received financial compensation for their travelling costs. Compensation was paid for: fares for public transport; rand per kilometre travelled by an individual in a private car; or rand per kilometre travelled by pool car. This was, however, slightly problematic as compensation was paid out only after each workshop – once attendance had been verified against registers and workshop reports.

A further incentive was created in the form of a teacher awards ceremony which took place early in 2011 to acknowledge the teachers' participation in the 2010 programme and their performance in the baseline assessment tests. Two laptops and a data projector were awarded for outstanding achievement and a number of cash awards were presented for commendable achievement. The benefits of the audio-visual equipment were evident during lesson observations done by the

mentors in the classrooms of the winning teachers. The 2010/11 awards proved an effective incentive, motivating some teachers to work much harder through the subsequent programme. But they were disappointed when they learnt that the awards were a once-off event as this meant that their achievements through the rest of the programme would not be acknowledged in the same way.

This highlights the need for consistency and continuity when it comes to incentivising project participation.

3.2 Can self-directed learning work?

Self-directed learning (SDL) became an important aspect of the teacher development intervention. When the project review at the end of 2011 revealed that an increased level of intervention was required to make progress, it was not possible simply to increase the number of workshops as removing teachers from the class would be counterproductive to the aims of the project. This led to the decision to include SDL tasks as an extension to the content delivered in the workshops.

The SDL tasks were designed by the subject facilitators as a series of content and methodology tutorials and amounted to between 30 and 35 hours of pre- and post-workshop exercises and activities to supplement the learning and knowledge acquired in the content workshops.

The tasks focused on interpretation and understanding of subject content as well as practice and implementation of the teaching methodology. SDL tasks were issued at every content training workshop and were to be completed by the teachers and ready for discussion and review by the next content workshop. The purpose was to give the teachers constant practice with the learning content as well as to provide preparation for the next workshops. The SDL tasks also provided a way to close the gap between workshops, which could be as much as two months apart. Furthermore, they were less costly to administer than workshops and held high potential for increasing the dosage in the FET teacher development intervention.

It was not expected that the teachers would embrace self-directed learning wholeheartedly. The completion rate of tasks was initially discouraging, as no more than 40% of teachers in all subjects attempted the tutorials. This can be directly attributed to a lack of time, due to workloads. Most teachers perceived the SDL tasks as extra work added to an already busy schedule.

In an endeavour to alter perceptions and improve the completion rate, the SDL tutorials were redesigned to incorporate the design of lesson plans and related assessment activities that could be used in the classroom. This worked well, especially for teachers who drew up formal lesson plans. Slowly, teachers began to embrace the process and soon more English and Physical Science teachers were attempting and completing a greater percentage of the tasks.

The benefits of the SDL tasks were also demonstrated in the course of a Physical Science workshop when a teacher raised a difficulty she had experienced with teaching an aspect of the curriculum. She was directed to the related SDL task and the advice suggested in the module. The group then completed the task and the value of these activities was recognised. Teachers realised that they could overcome the challenge of time because the SDL tasks provided concrete examples of teaching tasks. Nevertheless, the completion rate in Mathematics remained low.

Another method used to influence the completion rate was to involve the subject mentors to monitor teachers' progress with the SDL tasks during on-site mentoring visits. Mentors were encouraged to provide guidance and assistance where it was required.

An SDL monitoring tool was designed to document teachers' progress with the tasks. This typically included a description of each content knowledge activity or application and the time allocation for each activity, plus columns for the teacher to insert time spent per activity, for teachers' notes, and for the mentor's signature. While it did have the appearance of a policing mechanism, this monitoring tool created greater opportunity for the teacher to seek guidance from the mentor and for the mentor to offer guidance where obvious difficulties were observed.

Although the SDL component of the intervention cannot be claimed an overwhelming success, it may be said that with the correct planning and implementation, self-directed learning has great potential to succeed as a strategy for professional teacher development.

3.3 Professional learning clusters

The next link in this chain of professional development activities was the formation of professional learning clusters (PLCs). Teachers teaching the same subject were encouraged to meet as a community of professionals for a total of 10 hours per term. Meetings were to take place twice a month, to be no longer than two hours and to take place in any of the following contexts: at school with subject peers and the subject mentor; at cluster gatherings with the subject advisor; or at content workshops in the time allocated for professional learning.

The professional learning clusters would provide a platform for teachers to work together to: assist each other with SDL tutorials; design lesson plans; prepare materials; design interesting and creative worksheets for their learners; plan tests, exams and memoranda and discuss curriculum and professional issues. In this way teachers were given the opportunity to build capacity among themselves.

In order for the PLCs to work, teachers would have to own the process. They were expected to organise themselves into a professional cluster, create opportunities to meet and plan an agenda. The subject advisors would assist with the process and also convene one monthly subject meeting. Agenda and minutes of the meetings would provide evidence of the process.

It was recognised that the success of the PLCs would be influenced by the attitude of the participants and their desire to advance in their subjects. However, actual implementation of the PLCs proved more difficult than anticipated. The concerns about transport that had been raised at the teachers' seminar at the start of 2012 proved the greatest stumbling block. Meeting after school and travelling to neighbouring schools was not possible because of the teachers' reliance on public transport, as illustrated in the case study of Teacher Mbonambi*.

It is largely due to the concerted efforts of the JET team and subject facilitators who created opportunities for the PLCs to take place at the content training workshops, that this activity can report some success. Evidence shows that in the evening sessions before each workshop, teachers and subject advisors discussed topics related to curriculum management and delivery, assessment schedules and self-directed learning tasks. It was, however, not the perfect solution as many teachers reported feeling exhausted after a day of teaching. They felt that the late night discussions were often very intense and demanding on issues such as improved lesson planning and preparation, questioning skills and assessment.

In addition, the teachers met in clusters with their subject advisors for one hour per month, although there is no documentation to show that these meetings took place. Teachers were also encouraged to meet during breaks for subject discussions. This usually took place on occasions when the mentor was present and it involved a report-back on the lesson and advice for teaching certain aspects of the curriculum as well as interpretation of content.

The feasibility and sustainability of PLCs is questionable at this point. This activity requires more discussion and planning to ensure that it is accomplished in a way that could lead to its institutionalisation at school and cluster levels.

3.4 Teacher testing

Teachers wrote a Rapid Baseline Assessment Test in 2010 so that their subject competence could be determined and the results could be used to inform the design of the intervention. The results revealed that teachers required assistance with the acquisition of sound subject content knowledge and improved competence. In order to track the teachers' progress in their subjects, after exposure to the content training workshops and mentoring visits, a series of tests were designed. Through the course of the intervention, teachers wrote three such diagnostic tests which were assessed by the facilitators of the subject and evaluated externally for consistency, quality and appropriateness. Teachers will write a final assessment to evaluate the overall effect of the intervention on their performance and competence.

There has been a noticeable improvement in subject matter knowledge among all the teachers in the intervention, despite the difficulties they have had to contend with, both personal and systemic, that impacted on their participation in the professional development programme. Figure 1 illustrates the overall improvement rates in teachers' subject matter knowledge from July 2010 to July 2012.

The improvement rates show that there has been an average gain of 3% in EFAL, 25% in Physical Science and 32% in Maths Literacy over the past two years. However, all gains must be viewed cautiously until an external assessment is conducted at the close of the project.

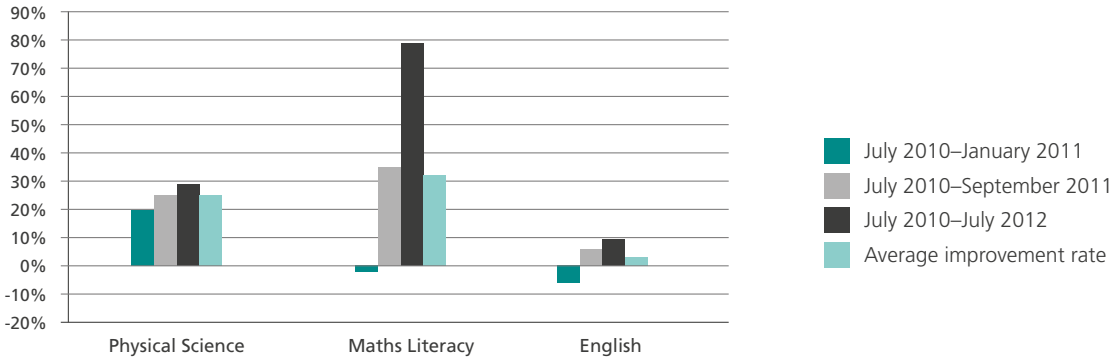
3.5 Mentoring

The content training workshops were supported by a sustained process of classroom mentoring in order to optimise the opportunities for improvements in teaching. Between 2011 and 2012, mentoring was increased from one two-hour visit per term, to an ongoing fortnightly cycle of six-hour mentoring sessions totalling 144 hours over the year. During each six-hour session on site, the mentor was to observe and evaluate the teacher's classroom practice and to provide coaching. Teachers were encouraged to use formal lesson plans in the preparation and execution of lessons.

In reality, as the 2012 academic year got under way, it became clear that the target dosage was overly ambitious. Firstly, the plan did not take into account risk factors such as strikes, teacher absenteeism and other departmental training which might take teachers out of school. Secondly, most teachers teach for a full day, leaving very little time to discuss the mentor's observations or for one-to-one coaching.

Further, the skilled expertise required for mentoring was difficult to locate in the community. Only one suitably qualified full-time mentor was available for

Figure 1: Teacher Improvement rates across subjects



Mathematics. Finding full-time mentors for the other three FET subjects proved to be more challenging. This led to the following improvised strategy for mentoring support: because of the Mathematics mentor's experience in Physical Science she was also able to assist in this subject; the Mathematical Literacy teachers were mentored by the subject facilitator; the English First Additional Language teachers were mentored by two JET staff members and from midway into the second term they were supported by a part-time mentor.

With all these factors in play, the planned dosage for the intervention was subsequently refined. Table 5 presents the second revision of the overall FET teacher development intervention which was agreed to by all stakeholders for 2012.

Generally, the mentors reported that the on-site visits allowed them some insight into the strengths and weaknesses of the teachers which affected learners' performance. Content knowledge gaps, inadequate lesson preparation, and weaknesses in assessment design were some of the mentors' observations and these fed into the content for the training workshops.

At the beginning of the year, the skill of lesson preparation and the use of quality lesson plans were found to be lacking. Lesson plans were not well structured and did not record what the teacher would do or what was expected of the learners. Poor lesson planning highlighted gaps in content knowledge which transferred to the lesson itself. This gap in planning skills was addressed in the workshops, where teachers were given several opportunities to design and teach a lesson. These lessons were peer reviewed and the value of this exercise was highlighted in the questions generated. This practice resulted in the teachers making more of an effort with lesson plans and improvements in quality were noticed. Teachers began to recognise the value of the lesson plan – as one teacher stated: "A proper lesson plan helped to keep me focused and gave me direction during the presentation."

4. CONCLUSION

Despite the careful strategic planning of the FET teacher development intervention, systemic and contextual factors have strongly influenced the outcomes of the project. Some of the lessons learnt through its implementation are highlighted below.

- As noted in relation to the Teacher Development component as a whole, the post provisioning model employed by the district has affected the stability of the cohort of teachers involved in the project. Redeployment often meant teachers were moved to schools outside of the project cluster.
- Among the knock-on effects of redeployment are heavier workloads for the teachers retained and poor regard for teachers' subject specialisations. It led to teachers teaching several subjects in which they had no formal training and they therefore lacked the required competence.
- There is still a degree of reluctance regarding teacher testing and the results need to be interpreted with caution. Results also cannot be generalised but should rather be analysed on an individual basis.

Table 5: Final dosage for FET Teacher Development implementation (hours)

	J	F	M	A	M	J	J	A	S	O	N	D
Content Training Workshops (80hrs)	20 hours			20 hours			20 hours			20 hours		
Mentoring (96hrs)	**0**	**12**	**12**	**12**	**12**	**6**	**6**	**12**	**12**	**12**	**0**	**0**
Self-Directed Learning (120hrs)	0	18	18	12	12	12	12	12	12	12	0	0
Professional Learning Clusters (24hrs)	0	4	2	4	2	0	0	4	2	4	2	0
TOTAL 320 (hours)												

- Obtaining support and ensuring advocacy from all the stakeholders provides no guarantee of committed participation by all members in all the planned interventions. To mitigate this problem, applicants should be screened before selection into the programme, to ascertain their interest and willingness to participate.
- Commitment could be reinforced by having programmes accredited as short courses and by including other periodic incentives. Financial incentives and rewards must, however, be administered cautiously as they can do more harm than good, especially if they are reduced to a bargaining tool for participation.
- Teachers will never be completely comfortable having their classroom practice observed and it is therefore important that mentors should continue to tread carefully and establish a supportive rapport with the mentee. Mentors should also be aware that preparation is usually more thorough for observed lessons; hence certain didactical challenges remain hidden.

Despite the careful strategic planning of the FET teacher development intervention, systemic and contextual factors have strongly influenced the outcomes of the project.

Notwithstanding the systemic and social challenges that teachers face, reports indicate that the final dosage implemented in the FET teacher development intervention has shown some successes.

- Mentors' reports show cases of progress in subject content knowledge and improved teaching methodology.
- In addition, the assessment results show evidence of improvements in subject matter knowledge.

One of the main aspects of a project's success is its sustainability. Yet this can only be achieved if certain aspects are in place. Among other things, it requires that:

- The beneficiaries are a stable cohort, allowing for an effective cadre of lead teachers to be established; and
- The district drives a sustainability strategy which is institutionalised through its Learner Attainment Improvement strategy.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SECTION THREE
FURTHER LESSONS

3

In this section, Chapter 6 raises the important but often neglected aspect of Cost Benefit Analysis in education development initiatives. It puts forward the case for CBA and considers the practicalities of implementing it in teacher development and other school improvement interventions. Further chapters look at lessons learnt through the implementation of other complementary components of the Systemic School Improvement Model, specifically: Parental Involvement, District-level Support and Stakeholder Mobilisation.

