NEEDU
NATIONAL EDUCATION EVALUATION & DEVELOPMENT UNIT

schools
that Work II
Lessons from the Ground

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead

A Reading Nation is a Leading Nation

2030
NDP

Schools that Work II
Lessons from the Ground

Schools that Work II Lessons from the Ground

LIST OF TABLES

LIST OF BOXES

LIST OF FIGURES

LIST OF ACRONYMS

ATP	Annual Teaching Plan
CAPS	Curriculum and Assessment Policy Statement
CEM	Council of Education Ministers
CIPO	Context-Input-Process-Output
DBE	Department of Basic Education
DET	Department of Education and Training
DOE	Department of Education
ELO	Expanded Learning Opportunities
FAL	First Additional Language
FET	Further Education and Training
HL	Home Language
HoA	House of Assembly
HOD	Head of Department
HoD	House of Delegates
IQMS	Internal Quality Management System
JSE	Johannesburg Stock Exchange
LOLT	Language of Learning and Teaching
LTSM	Learning and Teaching Support Material
NDP	National Development Plan
NEEDU	National Education Evaluation and Development Unit
NSC	National Senior Certificate
OSF	Out-of-School Factor
PED	Provincial Education Departments
PLC	Professional Learning Communities
PPN	Post Provisioning Norm
RCL	Representative Council for Learners
SANCO	South African National Civic Organisation
SGB	School Governing Body
SIP	School Improvement Plan
SMT	School Management Team

Earlier this year, I tasked the National Education Evaluation and Development Unit (NEEDU) in the Department of Basic Education (DBE) to conduct a study on schools that work. Because performance in the National Senior Certificate (NSC) examinations is an objective measure of the system, it was also used as a yardstick to identify schools that work. Whether schools cater for learners in the Foundation Phase, Intermediate Phase, Senior Phase, or FET Phase, the principles of running a functional school are universal. The NSC examinations are the final step; but each of the twelve years preceding this step, is equally important. Learners are very seldom successful in the FET Phase, if they have not achieved in the Senior Phase. Similarly, learners cannot be successful in the Senior Phase, if they have not achieved in the Intermediate Phase, and success in the Intermediate Phase is reliant on the mastering of the fundamental skills on the Foundation Phase.

The teacher in the Foundation Phase may feel that she or he has very little to do with the Grade 12 learner some nine or more years later but to the contrary, if the fundamental literacy and numeracy skills are not in place, it is almost impossible for a learner to be successful in the NSC examinations. Likewise, if the initial cornerstones are not set in place in the Intermediate Phase, where learners are introduced to the basic principles of content subjects, extending and building their knowledge and skills in Senior and FET Phases becomes difficult. With regard to language, it is in the Intermediate Phase that learners need to transition from learning-to-read to reading-to-learn. If this vital stage is neglected, the mastery that learners need, in order to succeed in their further education, is significantly hampered.

It must be emphasised that although the study on *"Schools that work II"* used schools that achieved well in the NSC examinations as a yardstick, many of the findings will be able to be used by schools, which cater for learners in the different phases in our educational system. This publication of the study on *"Schools that work II"* contains findings, which convey best practices that are common to successful and improving schools. It is intended to start a conversation among all stakeholders—educators, learners, families, and communities, businesses, our social partners, and legislators on how to join ranks to increase excellence in our schools and districts. This is a challenge we must face together if all learners are to reach the high standards we now expect of them.

The bulk of this publication highlights best practices from high-performing schools serving learners from different socio-economic backgrounds. These practices can serve as a starting point for schools' self-introspection, and for schools to begin to develop their own vision on the kind of school that they want to become and to stimulate their thoughts about how to make their vision a reality. The intention is not to endorse any particular practice as the only route to improvement or to suggest that these practices are the definitive answers to school improvement. On the contrary, the purpose of sharing best practices in this publication is also to encourage meaningful reflection and discussion and to help schools develop shared goals for school improvement.

Sharing best practices should be an integral part of the work of an improving school. There are aspects of every school's work, which reflect the best of practice, which others can learn from. Districts can also draw upon this body of research to increase their understanding of the challenges and the potential they have for improving learning in all schools that they serve. If we move from the premise that says, "It takes the whole village to raise a child," then we must accept that the responsibility for raising a well-educated and civic-minded generation of children cannot rest solely with schools; it is a social and communal endeavour.

This publication therefore, provides some practical ways on how schools, parents, and the community can work together to ensure that schools are safe and secure spaces for quality teaching and learning, as well for accountable leadership, management and governance. I hope that you will find this compilation of best practices of practical use. I especially hope that it helps schools and districts – working alongside parents and communities – to create the habits of reflection, inquiry, and action that fuel continuous school improvement. I am confident that this publication will contribute immensely in making a difference in the teaching, learning, leadership, management and governance standards within our schools.

MRS AM MOTSHEKGA, MP
MINISTER OF BASIC EDUCATION
DATE: 15 September 2017

EXECUTIVE SUMMARY

In June 2007, the then Minister of Education, Minister Naledi Pandor, MP, established a Committee to conduct a study on schools in quintiles 2 to 4 that performed well in the Senior Certificate exams. Called, "Schools that Work," the study explored, the circumstances under which these schools achieved good results, while others in the similar circumstances did not.

Ten years later, in February 2017, the Minister of Basic Education, Mrs Angie Motshekga, MP, tasked the National Education Evaluation and Development Unit (NEEDU) to conduct a similar study (Schools that Work II). The purpose of the study was to establish whether, in the ten years since the first study, characteristics of schools that work remain the same or whether new insights have been learnt. The research question that the 2017 School that Work II study sought to address was:

What are the characteristics of the schools that work in South Africa?

The study's intention was to lift key characteristics of such schools – applicable across both primary and secondary schools. The National Senior Certificate (NSC) examinations, currently the only objective measure of learner performance in the system, were used as a yardstick to identify schools that work. The best practices identified in the sampled schools therefore are relevant in and applicable to all schools.

One hundred and eleven (111) schools representing the highest-performing secondary schools across the country and in different quintiles were sampled in the 2017 Schools that Work II study. A set of three criteria was used to select these high-performing schools:

- A pass rate of > 95% in the four consecutive years prior to 2016 (2012-2015),
- Schools that presented 100 or more candidates in the NSC examinations in 2016, and
- The "inclusive basket of criteria" was approved by Council of Education Ministers (CEM), as a pilot, to strengthen the focus on the quality of NSC passes. These criteria include schools' performance in Mathematics, Physical Sciences, bachelor passes, distinctions, maths participation rate, pass rate and the throughput rate. A *perfect basket* score of 100% indicates a school that performs extremely well on all seven inclusive criteria. An *inclusive basket score* of 70% in the 2016 NSC examinations was used as a cut-off point for a school to be included in the *Schools that Work II* study. The study design allowed for the identification of schools in different quintiles that obtained a *basket score* of $\geq$ 70 percent.

The report is organised into five sections, as follows:

- **Part I** describes the research methods, including the limitations of the study.
- **Part II** reviews literature regarding factors or practices that account for the ability of schools to be effective in promoting learning, especially schools that serve learners from less privileged backgrounds—that otherwise lack productive learning outside school.
- **Part III** presents a brief analysis of the NSC results with a view to locating the sampled schools in their performance context.
- **Part IV** examines best practices, which schools that work associate with their success in improving learning outcomes and closing the achievement gap among learners.
- **Part V** presents conclusions and recommendations.

Qualitative methods and techniques were used to collect and analyse data from schools. In this study, the Context-Input-Process-Output (CIPO) framework was used to explore the myriad factors that

account for the ability of schools to be effective not only in promoting learning and closing achievement gaps but also in helping learners develop core social and emotional attributes that are necessary for learners to succeed in many other areas of life— a well-rounded education. While each of the high-performing schools has unique features, a set of important common best practices emerged from the analysis of data. These practices are grouped around the following six main themes:

- **Theme 1:** System's support and partnerships
- **Theme 2:** Learner-centred climate
- **Theme 3:** Enabling environment
- **Theme 4:** School leadership and management
- **Theme 5:** Professional development and collaboration
- **Theme 6:** Quality of teaching

Each theme is further broken down into specific sub-themes. There is at least one best practice for each sub-theme. Thirty best practices (see **Appendix D**) were extrapolated from schools' descriptions of what they do to improve the learning outcomes. The six themes should be viewed as integrated and interrelated—they are important to school effectiveness but not sufficient in isolation. Although they are treated discretely in this study, they are connected, influence one another, and infuse the organization.

One of the most significant findings of the *School that Work II* study is the continuous success of high-performing schools in the lower quintiles, even as the poverty of learners attending these schools remains intractable.

In an era in which school leaders are constantly looking for a magic bullet towards educational success, it is noteworthy that none of the high-performing schools in the present study rely exclusively upon a particular programme to achieve their success. These schools do nothing out of the ordinary—they simply do ordinary things extra-ordinarily well.

The assessment of the variety of strategies and practices employed by the high-performing schools indicated that there are no magic potions, no single golden bullet or any earth-shattering practice to delivering improved learning outcomes and reducing achievement gaps but the following came through in all the sampled schools:

- Bold, courageous, inclusive and creative leadership;
- Ownership of school and its success by all – learners and parents included;
- High expectations of all learners;
- Maximum utilisation of all available learning and teaching time;
- High discipline; and
- Mutual respect between learners and educators

INTRODUCTION

As learner performance and achievement are increasingly placed under scrutiny, teachers are under more pressure than ever to produce good results in the international and national assessments including the NSC. In this era of accountability, the performance of *all* learners is counted and schools must help every learner to succeed. In South Africa, while many schools are struggling to address low levels of learner achievement, others—referred to as *schools that work* in this report—have made remarkable progress not only in improving the NSC results but also in narrowing the achievement gap between top- performing learners and those that are struggling or lagging behind.

What makes high-performing schools work? The question resonates in an era when turning around chronically low-performing schools, especially those that serve large portions of children from poor backgrounds, tops the national agenda. International research has applied complex analytical tools to identify particular practices and policies that generate real and lasting improvements in learning outcomes.

Becoming a high-performing school takes many years of hard work. There is no silver bullet—no single thing a school can do to ensure high learner performance. The present study confirms local and international research findings that there is no standalone factor that defines an effective school. Nevertheless, different factors are at play within a multifaceted system to promote learning.

This report recounts how 111 high schools are able to produce quality results in the NSC examinations, narrow the achievement gap among learners and sustain their success over time.

In this report, we examine best practices for improving learner achievement, including strategies for engaging learners and improving learning outcomes. Among these practices, some consistently emerge as the key ingredients in successful schools.

We have organised this report into five parts, as follows:

- **Part I** describes the research methods, including the limitations of the study.

- **Part II** reviews literature regarding factors or practices that account for the ability of schools to be effective in promoting learning and at closing achievement gaps, especially schools that serve learners from less privileged backgrounds—that otherwise lack productive learning outside school.

- **Part III** presents a brief analysis of the NSC results with a view to locating the sampled schools in their performance context.

- **Part IV** examines best practices, which schools that work associated with their success in improving learning outcomes and closing the achievement gap among learners.

- **Part V** presents conclusions and recommendations to school managers, district managers and policy makers about how to evaluate various strategies to improve learning outcomes and close the achievement gap.

This research followed qualitative methods.

1.1 RESEARCH QUESTION

The research questions that the present study sought to address are:

- *What are the characteristics of the schools that work in South Africa?*

- *How do schools in the lower quintiles (quintiles 1 to 3) succeed against all odds?*

Because learner performance in the NSC examinations is the objective measure of the system, it was used as a yardstick to identify schools that work.

This study looked beyond curriculum delivery. It also sought to establish how schools' culture or climate created an environment where learners are afforded a well-rounded education.

1.2 STUDY DESCRIPTION

In this study, a qualitative, non-experimental, and descriptive approach was followed. This approach was seen as ideal because the aim was to capture in-depth views of both the teachers and their learners. Researchers had no pre-determined or pre-conceived ideas or views about what makes a school perform well. Nor did they allow their biases influence how schools narrated their stories of success.

1.3 DATA COLLECTION METHODS

The study adopted the pre-visit questionnaire, focus group discussion methods and documentary analysis to collect data.

Pre-visit questionnaire: The first set of study data was based on the questionnaire method. A questionnaire was sent to all sampled schools prior to school visits to gather contextual information, e.g., learner and teacher profiles, class size, school's source of income and academic streams offered at the school) and supporting input factors (e.g., district support, professional development activities and teaching-learning resources).

Focus group discussion: In each sampled school, focus-group discussions, using unstructured interviews, were conducted with school management teams (SMTs), teachers and learners. The inclusion of the SMT, teachers and learners served different purposes in the study:

- The purpose of holding SMT focus group discussions was to find out the in-school and out-of-school factors that the SMT associated with good results in the NSC examinations.

- Teachers whose learners performed well (i.e. those that obtained an average of 60% or above in the NSC examinations), were included in the teacher focus group. The purpose of this focus group discussion was to identify subject-specific factors that are associated with good results. Only teachers teaching specific subjects were invited to participate in the teacher focus group discussions. These subjects included Mathematics, Mathematics Literacy, Physical Science, Life Sciences, Geography, Economics, Business Studies, Accounting and English (FAL/HL).

- Schools were requested to identify six top-performing learners in Grade 12 in order to solicit their voice and perspective, and triangulate their teachers' responses.

Researchers posed three broad questions to solicit responses from the SMT members, teachers and learners:

- To what would you attribute your good results in the NSC examinations?

- What are you doing to maintain or improve good results that you obtained in 2016 in the NSC?

- In your view, what else could be done (by you and/or other stakeholders) to obtain even better results in the NSC examinations?

Schools were allowed to tell their stories without interruptions from researchers. Researchers listened to the stories as narrated by schools, probed more to get sufficient detail about why schools were successful and extrapolated from the stories factors that explain why schools produced good results in the NSC examinations. All interviews were audio-recorded and were transcribed word-for-word before they were analysed.

Documentary Analysis: Researchers collected a set of three documents from each school visited. These included copies of Grade 11 mark schedules, reports of the top six learners in Grade 11 for 2016, and subject analysis for 2016 NSC examinations results. Grade 11 mark schedules and reports of the top six learners in Grade 11 for 2016 were used to establish the quality of results in Grade 11. Subject analysis for 2016 NSC examinations results was used to select the teachers to be interviewed. Only teachers whose subjects got an average score of 60% or above were interviewed.

1.4   DATA ANALYSIS

A team of five researchers were trained to analyse qualitative data using Strauss and Corbin's (1990) grounded theory. In grounded theory, procedures and techniques for analysing qualitative data involve *open* coding, *axial* coding and *selective* coding. Each of these techniques is briefly discussed below:

Open coding: A team of researchers took each interview transcription and conducted analyses line-by-line, by sentence or paragraph, or taking the whole page and asking, "What seems to be going on here?" (Strauss and Corbin's, 1990: 73). This involves *labelling* a phenomenon by breaking down an observation, a sentence, a paragraph, and giving each discrete incident, idea, or event, a *name*, something that stands for or represents a phenomenon (p. 63). This is done by comparing incidents so that similar incidents are given the same name in order to avoid too many names. As far as possible, data in this study was labelled using the same *names* as dimensions of schools in the Context-Input-Process-Output conceptual framework, which was used in this study. This framework is described in Section 1.5 (Figure 1) below.

Once concepts have been identified, they are then grouped to minimise their number. The process of grouping concepts that seem to pertain to the same phenomena is called *categorising*. The phenomenon represented by a category is given a conceptual name. In this study, six *categories* or *themes* were identified through open coding analysis. These themes are discussed in Part IV in this report.
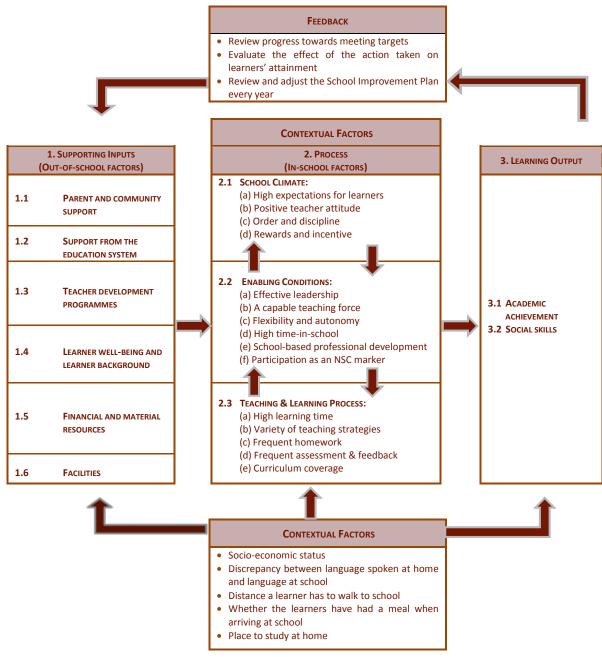
Axial coding involves putting qualitative data back together in new ways after open coding and making connections between *categories* and their *subcategories*. The connection between categories and their subcategories in the present study is illustrated in Figure 25 in Part IV.

Selective coding is the process of selecting the *core category*, systematically relating it to other categories and validating those relationships. Strauss and Corbin (1990) describe the centrality of the core category as that of the sun, standing in an orderly systemic relationship to its planets. In this study, the "learning outcomes" was identified as the core category. The interconnectedness among the six categories, identified through axial coding, in relation to the learning outcomes, the core category, is illustrated in Figure 26 in Part IV.

1.5   CONCEPTUAL FRAMEWORK

In the present study, we employed the Context-Input-Process-Output (CIPO) framework (illustrated in Figure 1 below) to explore the myriad factors that account for the ability of schools to be effective in promoting learning and at closing achievement gaps.

FEEDBACK
- Review progress towards meeting targets
- Evaluate the effect of the action taken on learners' attainment
- Review and adjust the School Improvement Plan every year

CONTEXTUAL FACTORS

1. SUPPORTING INPUTS (OUT-OF-SCHOOL FACTORS)

1.1	PARENT AND COMMUNITY SUPPORT
1.2	SUPPORT FROM THE EDUCATION SYSTEM
1.3	TEACHER DEVELOPMENT PROGRAMMES
1.4	LEARNER WELL-BEING AND LEARNER BACKGROUND
1.5	FINANCIAL AND MATERIAL RESOURCES
1.6	FACILITIES

2. PROCESS (IN-SCHOOL FACTORS)

2.1   SCHOOL CLIMATE:
(a) High expectations for learners
(b) Positive teacher attitude
(c) Order and discipline
(d) Rewards and incentive

2.2   ENABLING CONDITIONS:
(a) Effective leadership
(b) A capable teaching force
(c) Flexibility and autonomy
(d) High time-in-school
(e) School-based professional development
(f) Participation as an NSC marker

2.3   TEACHING & LEARNING PROCESS:
(a) High learning time
(b) Variety of teaching strategies
(c) Frequent homework
(d) Frequent assessment & feedback
(e) Curriculum coverage

3. LEARNING OUTPUT

3.1   ACADEMIC ACHIEVEMENT
3.2   SOCIAL SKILLS

CONTEXTUAL FACTORS
- Socio-economic status
- Discrepancy between language spoken at home and language at school
- Distance a learner has to walk to school
- Whether the learners have had a meal when arriving at school
- Place to study at home

Source: Adapted from Heneveld & Craig (1996)
Figure 1: Context-Input-Process-Output model

A team of trained researchers frequently used the CIPO model to analyse the dimensions of schools and their interrelatedness as well as how the interplay between these dimensions affect learning outcomes. This model has a causal structure, in that outputs are a function of various group processes, which are, in turn, influenced by numerous input variables. The four elements of the model namely, *context*, *inputs*, *process* and *outputs* are briefly discussed below:

Context can be subdivided into direct environment, local community and local/regional administration on the one hand and the national context on the other. It includes developments that influence education, like technological, demographic and economic developments, the labour market, e.g., teacher quality, the general state of the economy, the institutional infrastructure and the general health situation in a country. These have an important potential influence upon quality of education.

Inputs are the conditions that exist prior to group activity. Inputs reflect the resources that groups in an organisation have at their disposal and are generally divided into three categories: individual-level factors, group-level factors, and environmental factors.

Processes are the interactions among group members groups in an organisation. Processes are the mediating mechanisms that convert inputs to outputs. A key aspect of the definition is that processes represent interactions that take place among team members. In comparison with inputs and outputs, group processes are often more difficult to measure, because a thorough understanding of what groups are doing and how they complete their work may require observing members while they actually perform a task. This may lead to a more accurate reflection of the true group processes, as opposed to relying on members to self-report their processes retrospectively, which was the case in the present study.

Outputs are the results of group activity that are valued by the team or the organization. Indicators of team effectiveness have generally been clustered into two general categories: group performance and member reactions. Group performance refers to the degree to which the group achieves the standard set by the users of its output. On the other hand, member reactions, involve perceptions of satisfaction with group functioning and personal development.

The major criticism that has been levied against the CIPO model is the assumption that group functioning is static, a single-cycle, and follows a linear progression from inputs through outputs. To incorporate the reality of dynamic change, feedback loops were added to the original CIPO model, emanating primarily from outputs and feeding back to inputs or processes.

1.6   THE SAMPLE

In June 2007, the former Minister of Education, Mrs. Pandor, MP, established a Committee to conduct a study on schools in the middle quintiles (i.e. quintile 2 to 4) that had performed well in the NSC examinations. Called "Schools that Work," the Ministerial Committee was tasked with exploring, through a qualitative study, the circumstances under which these schools achieved good results, while others in the same situation did not.

In the 2007 study, 18 schools were selected based on the following criteria:

- Schools must be in the middle quintiles
- $\geq$ 80 candidates wrote the NSC examinations in 2006
- Schools must have achieved $\geq$ 80% pass rates with a good percentage of endorsements

The authors of the 2007 study, Christie et al (2007), acknowledge that these schools were not randomly selected, were not necessarily all "excellent" schools and were not selected to represent "the best" in the system. Nevertheless, they "all achieved better than the norm" and they "performed well under conditions that are typical of the mainstream of South African education system" (2007:10).

In April 2017, the Minister of Basic Education, Mrs Angie Motshekga, MP, commissioned the NEEDU to replicate a similar study, *Schools that Work II* (hereafter referred to as the 2017 study) to address a similar research question as in the 2007 *Schools that Work* study (hereafter referred to as the 2007 study).

In the 2017 study, schools were selected based on a set of criteria. While schools in the 2007 study were not selected to represent "the best" in the system, in the 2017 study, high-performing schools that served large percentages of learners from disadvantaged backgrounds (representing over 80% of the school population) were selected based on their good performance in the NSC examinations. For this reason, throughout this report, these schools are referred to as "schools that work" and/or "sample schools." In the 2017 study, a set of three criteria were used to select these high-performing schools:

- The "inclusive basket of criteria" that are used for the NSC resulting (described in detail below),
- A pass rate of 95% or above in the past five years (2012-2016), and
- That 100 or more candidates were presented in the 2016 NSC examinations.

Over the years, the Department of Basic Education (DBE) has been focusing on the overall pass percentage when releasing the NSC examination results. In 2016, DBE made a significant shift in the NSC resulting from reporting overall pass percentage to reporting the results in a more integrated approach. When redesigning the NSC resulting format, DBE looked beyond the narrow fixation with overall pass percentage to re-directing the focus to six other important criteria, which are critical quality indicators referred to as the *inclusive basket of indicators*. These indicators are:

- Percentage passed Mathematics
- Percentage passed Physical Science
- Percentage attained bachelor passes
- Percentage attained distinctions
- Mathematics participation rate
- Throughput rate

The purpose of including these additional criteria in the NSC examination resulting is captured cogently in DBE's plan as follows:

To ensure that schools pursue the national goals of promoting the enrolment and performance in Mathematics and physical sciences. The inclusion of bachelor passes and distinctions brings in a quality dimension to performance, and the throughput rate will ensure that the culling of learners in Grade 10 and Grade 11 will be monitored (DBE, 2017c:2).

The inclusive basket of indicators is captured in a consolidated format, which includes a weighting based on the importance attached to each of these indicators. The computation of the percentage obtained for each of these indicators by school, district, province and nationally, as a factor of the weighting allocated, determines the final score (or the *basket score*) obtained. The computation of a basket score is described in **Appendix A** and is illustrated in the following table.

Table 1: The inclusive basket of performance indicator weighting

INDICATOR	WEIGHTING	FACTOR	FINAL SCORE
Overall pass percentage	35%	0.35	35
Percentage passed Mathematics	10%	0.10	10
Percentage passed Physical Science	10%	0.10	10
Percentage attained bachelor passes	15%	0.15	15
Percentage attained distinctions	10%	0.10	10
Mathematics participation rate	10%	0.10	10
Throughput rate	10%	0.10	10
TOTAL	**100%**	**1**	**100**

A perfect basket score of 100% indicates a school that performs extremely well on all seven inclusive criteria. Basket scores were used to rank all schools in the country, which presented matric (Grade 12) candidates in the 2016 NSC examinations. An inclusive basket score of 70% in the 2016 NSC examinations was used as a cut-off point for a school to be included in the 2017 study.

The study design allowed for the identification of schools in different quintiles that obtained a basket score of $\geq$ 70 percentage. The proportion of high-performing schools in different quintiles is presented in Table 2. Schools were purposefully selected from different quintiles to establish whether factors that are associated with good results in the NSC examinations vary according to different quintiles, the extent of the variation, and whether variations exist among schools within the same quintile.

To ensure that the 2017 sample was representative of the "the best" in the system, all schools were first stratified by province and quintile. They were then ranked by inclusive basket scores. In addition, the top-performing schools in each quintile and in each province with an inclusive basket score of $\geq$ 70 percentage were selected provided they met two additional criteria: a pass rate of $\geq$ 95 percentage in the past four years, and that the number of candidates who were presented in the 2016 NSC examinations was $\geq$ 100. Among the schools which met the three selection criteria (listed above), 111 schools were sampled. All quintile 1 to 3 schools, which met the selection criteria, were sampled. However, only the highest-ranking quintile 4 and 5 schools in each province were included in the study. The spread of the sampled schools in terms of quintiles and provinces is shown in Table 2 below.

Table 2: A proportion of high-performing schools in different quintiles

PROVINCE	QUINTILE 1	QUINTILE 2	QUINTILE 3	QUINTILE 4	QUINTILE 5
Eastern Cape	0	0	3	1	5
Free State	3	1	2	0	2
Gauteng	0	2	3	3	9
KwaZulu-Natal	3	3	1	14	5
Limpopo	1	3	3	3	4
Mpumalanga	4	0	0	3	6
North West	0	0	1	5	6
Northern Cape	0	0	0	0	5
Western Cape	0	0	0	0	7
TOTAL	**11**	**9**	**13**	**29**	**49**

A total of 120 schools—representing three distinct groups of schools—were included in this study:

- 62 schools in the middle quintiles (i.e. quintile 2 to 4) that had performed well in the NSC examinations (this group of schools was also the target population in the 2007 study);
- 11 schools in quintile 1 that met the selection criteria described below were included in the 2017 study; and
- 47 schools in quintile 5 were selected to provide a contrastive case.

Five of the 18 schools in the 2007 study sample met the inclusive basket score of $\geq$70% and presented $\geq$ 100 candidates in the 2016 NSC examinations. These schools were included in the 2017 sample to establish what they were doing well to maintain good performance over the years. Of the 13 remaining schools that did not meet these criteria, nine (see the list in **Appendix B**) were sampled in order to find out why performance had dropped. These schools were excluded from the list of 111 schools as listed in **Appendix C**, which represent the highest performing schools in different quintiles across the country.

As the research unfolded and further information about the schools emerged, it became clear that some schools, particularly those in the lower quintiles (i.e. quintiles 1-3), were producing good results against all odds. These schools had to put in more effort, work harder and smarter to produce quality results comparable to those in schools with better resources (i.e. quintiles 4 and 5). This observation necessitated the inclusion of a second research question:

How do schools in lower quintiles (quintile 1 to 3) succeed against all odds?

To address this question, as was done in the 2007 study, while schools in quintile 5 were included in the 2017 study, data from these schools were only used to provide a contrastive case. These schools enjoy profound inputs that have a bearing on the quality of the output, i.e. better learning outcomes. These inputs include, but are not limited to, better resources, smaller class sizes, ability of parents to sponsor extra private tuition, and learner admission criteria, some of which target learners with good results and enabling family circumstances. The influence of these factors on the learning outcomes is discussed in sufficient details in sub-section 4.4.

1.7 LIMITATIONS

In the CIPO conceptual framework (see Section 1.5 above), unlike the inputs and outputs, processes (what goes in the school) are often more difficult to measure, because a thorough understanding of how teachers complete their work inside and outside their classrooms may require observing them while they actually perform different tasks. This may lead to a more accurate reflection of the true teacher processes, as opposed to relying on teachers to self-report their processes retrospectively.

The first limitation of this study is that the best practices presented in this report were based on teachers' and learners' self-reporting. However, an attempt was made to improve data validity by triangulating different sources of data collected through focus group discussions with SMT members, teachers and learners in each school.

The second limitation is that the "causal" relationship between the best practices reported in this study and good learner performance in the NSC examinations is also based on teacher perceptions. Our role in this research was that of a reporter—to narrate schools' success stories as told by schools themselves. While the study's design does not permit causal inferences, in Part II below, we reviewed the literature to establish whether there is sufficient body of empirical evidence to link the best practices exhibited by high-performing schools in this study (which are presented in Part IV in this report) and improved learning outcomes.

In this section of the report, we briefly explore several types of practices that research has identified as having an impact on improving learning outcomes and closing the achievement gap. The Context-Input-Process-Output (CIPO) framework (discussed in Part I above) guides the review of literature, including the analysis and interpretation of data. The cursory review of literature is organised according to the CIPO framework.

2.1.   CONTEXTUAL FACTORS

The place to begin in exploring how best to advance learning is to look first at the broader question of what factors contribute to making schools effective or, put another way, what makes high-performing schools work?

Many interventions aimed at improving learning outcomes and closing the achievement gap relate to in-school activities, services, and pedagogical approaches. However, much of the literature and research addressing this issue also emphasizes the need to reach out beyond the school setting to build strong community relationships, increase the involvement of parents, and deal with learners' socio-emotional issues, which they bring to school with them.

Effective progress in improving learning outcomes and closing achievement gaps must be nuanced and address both academic and environmental factors. Ultimately, programmes that rely entirely on increasing academic standards without parallel attention to social-emotional factors associated with achievement, motivation and performance are less likely to improve the learning outcomes.

As noted in the review of literature below, there is an extensive body of research surrounding the socioeconomically-based achievement gap in learner performance. A significant number of studies have reported that although differences in family income do not fully explain the achievement gap, the link between poverty and low achievement should not be ignored.

Addressing the question, "Why does family wealth affect learning?" Willingham (2012) explains that the influence of family wealth on learning is driven by "two broad categories of effects:"

- Firstly, as one might expect, wealthier parents have the resources to provide more and better learning opportunities for their children.

- Secondly, children from poorer homes are subject to many challenges and chronic stress, which research has shown is more destructive to learning than was previously reported.

As noted in a sample of research studies reviewed in **Box 1** below, there is an acknowledgement showing an association between academic achievement and social and emotional characteristics:

Box 1: Effect of socioeconomic status on learner achievement

Box ① Cursory look at research	Sources
In the late 1960s and early 1970s, researchers concluded that, in general, public schools were ineffective and that family-related variables such as income, race, education, and occupation were the primary factors in explaining student academic achievement. Well up into the decade of the 90s, school-based research was still concluding that a school's rate of student poverty is the most important factor influencing student performance. The problem with this finding, of course, is that educators have no control over the social and economic backgrounds of learners. However, teachers have to work with the learners who are assigned to them and do the best they can to overcome these obstacles.	Coleman *et al* (1966) Wang, Haertel & Walberg (1997)
• Students' personal and family characteristics have an overriding influence on their performance rather than the schools they attend. • The relative affluence or poverty of students' families accounts for seventy percent of the differences in scholastic achievement and that difference in the level of school resources has little effect. • Schools do not reduce the initial inequalities between children, but rather, perpetuate or even exacerbate them.	Coleman *et al* (1966)
• Socioeconomic status (SES) has a stronger correlation to "cognitive scores" than any other factor. Home, community, and societal factors play a role in creating learner achievement gaps.	Elias & Arnold (2006)
• Socioeconomic status (SES) has a stronger correlation to "cognitive scores" than any other factor including race among students who often suffer from attending schools of lower-quality	Jiménez & López-Zafra (2009)
• Household income is positively associated with achievement levels. Family income serves as a better predictor of school success than other factors.	Payton *et al* (2000)
• Learners start from different skill and knowledge levels and have different family background circumstances that may affect their learning. • When estimating the relative influence of more than 30 educational, psychological, social and emotional categories on academic learning, both social and emotional variables have the most influence on academic performance.	Wang, Haertel & Walberg (1997)
• Children from low-income families are more likely to experience problems of health, nutrition, low birth-weight, housing, violence, substance abuse, and other factors that depress achievement.	Haycock (2001)

Poverty background may be the most important factor in learning, but it is not the only factor. Moreover, no researcher has concluded that it is a factor that cannot be overcome, at least partially, by other inputs into the education process, including those discussed in Section 4.4 below. Over the past few decades, a large body of school effectiveness research, including Shannon and Bylsma (2004), established the fact that these early claims—i.e. learners' personal and family characteristics have an overriding influence on their performance (rather than the schools they attend) were incorrect or were at least over exaggerated. There is no shortage in the literature of lists of widely accepted characteristics of effective schools. The characteristics common to most lists are listed in **Box 2**. As illustrated in **Box 2**, these characteristics align perfectly with the CIPO framework discussed in Section 1.5 above.

Box 2: Widely accepted characteristics of effective schools

BOX ② CURSORY LOOK AT RESEARCH			
CHARACTERISTICS OF EFFECTIVE SCHOOLS	**HENEVELD'S & CRAIG'S (1996) MODEL**		**OUTPUTS**
	SUPPORTING INPUTS	**PROCESS**	
High levels of family and community involvement	Strong community support		Learner Academic Achievement
High standards and expectations for all students		High expectations for learners	
Supportive learning environment		School climate	
Clear and shared focus		Enabling conditions	
Effective school leadership		Effective leadership	
Focused professional development		Frequent and appropriate teacher development programmes	
High levels of collaboration and communication		Flexibility and autonomy	
Curriculum, instruction, and assessments aligned with state standards		Frequent assessment and feedback	
Frequent monitoring of learning and teaching		Effective leadership	

Further, the school effectiveness research identified variables that, all or in part, are under the influence and control of the schools and that, when addressed properly, contribute to making schools more effective. These in-school factors are discussed in Section 4.5 below.

2.2.   SUPPORTING INPUTS (OUT-OF-SCHOOL FACTORS)

An examination of the relationship between supporting inputs in any education system and learner achievement cannot be done without examining first how learning occurs, and what factors facilitate or hinder learning. What makes a good school? What do schools with high achievement levels have in common? The failure to create and maintain optimum learning environments can undermine all efforts to improve the quality of teaching and learning.

A key question is whether certain inputs support schools to overcome learners' personal and family background factors that are present before learners start school. There is an extensive body of research (sampled in **Boxes 3A-E** below) suggesting that certain inputs (including family involvement, effective support from the education system, frequent and appropriate teacher development programmes, sufficient textbooks and other resources, and adequate facilities) make a difference in narrowing the achievement gap in learner performance.

Box 3: Inputs that lessen the effect of socioeconomic status on learner achievement

    A. Parental/Family involvement

BOX ③ A CURSORY LOOK AT RESEARCH: PARENTAL INVOLVEMENT	SOURCES
Notwithstanding other contextual factors that affect teaching and learning (as discussed in Box 1 above), at the school level, learner academic success depends on close partnership between teachers, learners and their parents. Joyce Epstein, a leading expert on parent involvement in the United States, divides school parent involvement programmes into six broad categories: • *Parenting*, in which schools help families with their parenting skills; • *Communicating*, or working to educate families about their child's progress; • *Volunteering*, which includes finding ways to recruit and train parents to work in the school or classroom; • *Learning at home*, in which schools promote at-home learning so parents can monitor and help with homework; • *Decision-making*, in which schools include families as partners in school organizations; • *Community collaboration*, a two-way outreach strategy in which community or business groups are involved in education and schools encourage and family participation in the community. Studies quoted below suggest that no initiative, no matter how well conceptualised and implemented, will have long-term academic benefits unless teachers, parents, and communities work together as partners in the educational journey of learners:	Epstein (2001)

• "The most accurate predictor of a student's achievement in school is not income or social status but the extent to which that student's family is able to:
  ✓ Create a home environment that encourages learning;
  ✓ Express high (but not unrealistic) expectations for their children's achievement and future careers; and
  ✓ Become involved in their children's education at school and in the community" (1994: 160)
	Henderson & Berla (1994: 160)

• When schools work with families to support learning, children are more likely to succeed in school and beyond.	Jeynes (2015)

• Parental involvement results in substantial benefits to children, parents, educators, and the school. Benefits for learners include the following:
  ✓ Children tend to achieve more, regardless of ethnic or racial background, socioeconomic status, or parents' education level.
  ✓ Children generally achieve better grades, test scores, and attendance.
  ✓ Children consistently complete their homework.
  ✓ Children's positive attitude about school often results in improved behaviour in school and less suspension for disciplinary reasons.
  ✓ Children from diverse backgrounds tend to do better when parents and professionals work together to bridge the gap between home and school.
	Henderson & Berla (1994)

• The achievement scores of children with highly involved parents is higher than children with less involved parents.	Johnson & Duffett (2003
• Programmes and interventions that engage families in supporting their children's learning at home are linked to higher student achievement.	Epstein & Sanders 2000
• Other forms of involvement among Epstein's six factors (namely, volunteering and attending school events) appeared to have less direct effect on student achievement, particularly in high school.	Henderson & Mapp (2002).
• The most accurate predictors of a student's achievement in school is the extent to which a student's family encourages and supports learning at home, expresses expectations for achievement in school and in life, and becomes involved in their children's schooling.	National Coalition (2006)

BOX 3: Inputs that mitigate the effect of socioeconomic status on learner achievement

B. Effective support from the education system (district offices)

BOX ③B CURSORY LOOK AT RESEARCH: EFFECTIVE SUPPORT FROM THE EDUCATION SYSTEM	SOURCES
There have been several international research studies that have focused on how districts influence school improvement efforts. Findings from a sample of studies, which are briefly reviewed below, suggest the following characteristics of effective district offices:	
• They emphasise curriculum and teaching. These districts develop benchmark assessments that are used to identify problems with student mastery of content and skills. The emphasis is on ensuring that problems are identified and addressed quickly.	Gordon (2002)
• Supervisors have the greatest impact on their districts when they dedicate their time to specific teaching strategies such as modelling effective instructional leadership, both in one-on-one settings and in professional learning communities.	Honig (2012) Honig & Rainey (2014)
• To become true leaders of teaching and learning improvement in their schools, Principals often need intensive and personalized supports, which district Principal supervisors (or Circuit Managers) are in unique positions to provide.	Honig et al. (2010)
• District managers protect district officials' time, taking other tasks off their plates so that they can focus on working intensively with Principals. Further, district officials are assigned manageable workloads.	Shannon & Bylsma (2004)
• District officials receive intensive professional development as well, in order to perform their role of supporting schools effectively.	Maguire (2003)
• To help them answer questions that are fundamental to system-wide improvement, district leaders have access to the right data.	Honig (2012)
• Districts use credible data to answer questions important to their strategic decision making, such as: ✓ Which of the students are chronically low performing across grades and subject areas? ✓ Which teachers and Principals, if any, have these students had in common? ✓ What other features of these schools might help explain such results?	Togneri & Andersonn (2003)
• Districts send a clear and unwavering message: Low expectations for any group of students are unacceptable.	Honig & Rainey (2014)
• The most successful improvement efforts are systemic as districts look at how the "pieces" of district structures and programmes fit together and take a comprehensive "big picture" view.	Honig & Rainey (2014)
• There is an alignment among different units within a district to enable district officials to draw on other professional learning resources to help schools.	Cawelti & Protheroe (2001)

BOX 3: Inputs that mitigate the effect of socioeconomic status on learner achievement

C. Frequent and appropriate teacher development programmes

BOX ③C CURSORY LOOK AT RESEARCH: PROFESSIONAL DEVELOPMENT	SOURCES
Educational improvement requires teachers to have deep knowledge of their subject and the pedagogy that is most effective for teaching the subject. Professional development affects student achievement through three steps. Firstly, professional development enhances teacher knowledge, teaching skills, and motivation. Secondly, better knowledge, skills, and motivation improve classroom teaching. Thirdly, improved teaching raises student achievement. If one link is weak or missing, better student learning cannot be expected. Following is a sample of empirical studies, which validate the effects of professional development:	Cohen & Hill (2000)
• **Influence of professional development on achievement:** ✓ Intensive ongoing professional development for administrators and teachers leads to an increase in student achievement.	Yoon *et al* (2007)
• **Importance of content focus in high quality professional development:** ✓ "Programmes whose content focused mainly on teachers' behaviours demonstrated smaller influences on student learning than did programmes whose content focused on teachers' knowledge of the subject, on the curriculum, or on how students learn the subject" (1998: 18).	Kennedy (1998)
✓ Successful professional learning immerses teachers in the content they teach and provides research-based knowledge about how students learn.	Killion (2012)
✓ The professional development has a positive effect on teacher knowledge. Teachers' knowledge of the content they teach is a consistently strong predictor of learner performance.	Darling-Hammond (1999)
✓ Central to continuous school improvement are efforts to initiate programmes and practices that develop and disseminate the skills, abilities, and knowledge of the entire school staff. The purpose of professional development is to nurture the academic growth of children by improving the skills of teachers.	Darling-Hammond (2006)
• **Quality of effective professional development programmes:** ✓ The data from large-scale national studies show that most professional developments provided to teachers do not meet the quality characteristics including focussing on content knowledge and skills of teachers, and active methods of teacher learning of practices.	Corcoran & Foley (2003)
✓ Many professional development programmes are not evaluated across the four categories of outcomes to assess the degree to which the programme activities are having effects on teaching and learning. These categories are: (a) quality of implementation of development activities; (b) gains in teacher knowledge; (c) change in classroom practices, and (d) increase in student achievement.	Ronfeldt *et al* (2015)
✓ Professional development needs to be differentiated and take into account teachers' previous experiences and learning styles. There is no one-size-fits-all answer.	Hattie (2009)
✓ What distinguishes high-performing, high-poverty schools from lower-performing schools is effective collaborative professional development for teachers.	Silva (2008)

Schools that Work II Lessons from the Ground

Box 3: Supporting inputs which mitigate the effect of socioeconomic status on learner achievement

D. Sufficient textbooks and other resources

BOX ③D CURSORY LOOK AT RESEARCH: ADEQUATE TEXTBOOKS AND OTHER RESOURCES	SOURCES
There are different results for the studies that investigate the relationship between educational resources of schools and academic achievement. Some studies indicate that educational resources of schools do not have an effect on academic achievement of students (e.g., Hanushek & Luque, 2003). On the other hand, some studies report the exact opposite (Card & Krueger, 1996). Some studies report that the educational resources of schools play an important role in order to diminish the effect of socioeconomic features on academic achievement, and create equal opportunities for learners. Reviewed below are findings from a sample of research studies, which report a relationship between the educational resources of schools and the academic achievement of students:	Savasci & Tomu (2013) Hanushek & Luque (2003) Card & Krueger (1996)
• It is endorsed that academic achievement of students is related to individual differences between students, socioeconomic features in which they grow up, and educational resources of students' current school.	Savasci & Tomu (2013)
• Educational resources are of vital importance in terms of their role in attaining educational aims and objectives. The level of attaining educational aims and objectives is directly related to educational resources and use of them.	Hanushek & Luque (2003)
• The general conclusion of the meta-analysis is that school resources are systematically related to student achievement and that these relations are large enough to be educationally important.	Greenwald, Hedges & Laine (1996)
• There are positive relationships between academic achievement of students and physical, financial and material resources.	Adeogun & Osifila (2008)
• There are some studies that indicate that the effect of educational resources on student achievement depends on the development level of a country, as well. To account for academic achievement of students, factors related to schools are more effective in developing countries, and social background of students is more effective in developed countries.	Fuller & Clarke (1994)

Box 3: Supporting inputs that mitigate the effects of socioeconomic status on learner achievement

E: Adequate facilities

BOX ③E CURSORY LOOK AT RESEARCH: ADEQUATE FACILITIES	SOURCES
It is appropriate to ask whether education systems should spend part of the relatively scarce resources they have available on upgrading school facilities. According to the National Education Knowledge Industry Association, "School buildings are a tool in the enterprise called learning and, like any tool, they can help or hurt the enterprise. We can't control all the influences that affect a child's learning, but we can control the kinds of learning facilities to which we send our children" (2007: 26). The influence of the physical environment is often subtle, sustained, and quite difficult to measure with precision. However, the literature quoted below makes it clear that it is necessary to ensure that those upgrades are directly related to things that make a difference in learning outcomes:	National Education Knowledge Industry Association (2007)

• EFFECT ON TEACHING AND LEARNING:
  ✓ Physical characteristics of schools that directly or indirectly affect learning are many and varied. They include:
    ➢ External physical, e.g., age of building, maintenance, school grounds;
    ➢ Internal physical, e.g., lighting, maintenance, lockers, storage space;
    ➢ Security and safety, e.g., weapons screening, school order and discipline;
    ➢ Ambient environmental health, e.g., air circulation/ventilation, indoor air quality
    ➢ Physical classroom e.g., lighting, temperature control; and
    ➢ Instructional facilities, e.g., science lab, access to computers, access to library, class size.
	Ramsuran (2005)
	
	Hawkins & Overbaugh (2008)

✓ A building condition affects many intervening variables, which, in turn, influence student learning. One of these variables, Duke and Griesdorn (1998) suggest, is time on task. The central question: How much instructional time is lost or compromised as a result of building-related problems?	Duke & Griesdorn (1998)
✓ Teachers who offer Mathematics and physical science do not have facilities and equipment to promote effective teaching and learning. Consequently, teaching of physical science remains at a theoretical level without any experiments to enhance understanding and application of knowledge.	Green, Cook & Bolt. (1996)
• EFFECT ON LEARNING OUTCOMES: ✓ Studies conducted over the past four decades have found a statistically significant relationship between the condition of a school, or classroom, and student achievement.	Uline (2010)
✓ In general, students attending school with better facilities score five to seventeen points higher on standardized tests than those attending school in substandard buildings.	Maxwell (2013)
✓ The quality of facilities has indirect effect on achievement. Facilities have more of an effect on factors such as student attitudes toward school, self-esteem, security, comfort, and pro-social behaviour, which in turn affect learning and achievement.	Moore & Warner (1998)
✓ Some scholars are deeply sceptical about linking improved achievement with top-notch facilities. Critics of studies making such linkages argue that these studies fail to control for critical variables such as good teaching, which, among other variables, makes it possible for students to attend a substandard facility, but still learn and perform well.	Wenglinsky (2007)
• EFFECT ON SAFETY AND DIGNITY: ✓ School facility factors such as building age and condition, quality of maintenance, temperature, lighting, noise, colour, and air quality can affect student health, safety, sense of self, and psychological state.	Johnson (1997)

2.3. PROCESS (IN-SCHOOL FACTORS)

Research, which challenges studies that poverty and other demographic variables are determinative in predicting student success, suggests that, "since low-income learners are more school-dependent than their more advantaged peers, there is potential for schools to help solve the problem" (Murphy, 2014: 26).

While there can be no claim that a single instructional intervention can be said to "cause" a particular achievement result, it can be argued with a high degree of confidence on the strength of empirical evidence that there are some consistent associations between in-school factors and learner achievement. In their model, Heneveld's and Craig's (1996) (discussed in section 1.5 above) organise these factors into three categories: positive school climate, enabling conditions, and an effective teaching and learning process. Research-based approaches about narrowing performance gaps, as reported in the literature, are organised according to these categories in Boxes 4A-C below:

Box 4: In-school factors to narrowing performance gaps
  A. School climate

BOX ④A: CURSORY LOOK AT RESEARCH: SCHOOL CLIMATE	SOURCES
Schools can improve student engagement by maintaining a climate conducive to serious work and learning. Such a climate has three principal characteristics: it is a safe, disciplined and respectful; it presses all students to do significant academic work; and it provides students with needed support through greater personalisation and caring. Successful schools create an environment that ensures support, mentoring and encouragement for all students. With healthier base conditions, the school is in a better position to move on to dealing directly with improving teaching and learning:	Thapa *et al* (2013)
• SAFETY, ORDER AND DISCIPLINE: ✓ The factor mentioned most often and ranked number one in school effectiveness research is a "clean and orderly climate." Accordingly, the list of findings includes this item. The effective school establishes a well-disciplined, secure, and wholesome learning environment, and maintains clean and orderly school buildings.	Claus & Girrbach (1985)
• ACADEMIC PRESS: ✓ **Attendance and timeliness:** ➢ As a starting place, schools have well-established standards for school attendance and timelines and active programmes to combat tardiness and absenteeism. A system of following up of absent students is in place.	Ahmed Abdi Aden (2013)
➢ The one paramount factor that all scholars agree on is that time in learning is the only within-school variable that directly influences a child's education. When students and/or teachers are not in school, learning and achievement suffer.	Rocca (2003)
✓ **Self-goal setting:** ➢ Self-set goals enhance the performances of students with low achievement motivation. Therefore, teachers should encourage students to set goals if their motivation to achieve is low.	Cauley & McMillan (2009)
✓ **High expectation:** ➢ Teachers who expect less can unwittingly perpetuate the achievement gap by failing to encourage students from poor backgrounds.	Green (2005)

Box 4: In school factors to narrowing performance gaps

B. Enabling conditions

BOX ④B: CURSORY LOOK AT RESEARCH: ENABLING CONDITIONS	SOURCES
• **EFFECTIVE LEADERSHIP:** School leadership is unquestionably one of the most crucial components of educational improvement and change. Very rarely have schools been turned around without the leadership from a Principal who has set clear priorities and goals that are followed through with professional learning. Many other factors contribute to positive change in schools, but leadership is the catalyst.	
✓ **Strategic planning:** A good strategic plan can improve student outcomes, keep great teachers and enhance the reputation of school leadership.	Kotter (2007)
✓ **Instructional leadership:** Instructional leaders in successful schools have effective monitoring, evaluation and review programme including regular reviews of planning, pupil work analysis and lesson observations with evaluative feedback.	DuFour *et al* (2005)
✓ **Facilitative leadership:** Principals in effective schools help to create appropriate structures for discussing educational issues and encourage teacher and parent leadership by sharing power over key decisions. Although the Principal is in a critical position to lead change, he or she cannot do it alone. Empowering others throughout the school to develop and exercise leadership roles and to share in the leadership of change is both desirable and achievable.	Knapp (2003)
• **A CAPABLE TEACHING FORCE:** The importance of good teachers is no secret: ✓ There is enough evidence to show unequivocally that good teachers are vital to raising student achievement and closing achievement gaps. Teachers have a substantial effect on student achievement.	Rockoff (2004)
✓ The effect of teaching on student learning is greater than student ethnicity or family income, school attended by student, or class size. The effect is stronger for poor and/or Black students than for their more affluent and/or white peers, although all groups benefit from effective teachers.	Rowan, Correnti & Miller (2002)
✓ Teacher quality—whether measured by content knowledge, experience, training and credentials—is strongly related to student achievement. The factor that sets good teachers apart from other teachers is usually their training in teaching methods, in addition to content knowledge in the subject area they teach as measured by a university major in the field.	Goldhaber & Anthony (2007)
• **FLEXIBILITY AND AUTONOMY:** Effective Principals allow decentralized decision-making to departmental heads to determine the most important priorities for learning, while ensuring that capacity-building and other resources are distributed fairly.	Glazer (2008)
• **TEACHER COMMITMENT AND DEDICATION:** Committed teachers are a key pillar supporting student achievement: ✓ Teachers are willing to work 24/7. They are at the school early in the morning until late in the evening. Some teachers even come in on Saturdays to address students' needs.	Ferguson (2015)