CHAPTER 6

COST (BENEFIT) ANALYSIS OF FET TEACHER DEVELOPMENT

DOUBLE-HUGH MARERA

1. INTRODUCTION

This chapter addresses an aspect of education interventions that is important but often neglected: cost benefit analysis (CBA). It takes as a case study the costs of teacher development in the Further Education and Training (FET) phase in the Bojanala Systemic School Improvement Project (BSSIP) and presents an analysis of the various cost components, determining an overall cost per teacher in respect of this investment.

While the chapter provides an argument for the increased use of CBA in education development, as in other resource-constrained environments, it must be noted that a full cost benefit analysis was not possible in the case study selected. This is primarily because of the lack of data, in comparable rand-value terms, on the benefits side of the equation. This lack of data – and the difficulties of quantifying either the shorter- or longer-term benefits of teacher development – only reinforce the need for an increased level of attention to both costs and benefits in education development.

The decision to focus on the FET teacher development component of the BSSIP was influenced by a number of factors. Firstly, although cost data are generally available for all the components of the BSSIP, the project was multi-funded. This would make cost benefit analysis more complicated. Secondly, however, the FET teacher development component is funded by just one organisation, which makes it more suitable for the practical analysis intended in this research. Thirdly, the costing of the FET teacher development component provides a starting point from which to consider the feasibility of carrying out cost benefit analyses for teacher development and other education interventions.

The chapter looks first at a definition of cost benefit analysis and its strengths and weaknesses. It argues for CBA as a necessary element in education interventions and reviews the methods most commonly used in CBA. Turning to the case study, the chapter considers the available data and presents a cost analysis, setting out the approach adopted, which could be used similarly in assessing the costs of other education interventions, as a first step towards comprehensive CBA. The conclusion points to a definite need for further research in this area.

2. WHAT IS COST BENEFIT ANALYSIS?

Cost benefit analysis is a method used to evaluate a programme's or an intervention's economic desirability. It compares the present values of a project's costs with the estimates of its perceived benefits. The project is considered economically sound if the net benefits exceed the net costs. The approach can be used to evaluate one or multiple interventions. If the approach is used to compare multiple interventions, the intervention with the highest net benefits per costs is considered the most desirable (Levin and McEwan, 2001; Unsal, 2004, in Kocabas and Kopurlu, 2010).

The strength of CBA is that it can be used to judge the 'absolute worth' of an intervention and thus to compare cost benefit results for a number of competing

interventions. The major weakness of CBA, with regard to education interventions, is that it is often difficult to place monetary values on all relevant educational benefits. It is also often difficult to attribute outcomes (benefits) directly to specific interventions (Jimenez and Patrinos, 2008).

Generally, cost benefit analysis is used *ex-ante*, that is, to determine the economic feasibility of an intervention in advance of implementation. It can also be used *ex-post*, to evaluate the economic impact of an intervention and its benefits after implementation.

3. WHY (NOT) COST BENEFIT ANALYSIS?

There is a dearth of information on how much it costs to run in-school teacher development interventions in South Africa. More concerning is that it appears that even the education departments in South Africa are not aware of the costs. JET itself has been involved in a number of school improvement projects over the past decade, but even in these projects costs and benefits have not been calculated or estimated systemically.

The case study presented in this chapter attempts to provide some initial insights into this area by analysing the cost data from one small-scale school improvement project. It is hoped that this analysis will stimulate further research in CBA, its significance in education development interventions and the practicalities of its application in this field. It is also hoped that the research will assist national and provincial governments to consider interventions more critically and select those that make the best use of the limited funds.

4. REVIEW OF CBA METHODS

Three methods are commonly used in cost benefit analysis. These are: net present value (NPV), internal rate of return (IRR) and benefit-cost ratio (BCR). They all compare costs and benefits of an intervention in a time dependent manner. By and large, the decision depends on whether or not the benefits exceed the costs (Levin and McEwan, 2001).

4.1 Net present value

The net present value is the most widely used approach to CBA. It is estimated as the difference between the present values of benefits and costs. NPV can be calculated in two ways, either by taking the difference of the discounted benefits and costs, or by discounting the net benefits. The intervention is considered worth pursuing if the NPV is positive for a chosen discount (or interest) rate. It is, thus, influenced by the chosen discount rate. The mathematical formula for estimating the NPV is given by:

$$NPV = \sum_{t=0}^{n} \frac{B_t - C_t}{(1+i)^n}$$

where B_t is the benefits at time t; C_t is the costs at time t; i is the discount or interest rate and n is the length of the time applicable to the benefits and cost streams.

4.2 Internal rate of return

The internal rate of return is the discount (or interest) rate at which NPV equals zero. With this approach, the intervention is worthwhile if the IRR exceeds the discount rate. The IRR is calculated by solving for IRR using the following formula:

$$NPV = 0 = \sum_{t=0}^{n} \frac{B_t - C_t}{(1+IRR)^n}$$

where all the other variables are as above.

4.3 Benefit-cost ratio

The benefit-cost ratio is derived by dividing the present value of benefits with the present value of the costs. The formula for this is shown below:

$$\frac{B}{C} = \frac{\sum_{t=0}^{n} \frac{B_t}{(1+i)^n}}{\sum_{t=0}^{n} \frac{C_t}{(1+i)^n}}$$

where *B* represents the benefits and *C* represents the costs and all the other variables are as above.

All three methods work on the assumption that all the costs and benefits of an intervention can be accurately quantified in monetary terms and are specified accordingly. In addition, the NPV and BCR explicitly assume an interest rate. This creates another layer of uncertainty. In practice, the decision on the desirability of an intervention may be based on the calculation of all three measures.

A true cost benefit analysis requires comparable value data for the anticipated or assessed costs and benefits of a given project or intervention.

5. A COST ANALYSIS OF FET TEACHER DEVELOPMENT IN THE BSSIP

As indicated in the methods outlined above, a true CBA requires comparable value data for the anticipated or assessed costs and benefits of a given project or intervention. In the case of the BSSIP FET Teacher Development intervention, only cost data is available. Consequently, this study presents a cost analysis rather than a comprehensive cost benefit analysis. The study highlights, among other things, the need for thorough and consistent data collection in education interventions, and the need to find a way of measuring the benefits of such interventions in monetary terms, if this is indeed practical or appropriate.

5.1 Sourcing the data

The cost data for the study were extracted from the journal entries of the FET teacher development account. The journal accounts form part of a JET internal database which is used to record all the payments made by the organisation. The data were prepared by the BSSIP team so that all inconsistencies and incorrect classifications could be rectified.

Although the BSSIP has been running since 2009, this case study uses data from the year 2012 only. This is because the project has evolved over the years and most expenditure occurred in 2012 when the scope and intensity of the intervention was increased. (Chapter 5 sets out the design and implementation of the BSSIP FET Teacher Development intervention.) The cost data include all payments related to the FET teacher development component in 2012.

The benefits of the teacher development intervention are largely prospective – anticipated as future rather than immediate gains. They are many and varied and include: improvements in teacher content knowledge, teaching habits, teacher productivity, teacher retention, and learner performance in tests and National Senior Certificate exams, as well as more generalised notions such as improved attitudes towards learning, school happiness, community happiness, a lower dependency on social grants and similar.

Perhaps, the most important of these benefits is effective teaching. That is, teaching that results in real gains in terms of learner performance in school and national assessments. In the BSSIP, no project-specific learner data were collected with a view to measuring this benefit in terms of a cost benefit analysis. Attempts to use data already available in the public domain are not without challenges. For example, the National Senior Certificate learners' records data are anonymous and it is not possible to link the learners' performance to their teachers in the intervention. Hence it is not possible to distinguish the performance of learners whose teachers did participate in the teacher development intervention from that of learners whose teachers did not.

However, during the course of the intervention, a series of diagnostic assessments was conducted with the teachers in the target subjects (Mathematics, English Language, and Physical Science). Although the tests were not standardised and a comparison of the results over time therefore does not provide a full picture of the levels of teachers' content knowledge, teachers' scores in consecutive annual assessments do show improvements in their content knowledge (see Chapter 5). This points to the possibility for improvements in learner performance as well.

The social benefits of the FET teacher development intervention are very difficult to estimate and even more difficult to estimate in monetary terms. Very little information was collected to measure these benefits. Ideally, in a pure cost benefit analysis, experimental (or quasi experimental) designs or correlational methods are used to obtain robust monetary estimates of the benefits. However, this is not possible with the information at hand in this case study.

5.2 Analysing the costs

Cost analysis refers to the process of determining the cost of an intervention in terms of the resources used (Levin and McEwan, 2001). The resources may be direct or indirect. Direct resources are those for which costs are readily identifiable and available and they are often budgeted for (personnel costs, for example). Indirect resources are those for which information on the costs is not readily identifiable or available such as other opportunities foregone through involvement in the teacher development programme, or time lost to long travelling distances or difficult travelling conditions.

5.2.1 Limitations

Not all of the costs pertaining to this case study could be readily estimated. While the direct costs of the intervention were available from the JET internal database, the opportunity costs are difficult to gauge. Costs saved due to improved teacher retention at the project schools also cannot be accounted for. Furthermore, the cost data could not be broken down into smallest ingredients and this may have masked some interesting findings for this study. For instance, the data do not allow for estimation of the costs of content training workshops versus in-school support and mentoring.

5.2.2 Cost summary

Table 1 summarises the direct costs associated with the BSSIP FET teacher development intervention. These include professional fees, travel/accommodation, training materials' development and printing/photocopying costs.

Table 1: Direct costs of FET teacher development
Cost Disaggregation
Professional Fees/Services JET Employees | Consultants/Mentors
Travel/Accommodation/Venues Travel-Cars/Reimbursements | Accommodation | Venue hire Catering | Subsistence
Materials Printing/Photocopying | Stationery
Miscellaneous Incidentals

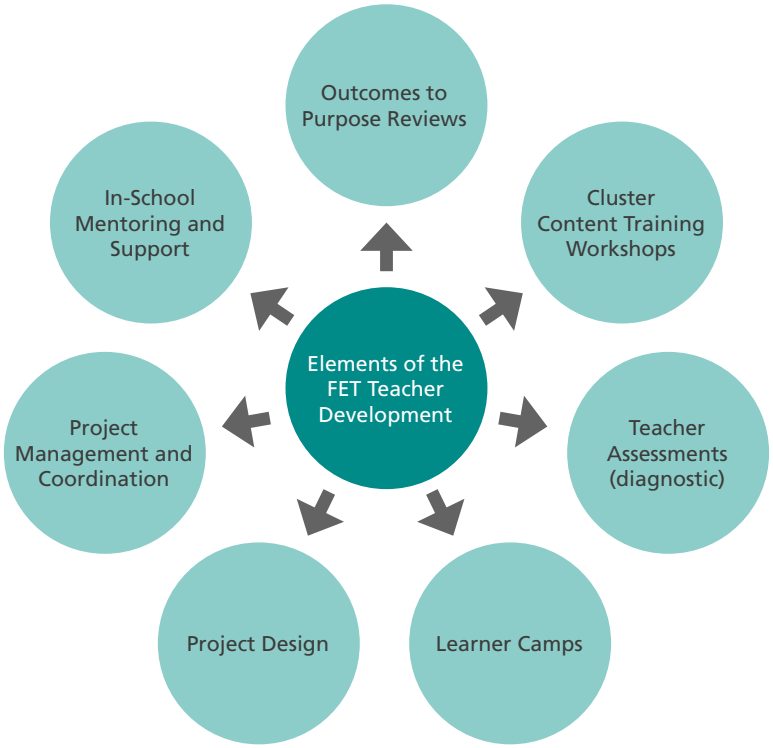
The costs listed above can be combined to provide an estimate of the total annual cost of the FET teacher development intervention. The per-teacher cost of the intervention can then be calculated.

5.2.3 Ingredients method

The ingredients method is the most commonly used approach to cost analysis. It involves identifying all the ingredients needed to implement an intervention and then assigning a monetary value to them (Levin and McEwan, 2001; White et al, 2005).

The BSSIP FET teacher development intervention comprises the following elements: project design, cluster-level content training workshops, in-school mentoring and support, learner camps, diagnostic assessments, project management and coordination and Outcomes to Purpose Reviews (OPR) (see Figure 1).

Figure 1: FET teacher development cost elements



The elements of the intervention are interlinked in their implementation and can therefore be combined into two major elements: District Liaison and Coordination, and Teacher Development.

5.3 Cost Elements

Looking at the overall costs of the two key elements of the intervention, this section presents the amount (in Rand) spent for each element and the relative proportion of the annual budget. Table 2 shows the FET teacher development costs for 2012 by aggregated elements. A total of R2 700 293.43 was spent on this component of the BSSIP project in 2012. Nearly three quarters of this amount was spent on workshops and in-school mentoring and support. The balance of 27% was spent on district liaison. Taking a total of 23 teachers targeted by the programme, the total expenditure equates to a per-teacher cost of R117 404.06 for the year.