Box 4: In school factors to narrowing performance gaps

      C. Teaching and learning process

      (a) High learning time

BOX ④C(a): Cursory look at research: High learning time	Sources
By universal agreement, the most important classroom variable is time. If research has established any relationship in education, it is that which exists between time and learning. Other factors (student-teacher interaction, teacher quality, and school leadership) can have a potential impact, but there are no within-school variables that have a direct impact on a child's learning other than time-on-task. Time in learning is universally acknowledged (by many studies including those reviewed below) as the single most critical classroom variable. The socio-economic status of students, the most important external factor in learning, cannot be controlled. Research makes clear that time is a resource that must be used well and in concert with a continuous focus on quality teaching to realize its full potential.	Farbman (2015)
• Total learning time is one of the strongest predictors of student outcomes among other factors.	Hoxby (2008)
• More time in school (i.e. formal educational settings) can help to overcome the negative effects of poverty (like poorer health, less stable home lives, and fewer out-of-school learning opportunities) on learning.	Cooper (1996)
• Adding time is, more often than not, associated with improved school wide outcomes, with notable stronger effects among schools serving primarily at-risk students.	Patall (2010)
• Extended learning opportunities (ELOs) are associated with gains in student performance and engagement, as well as improvements to study habits.	The Quality Imperative (2009)
• It makes sense that highly effective schools are those with considerably more time than the conventional is that, almost by definition, they provide more time in classrooms. In addition, more time in class should then, assuming reasonably efficient instruction, translate into more raw learning time or, as it is known in the literature, "time-on-task".	Downey (2004)
• There is interplay between time and the quality of teaching. That is, the effectiveness of instruction might determine whether extended school time has positive, negative, or no effects on student outcomes.	Patall (2010)
• More engaged time in academic classes allows broader and deeper coverage of curricula, as well as more individualized learning support.	Farbman (2015)
• Elementary (primary school) students who participate in "high quality afterschool programmes record higher Mathematics scores than peers who experience less adult supervision."	Vandell (2007)
• Research based on a large dataset of classroom observations in California found that differences in the amount of engaged learning time among students accounted for 9 percent of differences in student outcomes in elementary (primary school) grades—a strong association in the field of education.	Fisher & Berliner (1998)
• Research makes plain that more learning time is not the standalone factor of effective schools, but a core component that operates within a multifaceted system to promote student learning and growth.	Farbman (2015)

Box 4: In school factors to narrowing performance gaps
    C. Teaching and learning process
    (b)   Effective teaching strategies

BOX ④C(b): CURSORY LOOK AT RESEARCH: TEACHER COLLABORATION	SOURCES
A large body of research has demonstrated that quality of teaching is perhaps the most significant in-school factor contributing to student achievement. Teachers help their learners engage in school by varying their teaching methods, including the empirically-tested techniques, which are summarised below in Boxes 4C(i) to (vi):	Stronge (2010) Minkel (2015)
• **(i) Teacher collaboration:** Several research studies confirm the value of teacher collaboration:	
✓ Teacher collaboration helps to foster a collaborative culture that puts the students' learning first, and turns a teacher's best practice into a school wide best practice.	Perez (2009)
✓ Students tend to do better in class because they receive the consistent message from teachers that everyone should strive to do their best.	Camburn (2010)
✓ To be most effective, collaborative learning should be driven by analysis of student data and focus upon the development of teachers' knowledge, skills and understanding.	Harris & Jones (2012)
✓ When teachers planned together in collaborative teams to identify and deploy the most powerful teaching strategies to address gaps in student learning, the subsequent impact was perceived to be significant.	Moolenaar (2012)
✓ While true collaboration is best achieved through a structured process for exchanging insights and content, even informal teacher-to-teacher collaboration can have a positive impact on students.	Winn & Blanton (2005)
✓ In addition to impact on teacher and student learning, collaboration recognises the crucial role teachers have in school improvement. For this reason, collaboration is regarded as a rewarding professional learning experience	Supovitz & Sirinides (2010)
✓ High-quality collaboration in general and about assessment in particular among teachers is associated with increases in their students' achievement, their performance, and their peers' students' achievement.	Schmoker (2007)

BOX ④C(b): CURSORY LOOK AT RESEARCH: LOOPING	SOURCES
• **(ii) Looping:** The empirical literature is mixed on looping's relationship to student achievement. However, many different studies, including the following, have suggested that looping can favourably impact academic achievement:	
✓ The looping classroom can be particularly beneficial for students with academic or social challenges.	Pratt (2009)
✓ Teachers and administrators are better able to meet students and families where they are and propel them forward when capitalizing on knowledge of students' abilities.	Thompson *et al* (2016)
✓ Students in looping classrooms benefitted academically by remaining with the same teacher and classmates for two successive years	Bogart (2014)
✓ Scores for those in the looping classrooms remained significantly higher in second year comparisons.	Bogart (2014)
✓ Looping students had significantly higher mean scores in reading and math when compared to randomly selected non-looping students at their school and in comparison to randomly selected non-looping students in the district.	Hampton *et al* (1997)
✓ Students in looping classrooms perform significantly better than their peers in non-looping classrooms in rural China.	Wang (2017)
✓ When you teach the same grade every year, you hold the curriculum constant and cycle through a new group of kids every year. When you loop, the kids are the	Minkel (2015)

BOX ④C(b): CURSORY LOOK AT RESEARCH: DIFFERENTIATED INSTRUCTION STRATEGIES	SOURCES
• **(iii) Differentiated instruction strategies:** Just as everyone has a unique fingerprint, each student has an individual style of learning. Not all students in a classroom learn a subject in the same way or share the same level of ability:	Weselby (2017)
✓ Differentiated instruction can enable students with a wide range of abilities—from gifted students to those with mild or even severe disabilities—to receive an appropriate education in an inclusive classroom.	Rock, Gregg, Ellis, & Gable (2008) Lawrence-Brown (2004)
✓ Students who were taught using a differentiated curriculum demonstrate significantly higher achievement.	McQuarrie (2008)
✓ The differentiation strategies of choice and interest play a vital role in achievement and student satisfaction in learning.	Koeze (2007)
✓ When students experience continued frustration due to tasks that are too difficult, no learning occurs.	Tomlinson (1999)
✓ Students whose skills were under-challenged demonstrated low involvement in learning activities and lessening of concentration.	Tomlinson (2006)
✓ In order for all students to experience successes that matter to them, schoolwork must accommodate individual differences of talent and development.	Stevenson, (1992)
✓ Differentiated instruction is the only way for effective teaching for all students in mixed ability classrooms.	Koutselini (2006).
✓ Differentiation constitutes an innovating, constant reflective procedure of effective teaching and learning that cannot be met by readymade lesson plans.	Strand (2010)

BOX ④C(b): CURSORY LOOK AT RESEARCH: CO-OPERATIVE LEARNING	SOURCES
• **(iv) Co-operative learning (learner peer-support) or kids teaching kids:** Co-operative learning in an arrangement in which students work in mixed ability groups and are awarded based on the success of the group.	
✓ Co-operative learning improves students' achievement, persistence, and attitudes.	King (2016)
✓ Without positive interdependence, most students will see themselves in competition with other students for good grades. With positive interdependence, most students work to help others succeed.	Johnson & Johnson (2004)
✓ Cooperative learning structured learning activities in which students are held accountable for their contribution, participation and learning, they are also provided incentives to work as team in teaching others and learning from others.	Woolfolk (2004)
✓ The impact of cooperative learning on achievement means that if schools wish to prepare students to take proficiency tests to meet local and state standards, the use of cooperative learning should dominate instructional practice.	Johnson & Johnson (2004)
✓ Cooperative learning resulted in higher achievement as compared to routine method of teaching in English.	Slavin (1995):
✓ Cooperative learning was found to be a better instructional strategy than routine method of instruction.	Dheeraj & Kumari (2013)
✓ Stronger effects are found for peer support than for superior (teacher) support.	Johnson & Johnson, 2004

BOX ④C(b): CURSORY LOOK AT RESEARCH: MAKING SUBJECTS MORE INTERESTING	SOURCES
• **(v) <u>Making subjects/lessons more interesting and relevant</u>:**	
✓ Learning can be seen as the acquisition of information, but before it can take place, there must be interest. Interest permeates all endeavours and precedes learning.	Lee (2016)
✓ Effective teachers start by making their students develop an interest in the subject they are teaching, thus making their subjects more interesting.	Cox (2015)
✓ If students are not paying attention, and their minds are wandering, then they are not absorbing any of the information that you are giving them to pass your class. You need to keep your class interested and engaged.	Cox (2016)
✓ The degree to which teachers are able to implement best practices in the classroom in thoughtful, meaningful way determines the performance of school or a student.	Ormrod (2006)
✓ Teachers need to connect real life to the content being taught to get the emotional engagement that draws students to learning.	Martin & Dowson (2009)
✓ Learning is enhanced when teachers integrate other subjects to show connections between disciplines and to create opportunities to collaborate with other teachers.	Ryan & Deci (2000)
✓ Teachers and students should learn to use mobile technology, such as iPods, iPads and content area related apps effectively in the classroom.	Wilson & Sperber (2004)
✓ Teachers use the relevant tools to make learning relevant, address students' learning styles and prepare students for high school, college and careers.	Frymier & Schulman (1995)

BOX ④C(b): CURSORY LOOK AT RESEARCH: USING WHATSAPP TO ENHANCE TEACHING	SOURCES
• **(vi) <u>Using WhatsApp to enhance teaching and learning</u>:** WhatsApp might be the first technology that entered the class without any training or administrator supervision, as teachers and students are using it in their private life, and its advantages enabled it to be become, naturally, an educational technology:	Bouhnik & Deshen (2014)
✓ The learning process integrating WhatsApp mobile learning activities is more effective for learning and teaching than the entirely in-class learning process.	C B Taibah University (2015)
✓ WhatsApp mobile learning activities carry benefits for students' achievement and attitudes towards mobile learning and teaching.	Barhoumi & Rossi (2013)
✓ By its access flexibility and just-in-time, it is emerging as a popular approach for learning in organizations.	Barhoumi & Rossi (2013)
✓ Knowledge can be transferred by participating in e-learning programs and improve learners academic performance. WhatsApp is useful in helping students both construct and share their knowledge.	Haq *et al* (2012)
✓ WhatsApp lets teachers engage their students with educational activities on tablets, laptops and smart phones.	Hindu (2011)
✓ There is a significant statistical difference between using audio messages and academic performance of students in institutions of higher learning.	Yeboah & Ewur (2014)

Box 4: In school factors to narrowing performance gaps

  C. Teaching and learning process

   (c) Effective Homework

BOX ④C(c): CURSORY LOOK AT RESEARCH: EFFECTIVE HOMEWORK	SOURCES
Homework is often a hot-button issue for schools and is thus a frequent topic of educational research. There is considerable debate over the effectiveness of homework among researchers, administrators, teachers, parents, and students. While some researchers point out some valid cautions about the benefits of homework, the body of evidence, as quoted below, suggests that homework can be beneficial:	Carr (2013) Kohn (2006) Bennet & Kalish (2006)
• **Effect of homework:** ✓ Along with classroom instruction and students' responses to class lessons, homework is an important factor that increases student achievement.	Cooper, Robinson & Patall (2006)
✓ A meta-analysis of homework-related research found that there is a positive relationship between the amount of homework students do and their academic achievement.	Cooper, Robinson & Patall (2006)
✓ When homework is properly utilized by teachers, it produces an effect on learning three times as large as the effect of socioeconomic status.	Redding (2000)
• **Benefits of homework** include: ✓ Long-term academic benefits, such as better study habits and skills; non-academic benefits, such as greater self-direction, greater self-discipline, better time management, and more independent problem solving; and greater parental involvement and participation in schooling.	Cooper (2007) Protheroe (2009)
✓ Homework enhances the development of self-regulation processes and self-efficacy beliefs, as well as goal setting, time management, managing the environment, and maintaining attention.	Bembenutty (2011)
• **Homework for students with learning disabilities:** Homework can have positive effects on school achievement for students with learning disabilities.	Patton (1994)
• **Too much homework is not good:** ✓ Students who spend too much time on homework (more than 90 minutes at the middle school level) actually perform worse than students who spend less time.	Shumow (2011)
✓ The sheer amount of work can be a huge obstacle for struggling students. In addition, it is of great importance that educators adequately explain and scaffold assignments to ensure success.	Carr (2013)
✓ Teachers should co-ordinate with one another so that students are not being overwhelmed with too many assignments and projects at the same time.	McNary *et al* (2005)
• **Homework should be challenging but not difficult:** ✓ Homework that students can't do without help is not good homework; students are discouraged when they are unable to complete homework on their own.	Vatterott (2010)
✓ Homework should not be used to teach new material, should be related to the class work, and students should fully understand the concepts and possess the skills needed to complete homework assignments.	Cooper & Nye (1994)
• **Prompt feedback:** Homework should be returned promptly with feedback. Students learn more from homework that is marked, commented upon, and discussed in class by teachers.	Protheroe (2009)
• **Parental involvement:** Parents are an essential element of successful homework practice. Well-designed homework should not require parents to teach their children but they should be encouraged to serve in a supporting role and should create a home environment that is conducive to learning.	Bennett-Conroy (2012)

Box 4: In school factors to narrowing performance gaps

C. Teaching and learning process
(d) Assessment and feedback

BOX ④C(d): CURSORY LOOK AT RESEARCH: ASSESSMENT AND FEEDBACK	SOURCES
Classroom assessment practices have the potential not only to measure and report learning but also to promote it. Research (as noted in a sample of studies quoted below) has documented the benefits of regular use of diagnostic and formative assessments as feedback for learning. Research has documented the benefits of regular use of diagnostic and formative assessments as feedback for learning:	Black *et al* (2004)
• **Diagnostic assessment** establishes a baseline to which future learning can then be compared. In this way, teachers can have some insight, prior to lesson presentation, of students' prior knowledge, abilities, strengths and weaknesses.	Hamlin (2016)
• **Formative assessment** is, at its core, designed to help teachers advance and better support student learning by making that learning (and gaps in learning) more visible. By using formative assessment information to adjust teaching on a continual basis, teachers will help students realize their full potential in the classroom.	Dyer (2015)
✓ Students who receive formative assessment perform better on a variety of achievement indicators than their peers do.	Hanover Research (2014)
✓ Findings indicate that students who receive formative assessment perform better on a variety of achievement indicators than their peers do.	Hanover Research (2014)
• **Feedback from assessment:** To serve learning, feedback must meet four criteria: It must be *timely*, *specific*, *understandable* to the receiver, and formed to allow for *self-adjustment* on the student's part: ✓ Feedback on strengths and weaknesses needs to be prompt for the learner to improve. ✓ If learners cannot tell specifically from the given feedback what they have done well and what they could do next time to improve, then the feedback is not specific or understandable enough for the learner. ✓ The learner needs opportunities to act on the feedback—to refine, revise, practice, and retry.	Wiggins (1998)
✓ Pinning (putting) a symbol (B-) or a number (82%) on a student's work is no more helpful than such comments as "nice job" or "you can do better."	McTighe & O'Connor (2005)
✓ Feedback has a profound impact on student achievement, provided that the feedback is timely, accurate, and specific.	Marzano, Pickering, & Baily, (2001)
✓ When partial feedback is provided, students are informed that responses are either correct or incorrect. When complete feedback is provided, corrective information is coupled with an answer-until-correct procedure.	Schmidt & Bjork (1992)
✓ While there seems to be considerable agreement that learning is facilitated by feedback, there is little agreement as to what type of feedback is the most effective.	Epstein et al (2001)
• **Key aspects of effective feedback:** ✓ It must identify any gaps between a desired learning goal and the student's present status towards that learning goal. ✓ Students must also take action to close the gap.	Wiliam (2014)

Schools that Work II Lessons from the Ground

Box 4: In school factors to narrowing performance gaps

C. Teaching and learning process

(e) Preparing learners for final examination

BOX ④C(e): PREPARING LEARNERS FOR FINAL EXAMINATIONS	SOURCES
School practitioners need to adequately and appropriately prepare students for high-stakes testing without detracting from real learning.	Gulek (2003)
• **Teaching the content domain:** ✓ A teacher should not engage in instruction that addresses only those portions of knowledge included on the exam. While this may raise scores, it will not build students' knowledge and skills in the broader subject area.	Johns (2016)
• **Providing practice tests:** ✓ Many teachers find that holding review sessions, issuing practice tests, and teaching test-taking skills to be the most effective means of exam preparation.	Cauley & McMillan (2009)
• **Giving timed tests:** ✓ One thing that can hinder students' ability to perform well on a high-stakes test is a lack of time management skills.	Monseau (2001)
• **Preparing learners to deal with exam anxiety:** ✓ Test anxiety may exert a debilitating effect on student performance. ✓ The higher the anxiety level, the lower student performance tends to be.	Putwain (2008) Hancock (2001)

Until 2015, following the annual release of the NSC results every January, the national debate has largely been on the pass rate. The Department of Basic Education (DBE) has recognised that placing inordinate emphasis on the pass rate as a measure of performance exerts enormous pressure on provinces, districts and schools to cull weaker learners in Grades 10, 11 and 12, and encourage others to take 'easier subjects' in order to improve their scores. While these practices may make the school, district or province look better than they actually are, they are extremely destructive to the future study and career prospects of individual students and to the growth of the human resources so badly needed for the development of the country (DBE, 2017b).

In 2016, the DBE began to adopt a broader set of indicators for measuring the NSC results. These indicators turned the attention to the quality of learning outcomes and closing the equity gap between learners from divergent socio-economic backgrounds. As noted in Section 1.6, these indicators include throughput rate, percentage passed, Mathematics percentage passed, Physical Science percentage passed, percentage attained bachelor passes, percentage attained distinctions, and Mathematics participation rate.

This chapter is organised under two main sections: The factors influencing the NSC results in schools that work and how these schools perform on each of the quality indicators. Data presented in the NEEDU 2014 Report (DBE 2017b) has relevance in this report. In this study, we use some of that data.

3.1.   THE FACTORS IMPACTING ON IMPACTING THE NSC RESULTS

The factors that influence the quality of the NSC results include amount of funding per learner, teacher-learner ratio, selective admission criteria, extra private tuition, the number of streams/subject offered in Grade 12, and quality of Grade 11 learners entering Grade 12. These factors have a bearing on how learners perform in the NSC examinations, and are briefly discussed below.

3.1.1   LEARNER SPENDING

In Section 4.4.1A (out-of-school factors), we discuss in sufficient detail that schools in Quintile 5 (and some schools in quintile 4) collect more revenue through school fees as compared to the funding that quintile 1-3 schools receive from government. They use these funds to maintain school infrastructure, procure learning, teaching and support materials (LTSM) and other resources, employ additional teachers to augment those provided by the state, and do other things.
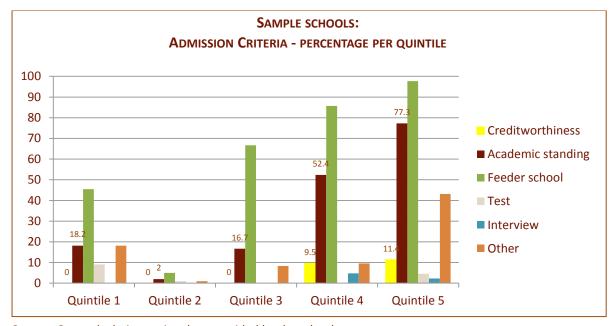
3.1.2   TEACHER-LEARNER RATIO

Schools in the lower quintiles (1-3) have a much higher teacher-learner ratio than quintile 5 and some quintile 4 schools. For example, in sample schools, in 2016 in quintile 5 schools, the average teacher-learner ratio in Grade 12 was 1:40 in Physical Science, compared to 1:69 in quintile 1 schools. Quintile 5 schools are able to raise sufficient revenue to employ more SGB-paid teachers. More teachers means smaller class sizes. For further discussion, see Section 4.4.1A (out-of-school factor 4).

3.1.3   SELECTIVE ADMISSION CRITERIA

Figure 2 shows that admitting learners from feeder primary schools is the most prevalent admission criterion in all quintiles. The next most prevalent criterion used is academic standing. In the quintile 1, 2 and 3 schools, this criterion is mentioned as a factor in less than 20% of the schools. However, in quintile 4 and 5 schools, 52% and 77%, respectively, used "academic standing" as an admission criterion. Targeting high-performing learners (the cream of the crop) gives these schools an unfair advantage over schools (mostly quintile 1-3), which, as one Principal notes, "we admit *any* learner who comes our way, provided they have an authentic school report" (**School KZ**-Quintile 1). Criterion mentioned in the "other" category included provincial admission policy and learners' ability in a specific sport field. In 10% of quintile 4 and 5 schools, parents' credit-worthiness is used as an admission criterion while few schools interview learners as an admission criterion.

SAMPLE SCHOOLS:
ADMISSION CRITERIA - PERCENTAGE PER QUINTILE

Source: Own calculations using data provided by the schools
Figure 2: Selective admission criteria by quintile

3.1.4   EXTRA PRIVATE TUITION
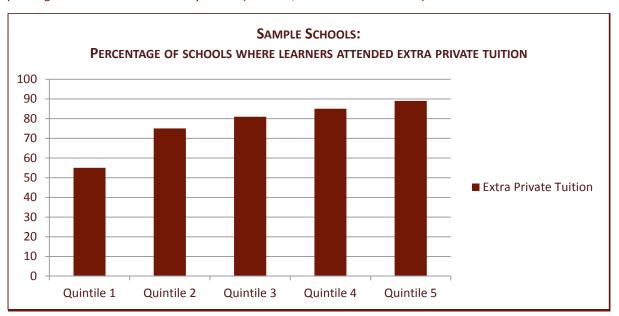
Certain learners from all five quintiles reported that they attended extra lessons. As shown in Figure 3, most learners interviewed, in 85% and 89% schools in quintiles 4 and 5 respectively, said learners in Grade 12 attended extra classes offered outside their schools where parents paid additional fees. Two points should be noted: Firstly, learners were specifically asked whether they attended extra private classes. Secondly, the data illustrated in Figure 3 does not reflect the number of learners who attended extra lessons in a school. No matter how few learners attended extra tuition, a school was recorded as having learners who attended private extra classes. By their own admission, learners said these extra classes "make a huge difference in [their] results" (Learner, **School CA**-Quintile 5) and that "while the school offers good education, but there is an added bonus when you attend these sessions—[and that they] wouldn't miss them for the world." (Learner, **School EC**-Quintile 5)

On the other hand, in quintiles 1 to 3 schools, very few learners said they attended private classes. They proffered two reasons for this:

Our parents cannot even afford to pay school fees—can you imagine, a mere R400 a year—so where on earth would they get the money to pay for extra classes? (Learner, **School KF**-Quintile 4)

Besides that we cannot afford extra private tuition but the truth of the matter is that we don't need those classes. We have good teachers right here who support us 24/7. They provide extra classes for free. Our track record speaks for itself—we outperform many quintile 5 schools in matric with all their privileges and the resources they have. (Learner, **School LN-**Quintile 1)

SAMPLE SCHOOLS:
PERCENTAGE OF SCHOOLS WHERE LEARNERS ATTENDED EXTRA PRIVATE TUITION

Source: Own calculations using data provided by the schools
Figure 3: Percentage of schools where learners attend extra private classes

3.1.5 NUMBER OF ACADEMIC STREAMS/SUBJECTS AND PERFORMANCE

There does not seem to be any particular pattern in respect of the connection between the number of streams or subjects offered in Grade 12 and how schools perform in the NSC examinations. Statistical analysis would be required to test the strength of the correlation between these two variables. It was beyond the scope of this study to establish whether such correlation exists. However, anecdotal evidence in Figure 4 does not seem to suggest any correlation between the two variables in quintiles 1 to 3 schools.

It is worth taking note of three outliers in Figure 4. In School No.3 (**School LN**-Quintile 1), the Principal in this school took a decision, over 10 years ago that the school would focus on Mathematics and Science. He never regretted his decision. Many years later, this quintile 1 school still produces quality results in the NSC examinations. It is the highest-ranking school among all schools in quintile 1 to 4, with an inclusive basket score of 83.3%. It outperforms 60.9% of quintile 5 schools sampled in this study. At this school, the number of subjects they offer, appears to have a positive impact on the quality of results.

The other two outliers are schools No. 13 (**School KT**-Quintile 3), which offers 13 subjects, and School No. 25 (**School LK**-Quintile 2), which offers 14 subjects. This suggests that their good performance is not necessarily related to the number of subjects on offer, but could be influenced by other factors. At School No.25 two of the key issues are discipline and accountability. The school prides itself on a strong sense of discipline with regard to time keeping, behaviour and work ethic. At School No. 13, accountability and discipline are also key factors together with the Principal having specific criteria for teacher recruitment. The school aims to employ past pupils, because they understand the ethos of the school. If past pupils are not available, teachers are recruited on a month's trial basis, to see if they can fit into the work ethic and vision of the school.

SAMPLE SCHOOLS:
NUMBER OF SUBJECTS AND BASKET SCORES IN THE QUINTILE 1 TO 3 SCHOOLS

Source: Own calculations using data provided by the schools
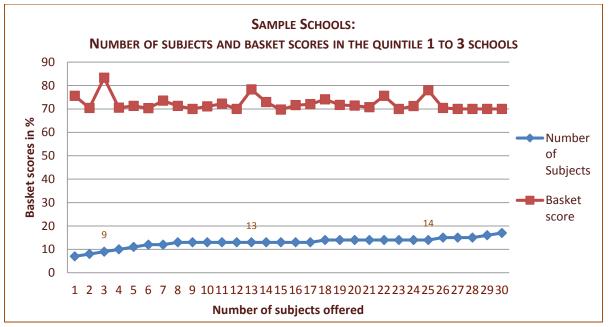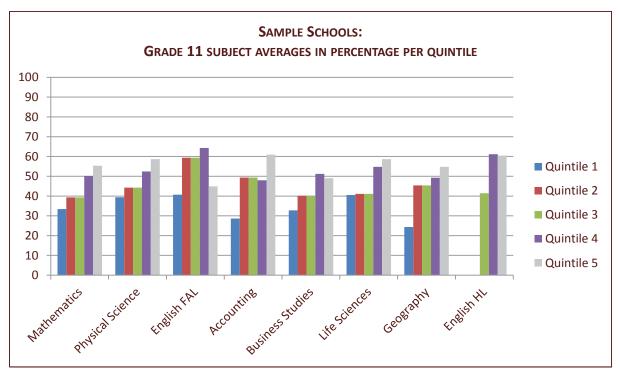
Figure 4: The connection between the number of streams or subjects and the NSC results

3.1.6 QUALITY OF GRADE 11 LEARNERS ENTERING GRADE 12

Figure 5 shows the Grade 11 subject averages per quintile. It can clearly be seen that quintile 1 schools perform poorly in Grade 11, with an overall average percentage of 34%. Quintile 2 and 3 schools perform slightly better, with average percentages of 45.5% and 51.5% respectively. There is a significant jump in the average percentages of quintile 4 and 5 schools, which attain average percentages of 61.6% and 63.2% respectively.