Table 2: FET teacher development costs, 2012

Cost elements	Amount spent	Per cent
District liaison	R727 867.84	27%
Teacher development	R1 972 425.59	73%
Total	**R2 700 293.43**	

5.4 Costs of ingredients

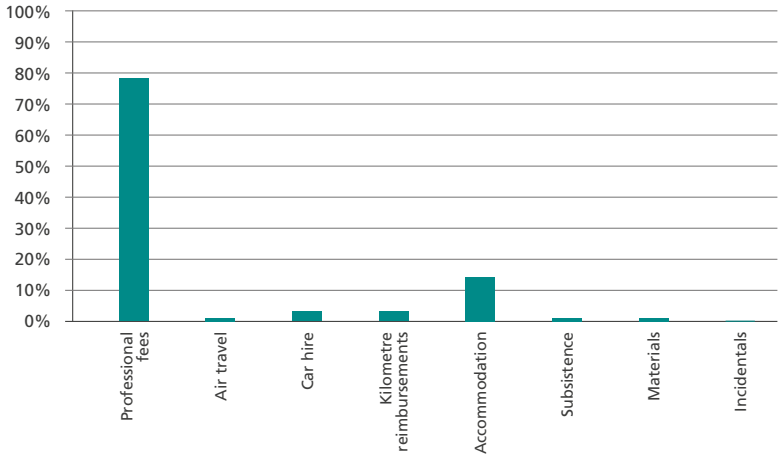
Table 3 shows the disaggregation of the ingredients and related costs for the teacher development intervention for the year 2012. Personnel professional costs accounted for 77% of the total costs incurred by the project during this year. The next highest proportion of costs was spent on accommodation (14%). Travel costs accounted for 7% of all the costs during the year. The remainder was spent on subsistence, materials and incidentals.

Table 3: FET teacher development costs by ingredient, 2012

Category	Amount spent	Per cent
Professional fees*	R2 076 993.65	77%
Air travel	R33 229.01	1%
Car hire	R83 329.99	3%
Kilometre reimbursements	R84 906.09	3%
Accommodation	R381 920.97	14%
Subsistence	R17 382.86	1%
Materials	R16 018.65	1%
Incidentals	R6 512.21	0%
Total	**R2 700 293.43**	

* Approximately 30% of the costs of professional fees went to consultants/mentors. Where JET staff helped with mentoring and workshops, their costs were only considered under JET professional fees.

Figure 2: FET teacher development, proportional costs per ingredient, 2012



5.5 Disaggregation of elements by ingredients

This section presents a breakdown of the elements of the FET teacher development intervention by their ingredients.

5.5.1 District liaison and coordination ingredients

Table 4 shows the costs related to district liaison and coordination, totalling R727 867.84 in 2012. Personnel costs account for about 90% of the total costs of this element. Travel, accommodation and materials costs account for about 9% of the total costs. The rest was spent on reimbursements, subsistence and incidentals. The overall costs for district liaison and coordination in 2012 equate to R31 646.43 per teacher.

5.5.2 Teacher development ingredients

The actual teacher development element of the intervention is made up primarily

Table 4: Costs of district liaison and coordination by ingredients, 2012		
Category	**Amount spent**	**Per cent**
Professional fees	R651 871.70	90%
Air travel	R15 685.88	2%
Car hire	R95.00	0%
Kilometre reimbursements	R1 159.00	0%
Accommodation	R38 709.40	5%
Subsistence	R1 448.20	0%
Materials	R16 018.65	2%
Incidentals	R2 880.01	0%
Total	**R727 867.84**	

of content training workshops and in-school mentoring and support of teachers. In addition, self-directed learning and professional learning clusters were incorporated within the content training workshops. A total of R1 972 425.59 was spent on the teacher development ingredients in 2012. The professional fees (including JET staff fees, consultants'/mentors' fees, and training materials) account for about 72% of the total costs. Accommodation is the next biggest cost, accounting for about 17% of the teacher development costs. Travel costs account for nearly 10% of the costs and include the cost of the learner camp which was part of this intervention. The other lesser costs went to incidentals and subsistence.

Table 5: Costs of teacher development by ingredients, 2012		
Category	**Amount spent**	**Per cent**
Professional fees	R1 425 121.95	72%
Air travel	R17 543.13	1%
Car hire	R83 234.99	4%
Kilometre reimbursements	R83 747.09	4%
Accommodation	R343 211.57	17%
Subsistence	R15 934.66	1%
Incidentals	R3 632.20	0%
Total	**R1 972 425.59**	

6. CONCLUSIONS AND IMPLICATIONS

As has been explained above, a true cost benefit analysis was not possible in this case study. The opportunity costs of teachers (and others) taking part in the intervention remain unknown and would be difficult to quantify. Far more important, though, is the absence of data to derive monetary estimates of the benefits. Such data could include learner test results and data on earnings for people with, for example, a National Senior Certificate. The data would be collated under the assumption that the intervention leads leaners to obtain at least a Matric pass. Using methods such as regression discontinuity and randomised control designs, it would then be possible to derive an estimate of the benefits. Once this is established, the CBA methods presented in section 4 above could be used to evaluate the economic implications of the intervention.

The results of the cost analysis reflected in this chapter were overall, as expected. They reveal that most of the expenditure in the teacher development intervention went to personnel costs, followed by accommodation then travel costs. The cost analysis also reveals that most of the money (73%) is used directly on the teacher development element, with the balance going to district support, liaison and coordination.

The case study indicates that the BSSIP FET teacher development intervention costs about R117 404.06 per teacher, per year. Without a monetary estimate of the benefits, it is not clear if this represents value for money in CBA terms. However, the direct costs of the intervention can be evaluated to an extent in terms of the number of teachers, and in turn the number of learners, reached as well as in terms of the scope of the intervention.

One of the key recommendations arising from this case study is that the government and all organisations that are working in education should consider making cost benefit measures native to any major school improvement projects.

Dosage tables for the FET teacher development programme (see Chapter 5) show that a total of 320 hours of content training workshops and in-school mentoring and support were delivered, per teacher, in 2012 (assuming that all the targeted teachers participated in the full programme). In relation to the cost of R117 404 per teacher, this can be considered as a cost of R337 per hour. For professional time and professional training, this appears to be a cost-effective rate. However, much more comparative data would be required to establish a realistic benchmark for teacher development costs.

It is also worth considering the economies of scale that could come into effect if the number of teachers reached through a given intervention is increased. This small-scale intervention targeted 23 FET teachers from the schools in just one circuit in the Bojanala District in the 2012 programme. If similar interventions could be extended to involve more teachers from additional school clusters, circuits, or from the district as a whole, some of the costs, such as consultants' fees and travel costs, would remain constant, up to a point. This would reduce the overall cost per teacher. However, the point at which the practicalities of convening one workshop for an ever higher number of teachers begin to outweigh the benefits – and the costs escalate to the next level – is yet to be determined. This remains an area for further investigation.

One of the key recommendations arising from this case study is that the government and all organisations that are working in education should consider making cost benefit measures native to any major school improvement projects. There is also a need for consistent and correct data collection to support cost benefit analysis and enable it to become a useful measure in education development.

In addition, it is clear that further research is required on cost benefit analysis in education and there is a need for funding for such research. This is supported by the fact that to date very few research projects have considered cost benefit analysis in education in South Africa.

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It is significant that JET's introduction of this component into the Systemic School Improvement Model marks a first in looking at the realities of parental involvement in (rural) schools and in opening up ways in which this can be developed to improve learners' performance.

CHAPTER 7

PARENTAL INVOLVEMENT IN IMPROVING SCHOOLING

KEDIBONE BOKA

1. INTRODUCTION

This chapter looks at parental involvement as one of the seven components in the Systemic School Improvement Model. It has been implemented in selected schools in different projects including the Bojanala Systemic School Improvement Project (BSSIP) in North West and the Centres of Excellence Project (COEP) in the Eastern Cape.

Parental involvement is about the role that a parent or guardian plays in assisting or supporting the learning path of her/his child at school. It is often difficult to isolate parents from the community in which they live; hence the word 'community' is used here to define the social context of the parents.

This chapter covers the conceptualisation of the parental involvement model and the logical framework that has been followed in the implementation of the component's activities. It looks at implementation specifically in the BSSIP over a two-year period – through 2010 and 2011 – and reflects on what worked and what did not in this project as well as the COEP. While the lessons learnt are considered to be of value to other school improvement projects that may incorporate parental involvement, a broader study would offer a greater understanding of the role and impact of parental involvement in South African schools.

It is significant that JET's introduction of this component into the Systemic School Improvement Model marks a first in looking at the realities of parental involvement in (rural) schools and in opening up ways in which this can be developed to improve learners' performance.

Parents' involvement in their children's schooling is important because it ensures continuity between home and school. It also is a way of ensuring that parents can interpret the world of their children and keep abreast of developments in their education. Children whose parents take a keen and active interest in their education tend to perform better than those whose parents are not supportive.

Research shows that when parents are involved in the education of their children the children's performance improves significantly. Similarly, trends in successful schools point to a close working relationship between the learners' families and the school. Furthermore, studies have shown that parental involvement in schooling leads to improved learner achievement irrespective of the level of education of the parents, their socio-economic status or ethnic/racial background. Learners whose parents take a keen interest in their schoolwork achieve higher grades, complete homework consistently and have better school attendance records. They exhibit positive attitudes towards learning and less antisocial behaviour towards their peers. Such results have been reported across the grades from primary to high school. (Tableman, 2004; Hornby and Lafaele, 2011; Epstein, 2001, 2004.)

2. A REVIEW OF THE LITERATURE

Despite widespread acknowledgement of the potential benefits of parental involvement there are clear gaps between the rhetoric found in the literature and policies and typical parental involvement practices found in schools. In most South African schools there is a statutory body – the School Governing Body – which includes elected parents' representatives, in line with the South African Schools Act, 84 of 1996 (SASA). In the policy framework for School Governing Bodies (SGBs) it is assumed that they would, as part of their obligatory functions, effectively ensure the involvement of all parents in the education of their children. Practice has shown that often the SGB does not meet this expectation. A common criticism of SGBs is that once the body is elected it gets absorbed with school governance matters and excludes its constituency – the parents – from being part of the drive to promote quality teaching and learning.

Despite widespread acknowledgement of the potential benefits of parental involvement there are clear gaps between the rhetoric found in the literature and policies and typical parental involvement practices found in schools.

There is a scarcity of research on parental involvement practices in South African schools. Nonetheless, the literature review undertaken to inform the design of the parental involvement component under discussion looked at parental involvement models and strategies which have been implemented successfully elsewhere, mainly in South America, North America, and in Asian countries. These parental involvement and support practices were compared and considered, taking into account the fact that the targeted project schools in South Africa are in rural settings in a developing country which has its own unique social context.

Research suggests that parents continue to wield considerable influence on their children's development as the children progress through school (Nokali, Bachman & Votruba-Drzal, 2010).

Studies show that parental involvement:

- increases grade point average (+.73 correlation between parental involvement and grade point average) (Hill & Tyson, 2009)
- improves writing skills (Epstein, Simon & Salinas, 1997)
- improves mathematics skills (+.67 correlation between parental involvement and mathematics) (Izzo, Weissberg, Kasprow & Fendrich, 1999)
- improves reading skills (Senechal & LeFevre, 2002)
- decreases dropout rates (Rumberger, 1995)
- and decreases retentions and special education placements (Miedel & Reynolds, 1999).

In JET's Systemic School Improvement Model, which combines different components targeting specific outcomes to improve teaching and learning, Epstein's model of parental involvement seemed the most appropriate for adaptation to the local projects. It takes an inclusive approach, encompassing in-school and at-home factors, and this influenced the design and implementation of the parental improvement component used in JET's systemic school improvement projects.

Epstein (1995) differentiates six types of parental involvement: parental volunteering; parenting; communication; learning at home; decision making; and collaborating with community. She asserts that by supporting and motivating parents to improve their involvement along these dimensions, their children's learning outcomes have been shown to improve. It should be noted, however, that this framework is not based on the empirical evidence of what parents actually do to support their children but is, rather, based on reflection about the general sort of things parents could or might do.

3. JET'S SYSTEMIC SCHOOL IMPROVEMENT MODEL

Many school improvement projects have been implemented in South Africa over the years and most are about strengthening curriculum delivery to improve learners' success. However, there are very few – if any – that articulate the role that parents play in supporting teaching and learning. The exclusion of parents can render the

achievements of such projects unsustainable and difficult to replicate because the good practices brought into effect through the projects have not been shared with the parents and therefore cannot be supported by them or by the wider community.

As most school improvement projects have not looked at the role that parental involvement plays in promoting sustainable learning at home and in school, the reality of schools and parents/families working together as partners in the education of the child is an area that is insufficiently explored. It was in part to address this knowledge gap that JET moved to include the parental involvement component in its Systemic School Improvement Model.

4. CONCEPTUAL APPROACH TO PARENTAL INVOLVEMENT

In JET's experience of previous school improvement projects and in the project schools considered here, there has been little evidence of a deliberate parental involvement implementation strategy in schools. This is observed in the low number of parents attending scheduled parents' meetings, non-participation in school activities, lack of homework supervision, lack of parent-teacher communication, and other such indicators. It seems that schools and teachers are left to teach without getting any feedback from parents, which makes teaching and learning non-collaborative.

The envisaged outcomes of the parental involvement component are:

- An evidence-based improvement in the involvement of parents in their children's education, demonstrated by increases in the monitoring of home study, the number of completed homework exercises, school visits by parents and parents' interest in school reports.
- Improved learner behaviours at school and after-school in respect of learners' conduct and specifically how they manage their after-school time, homework, study, and reading for enjoyment.

4.1 Designing the parental involvement component

The design of the parental involvement component was guided by these envisaged outcomes, by policies on school governance and the national Quality Learning and Teaching Campaign (QLTC), and by pointers drawn from the literature review.

However, without any practical precedents to work from, JET sought first to profile the challenges – in respect of parental involvement – found in the project schools and the rural communities in which they are located. The overall programme for parental involvement was then developed to include the following steps.

- Community profiling and charter development
- Developing School Action Plans
- Implementing the School Action Plans
- Mentoring
- Monitoring and review.

Figure 1: The parental involvement model

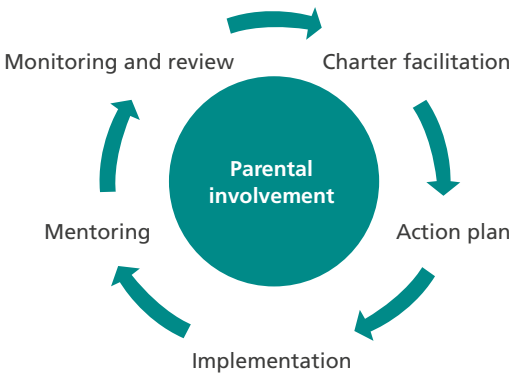

Table 1: Summary framework for parental involvement				
Objectives	**Inputs**	**Outputs**	**Measured by**	**Assumptions**
1) To increase the involvement of parents/ households in the education of their children 2) To improve learner behaviours at school and after school in respect of homework completion, study and reading	Develop school action plans focusing on key areas of: – homework supervision, – strategies to encourage parents to attend meetings, – formation of study groups.	– Increased monitoring of home study – Increased number of completed homework exercises – Increased school visits by parents – Improved level of reading for enjoyment among learners – Establishment of study groups for high school learners	– % of completion of homework – % parents signing homework diaries – Attendance register – X number of learners reading at appropriate grade level – Improved learner results in all subjects	– Parents want their children to succeed in school – Parents will endeavour to help their children with schoolwork – Teachers would like to see parents taking part in the education of their children

4.2 Logical Framework

A logical framework was developed for the component, setting out the key objectives, the activities to be implemented (inputs), and the anticipated outputs which are measurable over a period of time, as well as the assumptions on which the component builds and the potential risks implicit in these. The logical framework further takes account of the limited human, monetary and other material resources available for the implementation of the component. It is an important reference tool to keep project activities and outcomes on track.

4.3 Stakeholder consultation

When a project is implemented it is essential that all stakeholders are consulted so that their roles in the project are defined and their commitment and support confirmed. In the BSSIP, where the overall project had already been given the go-ahead by both Province and District authorities, JET also consulted with the District Governance and Management inter-sectoral team to ensure its support for the parental involvement activities.

4.4 Planned dosage

JET's systemic school improvement projects are usually implemented within a homogeneous circuit so that their impact can be measured effectively. A circuit typically comprises between 25 and 30 schools which are located within a defined geographic area that forms part of a local municipality and the wider education district. Each circuit comprises both high schools and primary schools and, in rural areas, where schools are clustered around villages, there may be three to five schools in one village.

The number of schools per village was used to develop the parental involvement intervention plan and to determine the frequency of the intervention activities, that is, the dosage. Schools were clustered according to proximity so that joint community meetings and training sessions could be held.

5. IMPLEMENTATION

5.1 Phase 1: Community profiling

In order to gather information around parental and community involvement in schooling, a pilot study was conducted in one village, Tlhatlaganyane, in the Moses Kotane West Area of the Retladirela Circuit in North West. The village has three primary schools and one high school. The study centred on parents, community stakeholders and resources that support learning. Focused discussion groups were

held with parents where they were invited to freely voice their impressions of the role they play to promote education.

Following the group discussions, parents were interviewed about matters relating to their involvement in their children's schooling. A questionnaire was designed to gather additional information about various community stakeholders and resources available within the community to support education.

This process of community profiling led to the following findings:

- Parents do not attend parents' meetings or visit the schools;
- Parents do not get involved in their children's homework (show little interest);
- A small percentage of parents do homework for their children instead of supervising the activities (show too much interest);
- Parents do not support schools in any way;
- Learner discipline, absenteeism, punctuality and homework are problems that affect learner performance in the schools and parents are not doing anything about it;
- Learners leave their homes to go to school being poorly nourished and without having had breakfast;
- There is no proper maintenance of school infrastructure and school surroundings.

Data gathered from the community profiling was compiled into a report and discussed with the community stakeholders. The participants, including parents, the principals and teachers from the schools, and other stakeholders, agreed to work together to support education while recognising and respecting each other's roles and responsibilities.

The benefit of this community profiling process was that it provided a baseline which helped to identify parents' perceptions of education, resources within the community which could be used to enhance education, strengths and weaknesses within the community, and the community's remedial plans.

5.2 Developing an Education Charter

The next step was to develop an Education Charter – a kind of social contract – for the village and its schools. This required that stakeholders should deliberate on the state of education in the schools in their community and agree on a common approach to address the challenges, introduce changes and sustain good practice under the guardianship of selected "champions". The charter process proved to be a breakthrough in Tlhatlaganyane where this agreement was crafted into a village charter with the slogan "It takes a village to raise a child". However, the process had its own shortcomings and was consequently excluded from the parental involvement model.

5.3 A change of scope

The plan was to profile each village and its cluster of schools, but this process, together with the development of an education charter for each village, takes time. With limited project funding, facilitators and time, it could not be extended to reach all the project communities simultaneously or within the given timeframe. Furthermore, the assumption that each community would require a unique approach made this aspect of the intervention difficult. A change of plan was needed but the lessons learnt were taken forward into the second phase of implementation.

The community profiling and charter development process had shown that:

- Parents and other community stakeholders are keen to assist their children to achieve at school but they are not aware of how they can be involved;
- Households in the villages are unaware that they may have resources within

their homes to assist their children with homework, study groups, and similar;
- Parents and teachers need to work together to support learners' success.

5.4 Phase 2: School Action Plans

The project moved forward to facilitate the development of School Action Plans in individual project schools or clusters of schools in the different villages.

This process began by exploring the strengths and weaknesses of the school in terms of parental and household support and monitoring of their children's performance. School management, parents/ guardians, and members of the school governing body were involved and community leaders such as church ministers, ward councillors and others were also invited. These discussions led to the development of a School Action Plan which pays attention to aspects such as after-school supervision of schoolwork; learner discipline; maintenance, repairs and improvements of school property; and support in extra-curricular activities such as sports, excursions and others.

The School Action Plans reflected the individuality of each school and brought to light innovative ways of supporting schools' and learners' success. They outlined how parents can be involved in schooling and drew up activities that parents could do individually at home and those they could do at school. The School Action Plans became a participatory tool because parents, school governing bodies, teachers, principals and learners were all involved. One principal remarked: "*I am no longer a one-man show who is overburdened – I have the support of parents.*"

It is important to note, though, that the success of implementing School Action Plans depended on a champion being identified to lead the process as teachers have their own teaching and learning responsibilities to take care of and parents are not always available to initiate actions. Consequently, each SGB was encouraged to create a sub-committee, referred to initially as the Quality Learning and Teaching Committee (QLTC), later changed to Parents' Support Committee. The committees comprised of volunteer parents and school facilitators who were recruited and employed by JET to work with the parents in implementing the School Action Plans. The school facilitators were drawn from the respective communities and each was responsible for a cluster of three to four schools.

The work that the parental involvement component had initiated in the schools in Moses Kotane West was reinforced when the national Department of Basic Education's Quality Learning and Teaching Campaign (QLTC) began to filter into districts and schools around the country.

Quality Learning and Teaching Campaign (QLTC)

The Quality Learning and Teaching Campaign (QLTC) is an intervention of the Department of Basic Education which was developed following a resolution of the African National Congress's (ANC) Polokwane Conference (2007) that education and health be placed at the centre of social transformation over the next five-year term – from 2010 to 2014. The campaign outlines the roles and responsibilities of each stakeholder in education in South Africa and calls on all stakeholders to make a pledge which articulates their commitment to their roles. As stakeholders, parents and communities are called on to play their part in promoting education.

In short, communities are called on to create an environment that is supportive of schooling and school-going children, to monitor the performance of schools, and to report problems to the relevant authorities.

Parents are called on to get involved in school governance structures, to talk to their children about school, to communicate with their children's teachers, to create a home environment that is conducive to study, and to protect education resources such as textbooks.

Source: DBE QLTC document

5.5 Implementing School Action Plans

The implementation of School Action Plans was driven by the Parents' Support Committee – that is – the parents who volunteered to involve themselves and the school facilitator. The action plans supported the attainment of the outcomes set out initially for the parental involvement component: to increase parents' involvement in their children's education and to improve learners' behaviour at school and after school, specifically how they manage their after-school time, homework, study and reading.

Some of the most common activities drawn into many School Action Plans were:

- Establishment of a school food garden to supplement the school nutrition programme and raise funds for the school through the sale of vegetables from the garden.
- Reading for children at school by parents.
- Creation of study groups, mainly for secondary schools, under the supervision of parents.
- Writing of school newsletters – with contributions of articles from teachers, school governing bodies and learners – to improve communication between school and home.
- Fund-raising for schools through cultural events such as dances and traditional storytelling.
- Developing homework diaries for parents to check that homework has been given and completed.

The action plans supported the attainment of the outcomes set out initially for the parental involvement component: to increase parents' involvement in their children's education and to improve learners' behaviour at school and after school.

5.6 Mentoring

The school facilitators, who were appointed to assist the parents' committees and to create an enabling environment for parents and schools to work together, were trained on strategies to involve parents in schooling. Training material specifically for working with parents on school activities and taking account of the local rural context of the schools was developed by JET. The material covered, among other things, parental volunteering, parenting styles and communication.

The facilitators, in turn, held training sessions with parents to share with them this knowledge of ways in which they could help their children to succeed in school and to mentor them on these strategies. This knowledge was translated into reality when parents and schools worked together to implement their action plans.

In addition, JET compiled a Parental Involvement Handbook to provide the parents with basic information on the current schooling system and a general guide on parental practice and opportunities for parents to involve themselves in their children's schooling. This handbook was distributed to all parents with children at the project schools.

6. ACHIEVEMENTS

The parental involvement component, as part of the Systemic School Improvement Model, succeeded in opening up a dialogue between parents and schools. Parents and communities realised that they are important role-players in education. This was reinforced by the fact that once the concept had been introduced to the parents, its applications were developed with them and within the project schools and communities and were not imposed as an external intervention. JET ensured that the facilitators were members of the local community and that the parents were involved in developing the school action plans and took on the role of implementing them.

Parents are not a constant variable in schools because their children progress to other schools or complete their schooling. Nonetheless, it is evident that over a period of two and a half years (2010 to 2012) the implementation of the parental involvement component in the BSSIP and COEP has effected a shift in attitude –

A partnership with FPD

JET partnered with the Foundation for Professional Development (FPD) – a Gauteng based private university – on an "edutainment campaign" to promote parental involvement in schooling. Initially, FPD was interested in producing a television series on this topic and asked to work with JET in the initial phases of establishing a baseline for parental involvement. JET approached the District Office to request permission for the parents in selected schools to be interviewed in a panel discussion about how they perceived their role in their children's education. This exercise gave JET and FPD a perspective on how parents' involvement could be structured in rural schools. However, the bigger aim of popularising parental involvement activities through television and radio – reaching a wider audience of parents – is still being pursued by FPD and is dependent on funding and sponsorship.

among parents and schools – which signals that parents now recognise the role they can play in supporting their children at school, and schools, similarly, recognise the contribution that parents can make.

A survey conducted on a sample of six schools in the BSSIP and COEP found that:

- Principals have come to value parents' contributions and they report an improvement in learner discipline and performance where parents are involved.
- Principals have seen the positive spin-offs of good communication between school and home through greater attendance and participation in meetings by parents.
- Parents on the other hand report that they feel valued, that they can make a positive contribution and are confident that they can support their children to learn. They further state that the school is a supportive environment that they can depend on.

6.1 What worked in implementing the parental involvement component

- The community profiling exercise helped in understanding the social context of the project schools and the aspirations that parents have for their children.
- Using local community members as school facilitators helped to bring awareness of parental involvement to both teachers and communities.
- School Action Plans highlighted the unique needs of each school as well as common solutions to challenges in parental roles.
- The formation of a Parents' Support Committee for a cluster of schools proved useful because parents shared experiences and developed common intervention approaches.
- Schools – principals and teaching staff – realised that involving parents in school matters can lighten their burden of learner discipline and opens a dialogue between homes and schools.
- School principals and teachers got an opportunity to learn about the educational aspirations of parents for their children.
- School performance became a focal point because parents worked with teachers to ensure the good behaviour of children in the school.
- Accountability for school functionality was widened to include parents.
- School governance was enhanced by the direct involvement of parents.

6.2 What did not work

- The model did not prescribe how this component should be implemented or what specific activities should be undertaken. Consequently, a long time was taken in testing which interventions would best yield the outputs as set out in the model. The general aim to increase parental involvement in schooling seemed vague and needed to be broken down into specific measureable outcomes. This was resolved when it was differentiated into

parental involvement activities at home and those at school. Activities denoting parental involvement were discussed at length and it was finally agreed that learner behaviour, protection of school resources and supervision at home were the areas/activities through which parental involvement outputs could be measured.

- The monitoring and evaluation done in other components of the Systemic School Improvement Model was not put in place in parental involvement from the beginning and was introduced only when implementation was already unfolding. Although this was a consequence of the component being developed "on the ground", as the community profiling and engagement processes progressed, monitoring and evaluation would constitute an important element in the implementation of future parental involvement projects.

7. CONCLUSION

The Systemic School Improvement Model that JET has implemented in these various projects considers education as a societal matter, where all stakeholders have to play their part in bringing about change. The inclusion of parental involvement in the projects has demonstrated that social contextual considerations are critical to sustaining the gains made in improving schooling.

The inclusion of parental involvement in the projects has demonstrated that social contextual considerations are critical to sustaining the gains made in improving schooling.

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Despite the importance of the district level in the day-to-day delivery of the education services outlined in the national and provincial policies and programmes, there is no common understanding of the role of the districts, their scope in terms of authority, resourcing, geographic coverage and the number of schools and circuits that should fall under their jurisdiction.