SAMPLE SCHOOLS:
GRADE 11 SUBJECT AVERAGES IN PERCENTAGE PER QUINTILE
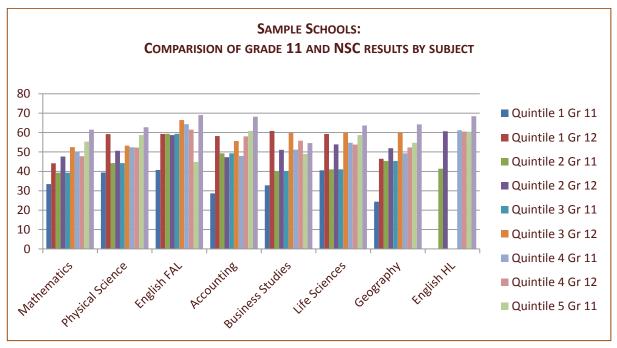
Source: Own calculations using data provided by the schools

Figure 5: Grade 11 subject averages per quintile.

Figure 5 clearly shows that level of knowledge and academic understanding of learners going in to Grade 12, in quintile 4 and 5 schools, is comparatively higher than that of learners in the lower quintiles. Thus, the learners and teachers in the lower quintiles have to work that much harder than in the higher quintiles to produce quality passes in the NSC examinations.

It must be noted, however, that our sample size is relatively small, and that the numbers of schools offering particular subjects is often lower that the number of schools in the study. Thus, the data must be interpreted with caution.

Source: Own calculations provided using data provided by the schools
Figure 6: Comparison between Grade 11 and NSC results

Figure 6 shows the comparison between results at the end Grade 11 and the final NSC examination results. The improvement in results is remarkable and is testament to the amount of time these schools put into ensuring they achieve good results. The improvement in subjects in Quintile 1 schools is particularly noticeable especially in subjects such as Physical Science, Accounting, Business Studies and Geography. Although there is improvement across the quintiles, the improvement is not as much as in the higher quintiles because of the educational quality of the learners coming into Grade 12.
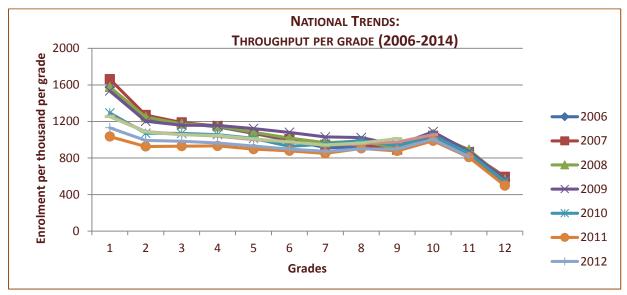
3.2   QUALITY INDICATORS

Discussed in this section is how schools in the present study perform on the six quality indicators, as compared to the national trends. The quality indicators are the throughput rate, percentage passed, Mathematics percentage passed, percentage attained bachelor passes, percentage attained distinctions, and Mathematics participation rate.

3.2.1   THROUGHPUT RATE

Figure 7 shows the extent of the problem using one measure of throughput, i.e., the number of learners that move from one grade to the next in consecutive years.
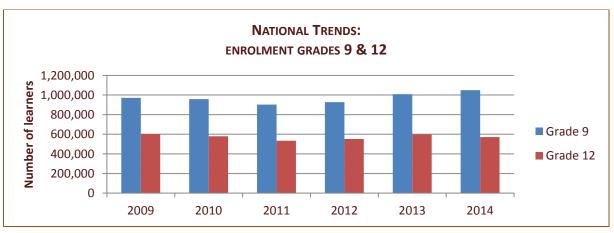
Source: DBE 2017(b)

Figure 7: Throughput by grade for cohorts reaching Grade 12 (2006-2014)

Although Figure 7 reflects nine cohorts, who reached Grade 12 from 2006 to 2014, the pattern remains constant. Broadly speaking, the numbers in Grade 12 are approximately half of those in Grade 10, two years previously, while the patterns of peaks and troughs remain the same across cohorts. Between Grades 1 and 10, enrolments exhibit a very gradual decline, indicating that a large proportion of South African learners remain in school for the first 9 grades, although this could be attributed to the requirement that all children must attend school until they reach the age of 16. Of most concern is the precipitous decline in numbers in Grades 11 and 12.

The largest share of the throughput problem lies in the FET Phase. Figure 8 illustrates throughput from Grade 9 to Grade 12. It reflects the percentage of learners who reached Grade 12 compared with those in Grade 9 three years previously (DBE, 2017b).

Source: DBE 2017(b)

Figure 8: National enrolment Grade 9-12, with percentage throughput for each cohort

As reflected in Figure 9 throughput from Grade 10 to Grade 12, for the cohort matriculating in 2016 for the schools sampled in this study, is better than the national trends. In these schools there is only a 16.65% decline in the numbers from Grade 10 to Grade 12, compared to approximately 50% decline in the national numbers as seen in Figure 7.
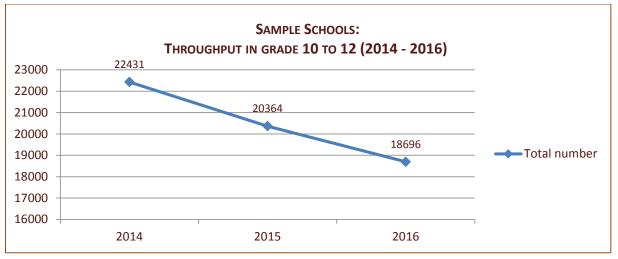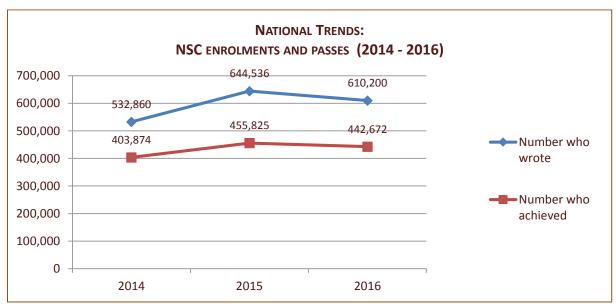
Source: Own calculations using data provided by the schools
Figure 9: Throughput by grade for cohorts reaching Grade 12 (2014-2016)

3.2.2   PASS RATE
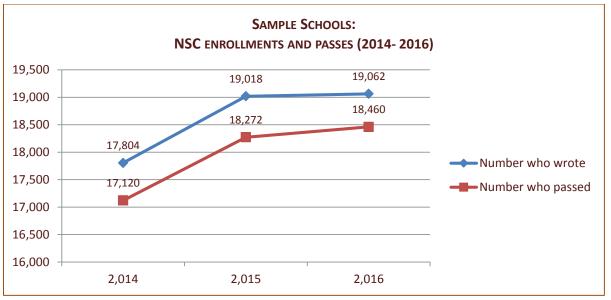
The pass rate is an indicator of efficiency and it remains an important measure of performance (DBE, 2017b). Figure 10 shows that the number of learners who wrote the NSC in 2015 increased by more than 111 000 learners from 2014, and then decreased again in 2016 by 34 000 learners. However, the pass rate decreased from 2014 to 2015 by 5%, and then increased by 2% in 2016.

Source: Own calculations using data provided by DBE
Figure 10: National enrolment and passes in the NSC examinations (2014-2016)
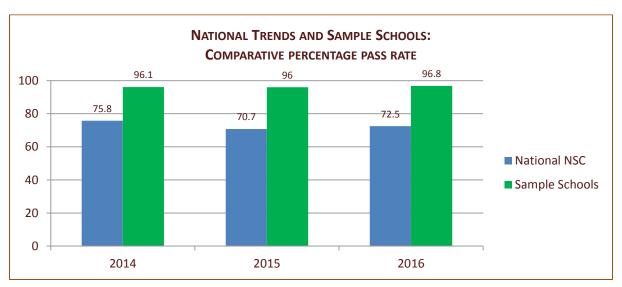
Source: Own calculations using data provided by DBE

Figure 11: National enrolment and passes in the sample schools (2014-2016)

In the sample schools, there is an increase in the number of learners who wrote the NSC examinations and notably the pass rate remains consistently high. Figure 12 below compares the pass rate nationally to that of the sample schools. It shows that the sample schools pass rates exceeds the national pass rate by more than 20%.

Source: Own calculations using data provided by sample schools and DBE

Figure 12: Comparison of pass rate in the NSC nationally and in the sample schools

3.2.3   MATHEMATICS PERCENTAGE PASSED

The national figures relating to Mathematics for the past nine years are given in Table 3**.** The first row gives the percentage of learners who wrote Mathematics in a given year. The second row gives the percentage of learners who passed Mathematics, in that year. The third row (bolded) looks at the total number of learners who wrote NSC in a year (the overall cohort) and expresses, as a percentage of the overall cohort, the number of learners who passed Mathematics**.**
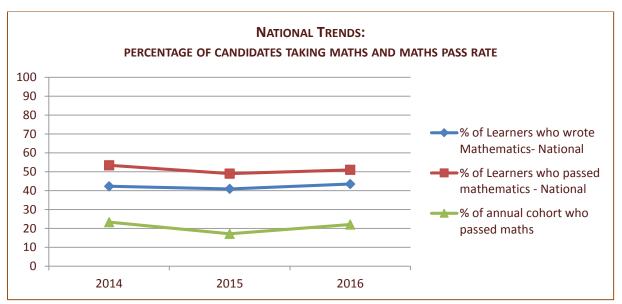
Table 3: Percentage of candidates taking and passing Mathematics

	2008	2009	2010	2011	2012	2013	2014	2015	2016
% of Learners who wrote Mathematics- National	53.1	51.2	48.5	45	42.7	42	42.3	40.9	43.5
% of Learners who passed Mathematics - National	46	46.4	48.7	47.2	50.8	58.6	53.4	49	51
% of overall cohort who passed Mathematics National	**24**	**24**	**26**	**25**	**23**	**22**	**23**	**17**	**22**

Table 3 shows that participation and success rates in Mathematics remain low, with below one-quarter of all candidates passing Mathematics, and it is important that schools seek to increase performance on both indicators.

3.2.4 MATHEMATICS PARTICIPATION RATE

Success in Mathematics is a prerequisite for entry into and success in both vocational and post-school academic studies in the fields of science, technology, engineering and Mathematics, as well as Accounting, Economics and Business Economics. The proportion of NSC candidates taking Mathematics dropped from 53.1% in 2008 to 42.0% in 2013. Yet the pass rate for Mathematics has risen steadily through this period, from 46.0% in 2008, to 58.6% in 2013. Although the pass rate declined in 2014 and again in 2015, with a slight increase in 2016, the pass rate is still higher than it was between 2008 and 2012. However, the percentage of learners from the annual cohort passing Mathematics is low. These figures are expressed in Figure 13 below.

Source: Own calculations using data provided by DBE

Figure 13: Percentage of learners taking Mathematics and percentage pass rate

Figure 14, below, looks at the same three factors, but for the sample schools in the current study. It can be seen that all three rates are considerably higher than the national rates.

Source: Own calculations using data provided by sample schools
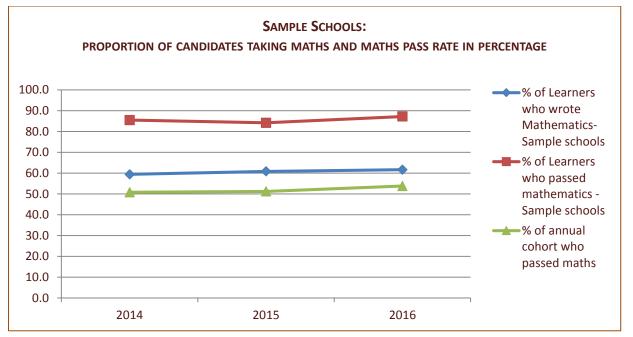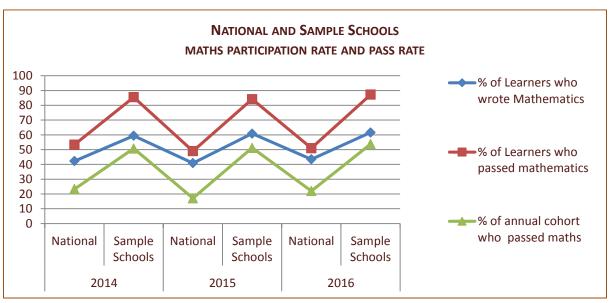
Figure 14: Mathematics pass rate and proportion of matric candidates taking Mathematics

When comparing the national figures with those of the sample schools, it can be seen that the percentage of learners taking Mathematics is between 16 and 18 percent higher in the sample schools. When considering the difference in the pass rate between the two groups, those in the sample schools achieved more than 30 percent higher than the national average. Figure 15 shows the comparison of the national rates and those of the schools in the sample. The lowest line shows the learners who passed Mathematics, expressed as a percentage of the overall cohort. In other words, if the total number of learners who wrote NSC examination in a year (the overall cohort) is considered, the lowest line expresses the overall percentage of learners who passed Mathematics.
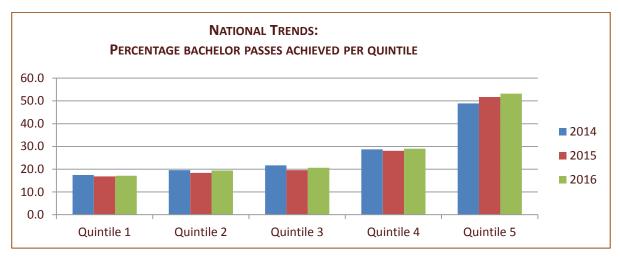
Source: Own calculations using data provided by sample schools and DBE

Figure 15: Mathematics pass rate and proportion of matric candidates taking Mathematics

3.2.5 BACHELOR PASSES ATTAINED (QUALITY OF PASSES)

The bachelor level pass requirements constitute an important quality indicator. Statistics for the past three years are shown in Figure 16.
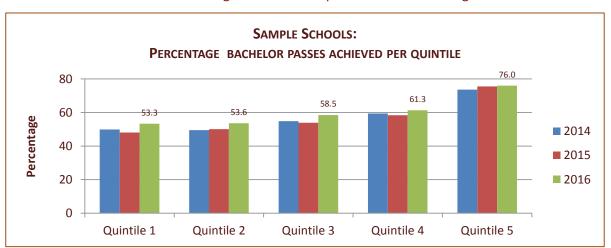
Source: Own calculations using data provided by DBE

Figure 16: Percentage bachelor passes achieved per quintile nationally

The proportion of candidates achieving bachelor level passes increased in the period 2014–2016, has remained around the 25% mark.

Figure 17 below shows the percentage of bachelor passes achieved per quintile in the schools in the present study. The quintile 1 and 2 schools obtained an average bachelor pass rate of over 50%. Quintile 3 schools obtained an average of 55.7% and quintile 4 schools average was 59.5%.
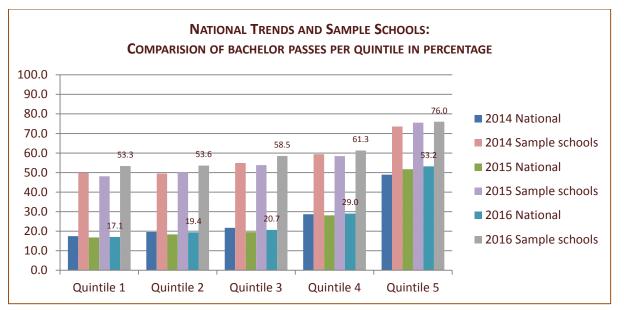
Source: Own calculations using data provided by sample schools

Figure 17: Percentage of bachelor passes achieved per quintile in the sample schools

Figure 18 shows the comparison between percentage of bachelor passes in the sample schools and schools nationally. The average for the sample schools in 2016 was higher than the average for the two preceding years. When considering the sample schools in 2016, the difference in percentage of bachelor passes, between quintile 1 and quintile 4 schools, is less than 8%. In contrast to the sample schools, there is a larger difference nationally between the bachelor percentage attained in quintile 1 and quintile 4 schools. What is perhaps more interesting is that the average for bachelor attainment in the quintile 1 sample schools in 2016 (53.3%) is the same as the national average for bachelor attainment for quintile 5 schools (53.2%).
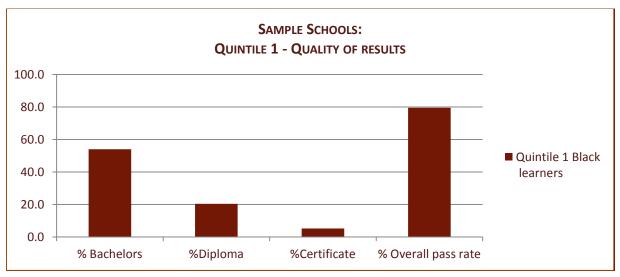
Source: Own calculations using data provided by sample schools and DBE
Figure 18: Comparison of bachelor passes in the sample schools and national sample

The picture in Figure 18 is even more interesting when considering that, in 2016, the average quintile 1 bachelor passes in the sampled schools was 24.3% higher than the national average bachelor passes for quintile 4 schools.

Figure 19 to Figure 23 show the quality of passes (percent of bachelor, diploma and certificate passes) and the pass rate per quintile in sample schools. There were 11 quintile 1 schools serving a population of 1 806 Grade 12 black learners. Figure 19 shows the quality of passes obtained by these learners.

Source: Own calculations using data provided by the schools
Figure 19: Quality of passes in quintile 1 in sample schools

The nine quintile 2 schools had a total enrolment of 1 709 learners in Grade 12. Learners in these schools represented three racial groupings: black, coloured and Indian learners. Figure 20 shows the quality of passes obtained by these learners.

Source: Own calculations using data provided by the schools
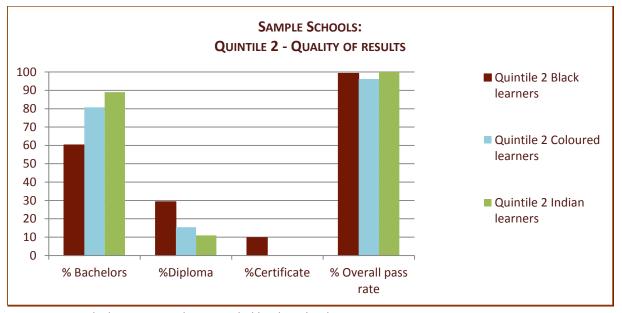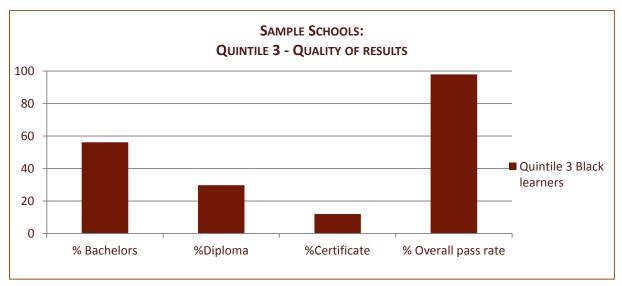
Figure 20: Quality of passes in quintile 2 sample schools

Thirteen schools in quintile 3 served only black learners. There were 2 810 Grade 12 learners in these schools. Figure 21 shows the quality of passes obtained by these learners.

Source: Own calculations using data provided by the schools

Figure 21: Quality of passes in quintile 3 sample schools

There were 29 quintile 4 schools, which together served learners from all racial groups (black, coloured, Indian and white). A total of 4 772 Grade 12 learners wrote the 2016 NSC examinations in these schools. Figure 22 shows the quality of passes obtained by these learners.

Source: Own calculations using data provided by the schools
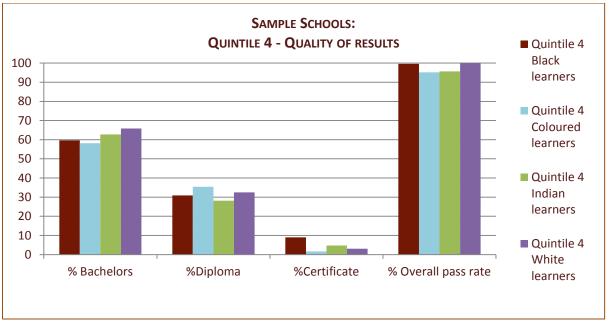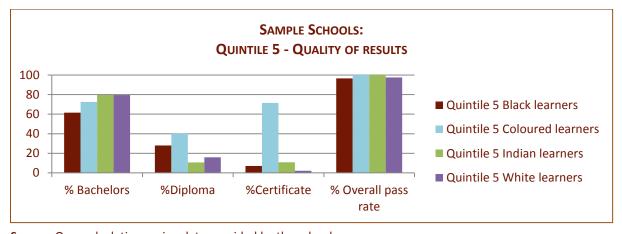
Figure 22: Quality of passes in quintile 4 sample schools

Forty-nine quintile 5 schools were sampled in this study. However, data was only provided by 33 schools to make a comparison about the quality of results by race. Some schools did not provide the required data. In the 33 schools, 5 817 learners wrote the 2016 NSC examinations in 2016. Figure 23 shows the quality of passes obtained by these learners.

Source: Own calculations using data provided by the schools

Figure 23: Quality of passes in quintile 5 sample schools

Although schools in the lower quintiles did not operate on the same footing with their more affluent quintile 5 counterparts (see Section 4.4.1A), Figure 24 shows that they were on par in terms of the pass rate. Figure 24 shows that, except in quintile 1 schools, black learners in our sample perform slightly better in quintile 2, 3 and 4 schools than in quintile 5 schools.

SAMPLE SCHOOLS:
PASS RATE IN PERCENTACE BY QUINTILES AND RACE
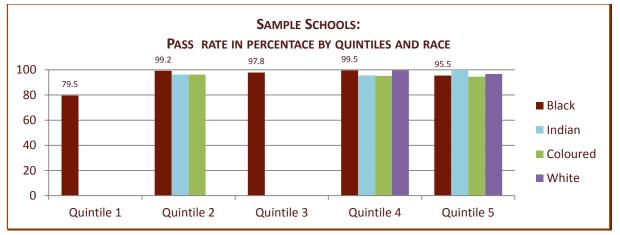
Source: Own calculations using data provided by the schools
Figure 24: Pass rate by quintiles and race in the sample schools

3.3 Summary

In looking at the various quality indicators, it can be seen that the sample schools outperform the national figures on every level, when considering the same timeframes:

- *Throughput:* When reflecting on the throughput rate, sample schools only lost 16.5% of the cohort, whereas schools nationally lost more than 50% of the learners.

- *Pass rate:* With regard to the overall percentage pass rate, the sample schools outperform the schools nationally by more than 20%.

- *Mathematics participation and pass rate:* The sample schools have a participation rate of 30% higher than schools nationally; their pass rate is 20% higher than schools nationally. This results in the fact that more than 50% of the annual cohort in the sample schools are passing maths, compared to less than 25% in national cohort.

- *Bachelor passes attained:* The average for bachelor attainment in the quintile 1 sample schools in 2016 is the same as the national average for bachelor attainment for quintile 5 schools.

These figures show that these schools are indeed doing something that 'make them work' and give credence to the fact that they were included in the study.

This section addresses the question: How do high schools with exemplary achievement growth achieve such results? The site visits allowed researchers to conduct a categorical analysis of teaching practices in the sampled schools. In the same manner that the authors of *Schools that Work* (Christie, Butler and Potterton, 2007) identified the common practices of excellent organizations, this study also sought to identify the extent to which there was a common set of behaviours exhibited by the managers and teachers in schools with high achievement, mostly serving learners with poor socio-economic backgrounds.

4.1   IMPACT OF SOCIO-ECONOMIC STATUS ON LEARNING OUTCOMES

One of the most significant findings of the *School that Work II* study is the continuous nature of the success of the high-performing schools in the lower quintiles, despite the poverty of students attending these schools, remains intractable. The schools listed in Appendix C have consistently performed well (with a pass rate of $\geq 95\%$) in past four years, even as the effects of poverty grow more onerous, as parents relying on social grant for their livelihood increases, and as parents are less likely to be at home before and after school because they work.

The message that "because of your gender or the colour of your skin or your socioeconomic status, you are relegated to a certain level of achievement" (as expressed by **School ML**-Quintile 1)—is not the language the high-performing schools in the present study use.

4.2   THEMES AND SUB-THEMES

As noted in Section 1.4, Part I, in this report, different groups of common practices were inspected (through *open coding* analysis of data) for further commonality and trends amongst the high-performing schools. Out of this process, six distinct broad *categories* or *themes* emerged.

'Categories' and 'themes' are used interchangeably in this study. While each of the high-performing schools has unique features, a set of important common practices emerged. Sharing these practices may be instructive for other teachers in their effort to tackle the disparities that exist in our education system. The key practices identified are grouped around the main themes of:

- System's support and partnerships,
- Learner-centred climate,
- Enabling environment,
- School leadership and management,
- Professional development and collaboration, and
- Quality of teaching and learning.

Through *axial coding* of data, connections were made between the six *categories* and their *subcategories*. Figure 25 below illustrates the connection between *categories* (in the middle circle) and their *subcategories* (in the outer circle).
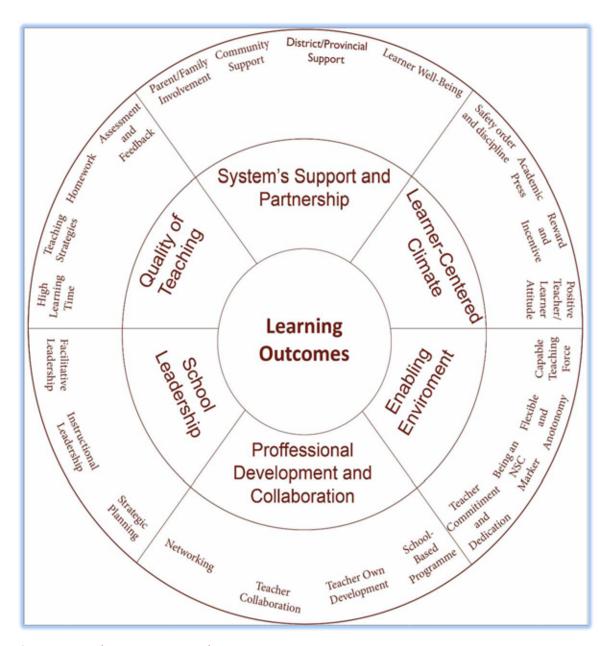
Figure 25 : Pathways to positive learning outcomes

The six themes should be viewed as integrated and interrelated—they are important to school effectiveness but not sufficient in isolation. Although they are treated discretely in this study, they are connected, impact on one another, and infuse the organization. Determined through *selective coding*, the conceptual framework in Figure 26 illustrates the interconnectedness among the six themes, in relation to the learning outcomes, the *core category*.

Figure 26: Interconnections among the six essential supports for learning outcomes

Three categories (school leadership, professional development & collaboration and quality of teaching) were interpreted to represent factors with *direct* influences on the teaching and learning context whilst the other three (system's support and partnerships, learner-centred climate and enabling environment) represented factors with *indirect* but important and related influences.