CHAPTER 8

LESSONS ON DISTRICT-LEVEL SUPPORT AND INTEGRATION

GODWIN KHOSA
WITH DINA MASHAMAITE AND KOLEKA NTANTISO

1. BACKGROUND

The education reform initiatives stemming from the national government stand a limited chance of succeeding without effective system capacity within the provinces to implement the reforms. One level of the system that is central to the delivery of the reforms is the district – the local level of the education system.

In their review of seven national education systems, Caldwell and Harris (2006) demonstrate the importance of careful design of the local levels of the system. They conclude that there is a "new enterprise logic of public education, one that places the student at the centre of the education system and ensures high-level performance of all students in all settings". Caldwell and Harris (2006) advise that education structures, particularly at local level, must be configured in accordance with this new logic. Key to this advice is that resources at this level are aligned with the unique mix of learning needs that exist, but also with constant changes at school level. Perhaps the most important message from their review is that "the nation or system that believes it has got the balance right for all time… is doomed to disappointments". This observation suggests that countries should continually assess the appropriateness of the local level of the education system and adapt it to changing circumstances.

In South Africa, the ruling party, the African National Congress, highlighted a concern about lack of clarity on the role of the local level of the education system, the district, at its 52nd policy conference in December 2007. This was the first time that the role of the district was raised officially since the National Conference on Districts that was held in 1997 (Prew, 2011). Even at the ANC conference, the call was about defining the role of the district and not about taking action to bolster the effectiveness of this level.

The ANC policy conference recommended that "Norms and standards be developed to determine the roles, functions and responsibilities of district offices". In line with this recommendation, the Department of Basic Education (DBE) developed Guidelines for the Organisation, Roles and Responsibilities of the Education Districts (2011). The guidelines document acknowledges that districts are key to the day-to-day delivery of the education services (both administrative and professional) outlined in the national and provincial policies and programmes. It further recognises that despite the importance of this level, there is no common understanding of the role of the districts, their scope in terms of authority, resourcing, geographic coverage and the number of schools and circuits that should fall under their jurisdiction.

The National Development Plan also recognises the role of the districts, noting that "teaching in schools can be improved through targeted support by district offices. District offices should also ensure communication and information sharing between the education authorities and schools and also between schools" (NDP, 2011:303).

This is perhaps an understatement of the central role that the district level plays in maintaining public education operations and the role it should play in improving learning outcomes.

It is clear from its proposals over the past 15 years that the government recognises the importance of education districts but it has had only a narrow focus on their role, which has not been sufficient to ensure that the districts become a key player in improving the education system.

In the implementation of the Systemic School Improvement Model, the district level was expected to host the project and collaborate with the project staff to plan, roll out and monitor the rollout of the model. The district coordination component of the model was expected to ensure proper coordination of district and project activities, strengthen cohesion between the project components, and mobilise additional project resources from funders.

JET's experience in the respective rural districts in the North West and Eastern Cape, where the BSSIP and COEP have been implemented, suggests that the districts are facing an uphill battle and that there is, perhaps, a weak engagement with district discourse, nationally. This chapter sheds some light on the profiles, experiences and workings of the districts in relation to the assumptions and success conditions of the Systemic School Improvement Model. It further presents the approaches and practices that worked in these endeavours to implement the projects with the districts.

2. THE ROLE OF DISTRICTS IN THE EDUCATION SYSTEM

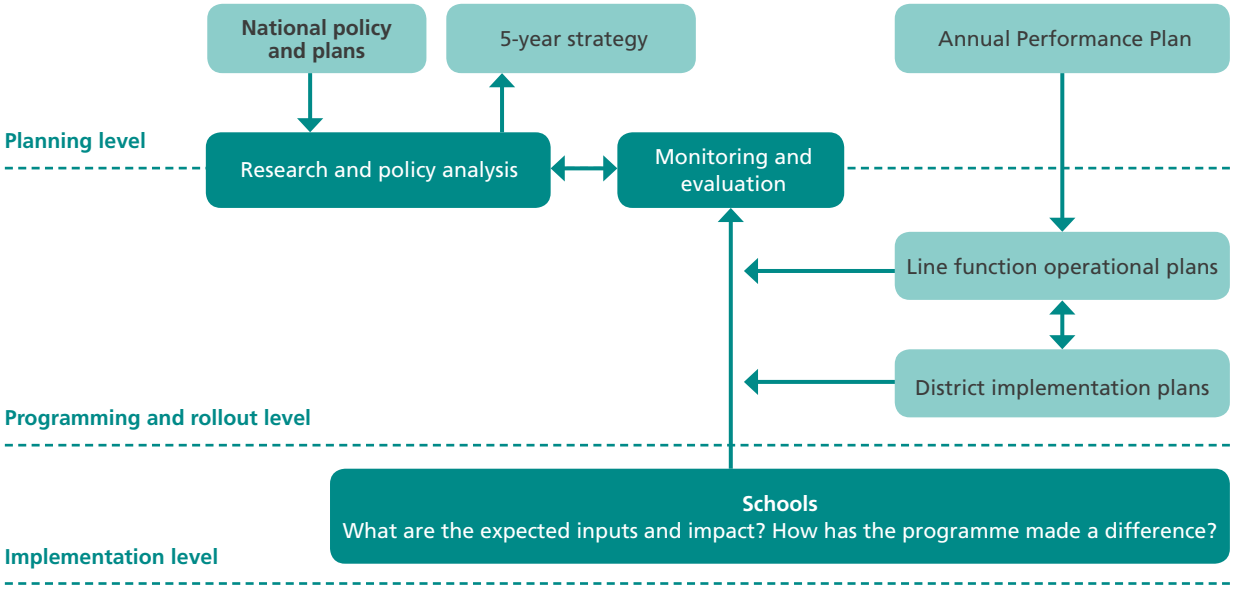
The district level is a complex tier of the education system in South Africa. Districts are mini-departments of education on their own. Although the product mix, quality standards and resourcing aspects are determined at levels above the districts, this tier of the system is expected to process the policies and programmes adopted at national and provincial levels into district-specific programmes and rollout plans, and to implement all aspects of education operations, such as curriculum, finances and resourcing. Figure 1, which outlines the planning, programming and implementation value chain, highlights the district as the key level responsible for the programming and rollout of national and provincial policies and programmes (DBE, 2011). The programming and rollout activities carried out by the district, at the interface between the provincial department and the schools, are bidirectional in nature. In respect of the provision of teaching posts at schools, for instance, the district office collects schools' information and requirements, considers the pool of teaching posts which is decided at provincial level, and gives guidance to the schools on how to plan and place teachers.

In this context where the districts receive the 'product mix' (policies and programmes) and resources, what they need for success is the appropriate organisational capacity to process the programmes for local implementation and to implement them accordingly. Ker (2003) defines "organisational capacity" as the ability or potential to perform by "successfully applying skills and resources to accomplish organisational goals and satisfy stakeholders' expectations". Capacity is a function of staffing, infrastructure, technology, financial resources, strategic leadership, process management, networks, and links with other organisations and groups.

A complementary requirement to capacity is programming. Programming can be defined as a process of setting up interventions that incorporate a theory of change, clear sets of objectives and targets, a sequenced outline of activities, and a mix of resources required to attain objectively verifiable achievements.

The following section of this chapter reviews the profiles of the two districts in which JET worked on the BSSIP and COEP to establish whether they had sufficient capacity, firstly, to maintain educational operations, and secondly, to collaborate with the projects to improve the quality of learning and teaching in the schools.

Figure 1: Policy, programming and implementation value chain



3. DISTRICT PROFILES: RESOURCING AND CAPACITY

The effectiveness of the district in its school support and monitoring functions depends partly on the availability of resources and its use of these. Among the district resources used to support and monitor schools are the number of personnel in subject areas, cars, communication facilities and financial resources. These factors, with the exception of financial resources, are profiled below. Financial information was not available to the project teams.

3.1 Human resources

Adequate and stable staffing in key management positions and subject advisory services are essential to the effectiveness of districts. Table 1 below profiles the percentage of positions filled and vacant in the district management hierarchy: district director, head of advisory services, and circuit managers, and Table 2 presents the numbers of subject advisors for the four key subjects that were supported by the projects.

3.1.1 District management vacancy profile

Table 1: Vacancy rates in districts (2010–12)

Years	2010				2011				2012					
Quarters	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	12	%
Director level														
Bojanala	A	A	A	A	1	1	1	1	1	1	1	1	8	66.6
Cofimvaba	1	1	1	1	1	1	1	1	1	S/A	A	A	9.5	79.2
Head Advisory Services														
Bojanala	1	1	1	1	1	1	1	1	1	1	A	A	10	83.3
Cofimvaba	1	1	1	1	1	1	1	1	1	S/A	A	A	9.5	79.2
Circuit Managers														
Bojanala	1	1	1	1	1	1	1	1	1	1	1	1	12	100
Cofimvaba	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	6	50

1 – Substantive Appointee; **A** – Acting; **S/A** – Acting and Substantive appointee; **0.5** – Substantive for 50% of the time

Both districts experienced some instability at the levels of district director and head of subject advisory services during the 12 quarters for which information was collected. Within this period, there was an acting director for about a third of the time in Bojanala and one-fifth of the time in Cofimvaba. In both cases, the substantive district directors were moved to higher acting positions as a result of changes in the provincial heads of departments. In both cases, the heads of advisory services were moved to district director positions. The circuit manager in Bojanala has been in the position for the full period, while the circuit manager in Cofimvaba has been in the position for half the time, since he is also acting as the head of management and governance. He has been acting in this position for almost five years – 19 quarters.

It appears from these two cases that people in district management do not move out of the system. However, instability at the district head office level tends to filter down the hierarchy. The appointment of acting managers in these positions robs the district management of the opportunity to design and drive the district strategy confidently because managers do not know whether they will be moved from the positions they currently occupy. JET has observed that the managers in acting positions avoid taking long-term decisions regarding systemic or school improvement. Changes in leadership also tend to weaken accountability systems as the acting leadership does not stay long enough to take responsibility for educational outcomes.

3.1.2 Subject advisory services vacancy profile

In Table 2 the information on Cofimvaba relates to the entire district which is covered by the subject advisors and that on Bojanala relates to the area office, a level below the district office, where the subject advisors are stationed.

The two cases corroborate the observation made that there is no common understanding on what the shape and size of a district should be.

- One of the differences in the two cases is that subject advisors are stationed at different levels of the education system. Subject advisory services in the North West Province are located one step closer to the schools than is the case in the Eastern Cape.

Table 2: Number of subject advisors for key subjects

	FET Phase				GET Phase (Intermediate and Senior Phase)				Foundation Phase	
	English	Maths	Maths Lit	Physical Science	Maths	English	Technology	Science	Lit	Num
Cofimvaba district	**Schools = 32**				**Schools = 248**					
Number of SAs	2	1	0	1	1	1	1	1	1	1
Ratio of SAs to schools	1:16	32	0	32	1:248	248	248	248	1:248	248
Ratio of SAs to teachers	1:32	32	32	32	1:248	248	248	248	1:248	248
Moses Kotane West	**Schools = 17**				**Schools = 68***					
Number of SAs	1	1	1	0	1	1	1	1	1	1
Ratio of SAs to schools	1:17	17	17	17	1:68	68	68	68	1:47	47
Ratio of SAs to teachers	1:17	17	17	17	1:68	68	68	68	1:47	47

*68 GET schools (this includes some of the grades located in some high schools)

- Another difference is in the ratio of subject advisors to schools and teachers. The ratio of subject advisors to schools for the GET subjects in Cofimvaba is 1:248, which means that there are 3.7 times fewer subject advisors per school in Cofimvaba than in the Moses Kotane West area of the Bojanala district.

- The difference in the ratios of subject advisors to the schools narrows at the FET level, where the ratio in Cofimvaba is the same or half that in the Moses Kotane West Area. Furthermore, it should be noted that in the Cofimvaba District, subject advisors are responsible for schools spread over a much larger area – within a radius of 150 km of the district office – than those in Moses Kotane West who are responsible for schools within a 30 km radius of the area office.

- The ratio of subject advisors to primary schools is four times lower than the FET ratio in Moses Kotane West and seven times lower in Cofimvaba. This pattern indicates that the districts invest more in the FET phase, where the stakes are high. Another reason that the FET Phase looks better resourced is that the number of schools and teachers is lower than in the GET and Foundation Phases.

- The number of subject advisors in the Bojanala District as a whole is 146 compared to 32 in Cofimvaba District.

To gauge how much time the subject advisors have for each school in their district or area, JET carried out a simple calculation which assumes that subject advisors spend half their time visiting schools, i.e. 115 of the 230 working days in a year.

As shown in Table 3, this indicates that in Cofimvaba subject advisors would have 3.7 hours available for each subject at each primary school per year and 28.8 hours for each subject at each high school. In Moses Kotane West subject advisors would have 13.5 hours for their subjects at each primary school and 54.1 hours at each high school.

Table 3: Estimated hours that subject advisors have to support schools

	Average ratio – high schools	Hours per school per year*	Average ratio – primary schools	Hours per school per year
Cofimvaba District	1:32	28.8 hours	1:248	3.7 hours
Moses Kotane West Area Office	1:17	54.1 hours	1:68	13.5 hours

*Hours/schools = (115 days x number of SAs x 8 hours)/number of schools/number of subjects

This allocation of time to schools is inadequate to bring about any measureable change, certainly for the primary schools. The time allocation is even lower if the time required to travel to the schools is taken into account.

The assumption that for the projects subject advisors would accompany the consultants and technical assistants to the schools was proven wrong as the districts have meagre, if any, absorptive capacity, as reflected in the table above. In most instances, in both districts, the subject advisors were not able to accompany the technical assistants and mentors to schools as expected. Furthermore, it became clear that most of the time the subject advisors were not even able to visit schools on their own to provide support to the teachers. In both districts the subject advisors' support to schools and teachers took the form mainly of cluster meetings and training workshops held at central venues.

In Moses Kotane West, each subject advisor is required to visit one school each month. While better than not visiting the schools at all, this provision is still not adequate to bring about improvements in all the schools. Subject advisors who have

a high number of schools to support are faced with the difficulty of not knowing how to allocate their time effectively. In addition, the high ratio of schools to subject advisors rules out the possibility of any classroom support and monitoring by the subject advisors. Most, if not all, the schools require this level of support.

3.2 Communication facilities and related services

Table 4 presents information about the functioning amenities and communications resources at the respective area offices. The area offices, called "education development centres" in Cofimvaba, serve three circuits each with just under 100 schools in each area. Information was collected over the last six months of 2012.

None of the key resources or services worked in the Tsomo area office over this six-month period because the electricity supply had been disconnected. This was because the leasing contract between the Eastern Cape government and the owner of the property it leases was not extended.

In Moses Kotane West the communications resources and services worked for most of the period monitored, although there were intermittent disruptions during the six months. The telephones did not work through August and part of September and the internet and email facilities were not working for six days in November and one day in December. These disruptions were reportedly due to late payments or technical problems. For the last four months of the year, the area office did not have working printing facilities because the printer cartridges had run out. It is worth noting that the photocopying facilities were working because they are maintained by the service provider under a lease agreement.

3.3 Office vehicles

Table 5 paints a picture of the provision of cars in the two district offices. The Bojanala District has 118 cars and Cofimvaba has only 21. While the Bojanala District has more cars because it has twice the number of schools as Cofimvaba, it also has a much more favourable ratio of cars to schools than Cofimvaba.

It is also worth noting that 11 out of the 14 subsidised cars in Cofimvaba belong to circuit managers. This means that there are in effect 10 cars available to the 32 subject advisors and the other corporate services officials to visit schools and the provincial department as well as to conduct other business of the district.

Table 4: Functioning amenities and resources

2012	Moses Kotane West					Tsomo Education Development Centre				
Month	Telephone	Internet/ Email	Photocopier	Printer	Electricity	Telephone	Internet/ Email	Photocopier	Printer	Electricity
July	√	√	√	√	√	X	X	X	X	X
August	X	√	√	√	√	X	X	X	X	X
September	17–30	√	√	X	√	X	X	X	X	X
October	√	√	√	X	√	X	X	X	X	X
November	√	2–8	√	X	√	X	X	X	X	X
December	√	06	√	X	√	X	X	X	X	X

Table 5: Availability of cars in districts

District	Pool cars	Subsidised cars	Total number of cars	Number of schools	Ratio of cars to schools
Bojanala	62	56	118	554	1:5
Cofimvaba	7	14	21	280	1:13

4. DYNAMICS OF LEARNER ENROLMENTS IN RURAL DISTRICTS

District offices on their own do not tell the full story of the districts. An equally important aspect at this level of the system is the profile of the schools for which the districts are responsible. Both the target circuits of the systemic school improvement projects (Retladirela, in Bojanala, North West and Mthawelanga, in Cofimvaba, Eastern Cape) are rural circuits characterised by a large number of small schools. In Mthawelanga circuit, 71% of the schools have enrolments of fewer than 200 learners, and in Retladirela circuit, 72% of the schools. Changes in learner numbers are often a result of parents moving to areas closer to job opportunities and better living conditions around towns.

Between 2008 and 2012, learner enrolment in the Mthawelanga circuit schools declined by 3% and in the Retladirela circuit it increased by 20%. This is so in spite of the fact that in the Retladirela circuit one school was closed down as it was considered not to be viable. The year-on-year changes in total enrolments in the two districts ranged from -8.8% to +16%. It is not clear whether these changes are normal, but the overall enrolments over the past four years do not appear to have moved too sharply. Changes in the levels of enrolments had been raised as a big concern by the district officials.

One of the main problems faced by schools with low enrolments is that they receive a small allocation of teachers. The challenge for the education system as a whole is that the running of district operations becomes an inefficient exercise. The large numbers of very small schools is something outside the ambit of the Systemic School Improvement Model, but it is clearly a constraint on any improvement initiative, for two reasons. Firstly, the small schools struggle to absorb additional training and support activities as the limited number of staff can barely maintain the prevailing systems and practices. Secondly, there are too many schools and not enough district staff to visit them often enough to ensure sustained change. In the Eastern Cape for instance, the education system will continue fighting a losing battle unless the basic economics of small, sub-economic schools are addressed.

5. KEY LESSONS FROM WORKING WITH THE DISTRICTS

The Systemic School Improvement Model developed for the projects considered here, assumed that the districts are adequately staffed and resourced for them to collaborate effectively with JET in planning and co-implementing the projects – particularly the school support and monitoring activities. This was not the case, so it was not easy for the districts to collaborate with JET to improve the quality of learning and teaching.

5.1 Tangible and sustainable results require more than just the keenness of the district to partner in a project

JET has observed that the district offices are keen to be involved with development agencies that wish to partner with them to implement improvement programmes. However, keenness and enthusiasm on their own are not sufficient for successful improvement programmes. Appropriate structures, resourcing levels, collaboration with unions and strong and consistent leadership are some of the key conditions required for the successful implementation of school improvement interventions.

5.2 District partnerships should be concerned with more than just project activities

The location of the project coordinator at the district office made it easier to unlock blockages in the implementation of the project activities and to ensure that the project remained relevant and important to the district staff. As a result, the project activities remained integrated, although a rift always occurred between the implementation of the project and district office activities as neither of the districts had adequate resources to roll out school support and monitoring activities as intensively as the project staff did.

5.3 Districts suffer from a 'weak dosage syndrome'

One of the greatest challenges facing districts appears to be their inability to implement school support and monitoring services effectively. Because they don't have enough inputs, what districts tend to do is to take a 'dosage' meant for a handful of 'patients' and share it among all their needy 'patients'. What they get in return is a complete lack of improvement or even resistance. The dosages of school support and monitoring visits and workshops organised by the districts are too weak to produce quick and measureable change.

5.4 Structural and resourcing constraints in the districts limit their capacity to absorb or lead change

As critical as they are in mediating national and provincial policies to schools, districts seem to be incorrectly configured and ill-equipped to drive and maintain change in schools. The related challenge to school improvement programmes, which happen to be implemented from outside government, is that they are implemented in a system with insufficient absorptive capacity. The districts do not have sufficient capacity – in terms of number of staff at district and school levels, resources and meaningful programmes – to be able to do the work of supporting and monitoring schools. This means that the district officials are not able to absorb new skills and practices propagated by the intervention programmes.

Regarding the role and the capacity of districts, it is important to emphasise that no tangible reform of or improvement in the education system will take root in the next few decades before the South African government has made some hard decisions about beefing up the districts.

6. CONCLUSION

Following the observations made in this chapter regarding the role and the capacity of districts, it is important to emphasise that no tangible reform of or improvement in the education system will take root in the next few decades before the South African government has made some hard decisions about beefing up the districts. The current debates are still stuck in "the role of districts", which we have observed over the past two decades. What is required is proper staffing, resourcing and programming of school monitoring and support activities. Properly staffing the districts will significantly increase public spending on education. Nonetheless, such a move to strengthen districts should be seen as an opportunity to:

- Strengthen the command from central government, which is direly needed, particularly in the weaker provinces;
- Right-size the provincial level of the education system by decentralising excess capacity lying in provincial departments to the district level where more practical work is done; and
- Increase the value for money in school-level investments through increased and strengthened monitoring and support from the districts.

The key lesson for non-governmental investors in school improvement is that social investment ventures that deserve to be supported should present more than a keen district director or management. Appropriate and well-staffed structures, effective resourcing levels in equipment and services, collaboration with unions, strong and consistent leadership and strong political will from the side of government should be non-negotiable preconditions for engagement.

At best, school improvement should run from within the government system and should be aimed at strengthening programming and implementation within the districts. Additional improvement interventions that are not integrated into the district programmes carry no residual value. The new approach to education improvement by non-governmental agencies and social investors should be one that seeks to support the reform agenda of government and, working with the beneficiaries, to fix the fundamentals in the system.

With the deficiencies presented above, a hope for effective systemic change is futile. In this situation, districts will only be able to satisfy bureaucratic planning and reporting requirements and maintain order, rather than drive the "new enterprise logic of public education, one that places the student at the centre of the education

system and ensures high-level performance of all students in all settings". Driving the new enterprise logic will entail ensuring that district structures and staffing levels, material resources, leadership and culture are relevant to the learner-centred enterprise logic.

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This chapter looks at the roles played by the various stakeholders in supporting the objectives of the projects, as well as the stakeholder structures and their effectiveness in guiding and supporting the projects.

CHAPTER 9

STAKEHOLDER INVOLVEMENT IN THE BSSIP AND COEP

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1. INTRODUCTION

This chapter focuses on the effect of stakeholder involvement in the systemic school improvement programmes as implemented in the Bojanala Systemic School Improvement Project (BSSIP) in the North West and the Centres of Excellence Project (COEP) in the Eastern Cape and endeavours to share key lessons that could be applied to other similar programmes.

The term 'stakeholder' is used – rather than 'role player' which is otherwise often used in South Africa – as it is an internationally known concept. Section 3 below provides further clarity on the concept.

Generally, stakeholder involvement is seen as a contributor to the effectiveness of a programme through its interrogation of the purpose, proposed effort and expected benefits of interventions at planning, implementation and close-out stages. Through stakeholder participation it is expected that the originally agreed upon objectives of a programme will be upheld and any deviations in the plans will be interrogated thoroughly with respect to the goals of the programme. It is assumed that stakeholders play a key role in enabling the achievement of a project's goals and objectives, facilitating means to serve as an accountability structure as well as a guiding and critical review structure. The role of the stakeholder is considered imperative where a programme is multipronged and driving change, requiring specific stakeholders' expertise to assist in the various components.

The qualities or characteristics of the stakeholders are usually based on their relevance within a programme. In the case of the BSSIP and COEP, the stakeholders included, respectively, the North West and Eastern Cape Provincial Departments of Education, the Moses Kotane West and the Cofimvaba district department officials, representatives of the donor agencies involved in each project, members of the school management teams, JET Education Services and teachers' trade unions' representatives.

This chapter looks at the roles played by the various representatives in supporting the objectives of the projects, as well as the stakeholder structures and their effectiveness in guiding and supporting the projects. Lessons learnt and challenges encountered are highlighted.

2. BACKGROUND

JET Education Services had previously implemented a similar programme in the Khanyisa Education Support Programme in Limpopo. It was a large-scale project with a number of outputs. Lessons learnt from Khanyisa were carried forward to the BSSIP and COEP. One of the key lessons learnt was the importance of "the relationship between the funders, the project implementers and the recipient department" and the central understanding that JET "should not be self-serving but should aim to enhance operations and the organisational capacity for development" (Khosa, 2013: 285).

With respect to stakeholder involvement in the COEP and BSSIP, JET had begun engaging with the provincial departments of education in the North West and the Eastern Cape during the inception stages in order to gain their buy-in and support of the strategic intervention that JET wished to implement. The engagement took the form of a presentation of the successes in the Khanyisa project and JET's intentions with respect to the Systemic School Improvement Model. While the COEP had begun in 2007, the BSSIP began only in 2009. Many of the lessons learnt in the COEP context assisted in the BSSIP context.

One of the key lessons involved the inclusion of the provincial education department to facilitate the identification of and access to a region where the Systemic School Improvement Model would benefit the circuit and the schools within the circuit. Through a series of discussions between JET and the Eastern Cape Department of Education and JET and the North West Department of Education, the departments were comfortable in suggesting the specific circuits where JET could begin its feasibility studies. The regions identified were Mthawalenga in Cofimvaba, Eastern Cape and Moses Kotane West in Bojanala, North West.

The results of the feasibility studies, together with the proposal for systemic improvement within the regions were presented to donor agencies for funding. Advocacy and canvassing for support within the regions were fairly successful as both programmes received substantial grants as well as substantial buy-in from the district offices, circuit offices, the schools and the trade unions. In order to consolidate their buy-in, each programme set up a provincial steering committee (PSC) structure where programme progress and challenges were discussed and decisions ratified. The discussion of stakeholder involvement in this chapter therefore focuses only on the implementation of the projects rather than on the feasibility process.

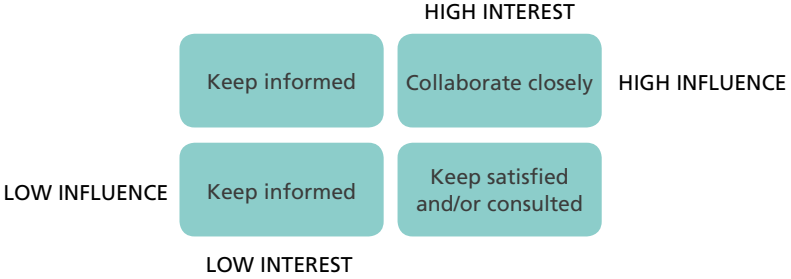
3. IDENTIFYING AND ORGANISING STAKEHOLDERS

A stakeholder is regarded as anyone with an interest in what will happen during the implementation of a change project. All the stakeholders should be aware and should be reminded that a change project will lead to the need "to do better", "to do more" and/or "to do things differently", otherwise the project cannot aim, in its objectives, to change current outcomes.

Managing the stakeholders during the process of change is vital. Getting the management process right leads to a stronger relationship as well as commitment to help with the change process when the project needs their assistance. When the management process is weak, even if the planning was done thoroughly and all the other project requirements are met, the project may still be perceived by stakeholders as a failure.