In Sections 4.4 and 4.5 below, each of the six themes and their sub-themes is introduced with a brief statement and then elaborated through several best practices, which span across the classroom, the school, and the greater community.

In an era in which school leaders appear to engage in a perpetual quest for the magic bullet for educational success, it is noteworthy that none of the high-performing schools in the present study rely exclusively on a proprietary programme to achieve their success. These schools do nothing out of the ordinary—they simply do ordinary things extra-ordinarily well. When asked: To what would you attribute your good results in the NSC examinations? Most teachers and school management teams (SMTs) had to pause and think. They struggled to answer this question and to pinpoint any particular thing that defined their success--they simply do *what* they are supposed to do, exactly *how* they are supposed to do it, *when* they were supposed to do it.

> *Schools that work do nothing out of the ordinary—they simply do ordinary things extra ordinarily well.*

> *High-performing schools simply do what they are supposed to do, exactly how they are supposed to do it, when they were supposed to do it.*

> *If you are looking for a blueprint, I'm sorry there is none. There are no silver bullets. Tell the Minister that we are just doing our job the best way we can*. (Principal, **School GL-**Quintile 4)
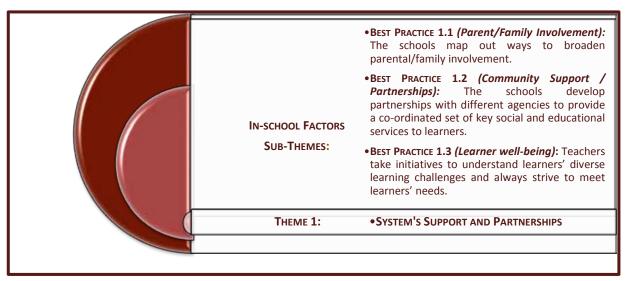
4.3 HOW BEST PRACTICES ARE PRESENTED IN THE REPORT

Before best practices exhibited by schools that work are presented, it is important to signal to the reader how they will be presented. In the first instance, we differentiate between a best practice, a good practice and an innovative practice as follows:

- **GOOD PRACTICE:** that which is professionally judged to be effective which requires further evidence or validation
- **BEST PRACTICE:** that which is proven over time and backed up by supporting empirical evidence
- **INNOVATIVE PRACTICE:** new and interesting ways of doing things with early indications of success

In the second instance, an "onion peel" approach is used to present the best, good or innovative practices. This is means that:

- Firstly, each best practice is introduced briefly as shown in the example below:

IN-SCHOOL FACTORS SUB-THEMES:	- **BEST PRACTICE 1.1** *(Parent/Family Involvement):* The schools map out ways to broaden parental/family involvement. - **BEST PRACTICE 1.2** *(Community Support / Partnerships):* The schools develop partnerships with different agencies to provide a co-ordinated set of key social and educational services to learners. - **BEST PRACTICE 1.3** *(Learner well-being)*: Teachers take initiatives to understand learners' diverse learning challenges and always strive to meet learners' needs.
THEME 1:	- **SYSTEM'S SUPPORT AND PARTNERSHIPS**

- Secondly, each best practice is elaborated with more detailed information and explanations as shown in the example below:

BEST PRACTICE 1.1 (Parent/Family Involvement): The schools map out ways to broaden parental/family involvement

Following are examples how high-performing schools foster high-quality and successful parent involvement. They:

✓ Create a welcoming school climate
✓ Provide families information related to child development and creating supportive learning environments
✓ Establish effective school-to-home and home-to-school communication

- Thirdly, each best practice begins with an action word to make it more explicit and to allow the reader to learn, in unambiguous terms, what schools that work do. Following is an example how this is presented in the report:

> Following are examples how high-performing schools establish effective school-to-home and home-to-school communication. They:
>
> ✓ **<u>Build and maintain</u>** regular communication between the school and family through such activities as phone conversations, email, report pick-up day, parent newsletters, learner performance accounting sessions or other forums.

- Fourthly, authentic voices from schools are used to provide further explanation about approaches that high-performing schools implement to improve achievement among learners. All interviews were recorded and then transcribed word-for-word. Following is an example how teachers' and learners' own voices are used to tell a story:

> *One strategy [to bring parents to school] that has worked for us is to invite them to give feedback how their children perform in monthly assessments. We give them dates for these feedback sessions. We told parents right from the beginning that we will never issue reports directly to learners. They know that reports are only issued in these feedback sessions. We run out of space in the school hall during the feedback sessions.* (Teacher, **School LN**-Quintile 1)

- Fifthly, as noted in the quotation above and one below, the source of each best practice is specified, i.e. the school and its quintile. Schools are not identified by names in the report for two reasons: all sample schools were assured anonymity and confidentiality and to avoid these schools being seen as a league table of top-performing schools in the country. Instead, school codes are used to identify schools, e.g., School FC.

> *Parents see the value of coming [to school]. We don't have a problem of parental involvement or parents attending meetings. We always have more than 95% attendance and the hall is always full. The Principal makes sure that he calls meetings at the time that suits most parents.* **(Learner, School FC**-Quintile 3)

- Sixthly, for every best practice, an overview of research and literature pertaining to its effectiveness in improving learning outcomes and closing achievement gaps is provided in Part II of this report. This is done to show evidence that each best practice has been empirically tested.

- Finally, the findings are written in the present tense, yet readers should note that the information presented reflects practices in high-performing schools at the time the study was conducted in May 2017.

The CIPO framework is used to organise and report the best practices from the schools that work. That is, sections 4.4, 4.5 and 4.6 present best practices relating to *inputs*, *processes* and *outputs*, respectively.

4.4 SUPPORTING INPUTS [OUT-OF-SCHOOL FACTORS]

Inputs reflect the resources that schools have at their disposal and are generally divided into three categories: individual-level factors, group-level factors, and environmental factors. In the CIPO model discussed in Section 1.5 above, six *input* factors are identified as follows:

- Parent and community support
- Support from the education system
- Teacher development programmes
- Learner well-being and learner background
- Financial and material resources
- Facilities

Schools in the lower quintiles (i.e., quintiles 1-3) have little or no control over these factors, hence they are also labelled as "out-of-school" factors.

This section is divided into two parts, as follows:

- **Part A** describes how each of these *inputs* or out-of-school factors affects the learning opportunities for learners in schools in the lower quintiles. Here, the circumstances, conditions or context under which these high-performing schools achieve good results in the NSC examinations are examined.

- **Part B** examines different approaches that high-performing schools in the lower quintiles use to reduce the impact of the out-of-school factors in their quest to deliver quality education to all learners.

4.4.1 THEME 1: SYSTEM'S SUPPORT AND PARTNERSHIP
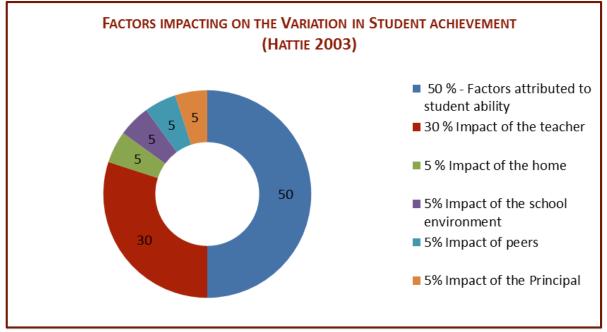
A. HOW OUT-OF-SCHOOL FACTORS IMPACT LEARNERS' ABILITY TO LEARN

The *out-of-school factors* (OSFs), sometimes called "outside forces," affect the learning opportunities of learners, and accordingly limit what schools can accomplish on their own.

Hattie's (2009) synthesis of over 800 meta-analyses relating to achievement suggests that while the school does not have control over two OSFs that have a combined impact of 55% on learner achievement namely, learner ability and home background, it has control over four *in-school factors* that account for 45% of learner performance. These factors include teacher quality, school environment, peer support and Principal leadership. The strength of the impact of each of the latter factors is shown in Figure 27 below.

Other studies (Grissom *et al,* 2013; and Sebastian and Allensworth, 2012) also corroborate Hattie's (2009) findings. These studies suggest that *in-school factors* that tend to have the most powerful influences on learning are teaching and Principal leadership. As noted in Section 4.5, where the *in-school factors* are discussed at length, findings in this study lend credence to these studies. First, we begin with a discussion on contextual factors, including the *out-of-school factors*, under which high-performing schools in this study achieve good results in the NSC examinations. The *out-of-school factors* are discussed next.
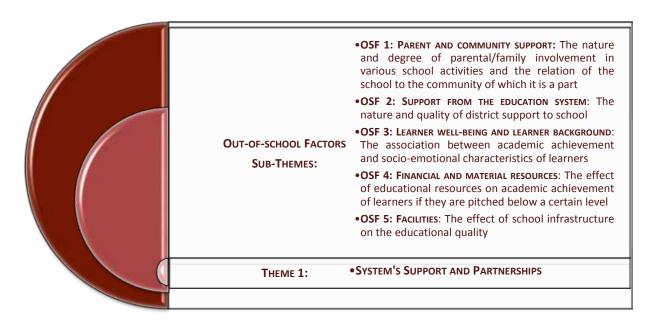
Source: Hattie (2003)

Figure 27: Factors impacting on the variation in learner achievement

The extent to which OSFs impact on teaching in the sample of schools in this study corroborates the empirically supported premise that OSFs greatly influence school improvement and that OSFs are not distributed randomly throughout society. Instead, the negative effects of many OSFs are concentrated in the schools that serve learners from economically disadvantaged communities. This increases the burden on these schools to work harder than their more affluent counterparts to make broad reductions in the achievement gap possible. Next, each OSF is discussed briefly.
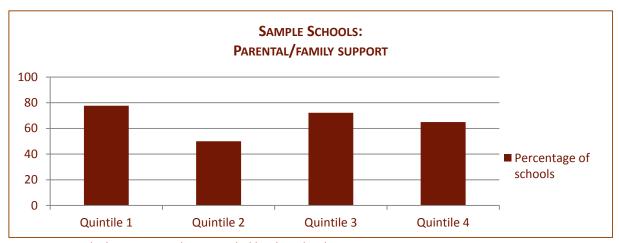
Out-of-school Factors Sub-Themes:	•**OSF 1: Parent and community support:** The nature and degree of parental/family involvement in various school activities and the relation of the school to the community of which it is a part
	•**OSF 2: Support from the education system:** The nature and quality of district support to school
	•**OSF 3: Learner well-being and learner background:** The association between academic achievement and socio-emotional characteristics of learners
	•**OSF 4: Financial and material resources:** The effect of educational resources on academic achievement of learners if they are pitched below a certain level
	•**OSF 5: Facilities:** The effect of school infrastructure on the educational quality
Theme 1:	•**System's Support and Partnerships**

A. PARENT SUPPORT

The lack of parent/family support or involvement in various school activities makes teaching and learning much harder in some schools in the present study.

Findings in 2017

Figure 28 below shows that many schools reported active parental/family support. It is important to note that this in contrast to many other schools in the country, who bemoan the fact that they have a lack of support by the parents. The schools in this study, have parental and family support because they actively take steps to engage with the parents and community. How these schools have managed to mobilise parents to participate in school activities is discussed in **Best Practice 1.1** (Parent/family involvement).

SAMPLE SCHOOLS:
PARENTAL/FAMILY SUPPORT

Source: Own calculations using data provided by the schools

Figure 28: Percentage of schools that reported receiving parental/family support

One school expresses the sentiments of many schools that do not receive parental/family support in respect of the deleterious effect of the lack of parent and community support or involvement.

We would accomplish much more had parents co-operated and worked with us. We call meetings they don't come. Learners arrive late to school, are absent, don't do their homework, are unruly; and you ask parents to work with you to deal with this but they don't show any interest. (HOD, **School MJ-**Quintile 1)

All over the world, they always quote an African proverb that says, "It takes the whole village to raise a child." I'm an African and I grew up in Africa, but I've yet to see Africans living up to this great proverb. (Teacher, **School FF-**Quintile 1)

While some schools (66.2%) in quintiles 1-4 receive parental/family support, as discussed in **Best Practice 1.1** (Parent/family involvement) below, parental/family support or involvement was not always a given in these schools. They, particularly those in quintiles 1-3, worked hard to make this possible. They are now reaping the benefits of their hard labour.

Parental/family support, which these schools receive, includes parents:

- **Making sure that their children attend school**, come to school on time, and, where necessary, attend extended learning opportunities, such as before school, after school, weekends and vacation programmes. Three schools share the nature of support they receive from parents as follows:

  The parents play an important role in making sure that the learners are at school. If we need our learners here at 8 o'clock or 6 o'clock in the evening, they make sure that they are here. They bring them to school and wait here for them until 10 o'clock [in the evening]. That's the support that they provide. (Teacher, **School KH-**Quintile 4)

  Some [parents] come during the week to find out if their children are actually attending lessons or dodging classes. (Teacher, **School LI-**Quintile 3)

  We finish extra classes at night and they [parents] come around to pick us up. (Learner, **School KZ-**Quintile 1)

- **Attending meetings** to discuss a wide range of issues with teachers, including learner performance, curriculum and behavioural issues:

  Parents always attend our face-to-face meetings. During these meetings, we have the opportunity to discuss issues around the achievement and progress of learners. We are able to debate issues around the code of conduct of the learners. (Teacher, **School GM-**Quintile 4)

- **Supporting learners at home** by, among other things, creating an environment that provides an opportunity for experiencing success at home:

  Learning cannot stop when the school closes. We rely entirely on parents to make sure that learning is extended at home. Parents help at home by making sure that their children do their homework and that they study. To do this, they set ground rules because there is no way learners can study or do their homework when the TV is on or they are busy with their cell phones. (Teacher, **School KK-**Quintile 4)

Parents also work as a collective, through the School Governing Body (SGB), to support schools. While not all schools in this study enjoy high level of support from the SGB, some schools (quintile 1-4) reported the role played by the SGB in the form of:

- **Oversight function:** *During the morning prayers, some SGB members will be here just to check if learners and teachers are coming to school on time*. (Teacher, **School WK-**Quintile 4)

- **Fundraising function:** *Parents assist us with raising additional funds, for instance, to buy duplicating papers so that we can have extra notes for these learners.* (Teacher, **School EE-**Quintile 4)

- **Supportive function:** SGBs support schools in many respects. Following are few examples from schools located in three different provinces:

  At the end of the year, the SGB normally provides a kind of support in the form of awards. They award educators who are doing very well. (Teacher, **School GN-**Quintile 3)

  The infrastructure is the duty of the SGB. They are helping us to see to it that the learners are comfortable in classes, they take care of the surroundings, they're doing their duties. (Teacher, **School WL-**Quintile 3)

The school governing body manages our funds very well. They are able stretch our Rand to do as much as we can with the available resources. (Teacher, **School KM-**Quintile 4)

B.   COMMUNITY SUPPORT

In line with **Goal 22** (to improve parent and community participation in the governance of schools) in the Action Plan to 2019 (Department of Basic Education, 2015), different structures in the community, including civic organisations, religious organisations, traditional leadership and politicians supported schools in different ways.

Findings in 2017

Forty percent of schools in quintile 1-4 benefit from the community support. Four schools described the nature of community support they enjoy from different community structures as follows:

The community supports us. We involve politicians, SANCO people, the civic organisations, including the men of the cloth [the pastors] and so on, to encourage our learners and to try and solve problems like drug and alcohol abuse, teenage pregnancy, et cetera. (Teacher, **School LF-**Quintile 3)

There is a Community Policing Forum. The school is part of the community. Part of their responsibility is to make sure that the schools, including our school, are safe. We are not members but we liaise with the forum. So, the school is enjoying the community support. That is very important. (Teacher, **School KZ-**Quintile 1)

The police escort us to the hostels, which are just nearby when we finish our extra classes at 11 pm. So, we don't have any safety difficulties. It is just safe. It is very rare for us to come across an incident where you are attacked or anything. We have the support of the community, so yes, it is very safe. (Learner, **School LN-**Quintile 1)

The school has a good working relationship with the headmen and the chief. They support us on different issues. For example, when we have disciplinary problems and we have exhausted all options, the headmen and the chief summon the learners and their parents at the headmen's kraal and they talk and advise them. (Teacher, **School LF-**Quintile 3)

C.   PRIVATE SECTOR SUPPORT:

Findings in 2017

Few schools benefit from private sector. This is largely because, as one Principal notes:

Big companies won't come to you and say "Can we help you?" You need to approach them, sell yourself, woo them. It's hard work because they are not readily available to dish out money. You have to show them what you have been able to accomplish with the little [money] that you have. (Principal, **School KF-**Quintile 4**)**

Another Principal agrees:

You cannot expect companies to invest in some unknown schools in the middle of nowhere. But if you approach a company and say "We are a rural school and this is evidence of what we have been able to do with little resources", they are likely to listen. So, you have to have a strategy to mobilise business support. (Principal, **School MM-**Quintile 1**)**

> *Your business mobilisation strategy must be backed by evidence of what you have accomplished with your own efforts* (Principal, **School MM**-Quintile 1).

And a third Principal shares her business support mobilising strategy:

If you are in a school like ours, which has been declared quintile 4 because you are in a township but over 60% of your learners come from the informal settlement and the rest come from here in township, you have no choice but seek financial assistance from somewhere.

Part of our strategy is to involve current learners and former learners who are pursuing their careers in universities. We visit different companies and make a joint presentation with learners. Former learners make a presentation about what they went through at our school to get where they are right now and the current learners say what would help them reach their goals. It's hard for companies to say 'no' to learners' innocent faces. We have been able to secure different sponsors to support us in different ways—donating science equipment and chemicals, sponsoring our top learners at universities, buying other teaching resources.

We are a quintile 4 school but you can see the quality of uniform many of our learners are wearing—clean but torn or worn out. That tells you something about our learners' socio-economic status. Many parents are not able to pay R400 a year school fees. (Principal, **School KF-**Quintile 4**)**

Schools in different districts and provinces also benefit from government-private partnership programmes. These programmes target specific learners, teachers and subjects.

OSF 2—DISTRICT SUPPORT: Nature of districts support to enhance teaching and learning at scale, and to help their schools become vibrant places for learning where learners have meaningful opportunities

Honig's (2012) research identifies three main design elements common in districts pursuing school improvement. Such districts:

- Focus on high-quality teaching and role of the Principal as an instructional leader;
- Ensure that Principal supervisors (or Circuit Managers) are truly focused on supporting Principals' instructional leadership growth; and
- Enable all district staff to focus their time and other resources on activities that support schools' pursuit of deeper learning.

Findings in 2017
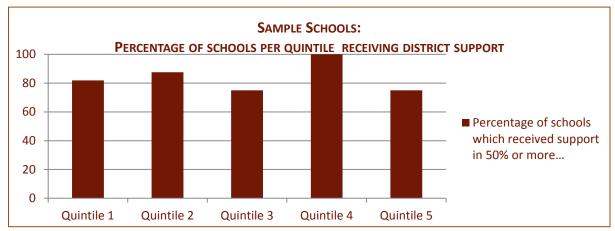
Some schools give districts accolades for engaging productively in district-wide teaching and learning improvement activities. In line with Honig's (2012) three main design elements for effective districts, the analysis of schools' assessment of district support to schools in this study shows that some districts:

- Provide quality of support to schools,
- Increase the emphasis on teaching and learning,
- Reorganise resources to support improvement efforts,
- Make effective use of data,
- Intervene in schools making little or no progress, and
- Assist learners with academic difficulties while challenging gifted learners.

District support to schools is organised under these six aspects.

THE NATURE AND QUALITY OF SUPPORT: Figure 29 below indicates the percentage of schools (by quintiles) which reported that district support contributed to high-quality teaching and learning and, in the final analysis, lead to improved learner achievement. It was beyond the scope of this study to establish how districts support schools. The only source of data to establish the nature of district support to schools was schools' own assessment of the quality of support they received from their districts. Asking the schools (the recipients of district support), to comment on the quality of support services provided by district offices (**Goal 27** in the Basic Education Sector Action Plan to 2019) provides a more reliable assessment than asking district offices to assess themselves.
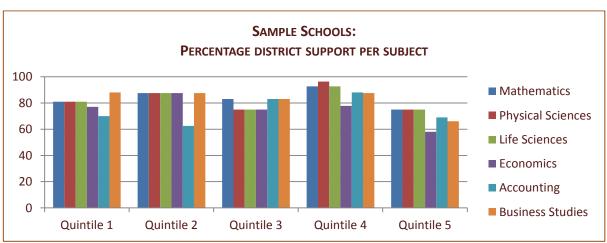
Source: Own calculations using data provided by the schools

Figure 29: Percentage of schools that reported receiving district support

The mode of district support to schools is both on-site (face-to-face) and off-site (through cluster meetings/workshops, telephone or WhatsApp):

Our subject advisor has set up a WhatsApp group, and if you are struggling with something in class, you can post it on that platform and you get the help that you need—either from her or other fellow teachers. (Teacher, **School WH-**Quintile 4)

Teachers are supported at a school site, particularly the underperforming schools, or in cluster meetings. Figure 30 below indicates the percentage of schools in which teachers receive support from subject advisors in the subjects that they teach:

Source: Own calculations using data provided by the schools

Figure 30: Percentage of schools in which teachers receive district support in their subject areas
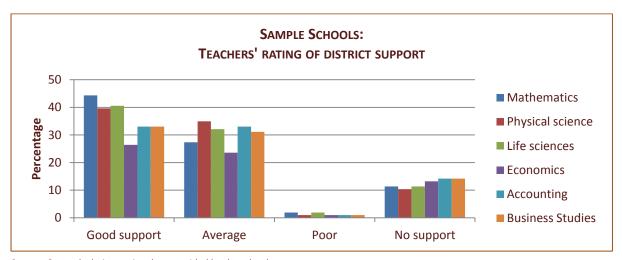
This graph shows that in most schools in each quintile and in all subjects receive some support from the District office.

Principals, HODs and teachers were asked to rate the quality of support they received from their subject advisors on-site or off-site in 2016.

Figure **31** below illustrates their responses. Although many of schools reported receiving adequate support (i.e., those classified as 'good' or 'average'), it is of concern that over 10% of the schools reported receiving 'no support.' As one teacher notes, many teachers value support they receive from their subject advisors:

I'm very happy with my Subject Advisor. I don't have any qualifications for Business Studies but the amount of guidance that is given to us it's amazing and I've really grown with him [the subject advisor]. (Teacher, **School LE-**Quintile 4)

Source: Own calculations using data provided by the schools

Figure 31: Schools' rating of district's support

INCREASING EMPHASIS ON TEACHING AND LEARNING: In order to have a positive impact, district officials work collaboratively—with everybody reaching across traditional silos to pursue a common goal, i.e. to work with teachers and SMTs to improve the quality of curriculum delivery in every school. Teachers reported that subject advisors:

- **Do not confine themselves to the traditional subject-matter** silos. Rather, they work collaboratively across professional development areas. For example, in one district, district officials from several subject areas choose the specific professional development approaches that cut across different subject areas and are most likely to have the greatest impact on teaching, e.g., how to moderate the quality of assessment tasks and analyse assessment results to inform teaching, intervention programmes, and teacher development programmes. And they empower teachers as a multi-disciplinary team. The National Development Plan (NDP) endorses this approach.

- **Start out by considering the schools' overall needs and priorities** so that they can provide services that align with teachers' actual learning needs. Then they choose strategies for leveraging professional growth in each school to address teacher capacity in individual schools:

Schools that Work II *Lessons from the Ground*

There is no one-size-fit-all approach. Our subject advisors know what each teacher needs to be supported on in each subject and in every topic. So, I don't waste my teaching time attending training on stuff that I already know. (Teacher, **School GO-**Quintile 3)

- **Have a clear district professional development plan**, which helps schools to know precisely what subject advisors monitor when they visit their schools. District officials and schools "have a common language for discussing the quality of teaching and how to address concerns because we all know the district's development plan," (Teacher, **School FE-**Quintile 2). Another school adds:

Our school and the district are tracking the same thing. We all know what the focus this year is—what we are trying to achieve. There are no surprises. When they [subject advisors] come here, we know what the agenda is because we were part of setting that agenda. (Teacher, **School WL-**Quintile 3)

- **Are careful not to skip over the SMT members and work directly with teachers instead**, in an effort to have a more immediate impact on the quality of teaching and learning in local schools. District officials recognize and acknowledge that they influence teaching and learning not directly and that their support will only have an impact if the SMTs, who have more direct impacts on learning outcomes, are not left behind:

> *Subject advisors work directly with teachers but they make sure that they don't leave the SMT behind.* (Principal, **School WH**-Quintile 4)

Subject advisors work directly with teachers but they make sure that they don't leave the SMT behind. They always have sessions with us—the Principal, Deputy Principal and HODs. They brief us about what they observed and found in their visit to the school. This briefing session is extremely important because we get empowered as curriculum managers and are able to monitor and make follow-ups after subject advisors are long gone and may never come back to monitor. (Principal, **School WH-**Quintile 4)

- **Prioritise teachers in schools with the greatest need for professional development** while not neglecting teachers in other schools. District officials target their most intensive supports to schools in the "lowest category," i.e. those that perform below a district or provincially set norm. The intensity of support is reduced in schools that perform at accepted levels. Some schools praise the differentiated district support to schools because limited resources are targeted to the areas of greatest need. One schools explains this well:

I know that schools in our district are categorised according to the way that learners perform. Although we do not get much support from the district, but they [district officials] spend more time supporting underperforming schools. And we understand and appreciate that; we probably don't need as much support. (Teacher, **School KT-**Quintile 3)

Many schools, however, are not as understanding about the diminished support given to high-performing schools by the district offices. Echoing the sentiments of many schools, one school feels strongly that:

We are punished for working hard and producing good results. We have the same resources and work under the same conditions as the school next door—if not under worse condition—but while we work hard to make sure that our learners excel, in the next school, 'laissez faire' is the order of

the day. Teachers are late all the time, they don't attend classes, they don't teach but when their learners perform badly, they get all the attention. They are given more resources, special programmes are designed just for them and we are even asked to send our best teachers to teach in study camps, which target learners from these underperforming schools. Why are these schools treated differently when they should be held accountable for not doing their work? (Teacher, **School GO-**Quintile 3)

- **Create professional learning communities (PLCs)** to encourage teachers to learn from each other and share good practices. This includes developing a process to identify best practices already in use in a district's schools and classrooms so that these practices can be replicated in other schools.

   We cannot always rely on subject advisors—they are few and have too many schools to support. (Teacher, **School EH-**Quintile 3)

   In the era where districts are understaffed, don't have the means to get to schools, and knowing that this situation may get even worse due to budget cuts, we cannot rely 100% on district support. There is a wealth of expertise among teachers within the same school and across schools. Nothing stops us from creating platforms where we can learn from one another. (Teacher, **School GN-**Quintile 3)

   > *There is a lot we can learn from each other as teachers. There is a wealth of expertise among us as teachers* (Teacher, **School EH**-Quintile 3).