It is therefore important to determine as early as possible who the stakeholders in the project will be. This is guided mostly by those who have influence, those who have an interest, and those who have both influence and interest in the project. This process of identifying the stakeholders can then be schematically represented in a matrix of four types of stakeholders (see Figure 1).

Figure 1: Four types of stakeholders (www.mindtools.com)



When dealing with the different types of stakeholders, it is important to clarify their roles and involvement very clearly in order to get the maximum benefit from their support and motivation. Such an analysis will assist in developing an in-depth understanding of the 'weight' the stakeholders could potentially bring to the project, linked to their motivations. This will further assist in formulating decisions on why they would be brought on board or not, as well as the depth and extent of required communication with them. It will also force the project team to think about the way in which the various stakeholders will be managed.

In education improvement projects, the project drivers often fail to characterise the four types of stakeholders by their relationship to the change project. Primary stakeholders would be those people who stand to be directly affected by the project, positively, negatively or both. Secondary stakeholders would be those who are indirectly affected by the project, also positively, negatively or both. And then there are key stakeholders who are needed either to fund the project or to ensure its implementation. Stakeholders therefore have an interest in a change project based on whether they can affect the project or will be affected by it. The BSSIP model, for example, presented an opportunity to promote parents' and communities' participation in the education of their children and the parents and communities in this way became stakeholders in the project. The more heavily stakeholders are involved in a project, the stronger their interest will be, whether they are focusing on the economics, social change, work tenure, time needed, the environment, or any other aspect.

When dealing with the different types of stakeholders, it is important to clarify their roles and involvement very clearly in order to get the maximum benefit from their support and motivation.

Despite the need for clarity in terms of who should or should not be characterised as a stakeholder, JET believes strongly in a participatory process when working in education. This means that as many people as possible of those who are affected by or have an interest in the project, interventions or efforts, should be involved. JET's view is that involving all these stakeholders will lead to a better process, greater stakeholder support and buy-in, more ideas on the table, a better understanding of the context, and ultimately, a more sustainable project. It therefore puts extensive effort into ensuring effective stakeholder involvement and buy-in in projects.

4. STAKEHOLDERS' VIEWS

In order to draw out the views of different stakeholders involved in the two projects under discussion here, and to extract key lessons learnt, JET surveyed the project data, primarily minutes of meetings, and conducted a series of interviews with a sample of stakeholders. Their voices and opinions are reflected in the following sections and are referenced with the categorisation used by JET in its partnership documents. Implementers (I) include the provincial departments of education, JET Education Services and teacher formations; Funders (F) include the different donor agencies as well as JET Board of Directors; and Clients (C) include the different schools involved in the projects. By using I, F and C with a number signifying the respective stakeholder (F1, F2, etc.) quoted, the identity of the stakeholders is protected. From the interviews and survey data, the voices of eight Implementers, three Funders and five Clients are referenced, 16 stakeholders in all.

5. ISSUES ARISING IN STAKEHOLDER INVOLVEMENT

As part of its commitment to stakeholder involvement in the projects, JET has organised numerous meetings as communication, opinion-shaping and decision-making forums to ensure that all stakeholders are on the same page and take ownership of the project during implementation. In total, 17 structured meetings with the stakeholders have taken place from 2009 to date (see Table 1).

From the minutes of all these meeting as well as interviews with participants, the following are highlighted as critical issues, as they could result in advantages or disadvantages for the change project.

Table 1: Meetings with stakeholders		
Year	**North West (BSSIP)**	**Eastern Cape (COEP)**
2009	1. February 17	
	2. May 19	
	3. August 18	
	4. October 21	
	5. November 17	
2010	6. February 02	1. May 25
	7. May 18	2. November 03
	8. August 17	
	9. November 17	
2011	10. February 10	3. June 01
	11. October 07	4. September 02
2012		5. March 23
		6. September 04

5.1 Attendance of senior representatives

There has been **consistent attendance of the most senior representatives** of all major partners in the project, in particular the attendance of the district directors as chairpersons in the steering committee meetings. Such commitment in attendance needs to be encouraged and should not be taken for granted within a system where senior people, from departments as well as project-related organisations, often 'give themselves the right' not to attend meetings or come up with excuses as to why they have more important meetings or activities to see to rather than these strategic decision-making meetings.

5.2 Decision-making powers

There is a danger that different stakeholders in a meeting may claim **decision-making power** over project domains and processes that have nothing to do with them, or where the consequences of these decisions reside with individual stakeholders. For example, the choice of service providers in a project should reside with the stakeholder who is directly responsible and accountable to the funders. Or, for example, the availability of teachers to attend workshops during holidays or dealing with teachers who are not attending school, relates to the contractual agreement and obligation between the employer and employee, and is not a decision to be taken by the representatives of these employees. The representatives of these employees should limit their direct and collective decision making to issues of conditions of service and contributory suggestions and recommendations in domains other than conditions of service.

5.3 Recognising the consequences of change processes

Any **change process will involve one or more of four key consequences** to the work delivery expected of employees, especially within a sector which is people/labour intensive such as education. These will include the need to do better, the need to do more, the need to do things differently, or any combination of the above. Stakeholder involvement is critical to managing these changes in expectations.

As argued by one funder "… *I still believe that doing teacher testing and figuring out where the weaknesses are and addressing those is critical"* (F3, p.13), and *"Build in time for reflection and for figuring out what's problematic and change direction before it becomes a problem because that is good project management. Just going along with an intervention without taking the time to report and reflect and change course is ludicrous*." (p.14).

Funders will focus on the urgency of ensuring that the project has the potential to be successful and will raise challenging issues which will not be raised by other stakeholders. As stated by Mitchell et al (1997), it is important to have three types of stakeholders involved in the decision-making process, representing "power, legitimacy and urgency stakeholders".

It is significant that, when teachers and principals report that their workload or management responsibility has increased, this need not be seen as a negative change, but rather as an indication that things are changing in our schools.

An implementer (I4 p.1), on the other hand, supports the teachers' and principals' arguments that their "… *involvement was very crucial for raising awareness on additional load on the already overworked teachers who had to sacrifice family time*." The challenge is therefore the need to manage the 'push and protection' agendas among different stakeholders.

Any change process will involve one or more of four key consequences to the work delivery expected of employees… These will include the need to do better, the need to do more, the need to do things differently, or any combination of the above.

5.4 Commitment at local level

Despite the commitment from senior people within the departments, recognising that their "*role is crucial in creating an enabling environment for the project*" (I1: p.1), the same commitment is often not seen from officials located closer to schools, where the implementation of the change project is happening. These officials need to realise the crucial support role they can play. Numerous principals indicated that "*the idea of having field workers to mentor schools was super*" (C4: p.2). One of the officials even admitted that "*the attitude of the principals in the project has changed and they are always at the project office for most of the time for assistance; a healthy relationship exists between them and the project*." (I8: p.5). The potential therefore exists for district and circuit officials to play a more supportive role, as invited by the principals in this project.

5.5 Granting permission

It is often not clear at what level of the system permission should be granted when stakeholders of the same groupings are located at different levels, such as national, provincial, regional, district, circuit and school level. This highlights the lack of communication between the different spheres within the system and the need to clarify the structural arrangements between them. With this gap in communication being narrowed by the project, a department official discovered, for example, that the problem still exists "*that schools do not use workbooks and this has been a wakeup call for the department*" (I5: p.5). As a funder emphasises, "*Lines of communication should be clear in any programme* …" (F1: p.2). It is therefore important that the focus should be on the benefits of communicating across the different levels rather than on the level of communication control. For example, if a project is going to be affecting schools, at what level does the granting of permission for it reside? Calls for more focus on "*role clarification*" (F1: p.2), and "*community leaders with influence should be given progress of the project*" (F1: p.3) highlight the importance of communicating with all stakeholders.

5.6 Planning a change project

The planning of a change project necessarily resides with the initiators of the project, with due consultation with the people who would be affected by and would effect the project. Furthermore, the planning process is a technical activity, needing specialists within the area of project planning and management. Stakeholders therefore need to allow the partner(s) among them whose responsibility it is and who have the technical expertise to perform this task, to perform it. It is therefore important to have "*clarity of purpose from the formation of the partnership and clarification of roles*" (C1: p.2).

If, for example, teachers, who might not have the technical skills of change project management, are allowed to get involved in this process, it may become diluted. Informing all stakeholders of the different processes is one thing, but allowing all

stakeholders to be involved in every process, despite a mismatch of skills and expertise within a particular process, can be harmful to the overall success of the project. Stakeholders with local knowledge may be most helpful in overcoming local problems, such as "*transport to workshops*" and "*attendance of weekend workshops*" (I5: p.6).

5.7 Staying focused

The steering committee can get **caught up with issues and challenges that have very little or nothing directly to do with the change project**, such as to "*advise the DoE*" (I4: p.1). Quite often some stakeholders will bring to the steering committee issues which have not been addressed effectively at another appropriate forum, in an attempt to make some gain related to the issues. For example, the possibility of influencing the post provisioning model or the non-closure of small schools through the steering committee process is zero, but these might be presented as stumbling blocks to the success of the project. If this kind of distraction is accepted, then any change project will have a limited chance of succeeding as change projects do not influence policy models. Furthermore, such issues, like the "*need to negotiate for teacher assessment and dealing professionally with inadequacies*" (I1: p.2) and "*doing teacher testing and figuring out where weaknesses are and addressing those*" (F3: p.13), are directly located in the negotiation domain where the representatives of employee stakeholders are equal partners to the employer in the process.

The steering committee ensured that at least 80% of the overall budget of the project would be spent on the core business of the project, that is, changes at school level.

5.8 Focused spending

The steering committee ensured that **at least 80% of the overall budget of the project would be spent on the core business of the project**, that is, changes at school level. This is especially commendable in light of the fact that project budgets are often drained at structural and strategic level, with few funds trickling down to the domain where change has to take place.

5.9 Data-driven decision-making

A **strong data-driven decision-making focus** was adopted, with project operations personnel submitting detailed reports to stakeholders at all the meetings. This approach enhances the quality of decision making, as was indicated by numerous chairpersons. It also emphasises the need and ignites a culture among school principals to follow the same approach through the dashboard data generation process. The long-term benefit would ideally be that schools will start submitting reliable data as they will realise the usefulness of up-to-date and real-time information. But it is important to note the opinion that "*it's very good to produce data. I think that's not a problem, getting as much data as possible, but then you have to make the time to analyse the data and figure out where the weaknesses are.*" (F3: p.14).

5.10 Getting the facts straight

It is important that, if **questionable information** is shared within a steering committee meeting, the participant must correct it or at least ensure that it does not reflect in the minutes as factual. For example, a statement suggesting that the responsibility for reading is limited to Language teachers should be corrected to acknowledge that reading is the responsibility of all teachers (teaching engagement). Similarly, statements such as: the LAIP is encouraging teachers to finish their work by June, or that it is the function of the MEC to allocate posts, need to be clarified. If such statements are left unchallenged, or if the ideas they convey are actually implemented in schools – like the need to finish the curriculum by June – then it is no surprise that some of our learners fail when they are required to learn and make sense of the same amount of content in less than six months that other learners are taught over a period of close to ten months.

6. LESSONS LEARNT FROM STAKEHOLDER INVOLVEMENT

The interviews conducted with project stakeholders covered a sample of 16 stakeholders which included Funders, Implementers and Clients (see Table 2).

Table 2: Types of stakeholders interviewed		
Type of Stakeholder	**Referencing Code**	**BSSIP and COEP**
Donors	Funders (F)	3
Departmental Officials	Implementers (I)	6
School Principals	Clients (C)	5
Teacher Union Representatives	Implementers (I)	2

Some of the lessons drawn from these interviews are outlined below.

6.1 Stakeholder involvement results in buy-in and ownership

This point is emphasised in comments from funders 2 and 3 that "*we absolutely buy into the model*" (F2: p.3), that "*the people that were at the PSC were very committed, were actively engaged and would take decisions*" (F2: p.5), and that "*the district officials were really on board*" (F3: p.8), despite the fact that "*there were some weak links*" (F3: p.8). This degree of commitment is beneficial to project implementation, especially if the project is expecting people to change their current ways of doing things at all levels of the system. When the most senior people regard the project as important, as demonstrated through their attendance at stakeholder meetings, for example, then the other personnel take their practice as an example.

6.2 Project planning, support and implementation should be seen as a whole

The initial buy-in to the project is as important as ensuring that competent project personnel are appointed to implement the project. These appointees should be people who have "*extensive knowledge of the issues and challenges in the area and with a clear understanding of the need to share and learn new knowledge from the beneficiaries. The person (people) must also understand the setting up of systems and procedures*" (F1: p.2).

The technical, process and people aspects of the project must be synchronised in order to complement and strengthen each other across components. The energy that the project leaders invest in the project should not be undone by service providers who see it as "only a job"; rather, the service providers need to know that they are assisting schools to make a difference in the lives of children. It is therefore important that all the participants in the project should be made aware of its relevance to them. When stakeholders realise that the intervention is not just about achieving the project goals – which may seem relatively remote to some – but rather about making a difference at the school level, they tend to support the project more enthusiastically. For example, when teachers recognise that the project is assisting them to improve their teaching practice and learners' achievements in the classroom, they become more amenable to elements such as classroom observation. They will open up the classroom space rather than shutting it down to such interventions. As one funder noted: "*There wasn't enough going into classrooms and modelling good teaching practice which I thought – that was the one thing that I think we lacked …* " (F3: p.9).

6.3 Even if projects start small, it is wise to plan in a big way

This is in order to ensure that pilot projects can go to scale. It is important "*to see what the baseline focused on. Did it just focus on the schools and the teachers? Did it look at the district officials? Did it look at the policies?*" (F2: p.10). However, going big too early in the life of the project, may compromise the potential to learn about the technical challenges of local school life and the micro-political context prevailing among people and/or organisations. As the projects proceeded, some participants called for "*JET to stay and to expand to other areas*" (I6:8).