- **Spend time supporting them as instructional leaders**. Members of the SMT in some schools reported that circuit managers take deliberate steps to reduce the amount of time they spend on operational and regulatory functions and shift their focus toward improving curriculum delivering:

   Everything else comes second. The whole reason why we are here is to teach, teach, teach and nothing else, but teach. This is what we spend most our time with circuit managers discussing. Each term, we know what must be achieved with regard to curriculum delivery. We have clear targets against which to assess progress we are making. So, when our circuit manager visits us, she is here to support us meet our targets. Administrative issues are important too, but they come second—they take a back seat. (Principal, **School FG-**Quintile 1)

- **Monitor teaching and learning as their top priority**. Some Principals talked about how the district had moved teaching and learning to the centre stage. As one Principal notes:

   The main thing that our circuit manager monitors or talks about in all Principals' meetings is curriculum delivery. He reminds us all the time: "You can't have your teachers knowing more about curriculum matters than you do. How can you be curriculum managers if you are not informed? How can you lead if you are in the dark?" So, we make it a point that we get empowered and we empower ourselves about curriculum issues. (Principal, **School MJ-**Quintile 1)

   This is contrary to a common practice, which NEEDU observed in many districts during its 2012-2016 systemic evaluations, where circuit managers were found spending the bulk of their time mainly on operational issues, and engaged in tasks such as monitoring schools' compliance with national, provincial, and district policies or directives.

REORGANIZING RESOURCES TO SUPPORT IMPROVEMENT EFFORTS: Different units or sub-directorates strategically co-ordinate their work so that the individual parts of the district system operate in concert with one another, as opposed to working in separate silos or in competition for limited district resources. This is evidenced by:

Cross-functional teams—including representatives from different district units—working together to support teaching and learning in a cluster of schools. These teams are able to build bridges among organizational silos and this makes support to schools more effective:

Our district supports us through multi-disciplinary teams. This helps because the district is in a better position to see where problem areas are and can find a lasting solution instead of one unit pointing fingers at another while schools are suffering. We used to get conflicting and confusing messages from different units within the district but this is now a thing of the past because one hand knows what the other hand is doing in the district. (Principal, **School GP-**Quintile 2)

> *Subject advisors do not confine themselves to the traditional subject-matter silos. Rather, they work collaboratively across professional development areas.*

- **The prioritisation of a manageable number of teaching and leadership goals to anchor observations and improvement efforts**. A small sample of Principals talked about how their districts narrow their focus on few critical things:

  As we prepare our school improvement plan, we work with our Circuit Manager to prioritise three to five things to focus on and accomplish each year. If you do too many things, you run a risk of accomplishing none of them. (Principal, **School WJ-**Quintile 4)

- **The use of common monitoring tools.** Circuit Managers across the district use common tools to collect information about classroom teaching and Principal instructional leadership that would allow them to provide meaningful feedback or assess the value of a particular professional development strategy.

MAKING EFFECTIVE USE OF DATA: Principals and teachers in three schools talked of performance-oriented districts that rely on data to plan and design professional development programmes. Teachers in these schools reported that the district office:

- **Analyses assessment results** at least on a quarterly basis to "keep track of how learners are performing in order to support schools to design strategies to help learners who are falling behind while there is still time to give them more opportunities to succeed." (Teacher, **School GQ-**Quintile 2)

- **Uses the data it collects** through its annual school improvement planning (SIP) process. The new, redesigned SIP which the Whole-School Evaluation Unit in the Department of Basic Education has designed seeks to lead schools through a process of assessing their current capacity relative to their performance targets, which will provide better information about the kinds of district support they will need:

  The district takes our school improvement plans seriously. They analyse them to figure out what the individual needs of every school are. This helps the district to tailor-make the support they provide to each school as well as professional teacher development programme. This is why in this district we don't have one size-fit-all support programmes. (Principal, **School FD-**Quintile 3)

- **Uses the analysis of assessment results and the IQMS processes** to inform teacher professional development programmes:

Truth be told: when many learners keep performing badly in a particular topic, the problem is not always with the learners but with the teachers. It may be that the teachers do not have the content knowledge or the correct technique required to teach that topic. Our subject advisors are quick to pick this up during the analysis of assessment results. They then provide relevant development programmes to address whatever gaps they identified. (Principal, **School GN-**Quintile 3)

> *When many learners keep performing badly in a particular topic, the problem is not always with the learners but with the teachers* (Teacher, **School GN, Quintile 3**).

INTERVENING IN SCHOOLS MAKING LITTLE OR NO PROGRESS*:* The district intervention involves not only more control and supervision, but also results in the allocation of additional resources and support being channelled to the chronically low-performing schools. Intervention for underperforming schools takes different forms, including the following:

- **Close district support and monitoring**. Some schools reported that their districts provide intensive supports to help low-performing schools improve:

During the time when our school was underperforming, we received a lot of support from the district. A multi-disciplinary team from the district was assigned to our school and they were here almost every day to support us and help us address our challenges. They still do provide that kind of support to underperforming schools. They mobilised parents and the community to make sure that they support our efforts, especially when we deal with issues, which affect learner performance such as behaviour, late coming and absenteeism. (Principal, **School GQ-**Quintile 2)

- **Government/Private funded programmes**: Specific programmes targeting underperforming schools are designed to help them improve: "We often envy underperforming schools because they have access to good programmes and resources. Schools like ours are excluded in these programmes because they think we don't need them but we can benefit at least from the resources produced in these programmes." (Principal, **School GO-**Quintile 3)

ASSISTING LEARNERS WITH ACADEMIC DIFFICULTIES WHILE CHALLENGING GIFTED LEARNERS: Some districts provide timely, on-target support needed long before learners fall so far behind that they might never catch up. For example, four schools mentioned that their districts encourage schools to develop benchmark assessments that provide ongoing data on the progress of learners. Schools are expected to use this data to identify difficulties and to provide prompt assistance.

> *Some districts provide timely, on-target support needed long before learners fall so far behind that they might never catch up.*

Some districts organise study camps for mostly Grade 12 learners at the end each quarter, targeting not only the underperforming schools but also those whose test scores reveal strong performance and growth. Subject advisors identify best teachers from different schools to teach in the study camps. These extended opportunities are differentiated so that "learners who are lagging behind can catch up and the high fliers are challenged further to give us more distinctions." (Teacher, **School EF**-Quintile 3)

Research is demonstrating the impact of social and emotional development on academic achievement and school success (Elias & Haynes, 2008; Stipek & Miles, 2008). Teachers in schools serving learners from predominantly low-socioeconomic households describe the influence of the socio-emotional dimension on academic achievement. Socio-emotional characteristics of learners and of the environment, which teachers reported as having a negative impact on academic success, include the following:

- Discrepancy between language spoken at home and the language of teaching and learning at school;
- Distance a learner has to walk to school;
- Whether the learner has had a meal before arriving at school;
- Place to study at home and home environment;
- Malnutrition and ill health/affected or infected with HIV;
- Teenage pregnancy; and
- Child-headed families.

Findings in 2017

Schools, mostly those serving learners from poor backgrounds, grapple with these issues every day. Two schools describe how dealing with these issues is a daily struggle:

When learners walk in that [classroom] door, some are hungry—they did not eat last night. Some are tired because they had to take care of a sick mother who is infected with HIV. The other is traumatised because she had to witness her mother being abused by her father. And others are disoriented because as head of families they don't know what they are going to eat tonight; and the story goes on. These children are in front of you and you have to teach them. Where do you start? Failure is not an option. The fact that these children have to go through these hardships is the very reason why we work hard to teach them because only education will take them out of these circumstances. (Principal, **School KV-**Quintile 2)

We are a quintile 4 school and so our learners are not eligible for the feeding scheme [the National School Nutrition Programme]. Most our learners need it because of their background. By the time they leave school after extra classes at 6 in the afternoon, they are hungry. Some still have to walk long distances home, and when they get home, they have a zillion things to do, and some don't have space or there is no light so they can do their homework. That's why in our school we give them time here at school to do their homework. The only thing that keeps us going is the love we have for our learners. (Teacher, **School KF-**Quintile 4)

A learner whose life experiences are narrated below provides a profile of the learners that teachers in this study teach in their classrooms:

I lost my parents when I was young. Being the eldest in my family meant that I had to skip childhood and become an adult at a young age. When my peers are preoccupied with which cell phone or iPad their parents must buy for them the next birthday, all I have to worry about are basic things—what we are going to eat tonight. Life has not been easy but I have realised that self-pity will not take me anywhere. My source of strength is the support, motivation and love that I get from my teachers.
(Learner, **School KS**-Quintile 4)

> *When I see how our teachers go beyond the call of duty to help us succeed, I always say to myself 'I can't let them down'* (Learner, **School** KS-Quintile 4).

OSF 4—FINANCIAL AND MATERIAL RESOURCES: The educational resources of the schools affect the academic achievement of learners if they are pitched below a certain level

Considering the educational resources of the school, a large amount of the school income is obtained by charging school fees in quintile 4 and 5, and providing government 'school allocations' for no fee-paying schools (quintiles 1-3) and a lesser amount for quintile 4. School funding is pro-poor—with quintile 1 schools receiving proportionally more school allocations from government. School allocation is the non-personnel funding schools receive from government each year. The Basic Education Sector seeks to "ensure that all schools are funded at least at the minimum per learner levels determined nationally and that funds are utilised transparently and effectively" (**Goal 23** in the Action Plan to 2019, Department of Basic Education, 2015).

Provincial Education Departments (PED) deposit these funds directly in schools' bank accounts with clear conditions how these funds must be used. Each PED specifies a portion of funds that must be used for:

- Minor maintenance of building facilities;
- Classroom equipment (furniture, computers, etc.);
- School supplies like pencil and paper, chalk board, flipchart;
- Procurement of textbooks and other learning and teaching support material (LTSM); and
- Basic services such as electricity, water & sanitation and garbage removal and telephone.

The fee-paying schools (quintiles 4-5) charge school fees and the school governing bodies (SGBs) decide how the collected funds should be used. In this study, the SGBs in quintile 5 schools, amongst other things, use school fees to employ more teachers to augment those provided by the state in order to cut down the class size and the teacher-pupil ratio. The no-fee paying schools, on the other hand, are not authorised to use its school allocation to hire additional teachers.

The minimum threshold for the school allocation, or the amount of funding per learner, that quintiles 1 to 3 schools should receive to maintain their status as 'no fee schools' increased to R1,509 per learner by 2014 (Department of Basic Education, 2015).
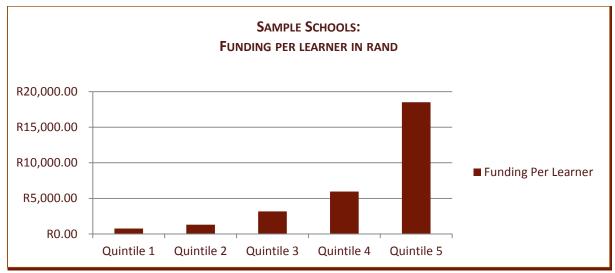
Findings in 2017

The effect of financial and material resources on schools serving learners from poor backgrounds is discussed under the following headings:

- Funding per learner
- Learner-teacher ratio
- Average class size
- Appointment of additional teachers
- Adequacy of material resources

FUNDING PER LEARNER: Figure 32 below shows that schools in quintiles 4 and 5 collect more revenue through school fees than funding quintile 1-3 schools receive from government to maintain school infrastructure, procure LTSM, pay municipal services, and do other things. It must be noted that the information in Figure 32 was provided by the schools directly. It has not been verified either by the PEDs responsible for each school, neither was it checked by NEEDU against other documentation from the schools.

SAMPLE SCHOOLS:
FUNDING PER LEARNER IN RAND

Source: Own calculations using data provided by the schools

Figure 32: Revenue schools receive from government or collect from school fees

Figure 32 suggests that the educational resources of the schools are directly related to the socioeconomic situation of the families, and the higher socioeconomic level learners have, the more financial resources their schools have.
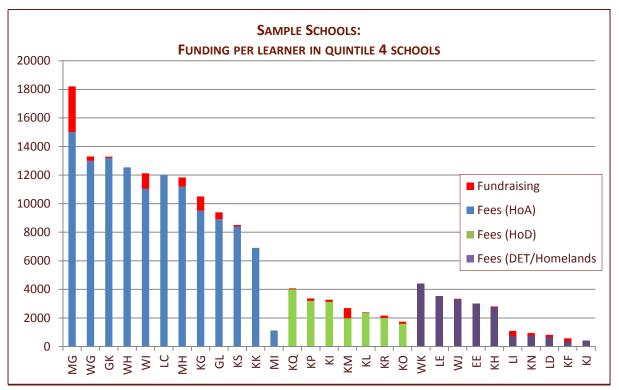
Quintile 4 schools are unique among other quintiles in that they receive minimum school allocations from the government but can also charge school fees to augment government allocations. There are vast disparities among the quintile 4 schools in terms of the revenue they are able to collect. The two main reasons for the variation in school revenue among these schools emanate from the fees they charge and their ability to collect them from parents.

As illustrated in Figure 33 below, quintile 4 schools, which were administered by the former Department of Education and Training (DET) and former homeland education departments (mostly located in townships), charge low fees owing to parents' inability to pay. On the other hand, quintile 4 schools formerly administered by the House of Assembly (HoA) (mostly located in towns) are able to charge high fees. Like the quintile 5 schools, this allows them to hire more teachers to reduce class size and procure more educational resources.

The quintile 4 schools in our sample, as presented in Figure 33, are arranged according to previous administrations. The first 12 schools were previously administered by the House of Assembly. S**chool MI** is an outlier. It is now predominantly black in terms of learner and teacher population. The current

learners come from a lower income bracket and thus can only afford minimal school fees. The next seven schools, illustrated by green bars, were administered by the House of Delegates (HoD). The final group of 10 schools, illustrated by purple bars, were administered by the former DET and homeland education departments.

Source: Own calculations using data provided by the schools

Figure 33: Quintile 4 school income from school fees and fundraising

Additional resources in schools charging high school fees enable them to reduce learner-pupil ratios, reduce class sizes, hire additional teachers and procure more equipment and LTSM. Each of these benefits is briefly discussed below:

LEARNER-TEACHER RATIO: This study examined learner-teacher ratio in the three subjects: Mathematics, Physical Sciences and the LOLT (English or Afrikaans). Figure 34 below shows that quintile 1 schools have the highest learner-teacher ratio in Mathematics, Physical Sciences and LOLT. The opposite is observed in quintile 5 schools. One quintile 5 school explains lucidly why it is able to keep teacher-learner ratio low:

At the moment, we have 14 SGB posts that SGB is paying. That makes the teacher-learner ratio 1:25 in some of the subjects and less in other subjects. This makes it possible for this school to get better results at the end of the year. (Teacher, **School LA**-Quintile 5)

It must be noted that the calculation of ratios took into account the number of Grade 12 learners the teachers taught in each of the three subjects (Mathematics, Physical Sciences and the LOLT), but did not take into consideration the rest of their teaching load. The school average was calculated using the total number of learners in the school divided by the total number of teachers.

Source: Own calculations using data provided by the schools
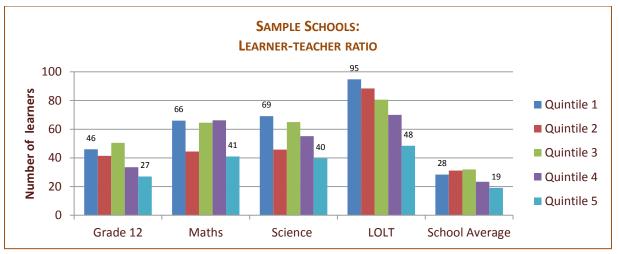
Figure 34: Learner-teacher ratio per quintile

AVERAGE CLASS SIZE: The literature manifests that there is a relationship between the number of learners in class and achievement, and that achievement is higher for the classrooms having less learners than the classrooms having more learners. In many ways, uncrowded classrooms make it easier for teachers.

An overcrowded classroom—with learners' desks up against the chalkboard

Source: School KW-Quintile 2

In the present study, the number of registered classes in Grade 12 was used to calculate average class sizes in order to avoid nonsensical averages associated with many subject offerings in high schools. When it comes to the mean class sizes of the schools, the classrooms in quintile 5 schools are less crowded, and the classrooms in quintile 1 schools are the most crowded.

This is illustrated in Figure 35 below. In this study, because the class sizes are high in quintiles 1-3 schools and in quintile 4 schools, which charge low school fees, teachers in these schools work harder than their counterparts in more affluent schools with smaller class sizes to produce good results.

Source: Own calculations using data provided by the schools
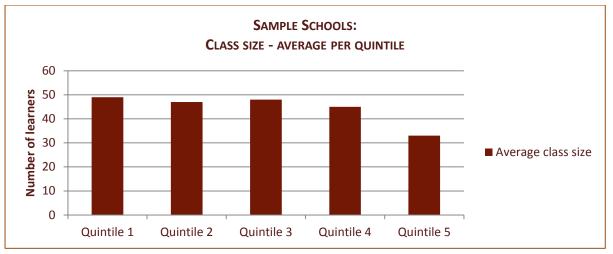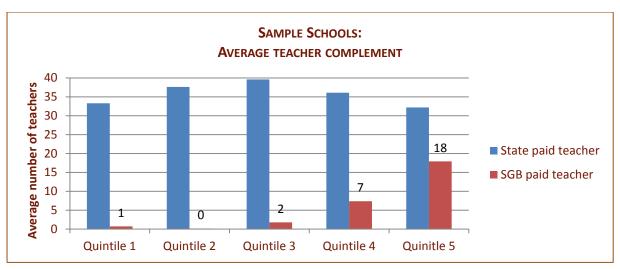
Figure 35: Average class size per quintile

APPOINTMENT OF ADDITIONAL TEACHERS: Quintile 5 schools are able raise the most revenue to afford hiring additional teachers. Figure 36 below indicates that very few of the quintile 1-2 schools have additional teachers, while schools in quintiles 4 and quintile 5 are able to hire an increasing number of teachers. As one quintile 5 school notes:

We have a lot of governing body paid teachers and if our Governing Body did not appoint those teachers I don't think that our results were going to be good. So unfortunately, we charge high school fees to be able to pay Governing Body teachers so that our numbers in our classes are smaller and for the general things like our classes are clean and the facilities are good: there are toilets, there are no broken windows. (Teacher, **School NB**-Quintile 5)

Source: Own calculations using data provided by the schools

Figure 36 : Average number of state paid and SGB paid teachers

Quintile 5 schools in this study are able to employ more than an additional third of the number of teachers provided by the state, as shown in Figure 37.

PERCENTAGE OF SGB HIRED TEACHERS PER QUINTILE
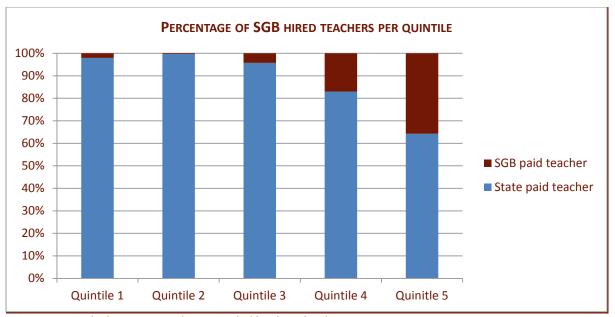
Source: Own calculations using data provided by the schools
Figure 37: Percentage of State and SGB hired teachers per quintile

ADEQUATE MATERIAL RESOURCES: In 70% of the schools in this study, learners in Grade 12 in 2016 have their own copy of textbooks in gateway subjects (Mathematics, Physical Sciences, Life Sciences, Economics, Accounting and Business Studies). However, this was not true in other grades below Grade 12 in quintile 1-3 schools and some quintile 4 schools: "The priority is Grade 12. In other grades as many as four learners share a textbook. We can't afford to provide a textbook for each learner." (Teacher, School LL-Quintile 2)

Donated science kits
Source: School FE-Quintile 2

Educational resources play a significant role in order to provide equal opportunities for learners and to diminish the effect of socioeconomic factors on academic achievement. The level of attaining educational aims and objectives is directly related to educational resources and the use of them (Savasci & Tomul, 2013). In the present study, 27% quintile 1-4 schools reported having limited material resources compared to more affluent quintile 5 schools. Expressing the sentiments of many quintile 1-3 schools, a teacher in quintile 1 school said:

The two things our school can afford to provide are textbooks which learners still have to share and chalk—the rest is for you [the teacher] to improvise. Teachers sometimes use their personal funds to buy teaching materials. (Teacher, **School MM-**Quintile 1)
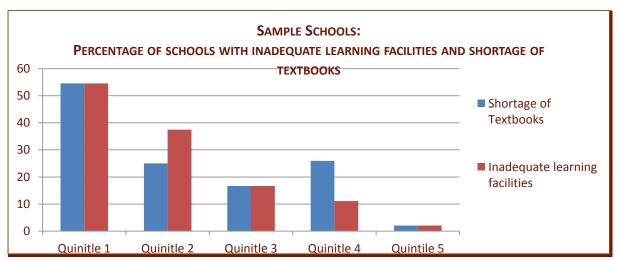
A science storeroom
Source: School CD-Quintile 5

Figure 38 shows the percentage of schools per quintile (1-4) which reported having insufficient textbooks for each Grade 12 learner to have his/her own textbooks and the number of schools which reported having inadequate materials, resources and equipment, for example, science laboratory equipment.

Quintile 5 schools reported the exact opposite in respect of the availability of material resources in their schools. For example, one teacher said:

We've got a very supportive Governing Body. Our staff is very well-resourced. Every single classroom or staff has a laptop, iPad, data projectors etc. So we've got an IT the department that's very proactive. (Teacher, **School GA**-Quintile 5)

Source: Own calculations using data provided by the schools
Figure 38: Percentage of schools with insufficient textbooks and inadequate learning facilities

The basic education sector is working towards achieving **Goal 19** (to ensure that every learner has access to the minimum set of textbooks and workbooks required according to national policy) by 2019.

OSF 5—FACILITIES: A review of the literature indicates that investments to improve school infrastructure has effects on the educational quality

According to the experts (Hanushek, 1995), an adequate school facility must at least comply with the following three parameters:

- **Comfort for students, teachers, and administrators**: spaces for teachers and students, with an adequate temperature, ventilation, and lighting, with water, electricity, as well as sanitary services.
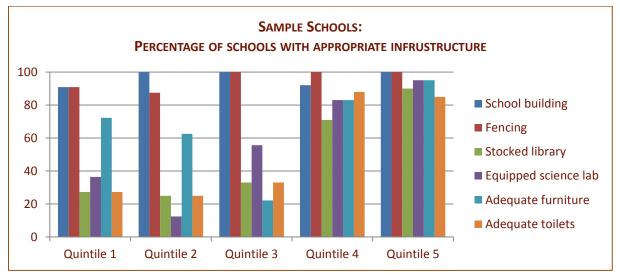
- **Spaces for the development of rehearsals and practices** such as libraries, and natural sciences, information technology, physics and chemistry labs.
- **Spaces for the development of talents and entertainment,** such as sports, and culture.

These parameters resonate well with two goals encapsulated in Basic Education sector's Action Plan to 2019:

- **Goal 20:** To increase access amongst learners to a wide range of media, including computers, which enrich their education; and
- **Goal 24:** To ensure that the physical infrastructure and environment of every school inspire learners to want to come to school and learn, and teachers to teach.

FINDINGS IN 2017

While school building in these schools are maintained, 20% of quintile 1 schools, 30 of quintile 2 schools and 17% of quintile 3 schools require major renovations. Many quintile 1-3 schools in this study do not have libraries and science labs. The quintile 4 schools, which lack adequate infrastructure include mostly those that were previously administered by DET and homeland departments (mostly located in townships). Figure 39 below shows the percentage of schools with appropriate infrastructure.
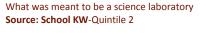
Source: Own calculations using data provided by the schools

Figure 39: Percentage of schools with appropriate infrastructure

Some schools have boarding facilities and they use them to their advantage. Firstly, "they [boarding facilities] play an important role in improving the results in the sense that learners get more time to study on their own in the evening" (Teacher, **School KH-**Quintile 4). Secondly, "when we advertise a vacant post we always indicate that we have subsidised house rentals to teachers and in that way we are able to attract good teachers to come and work here and to retain them for a long time because they have a decent place to live." (Teacher, **School LG**-Quintile 4)

While these schools understand how school infrastructure can affect educational performance, they refuse to allow the lack of basic infrastructure to determine their learners' academic success:

We teach the Physical Sciences but we don't have a science lab or any lab for that matter. We don't have the basic equipment, materials and chemicals to do experiments. We bring pictures just to show learners the equipment, different kinds of apparatus and materials that we talk about in our lessons so they can see what we are talking about. We explain the experiments instead of performing them. We ask them [learners] to visualise things but we still produce distinctions. You can imagine how great our results would be if we had at least the basic resources. 'Failure is not an option,' that's what we tell our learners. (Teacher, **School KV-**Quintile 2)

> *Our present circumstance cannot and will not dictate our future. We may be poor, but our minds are filthy rich. And with that, the sky is the limit.* (Learner, **School EI**-Quintile 2)

Schools in town have all facilities to make teaching and learning easy and enjoyable, we don't. Do we let that become a barrier in our way to success? No. Do we moan and groan about it? How would that change our circumstances? Some learners were born with silver spoons in their mouths; we were not. We know our circumstances and we have to make the best of it and work hard to get out of it. Our teachers improvise and approach different companies to get assistance. Some donate some science kits. Then chemicals get finished and our school cannot afford to replenish them. (Learner, **School LN**-Quintile 1**)**

I wish we had a library like other schools where you go to read and borrow some books. We don't have reading books at home. We live in a village; there are no public libraries here. Then, you come to school—still no library. Our teachers tell us about our heroes like Mandela, mama Sisulu and others who were born and raised in rural areas, just like us. So, they [teachers] encourage us to form book clubs and we have made it our mission, with teachers' support, to find books and other reading materials wherever we can find them. (Learner, **School EI-**Quintile 2**)**

Learning would have been a lot easier if we had all the facilities that we need but life is not about having everything that you need. Some have everything, and some have nothing. We happen to be those in the category of the 'have nots.' We don't have a library, labs and our school building is falling apart but the quality of teachers we have in this school is amazing. The commitment our teachers have makes us forget about what we have or don't have. Our teachers' love for us is enough to see us through the difficult times. We are one big and loving family. (Learner, **School KF-**Quintile 4**)**

Schools in the upper quintiles enjoy better resources, as many schools noted:

A well-resourced classroom
Source: School KL-Quintile 4

Resources are hugely important. We're very fortunate, our parents pay quite high school fees and we are very fortunate that our classrooms are well equipped. We've all got computers, whiteboards and whiteboard pens, video data projectors, two iPad classes and everything that we need. So, learners are very fortunate from that point of view. They really have just about everything on a platter delivered to them. (Teacher, **School KA**-Quintile 5)

A well-stocked library
Source: School FA-Quintile 5

Every pupil has his own desk. When you sit down to work, the teacher puts up notes. Teachers do not take 20 minutes to write the notes; they are on the projector waiting for us. So, everything we go through is at a much higher pace unlike if we didn't have those resources. Our school library is also well-stocked and we are able do any research teachers assign. (Learner, **School CA**-Quintile 5)

A science laboratory
Source: School FA-Quintile 5
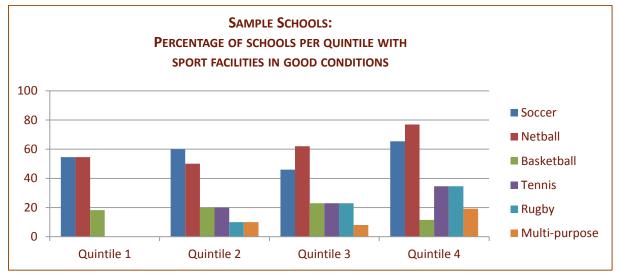
We have so many laboratories, Physical Science and Life Science. For every subject we have a strategy, and there is a garden for Agricultural Science. We have tablets and flat screen TV and we have Wi-Fi connected for us to do assignments. We are exposed to a better world as we have tablets and TVs where we can perform our educational programmes. The school employs young teachers who understand Technology very well. (Teacher, **School KA-**Quintile 5)

Schools that Work II Lessons from the Ground

As with the school infrastructure, sports facilities are in short supply in quintile 1-4 schools in our sample. This is illustrated in Figure 40 below:

SAMPLE SCHOOLS:
PERCENTAGE OF SCHOOLS PER QUINTILE WITH
SPORT FACILITIES IN GOOD CONDITIONS

Legend: Soccer, Netball, Basketball, Tennis, Rugby, Multi-purpose

Source: Own calculations using data provided by the schools
Figure 40: Percentage of schools with sport facilities in good conditions

Schools in all quintiles offer soccer, netball and basketball. Many more schools in Quintile 3 and 4 schools offer rugby and it is important to consider the combined percentage of these two sports to give a more accurate picture of sports offerings.

A rugby field
Source: School KS-Quintile 4

A soccer field
Source: School KY-Quintile 1

A school's gym
Source: School KS-Quintile 4

Unused swimming pools due water shortage
Source: School FE-Quintile 2

SUMMARY

While research finds a strong relationship between the supporting inputs or OSFs discussed in this section and academic achievement, schools in this study challenge the notion that OSFs have the strength to diminish learners' academic success. However, this does not, in any way, disparage these schools' high levels of effort to turn their schools around and to provide their learners with the best possible learning opportunities. These schools work hard to mitigate or diminish the effect of the socioeconomic features on learning. As one Principal lucidly and cogently puts it:

It's all in the mind. All you need is the right attitude—and lots of it. If you have the right attitude what other schools find impossible, you find it possible. With the right attitude, you will move mountains. (Teacher, **School KT**-Quintile 3)

It's all in the mind. All you need is the right attitude—and lots of it. With the right attitude, you will move mountains (Learner, **School KT**-Quintile 3)

Having explored the conditions under which schools that work operate, in the remaining part of this report, we now turn to practices that these schools exhibit to minimise the effect of these conditions on the quality of curriculum delivery. The high-performing schools attribute their good performance in the NSC results to these practices. The evidence from the schools that work, which is presented in the form of best practices, is quite persuasive that schools can reduce the inequality generated by OSFs and have the potential to offer much greater reductions in the achievement gaps among learners.

The best practices are discussed below are organised under six themes:

- Support and partnerships,
- Learner-centred climate,
- Enabling conditions,
- School leadership and management,
- Professional development and collaboration, and
- Quality teaching.

These six factors together create the conditions for improved learning outcomes in the high-performing schools in this study. Next, we discuss each theme.
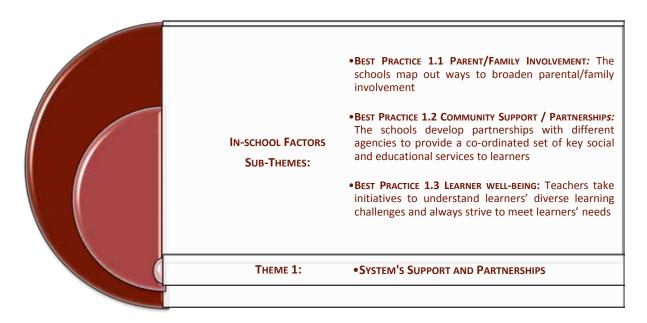
THEME 1: SYSTEM'S SUPPORT AND PARTNERSHIP

B.   HOW HIGH-PERFORMING SCHOOLS SEEK TO DEAL WITH OUT-OF-SCHOOL FACTORS

Described below are different approaches that high-performing schools use to reduce the impact of OSFs in their quest to deliver quality education to all learners.

Lending credence to the research findings in Box 3A in Part II of this report, high-performing schools mobilise all key role players who touch learners' lives to bring about school improvement and improved learner achievement. They have positive strategies to encourage parents/care-givers to be involved in sharing the responsibility of establishing a culture of success and in raising achievement.

Below are statements of best practices of *system's support and partnership*. These practices represent some of the practices that are most frequently discussed by high-performing schools:

IN-SCHOOL FACTORS SUB-THEMES:	•BEST PRACTICE 1.1 PARENT/FAMILY INVOLVEMENT: The schools map out ways to broaden parental/family involvement •BEST PRACTICE 1.2 COMMUNITY SUPPORT / PARTNERSHIPS: The schools develop partnerships with different agencies to provide a co-ordinated set of key social and educational services to learners •BEST PRACTICE 1.3 LEARNER WELL-BEING: Teachers take initiatives to understand learners' diverse learning challenges and always strive to meet learners' needs
THEME 1:	•SYSTEM'S SUPPORT AND PARTNERSHIPS

The best practices are organised under three sub-themes namely, parent/family involvement, community support/partnerships, and learner well-being.

> **BEST PRACTICE 1.1—PARENT/FAMILY INVOLVEMENT:** The schools map out ways to broaden parental/family involvement

How do schools foster high-quality, successful parent involvement? Following are examples how high-performing schools foster successful parent involvement. They:

- **Create a welcoming school climate**—Following are examples how high-performing schools do this. They:

  ✓ **Take concrete steps to eliminate the barriers** which may keep certain families from participating in the school. Describing how it eliminates the barriers, **School KV**-Quintile 1 notes:

A monthly parents' meeting to receive feedback about their children's performance
Source: School KV-Quintile 2

We soon realised that some parents did not come to school when we invited them to monthly sessions to provide feedback about how learners had performed because they could not read and understand the reports. So, we decided to do something about it.

We prepared our reports differently so that even the most illiterate gogo [grandmother] can read and understand how her grandchild is progressing at school, and it worked! You should see the number of parents, from all walks of life, whom we attract in our assessment feedback sessions. (Teacher, **School KV**-Quintile 2)

School KZ provides a compelling story of a caring school that visits learners at home to support them. **School KZ** is a quintile 1 school located in a deep rural community in KwaZulu-Natal. Because of its good track record in producing quality results in NSC examinations, the school attracts learners who stay in towns and townships as far as 285 kilometres away. Their parents rent rooms for their children in houses close to the school. As a result, these learners live with strangers, away from their own families. Teachers indicated that the school seems to attract learners with behavioural problems and other learning disabilities to the extent that the school offers inclusive education by default. A teacher from this school describes what this situation means for teachers at the school as follows:

Many of our learners don't stay with their biological parents. They stay with other adults from different households. [Therefore] we have to visit learners where they live to find out whether they are doing their schoolwork and are not getting out of hand. It's quite demanding.

Sadly, the families with whom the learners live, don't know the kind of children they are—that some are delinquent—only teachers know that. The learners just stay with them and they have no obligation to these children. Because their parents live many kilometres away, we took a decision to [keep an eye on] them daily, seven days a week. We protect them.

We [spend more time] with them even during weekends. We encourage them to do sports when they are not in class like playing soccer and netball. We also teach them during weekends. We keep them busy and occupied just so they get focussed on their schoolwork and get out of trouble. (Teacher, **School KZ**-Quintile 1)

- **Provide families with information related to child development and creating supportive learning environments**—Following are examples how high-performing schools do this. They:

  ✓ **Provide workshops and materials for parents** on typical development and appropriate parent and school expectations for various age groups:

You must appreciate that we teach learners who come from child-headed families. Some of these learners are heads of these families. They have become 'parents' to their younger siblings. Many adult parents struggle to play their part as parents effectively. Then, what would you expect from these young 'parents'? We work with our sister departments like Social Development, Health and Home Affairs as well as other agencies to support all parents with parenting skills. (Principal, **School LH**-Quintile 3)

- **Establish effective school-to-home and home-to-school communication**—Following are examples how high-performing schools do this. They:

  ✓ **Build and maintain regular communication** between the school and family through such activities as phone conversations, email, report pick-up day, parent newsletters, learner performance accounting sessions or other forums:

  One strategy [to bring parents to school] that has worked for us is to invite them [parents] give feedback how their children perform in monthly assessments. We give them dates for these feedback sessions. We told parents right from the beginning that we will never issue reports directly to learners. They know that reports are only issued in these feedback sessions. We run out of space in the school hall during the feedback sessions. (Teacher, **School LN**-Quintile 1). See **Good Practice 6.4**, how parents, amongst others, are held accountable for learner performance during assessment feedback accountability sessions.

  By 06:30, about 90% of maths learners are in class because I have communicated with their parents through WhatsApp and the parents help a lot in making sure that learners wake up early. Some parents even call teachers to ask if learners have arrived at school. (Teacher, **School GO**-Quintile 3)

  ✓ **Maintain a variety of effective avenues for two-way communications to involve a high percentage of parents:**

  We press upon the children to ensure that their parents are here. We say to them, 'It is your responsibility to solicit support from your parents. They [parents] did not just bring you here so they can stay away.' We tell the parents that providing financial support to their children is important but not enough to make their children succeed academically. All parents have to sign [the attendance register] when they come to the meetings so we have a record of parents who attend and those that don't. Just asking them to sign the attendance register is enough to put pressure on learners whose parents do not attend a meeting. They urge their parents to come next time. (Teacher, **School KW**-Quintile 2)

  We use the D-6 communicator, circulars, telephone systems to inform parents about all our school activities. If a child has been ill-disciplined or a child has an outstanding achievement in -debate, sports or anything, all these go on to the D-6 communicator and our SMS system. This is then communicated to parents. (Teacher, **School LN**-Quintile 1)

  ✓ **Keep parents regularly informed about learner progress and what parents can do to advance that progress:**

  We invite parents of learners who have performed well, those in top 20, to celebrate their academic success but it does not end there; we also invite parents of learners who are not necessarily in top 20 but have made significant improvement in relation to their individual set targets and celebrate those achievements as well. We also call parents whose learners perform

poorly to work out a plan to improve together, including the learner. (Teacher, **School LF**-Quintile 3)

We have an intervention programme at the end of each term. We call parents to discuss the intervention programme, especially for those who are underperforming. We try by all means to bridge the gap between high-performance and low-performance. (Principal, **School EH**-Quintile 3)

✓ **Clearly communicate school policies to all families in the language they understand:**

[Parents] are informed of pass requirements. For example, we explain what a bachelor, diploma or certificate pass means and then the children have what we normally call 'individual learner profiles' where each learner has an [academic improvement] target, i.e. what each learner plans to achieve. (Teacher, **School LN**-Quintile 1)

✓ **Schedule meetings to accommodate working parents**:

Parents see the value of coming [to school]. We don't have a problem of parental involvement or parents attending meetings. We always have more than 95% attendance and the hall is always full. The Principal makes sure that he calls meetings at the time that suits most parents. **(Learner, School FC**-Quintile 3)

✓ **Create a family suggestion or comment box** (electronic and onsite) for families to provide their questions, concerns and recommendations anonymously: "We learn a lot from comments that parents drop in the comment box. Because it's anonymous, parents name and shame but this is done in a constructive way." (Teacher, **School EI**-Quintile 2)

- **Strengthen families' knowledge and skills to support and extend their children's learning at home and in the community.** Following are examples how high-performing schools do this. They:

✓ **Develop activities for parents and teachers** to work together to extend school work into the home and support classroom learning:

We call the parents and learners to plan together. We say to learners, 'Don't come alone; come with your parents.' That helps. We talk about expectations for all parties [teachers, parents and learners]. As teachers, parents and learners we are clear about what each of us wants to achieve and what we are going to do to get it. (Teacher, **School LK**-Quintile 2)

✓ **Encourage parents/families to talk to their children** about their school day and check the work they did at school, including homework:

My parents guide and motivate me to do my work. They are quite time-orientated and I understand time management. It makes it easier when parents are supportive. (Learner, **School WJ**-Quintile 4)

✓ **Advise parents to provide a quiet place and a regular time for homework** and other learning activities:

We have an agreement with parents—you may call it a contract—and this is captured in the school's code of conduct. Part of the parents' responsibilities is to make sure that on each day at a particular time at home the TV, cell phone

> *We talk about expectations for all parties [teachers, parents and learners]. We are clear about what each of us want to see and what we are going to do to get it (Teacher, **School LK**-Quintile 2).*

and iPad are off. During that block time, learners do their homework or study. While they do

their work, they can record their favourite TV programmes and watch them later or they can watch the repeats during the weekend—or whatever.

After the quiet time, at a specific time, learners can open their cell phones for an hour to engage with learners and teachers on WhatsApp about schoolwork. It is during this hour—8 to 9 p.m.— that all learners and teachers in our school are chatting on WhatsApp. We agreed on this specific time because we wanted to stop the habit among some learners who would tell their parents that they are using cell phones for schoolwork when in fact they are watching or doing all sorts of things. So, parents know that it's only between 8 and 9 pm that learners are using their gadgets for school purposes. If they are using their gadgets at any other time, it's not about schoolwork. (Teacher, **School MK**-Quintile 1)

- ✓ **Provide training and materials for parents/families** on how to improve children's study skills or learning in various academic subjects.

- ✓ **Invite parents/families to collaborate with teachers** on developing an educational plan for their children. Currently, in most schools, this type of joint planning is reserved for the parents of children with disabilities, but it need not be so.

- ✓ **Provide information to parents/families** in a non-threatening environment about the high expectations and standards learners are expected to meet in each grade level, and specific ways for parents/families to support the expectations and help children learn at home.

- ✓ **Brief parents on the purposes of testing**, methods of reporting and interpreting test scores, and activities that can help improve results. See **Best Practice 6.4** (Effective use assessment to advance learning) how some schools do this.

- **Engage families in school planning, leadership and meaningful volunteer opportunities.** Following are examples how high-performing schools do this. They:

  - ✓ **Create roles for parents on all decision-making and advisory committees**, properly training them for the areas in which they will serve (e.g., budget or school safety).
    We involve the parents many times, for example, when the Grade 9s have to choose the subjects. We have parents' evening and the Grade 9 parents are invited to the school to get information about the subjects, what subjects are needed for different career paths before learners can choose subjects. (Teacher, **School GQ**-Quintile 1)

  - ✓ **Identify volunteer interests of parents**, their talents and availability, and matching these to school programmes and needs.

BEST PRACTICE 1.2—COMMUNITY SUPPORT/PARTNERSHIPS: The schools develop partnerships with agencies to provide a co-ordinated set of key social and educational services to learners

Schools do not exist in isolation. They reside within the communities they serve and must cultivate relationships with them. Schools that work in this study bring together diverse individuals and groups, including community-based organizations, youth development organizations, health and human service agencies, parents and other community leaders, to expand opportunities for learners, and to create supports that enable children and youth to learn and succeed. This is in line with the basic education sector **Goal 25** ("to use schools as vehicles for promoting access to a range of public services among learners in areas such as health, poverty alleviation, psychosocial support, sport and culture").

Schools that work create linkages with the larger community around them. To do this they:

- **Reach out to all stakeholders.** The following examples highlight ways in which schools that work reach out to their communities and draw them into their world. They:

  - ✓ **Take inventory of the current programmes** and services operating in or connected to their schools.

  - ✓ **Identify the sources of funding** that support these services.

  - ✓ **Develop a partnership plan with specific goals** (focused on improving school academics, behaviour and school climate) on which the schools will focus their efforts.

  - ✓ **Have a team or a committee** that is responsible for creating or expanding community school partnerships using the partnership plan. Such committees include the Principal, teachers, members of the School Governing Body (SGB) and learners.

  - ✓ **Make sure that the partnership committee co-ordinates, assesses and leverages resources** and/or support from the broad range of sources that are currently available within or connected to their school in order to support the schools' development efforts. These sources include, but are not limited to:

    - ▪ *District offices:* As noted in Section 4.4.1A (How out-of-school factors impact learners' ability to learn), some schools receive needed support and timely interventions from their districts.

    - ▪ *Government departments* (e.g., Home Affairs, Social Development and Health): The schools make arrangements with clinics, police and other services:

      We have made an arrangement with the local clinic here. Our learners go to the clinic from 2 o'clock [pm], and we ensure that they don't lose any lessons. (Teacher, **School FF**-Quintile 1)

    - ▪ *Former students and other role models*: Appreciating that motivating high school learners is not always an easy task, schools that work invite successful people that learners can look up to:

      What better way to motivate learners than to bring learners who studied here who have achieved something in life or are still at universities. They motivate our learners and say 'Not too long ago, we were learners at this very school just like you; we came from the same background as you do. I made it; I am a medical doctor. You, too, can make it.' (Principal, **KT**-Quintile 3)

      Our Principal and teachers invite successful people: some are people who were once learners at this school, to motivate us. They come here in their big and fancy cars and tell us that only by being focussed on their studies did they make it big in life. (Learner, **School LN**-Quintile 1)

      If the learners can see clearly how to structure their learning in order to achieve what these people [role models that learners can identify with] have, they will be much more inspired in their schoolwork. (Learner, **School LG**-Quintile 1)

One of the best ways schools that work solicit support is that they go to the people who matter most, and meet them on their own turf. "If you send home a flyer asking the community to come to a meeting at the school, it [the community] won't show up." (Principal, **School LN**-Quintile 1)

> *One of the best ways schools that work solicit support is that they go to the people who matter most, and meet them on their own turf.*

- *Community-based organizations* (e.g., faith-based organizations, traditional leaders): Meet the community where it is—church or wherever the community gathers. "We share our dreams for enhanced community-school partnerships; we discuss with the right people how they might help our school." (Principal, **School EF**-Quintile 3)

- *Private businesses:* "We cannot do what we need to do to produce good results with the funds we receive from government. Most our funds go to municipal services; we can't even buy basic science chemicals. So, we have a rigorous strategy to mobilise support from the private sector." (Principal, **School GN**-Quintile 3)

- **Connect students and families to community resources,** programmes or services that strengthen and support students' learning and well-being. Following are examples how high-performing schools do this. They:

  - ✓ **Facilitate families' access to community-based programmes or services** to ensure that families have resources to be involved in their children's education. These programmes and services, which the schools co-ordinates and leverages from community organizations and agencies include the following:

    - health education
    - substance abuse prevention
    - violence prevention

  - ✓ **Establish school-business partnerships** to provide students with mentoring, internships and on-site, experiential learning opportunities.

- **Provide families with information related to child development** and creating supportive learning environments. Following are examples how high-performing schools do this. They:

  - ✓ **Use the school as a community education centre** that teaches health, literacy, and other skills.
  - ✓ **Use the school as a site for other services** with the potential to improve learners' school performance such as tutoring, after-school care and recreation, learner and family counselling, etc.

- **Connect with the curriculum**, for example, finding ways to work with local businesses and subject-matter experts to connect what is taught in class to the outside world.

BEST PRACTICE 1.3—LEARNER WELL-BEING: Teachers take initiatives to understand learners' diverse learning challenges, and always strive to meet learners' needs

Among other things, high-performing schools co-ordinate with other social services in order to help resolve the socio-economic inequities that contribute to lower learning outcomes for learners.

One of the most effective ways that schools use to engage learners in learning is personalising learner and staff relations. What this entails in schools that work is that teachers:

- **Make an effort to recognise each individual learner**, including simple things like addressing them by name;
- **Make learners feel personally known and cared for**, e.g., making an effort to understand their experiences. Different schools share different approaches to support learners with greatest needs:

We have many orphans in our school. One teacher is assigned with the responsibility to locate them in different classes and gather more information about them. The school provides them with food through donations—most often from teachers. We also organise uniform for them because our uniform is very expensive. We collect uniform from the matriculants, before they leave the school and give it to learners in need. (Teacher, **School KJ**-Quintile 4)

Every matriculant at the school is assigned to a teacher who acts as his or her mentor. If he or she has a problem—social problems, personal problems, school problems, whatever the case may be—the teacher is always available to listen and lend a helping hand. Teachers are sort of a parent away from home. (Learner, **School FH**-Quintile 1)

We are fortunate that we have a school counsellor, a qualified counsellor, and she handles wellness issues. She is employed by the School Governing Body. She works with kids that underperform trying to understand the root causes of underperformance. She also offers counselling to learners who have emotional trauma at home or whatever issues they are grappling with. Some of the credit for our good results goes to her. (Teacher, **School KQ**-Quintile 4)

If you are sick or have a problem, teachers use their own cars and their own petrol to take us to the clinic. They give us medicine. I for one, my sister passed away few weeks ago, my class teacher helped me. They are our parents at school, not only are they teachers but they also play a big role in our lives, as our parents at school. (Learner, **School KZ**-Quintile 1)

What we've noticed is that children staying in after school get hungry and lots of them do not carry lunch. So, now we've got the Poverty Alleviation Club—we call it the PAC. What the PAC does is to make lunch for the learners. Those learners that attend the afternoon classes, sandwiches are provided for them. (Teacher, **School KM**-Quintile 4)

School for us is like a second home. We get matrons who act like our mothers and teachers also play a role of parents. So, the advice you get from your teacher is like advice from your own parent. This is because teachers know and understand me because I have been with them for a very long time and our teachers know what is good for us. (Learner, **School EE**-Quintile 4)

- **Establish a rapport with learners** through several strategies, including:
  - ✓ Creating an "open door policy" for students and staff;
  - ✓ Demanding respect from learners and the teachers toward each other; and
  - ✓ Making teachers available to help learners before and after school, where necessary.

4.5   TEACHING-LEARNING PROCESS [IN-SCHOOL FACTORS]

Five in-school factors or themes and their sub-themes identified through *open* and *axial* coding of data are learner-centred climate, enabling conditions, professional development and collaboration, school leadership and management, and quality of teaching. These factors are within the control of the school to manipulate and together they create the conditions for improved learning outcomes. They also create an environment that promotes learners' personal well-being, ensures a supportive context for learning, and provides *all* learners—regardless of their abilities and backgrounds—with the best opportunities to learn.

In this section, each of the five factors is introduced with a brief statement and then elaborated on through several best practices exhibited by high-performing schools. These best practices are supported by strong research based on improving and/or successful schools.

Learners from high-performing schools taking responsibility of their own learning
Source: Picture taken during Round Table Discussion on schools that work hosted by the Minister on 11 July 2017

Learners and teachers from some of the high-performing schools
Source: Picture taken during Round Table Discussion on schools that work hosted by the Minister on 11 July 2017

Principals from some of the high-performing schools
Source: Picture taken during Round Table Discussion on schools that work hosted by the Minister on 11 July 2017

Delegates at the Round Table Discussion on schools that work
Source: Picture taken during Round Table Discussion on schools that work hosted by the Minister on 11 July 2017
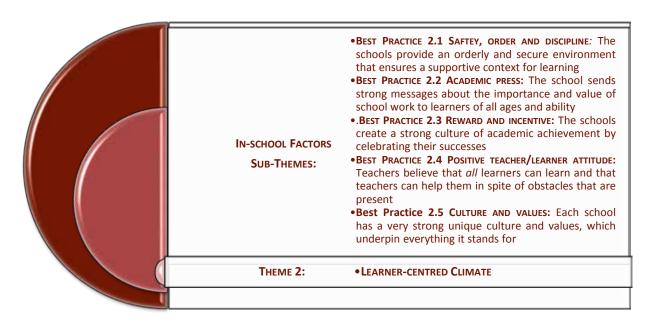
THEME 2: LEARNER-CENTRED CLIMATE

High-performing schools do not ignore the connection between what students learn and where they learn. A philosophy that defines these schools is:

The climate has to be right. That's first and foremost! If it's not right, then forget it. No best teacher in the world can be effective in an environment where there is no order and discipline. Get that right first and everything will fall into place. (Deputy Principal, **School WL**-Quintile 3)

The statement of best practices that follows expresses key study findings about the role of a *learner-centred climate* in school improvement. These findings convey practices that are common to high-performing schools.

| **IN-SCHOOL FACTORS SUB-THEMES:** | • **BEST PRACTICE 2.1 SAFTEY, ORDER AND DISCIPLINE**: The schools provide an orderly and secure environment that ensures a supportive context for learning
• **BEST PRACTICE 2.2 ACADEMIC PRESS:** The school sends strong messages about the importance and value of school work to learners of all ages and ability
• .**BEST PRACTICE 2.3 REWARD AND INCENTIVE:** The schools create a strong culture of academic achievement by celebrating their successes
• **BEST PRACTICE 2.4 POSITIVE TEACHER/LEARNER ATTITUDE:** Teachers believe that *all* learners can learn and that teachers can help them in spite of obstacles that are present
• **Best Practice 2.5 CULTURE AND VALUES:** Each school has a very strong unique culture and values, which underpin everything it stands for |
| **THEME 2:** | • **LEARNER-CENTRED CLIMATE** |

The best practices are organised under five sub-themes namely: Safety, order and discipline; academic press; reward and incentive; positive teacher/learner attitude; and culture and values.

BEST PRACTICE 2.1—SAFETY, ORDER AND DISCIPLINE: The schools provide an orderly and secure environment that promotes learners' personal well-being and ensures a supportive context for learning

The schools understand that "discipline and respect are a necessary prerequisite to any and all school improvement efforts" (Principal, **School MM**-Quintile 1) and that learners need an orderly and secure environment that promotes their personal well-being and ensures a supportive context for learning. School characteristics produce positive behaviours or outcomes that facilitate a rich learning environment.