6.4 A clear understanding of the goals of the project is important

This assists stakeholders in generating realisable and realistic expectations in relation to the plans. If the goals are not clear, then every project is expected to 'solve all the problems within education', which is unrealistic, especially for those who need to account to stakeholders. Below are just a few of the views voiced by participants on what they think the project was all about:

- "*Expectation was that through* ***teacher development****, we will improve the* ***learner results*** *at all school levels*" (I1: p.1);
- "*We expected improvement of* ***teacher performance, management skills and teacher knowledge and mindset***" (C1: p.1);
- "*Improvement of* ***results, school functionality and teacher development***" (C2: p.1);
- "*The project was about improving the* ***quality of curriculum delivery***" (C3: p.1);
- "*Our expectation was to improve the levels of* ***Maths, Science and English****, enable* ***principals to mentor teachers, impart knowledge and skills, and mentor and monitor management***" (C4: p.1); and
- "*Improve* ***professional development, SMTs and add value to the district***" (I6: p.1).

Ensuring clarity of the goals of the project can alleviate the engagement and discussion of issues unrelated to the project deliverables.

6.5 Separate expectations for 'quick wins' and 'deep change'

In order to see visible impact in a project endeavouring to improve the school system, it is essential to separate the expectations related to 'quick wins' and those related to 'deep change'. Interestingly, one funder asks the question of whether "*the system has the ability to do that (change) as quickly? And maybe that's the biggest lesson – how much can you expect from the system?*" (F2: p.17).

Most change, where people are involved, starts with 'thinking differently about what we do' before we can expect to be 'doing things differently'. For some people, the process between understanding the change and implementing the change may be short, while for others it will take longer. "*We cannot hurry impact and we should always be reminded that 'development is not a straight banana'.*" (F1: p.3). It should be expected that some teachers, principals and schools will lead and take on the change, while others will first want to observe the change before adopting it. We therefore "*need to be quite realistic about what they can achieve … dealing with rural schools and some of them were merging at some point during the project*" (F3: p.8).

This does not mean that those that are not changing immediately are against the project, but rather that the project team should use the quick wins as evidence, to demonstrate to others that it can be done and that the benefits are worth the sacrifice of the old practices.

For some it was clear that "*One can see the difference at the project school as compared to those that are not in the project …*" (I5: p.8). Sharing the successes of the project, however small, may become part of the introduction of all project related meetings. In support of this approach the project should then be configured into smaller 'pieces' with specific milestones to mark successes achieved. One of the successes that was shared enthusiastically, for example, was the fact that "*The district got position one in the province with 74%. JET introduced home-based study groups which helped a lot as it is used by all circuits in the district.*" (I7: p.5).

6.6 Knowing what each partner is bringing to the partnership

When 'selling' a change project to stakeholders, "*We need to know what each partner is bringing to the partnership*" (I1: p.2). This will clarify the expected

benefits and sacrifices from the start so that stakeholders know what they are signing up for and it will prevent their taking up a position, for example, "*To ensure that … their (teachers') interests are always protected*" (I7: p.1). When partners are there to 'protect interests' which contribute to the failure of quality education, change projects cannot yield the desired results.

Some of the people involved in education believe that the system will change if more money or 'things' are pumped into it, rather than focusing on the need for people in the system to change what they are doing or the way they are doing things. When stakeholders see the change project as 'what others need to do' or 'how others need to change', their involvement is disconnected from the real and deep change that is needed. If this commitment is absent, or the depth of change is not clear from the start, stakeholders tend to 'stay away' from difficult decision-making moments or shift the decision making to 'negotiation structures', thereby eliminating the benefits and strengths of stakeholder involvement. But when there is real commitment, shared by all stakeholders, the partnership can bring about change. For example, "*Teachers accepted and willingly wrote the test which was something that they would not have agreed to without the involvement of the project. This shows the good partnership that prevailed amongst the stakeholders as jointly they broke the barriers for some of the practices that were not acceptable by teachers and teacher unions*." (I5: p.4).

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6.7 Solutions may come from devolved structures

Not all the solutions to project challenges should come from a central structure like the steering committee as people closer to the problems might have a better understanding of how to solve them. This approach also takes away the dependency notion that 'the steering committee should solve our problems' and reduces the temptation to use 'parachute solutions'. The project gains the collective wisdom and knowledge from all affected by it, and not just from the committee members.

Some of the project participants stated that they "… *believe in empowerment and capacity building as a sustainable way towards eradicating poverty*" (F1: p.1). These projects sought to engender a culture of 'empowerment' rather than 'fixing up', which assisted schools with finding out 'how to fish' rather than 'giving them a fish'. Principals noted that they learned "*two-way communication, planning and implementation*" (C2: p.2). The module on "*School leadership introduced a dashboard, underperforming schools improved, maths teachers are confident to teach the subject, and all of these have brought about significant improvement in the district.*" (I6: p.4). One of the participants also noted that "*Parents are fully involved at school level and the rate of absenteeism due to attendance of initiation school has dropped*." (C5: p.7).

6.8 Understanding the purpose of teacher development

There is a need to develop a deeper understanding of the purpose of teacher development to ensure that the approach chosen is useful within the project process. Most participants noted that "*Human resources development is important to make sure that good practice can continue even after the end of the project*." (C3: p.2).

Some problems within a project may be related to people's attitudes rather than their ability to implement the change project. The gains of the project are therefore not just the quantitative results but also the long-term qualitative gains among participants and their new perspective and commitment to their profession. This might include, for example, "*the cooperation of parents*" and the formation of "*sub-committees … as the parents and the community now understand that the school belongs to them. This enables teachers to have more time with learners, as they are no longer doing some of the tasks that are now done by parents, such as cleaning of the schoo*l." (C5: p.7). This space also allows teachers time to support colleagues through mentoring, which "*is a very good way of providing support and that support is appreciated by us*" (C4: p.2).

6.9 Recognising deeper change

Although 6.5 above reflects on the benefits of sharing quick wins with all stakeholders in the steering committee meetings, it is important to emphasise that honest reflection on the 'deeper change' expected, within a structure of support and trust like the steering committee, is far more beneficial to the education system. One of the funders noted that "*the programme managed to build positive relationships with all stakeholders and it created a platform for people to think more deeply on the issues the programme wanted to address … (we) managed to focus towards the bigger goal*" (F1: p.3).

When stakeholders realise that the conversation is not about blaming each other but rather about assisting and empowering each other, they become more open to sharing their weaknesses and challenges. They will openly talk about how "*The project introduced good practices at school, including effective record keeping which was a challenge before and is still a challenge in schools not participating in the project. Without the project, the status quo might have continued at the project schools*." (I5: p.4). Creating and building such a culture of trust and mutual accountability takes time, especially in a district or province where the level of mistrust is high. Although this might not be the core purpose of the project(s), such involvements will have long-lasting benefits beyond the lifespan of the project(s).

7. SOME CONCLUDING THOUGHTS

In the interviews with various stakeholders several other issues were raised and these are briefly stated here as concluding thoughts for further consideration.

- There may be a need for "*… some level of* ***independent evaluation*** *or information gathering that will be real and raw and whether we like what it sounds like or not*" (F2: p.15).
- We need to **start with the younger teachers**, "*… I don't think going into schools and retraining old teachers is effective*" (F3: p.9). This does not mean that we should "*ignore the older teachers but let's try and create really excellent teachers in this country because that's what we desperately need.*" (F3: p.9).
- We should be less interested in writing up piles and piles of reports, as is often perceived to be the case. Rather, "*the* ***reports need to drive change and performance on the ground****. The report is a good way to reflect on what was done.*" (F3: p.15).
- The **pool of stakeholder involvement must extend** to "*SGB members, especially the parent component*" (C1: p.2), "*more members from the society*" (I4: p.2), "*the Chief and all community leaders*" (I5: p.7), "*traditional leaders*" (I7: p.7), as well as "*other governance structures in the circuit*" (I8: p.7).

8. PRACTICAL NOTES

Some practical notes relating to lessons learnt in stakeholder involvement in the COEP and BSSIP are set out below, offering a summary guideline of important steps that should be considered.

- It is recognised that identifying key stakeholders during the inception stages of a project is important in gaining stakeholder buy-in. It is also important to know who the primary and secondary stakeholders are in order to establish the levels of collaboration and partnership between the agent who is leading the project and those who will facilitate the programme activities.

- Initiating preliminary discussions with primary stakeholders in order to define the project parameters, stakeholders' responsibilities and the leading agent's lines of accountability is important to help situate the development programme within the broader imperatives of the primary stakeholders. This will create a sense of ownership of the programme and a willingness to commit time and support to it.

- Establishing partnerships between the lead agent and the participating stakeholders helps to define project strategy and to develop a shared understanding of the project goals. This, in turn, will reduce the risk of stakeholders becoming disgruntled and potentially obstructive, which can sometimes lead to the project being sabotaged during the implementation or evaluation phases.

- Defining clear roles for participating stakeholders in collaboration with all the stakeholders is important to enable the project to move forward and maintain momentum.

- Sharing the objectives of the project and collaborating with the stakeholders, using their expertise in specific contexts and in a way that supports the achievement of the objectives, will facilitate progress towards the desired outputs.

- Advocating and campaigning for the programme, highlighting potential gains for the education system and the people involved in light of identified needs, supports buy-in from the broader community, especially when it is conducted in a knowledgeable and empowering manner, fostering collegial discussions. It also helps to engender commitment from donor agencies focussing in the targeted areas of development. Authentic feasibility studies help to foster stakeholders' belief in the potential gains the programme promises.

- Once the project has gained the support required from all relevant stakeholders, it is important to create structures that will provide for the stakeholders' participation at appropriate levels. All stakeholders should be informed accordingly and the 'terms of agreement' between the lead service provider and the stakeholders should be set down in a memorandum of understanding or similar document that makes the required participation of all parties and the lines of accountability clear. This will assist in establishing consistent attendance at meetings, clarifying levels at which different types of decisions are to be taken and developing an understanding of the objectives or priorities of each stakeholder as a participant in the programme.

- With different stakeholders participating at different levels of the programme, it is important to develop effective communication lines between these different levels. All stakeholders, from the top management to the local school levels, need to be represented in some structure in order to uphold the project's objectives and keep the focus of the project activities and outputs aligned with these.

- The different stakeholder forums need to be clear on the objectives and expected outcomes of the overall systemic improvement programme as well as those specific to the different components. They also need to monitor how the different intervention strategies impact on each of the components. This requires stakeholders' representatives to engage critically with the intervention strategies, reviewing the immediate impact of the interventions, taking note of factors hampering or supporting the interventions and comparing the outcomes against those expected. When stakeholders engage with the programme in this way, they are in a better position to advise the lead partners to address potential problems. Stakeholders need to play a supportive as well as a guiding role in the programme.

- The primary stakeholders' forum should maintain an agenda to discuss strategy rather than detailed operational issues. Reports of interventions should focus on the strategic gains made or challenges encountered. Proposed changes in interventions need to be interrogated before they are implemented or discarded and the application of the changes needs to be discussed in relevant forums within the components of the Systemic School Improvement Model.

All stakeholders, from the top management to the local school levels, need to be represented in some structure in order to uphold the project's objectives and keep the focus of the project activities and outputs aligned with these.

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ACRONYMS & ABBREVIATIONS

APLLC	Accelerated Programme for Language, Literacy and Communication
BSSIP	Bojanala Systemic School Improvement Project
CAPS	Curriculum and Assessment Policy Statements
CKT-M	Content knowledge for teaching Mathematics
COEP	Centres of Excellence Project
CPD	Continuous Professional Development
CPTD	Continuous Professional Teacher Development
CPUT	Cape Peninsula University of Technology
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DTDC	District Teacher Development Centre
EFAL	English First Additional Language
ETDP SETA	Education, Training and Development Practices Sector Education and Training Authority
FET	Further education and training
FP	Foundation Phase
GET	General education and training
INSET	In-service education and training
IP	Intermediate Phase
ISPFTED	Integrated Strategic Planning Framework for Teacher Education and Development in South Africa 2011–2025
JET	JET Education Services
LAIP	Learner Attainment Improvement Plan
LTSM	Learning and Teaching Support Materials
NCS	National Curriculum Statement
NICPD	National Institute for Curriculum and Professional Development
PCK	Pedagogical content knowledge
PD	Professional Development
PTDI	Provincial Teacher Development Institute
QLTC	Quality Learning and Teaching Campaign
SACE	South African Council for Educators
SASA	South African Schools Act, 84 of 1996
SES	Socio-economic status
SGB	School Governing Body
SP	Senior Phase
WCED	Western Cape Education Department

Systemic School Improvement Interventions in South Africa
Some practical lessons from development practitioners

Looking at two smaller-scale systemic school improvement projects implemented in selected district circuits in the North West and Eastern Cape by partnerships between government, JET Education Services, and private sector organisations, this book captures and reflects on the experiences of the practitioners involved.

The Systemic School Improvement Model developed by JET to address an identified range of interconnected challenges at district, school, classroom and household level, is made up of seven components. In reflecting on what worked and what did not in the implementation of these different components, the different chapters set out some of the practical lessons learnt, which could be used to improve the design and implementation of similar education improvement projects.

Many of the lessons in this field that remain under-recorded to date relate to the step-by-step processes followed, the relationship dynamics encountered at different levels of the education system, and the local realities confronting schools and districts in South Africa's rural areas. Drawing on field data that is often not available to researchers, the book endeavours to address this gap and record these lessons.

It is not intended to provide an academic review of the systemic school improvement projects. It is presented rather to offer other development practitioners working to improve the quality of education in South African schools, an understanding of some of the real practical and logistical challenges that arise and how these may be resolved to take further school improvement projects forward at a wider district, provincial and national scale.

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