> *Discipline is the 'mother' of all. The beginning for success is discipline.* (Teacher, **School GO**-Quintile 3)

Following are examples how high-performing schools maintain an orderly and secure environment. They:

- **Ensure that standards of behaviour**, as spelt out in the learners' code of conduct, are clear to all staff, parents and learners:

  We have meetings with parents and we explain to them the rules and regulations of the institution. (Teacher, **School KJ**-Quintile 4)

  We do have a copy of the Code of Conduct just to remind learners of what is expected of them, their behaviour and everything that is required by our school. (Teacher, **School FE**-Quintile 2)

- **Uphold agreed upon standards of appropriate and inappropriate behaviour** in a fair and humane manner that focuses on developing learners' sense of responsibility to themselves and their peers:

  At the beginning of the year the learners sign the rules to make sure that they are aware of them. There is a demerit system which leads to different form of detention. If the learner doesn't do his homework then he is in these classes. (Principal, **School FD**-Quintile 3)

  When a child has gone wrong, we invite parents to be part of disciplinary measures to be taken. (Teacher, **School KJ**-Quintile 4)

  The RCL has a book to record learners who misbehave or do something wrong. At the end of the week, they submit it to the class teacher or the register teacher who then calls the parents in. (Teacher, **KS-Quintile** 4)

  We have a very good disciplinary system within the school: yellow card, red card and we also give positive marks or points to learners for good behaviour. (Teacher, **School WG**-Quintile 4)

- **Praise and recognise positive and improved behaviour** and do not tolerate disrespectful language and behaviour.

- **Respect the cultures of its learners** and use their cultural diversity as a resource and meet their schools' targets towards the eradication of racism and bullying.

  We have our way of doing things. Learners come from various cultures. We respect, appreciate and celebrate all cultures. Different cultures are celebrated not only in September, but throughout the year in this school, because we strongly believe that our cultures must unite us instead of pulling us apart. (Principal, School ED-Quintile 4)

> **BEST PRACTICE 2.2—ACADEMIC PRESS:** The schools send strong messages about the importance and value of schoolwork to learners of all ages and ability

The high-performing schools send strong messages about the importance and value of schoolwork to learners of all ages and ability (i.e. academic press). In these schools, there is reduction of non-teaching demands that draw teachers away from their classes and their learners. To do this, schools:

- **Ensure learner and teacher punctuality in the morning—**Following are examples of how high-performing schools improve learner punctuality. They:

  - ✓ **Send parents an SMS after marking the class registers** to inform the parents if a learner is not at school.
    We always want to check between home and the school the whereabouts of this child and to let a parent know that her child is not at school. (Principal, **School LH**-Quintile 3)

- ✓ **Expect parents to inform the school immediately if the child is going to be late**.
  We expect the parents to communicate that the learner is going to be late. Most of the time a child is late because parents drop the child late here. (Principal, **School EI**-Quintile 2)

- ✓ **Have morning classes:** "This helps us so that learners come early to school. We don't have a problem concerning late-coming because learners start extra classes at 06:00 before the school starts at 07:30." (Teacher, **School GN**-Quintile 3)

- **Monitor learner and teacher attendance closely**—One key factor in creating a learner-centred climate in high-performing schools is good attendance. Following are examples how high-performing schools make sure learner and teacher attendance is at acceptable levels. They:

  - ✓ **Set attendance targets, and staff and parents are aware of attendance levels**. These schools are less concerned about the average daily attendance because as one teacher notes:
    If you have 90 percent attendance, that does not tell you who is coming every day and who is almost always absent. (Principal, **School KI**-Quintile 4)

    On the contrary, the question at these schools is, what percentage of learners have 90 percent attendance or better or less? Learners are provided with enough opportunities to learn in school by adhering to planned schedules and improving teacher attendance:

    Every Friday, teachers call the parents of the children who were absent during the week, especially for a longer period. They must call their parents to find out what's going on. (Teacher, **School WG**-Quintile 4)

    Follow up is made whereby we ask parents to come to explain why learners are not attending intervention [extra] lessons or why they are not attending morning classes, because we have morning classes every day from Monday to Friday. (Teacher, **School WK**-Quintile 4)

    At the beginning of the year, all the learners sign a pledge whereby they commit themselves— with their parents—to say "I'll be at school on time, I'll do my tasks as expected, I'll submit [work] on time, I will not absent myself from school for no reason." (Teacher, **School FD**-Quintile 3)

    The school has an incentive for the class which has the highest attendance. I don't think we have had attendance below 95% in each class. (Teacher, **School LH**-Quintile 3)

    Schools make proper arrangements when teachers are absent so that at no stage learners are deprived of the opportunity to learn. Following are good practices from two schools:

    If a teacher is not in for whatever reasons, we first look at who is available, who teaches that class and who is available in that particular period. If his or her partner is free in that period, he or she will [fill in] because we are practising team teaching at this school. (Teacher, **School KF**-Quintile 4)

    And if a teacher knows in advance that they are going to be absent, for instance, if they are going to a workshop, then they arrange for their classes to be tutored in that period, or they have worksheets. They leave work behind, so learners are not sitting there unattended without doing constructive work. (Teacher, **School LJ**-Quintile 3)

- **Ensure punctuality between lessons and after break**—There is respect for teaching time. Following are examples how high-performing schools make sure that every minute counts. They:

- ✓ **Make sure that teachers stand in the doorway** at the beginning of a class period to encourage learners to get to class on time.
- ✓ **Manage the time for morning assembly carefully**:

  As management and staff of [this school], we cannot afford to spend time on any activity other than academic activities. We are conscious about our assembly. Our assembly cannot go beyond 07:30. The first period should start at 07:30. And when the break is over everybody is ready to go to class on time because we cannot spend time on anything else but in class teaching and learning. (HOD, **School KF**-Quintile 4)

- **Set and meet high expectations for all learners**. High-performing schools believe that, to produce good results, they need to challenge learners more. These schools challenge themselves to provide the expectations and opportunities they might reserve for "gifted" learners to *all* of their learners, including those considered disadvantaged or at-risk. Following are examples of how high-performing schools set high expectations and apply them consistently. They:

  > *Anything below 95% is just not good enough but 100% pass rate of certificate or diploma passes is 100% of nothing. It's absolutely useless!* (Teacher, **School GO**-Quintile 3)

  - ✓ **Encourage their staff, learners, parents/care-givers to have high expectations** of themselves:

    Our Principal always advises us that only the best is good enough. (Learner, **School WL**-Quintile 3)

  - ✓ **Believe that all of their learners can and will learn**. If learners do not grasp something at the first presentation, teachers pursue alternative methods until an uncertain learner understands. Consequently, self-doubt among certain learners that only a handful of learners are innately good at Mathematics and other subjects is beginning to give way to the recognition among learners that "it is really about hard work" (Principal, **School MJ-**Quintile 1). Learners know that if they trust teachers to help them, they, too, will do well in the NSC examinations.

    I know that learners in other schools attend extra classes where they pay a lot of money. In this school, we wouldn't attend those classes even if we had money to pay. We are happy with the kind of education that we receive from this school. Our teachers do everything for us. We couldn't ask for more. (Learner, **School KV**-Quintile 2)

    Our teachers are positive and they don't break us down and say 'You are dumb or something.' They build us up. They reach out to us and help us get better marks than we are used to. (Learner, **School WG**-Quintile 4)

- **Set and meet achievement targets.** In this study, many schools acknowledge that achieving the national targets begins with schools meeting individual learner targets. Thus, targets are set at different levels chronologically as follows:

  > *We are expecting learners' performance to be better than when we received them. Mediocrity is not part of our lexicon.* (Teacher, **School KI**-Quintile 4)

- ✓ *Learners' targets*—Each learner is encouraged to set his or her own goals and targets. All learners have and are aware of their targets:

  We have meetings with parents early in the year to set out what is required of them [learners] so that they [the parents] can also help us meet learner targets. (Teacher, **School KL**-Quintile 4)

  There is a tradition in our school to sign a pledge. We all sign a pledge by saying 'We are dedicated and we are prepared to produce 100% pass rate.' (Learner **School WK**-Quintile 4)

  We set targets as early as Grade 10. I make them realise that [performance] levels 2 and 3 are not good enough. So, our target starts from level 4 as early in Grade 10 and we are working towards that. (Teacher, **School GO**-Quintile 3)

- ✓ *Subject targets*—"Each subject has got its own targets," (Teacher, **School KQ**-Quintile 4).
  Each learner sets a target to say 'In this Learning Area I'm aiming to get this level, or that level. This helps us every time we engage learners after monthly tests and quarterly tests. We monitor their performance against their own targets. We say to them 'Check yourself how far you are from your target.' (Teacher, **School FC**-Quintile 3)

- ✓ *Schools targets*: *We set our target at the beginning of the year. For instance this year, our target is 100% pass rate—which we have achieved for the past five years—100% bachelors, and we want to get 100% pass in all the subjects.* (HOD, **School KF**-Quintile 4)

- ✓ *PEDs/districts targets*: *I have no choice; the district has given me a target of 100% pass rate this year and if you know my district director, you dare not meet the target.* (Principal, **School KQ**-Quintile 4)

> **BEST PRACTICE 2.3—REWARD AND INCENTIVE:** The schools create a strong culture of academic achievement by celebrating their successes and commiserating over their failures in different ways

Many schools mentioned that although they have good and committed learners, a certain segment of the student body seems content with the barest minimum pass requirements—just getting by. Trying to inspire learners who are struggling, unmotivated, and have "an IDC [I don't care] attitude" (Teacher, **School LL**, Quintile 2) and to get these learners to work up to their potential is an ongoing challenge raised by many schools. To address this challenge, the schools have created a strong culture of academic achievement by celebrating their successes and commiserating over their failures in different ways. Following are different ways they do this:

- **Show-case learners' work**. A common approach is to display learners' good work throughout the school. The Principals encourage every teacher to display proficient and exemplary learners' work in a highly visible manner. The result of these displays is that every learner, parent, and teacher has a clear and consistent understanding of what the school-wide expectations are for academic excellence.

- **Make sure that systems for rewards and sanctions are consistent**, clear, well-managed and used effectively across the whole school. Following are examples of how high-performing schools develop and apply systems for rewards and sanctions. They:
  - ✓ **Award academic excellence** by announcing high-performing learners at the assembly, award and prize giving day, honours day, or Principal awards day: "Everyone fights to be amongst the learners who are going to be called up in front" (Teacher, **School KH**-Quintile 4). Learners are rewarded with prizes, certificates, pins, trophies or badges.

After the first quarter, competition becomes very high. Learners also compete against their own marks. They want to get better marks each term. (Teachers, **School ML**-Quintile 1)

We don't only acknowledge high fliers but we also celebrate hard work. We recognise learners who have made significant progress even if they did not make it to the top 20. We identify learners who progressed the most and then we have vouchers that we hand out to them. (Teacher, **School GK**-Quintile 4)

- ✓ **Organise stakeholders** to award 12 Grade learners who are best performers with bursaries for their tertiary education.

  The Principal organises stakeholders to award these kids, who are best performers, with bursaries. (Teacher, **School KH**-Quintile 4)

BEST PRACTICE 2.4—POSITIVE TEACHER/LEARNER ATTITUDE: Teachers sustain a collective focus on learning: They believe that *all* learners can learn and that teachers can help them in spite of obstacles that are present

Teachers and staff believe that *all* students can learn and meet high standards. While recognizing that some learners must overcome significant barriers, these obstacles are not seen as insurmountable. Each of the schools develops a culture that supports learners' success. To do this they:

- **Cultivate optimistic attitude among teachers**:

  To alleviate poverty in the community these learners need education, just need education, an excellent education—because without a good matric certificate you can go nowhere. I don't ask teachers to give extra lessons but they just do it on their own. That is something that teachers offer to do. They want children to do well. (Principal, **School KU**-Quintile 3)

  It's all in the mind. All you need when you work under such desperate conditions as ours is a right attitude—and lots of it. If you have a right attitude, the impossible will become possible. (Teacher, **School KY**-Quintile 1)

  Teachers in the high-performing schools accept no excuses. They consistently tackle tough challenges, and have an "I can-do" attitude.

  Our teachers are very passionate and put in extra effort. They go an extra mile. They do this because they care. They love us. They wouldn't do what they do if they did not love us. (Learner, **School GP**-Quintile 2)

- **Encourage learners to develop a positive attitude** and disposition to their learning**:**

  Teachers motivate us to work harder to meet the set targets. Our motto in this school, which we repeat all the time, is: 'You can do it. Courage!' (Learner, **School LN**-Quintile 1)

  I used to be very naughty and my Life Science teacher saw the potential I had and he kept encouraging me. He kept saying 'You cannot be the stone that the builders reject.' (Learner, **School EH**-Quintile 3)

  In terms of academics, there is a lot of competition. We strive to get good marks, we draw motivation from other learners who are doing well and we get motivated to do better as well. (Learner, **School LI**-Quintile 3)

The fact that our teachers are very patient with us and are willing to help us, encourages us to keep on going. We are not afraid to ask questions because we feel free around our teachers. We have a close relationship with our teachers. (Learner, **School EH**-Quintile 3)

> **BEST PRACTICE 2.5—CULTURE AND VALUES:** Each school has a very strong, unique culture and value system, which underpin everything it stands for, and they live their values

One of the crucial keys to the success of consistently outstanding schools is undoubtedly the culture and values of the school. These values take time to establish and require constant nurturing. High-performing schools have a very strong culture, so powerful that "new staff is assimilated into it" (Teacher, **School EH**-Quintile 3). Following are different ways how values in the high-performing schools in this study become central to their ethos and how they underpin everything they stand for and do:

- **Provide a sense of purpose, direction and self-belief** that will ensure continuous improvement and see the school through any unpredicted challenges. Amongst other things, the schools that work do the following:
  - ✓ **Orientate parents of new learners** at the school about "how things are run at this school" (Principal, **School KT-**Quintile 3). Two schools provide good examples of how they do this:

    One other thing that is helping us a lot is the culture that was created when the school was formed. Each and every parent who sends a learner here is forced to abide [by it], [and] is forced to acclimatise himself or herself to the prevailing climate at the school. (Learner, **School LN**-Quintile 1)
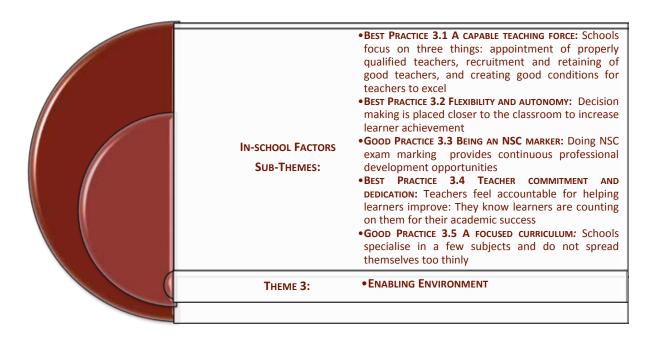
    We also have evening [meetings] with the prospective parents. Parents whose learners have been admitted to the school for the first time are invited so they have a very good idea of what the learners are expected to do when they get here. We specifically invite them to introduce them to the different systems that we have in our school. They must know what they are getting themselves into while they still have time to reconsider their decision to join us. (Teacher, **School EH**-Quintile 3)

  - ✓ **Make parents sign the pledge** to commit themselves to abiding by the culture of the school. "Learners also pledge to play their part." (Teacher, **School LK**-Quintile 2)
- **Inculcate a strong work ethic**:

  Everybody—from a cleaner to the Principal—has minimum standards to live by. I mean—minimum. We expect more than minimum. If you can't commit to that, then the door is wide open for you to leave. Everybody in this school knows that. (Principal, **School KT**-Quintile 3)
- **Ensure a high degree of consistency in approaches**, regardless of which staff member is involved:

  When teachers go to class, we make sure that they have lesson plans. And they know that before they go to class the HOD must first check the relevance of the lesson plan and its correlation vis-a-vis the annual teaching plan. We check the quality. (HOD, **School MK**-Quintile 1)
- **Hold a view that no challenge is insurmountable**. No effort is spared in the search for ways of doing things better:

  We don't have the best of everything—not many resources. We have large classes, poor and sometimes hungry children. All we have are committed teachers and the love they have for their learners. These are the only two things that have enabled our school to produce good results over the years. (Principal, **School KV**-Quintile 2)

THEME 3: ENABLING CONDITIONS

The statement of best practices that follows expresses key study findings about the role of *enabling conditions* in school improvement. These findings convey practices that are common to high-performing schools:

IN-SCHOOL FACTORS SUB-THEMES:	• BEST PRACTICE 3.1 A CAPABLE TEACHING FORCE: Schools focus on three things: appointment of properly qualified teachers, recruitment and retaining of good teachers, and creating good conditions for teachers to excel • BEST PRACTICE 3.2 FLEXIBILITY AND AUTONOMY: Decision making is placed closer to the classroom to increase learner achievement • GOOD PRACTICE 3.3 BEING AN NSC MARKER: Doing NSC exam marking provides continuous professional development opportunities • BEST PRACTICE 3.4 TEACHER COMMITMENT AND DEDICATION: Teachers feel accountable for helping learners improve: They know learners are counting on them for their academic success • GOOD PRACTICE 3.5 A FOCUSED CURRICULUM: Schools specialise in a few subjects and do not spread themselves too thinly
THEME 3:	• ENABLING ENVIRONMENT

The best practices are organised under five sub-themes namely, a capable teaching force, flexibility and autonomy, being an NSC marker, teacher commitment and dedication, and a focused curriculum.

BEST PRACTICE 3.1—A CAPABLE TEACHING FORCE: Schools focus on three things: appointment of properly qualified teachers, recruitment and retaining of good teachers, and creating good conditions for teachers to excel

A well-qualified and motivated teaching force has been seen as one of the most vital assets for educational quality. Indicators on teachers can be categorised in various ways, including:

- Descriptive background characteristics of teachers (formal qualifications, years of experience, language of teaching and learning, and in-service training history);

- Knowledge and skills (general knowledge, content knowledge, and knowledge about pedagogical or didactic strategies);

- Attitudes and morale relative to general working conditions; and

- Attitudes with respect to the work situation at school and learner-teacher ratios.

All schools hold a view, which is supported by empirical evidence (see Box 4B), that teacher quality counts and that teachers make a substantial difference in learner achievement. Thus, in their quest to provide learners of different abilities and from different backgrounds with quality education, high-performing schools make sure that learners are taught by properly qualified and effective teachers. To achieve this, they focus on three things: recruitment and appointment of most qualified teachers, retaining these teachers once recruited, and creating good conditions for teachers to excel. These are briefly discussed below:

- **Recruitment of most qualified teachers**: High-performing schools are guided by a conviction that "what teachers know and can do has the most important influence on what learners learn" (Principal, **School KT**-Quintile 3). Schools are proactive in recruiting teachers. Following are examples how high-performing schools recruit properly qualified teachers as part of the strategy to improve the quality of teaching. They:

  ✓ **Target skilled teachers with pedagogical training** and qualified teachers with university majors in the subjects they are teaching:

  We recruit only the best teachers. The SMT has an eye for the teachers who will be on board to deliver our programmes. We do have a lot of young teachers, and they have blended well into school culture. As older teachers, we are happy that when the time to retire comes, we will leave behind teachers that are able to carry the baton forward. (HOD, **School GP**-Quintile 2)

  Grade 12 results are always the end-result of good work done by teachers in grades 8 to 11. We are privileged that our Principal works hard to recruit well qualified, dedicated and passionate teachers from Grade 8 all the way through to Grade 12. It cannot be that the Grade 12 teachers are the only ones who have to work hard, while others relax. In our school, in Grade 12 we have the luxury of reaping the results of other teachers' work, who have been working hard over many years. (Deputy Principal, **School KT-**Quintile 3)

  In other schools, the best teachers are earmarked for Grade 12 and if they are placed in the lower grades, it's a demotion. In our school, it's the opposite. The best teachers are in Grades 8 and 9. We believe that you cannot ask an unskilled person to build a foundation for your house because the rest of the house—its walls and roof—depends entirely on it. The same principle applies or must apply in the education sector. At least, it applies in our school. It's an honour and prestige in our school to teach in the lower grades because of the value that is placed in the early grade teaching. When you teach in the early grades, you lay a solid foundation and you are a trendsetter. (Teacher, **School KZ**-Quintile 3)

  > *In other schools, the best teachers are earmarked for Grade 12 and if they are placed in the lower grades, it's a demotion. In our school, it's the opposite.* (Teacher, **School KZ**-Quintile 3)

  ✓ **Target university students enrolled in education faculties who were former learners** at the school:

  I target students while they are still at university and I woo them to come and join us in this rural school. I know all my former learners who are in the education faculties in different universities. I target them because they know our culture and work ethics from when they were learners here. Right now, 26 teachers in my staff were learners in this school. I don't have a problem with their commitment. I don't have to convince them about our work ethics. They know the drill, they were once my learners, they know what we stand for in this school. (Principal, **School KZ**-Quintile 3)

Figure 41 below indicates the percentage of schools which reported that they recruit teachers who have a proper qualification to teach their subject areas.

Source: Own calculations using data provided by the schools
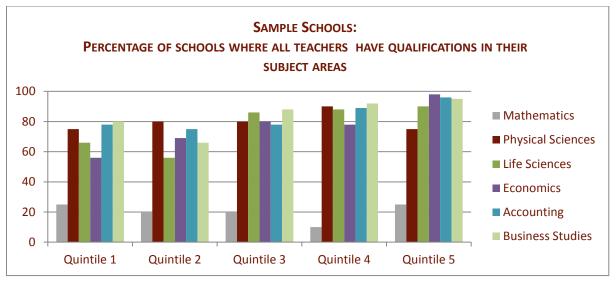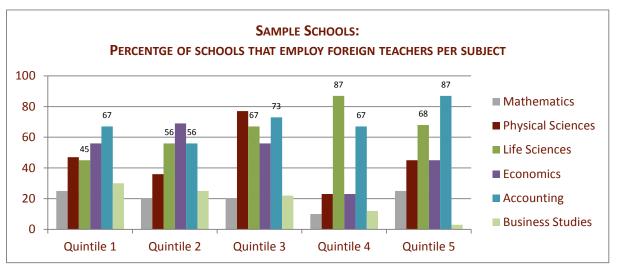
Figure 41: Percentage of schools where all teachers have qualifications in their subject areas

Figure 41 shows the percentage of schools where all teachers have the necessary qualifications in the subjects they teach. It is noticeable that the percentage of schools that have Mathematics teachers with the necessary qualifications is very low, from quintile 1 to 5. The highest percentage of qualified Mathematics teachers are in quintile 1 and 5. Some subjects, such as Accounting, Business Studies and Physical Science all have high percentages of qualified teachers teaching these subjects (above 75%, with one exception, Business Studies in quintile 2).

Source: Own calculations using data provided by the schools

Figure 42: Percentage of schools with foreign teachers teaching specific subjects

Figure 42 shows that teachers with right qualifications are also recruited outside South African borders. Figure 42 shows the percentage of foreign teachers teaching specific subjects in the sample schools. The most foreign teachers are employed to teach Accounting, followed by the Life Sciences.

- **Retaining good teachers:** Like other schools in the nation, these schools also grapple with two difficult questions: Where to attract teachers for hard-to-fill fields like Mathematics and Physical Sciences; and how to retain them once recruited, especially in rural areas. Following are examples of the strategies high-performing schools use to retain good teachers:

I started here when I qualified from university and I have had such a great mentor helping me from the time I started. I think a lot of times teachers don't want to share what they know and what works. In this school we have that culture where people are willing to help and share their knowledge to empower others. As a younger teacher, when I started my career, the support I got helped with my confidence that I can teach this subject. As a result, I am better in my job today. And I would not move to another school. (Teacher, **School LD**-Quintile 4)

Every new staff member is allocated a buddy who shows him or her the ropes. We support each other, we work hard and there is a very strong bond among us. We are task-driven and we share ideas with each other and so we don't have high staff turn-over. Teachers stay here until they retire. The teachers are very qualified in terms of the subjects that they teach. (HOD, **School WI**-Quintile 4)

We try to keep the staff motivated with incentives—praising and motivating them. A motivated staff means motivated learners. (Teacher, **School WI-**Quintile 4)

- **Creating suitable conditions**: Principals in high-performing schools strongly believe that their teachers cannot teach well unless suitable conditions are created. Following are examples of what high-performing schools do to create a healthy school environment:

In Grade 12 we try to plan together: 'I've covered this much, how far are you?' We share some of the activities especially in Literature—we discuss literature and the learner performance. We can teach different classes and our learners would not know the difference. (Teacher, **School GP**-Quintile 2)

The SMT is always concerned about the teachers' wellness. Every year, we have at least two of what we call 'teachers' out sessions' where we connect as a staff away from the school and work pressures. Each month, we save something at our own expense towards this. These are great sessions for us to click as a family. (Teacher, **School WL**-Quintile 3)

> **BEST PRACTICE 3.2—FLEXIBILITY AND AUTONOMY:** Decision-making is placed closer to the classroom to increase learner achievement

The Principals strongly believe that HODs and teachers know their learners best. For this reason, they feel that "placing the decision making closer to the classroom and holding HODs and teachers accountable for results is the best way to increase learner achievement" (Deputy Principal, **School GL**-Quintile 4). Schools that work do the following:

- **Give flexibility/autonomy to the HODs in their Department:** Driven by a belief that flexibility/autonomy encourages an environment of creative thinking so HODs and teachers can tailor teaching strategies to fit their departments and their learners, each department has flexibility to try practices or actions that would work for them but perhaps not in another department.

  > *We say to teachers, 'the non-negotiable is that you have to teach the whole syllabus. You don't have a choice. How you do that, we leave it to you and your team.* (Principal, **School GP**-Quintile 2)

  In exchange for that autonomy, after making sure that teachers are supported and empowered, we make a deal with our HODs: "You are free to use your professional judgment to decide what you do in your department, but you are going to be accountable for how your learners perform". In the same way, I am accountable to the District Director. (Principal, **EF School**-Quintile 3)

One thing I like about working at this school is that the Principal has always allowed HODs and subject heads to be innovative. As HODs, we are quite free to explore and experiment what works for our learners. And, really the bottom line is that as long as you don't mess up, or if you mess up and you correct it, that's fine. I think that is a very, very positive thing in this school—to have some form of freedom, where teachers feel valued and they feel they can express their creativity and explore things. I think that is a very positive thing. (HOD, **School CC**-Quintile 5)

- **Give flexibility/autonomy to the teachers in their classes:** Teachers decide how to teach in class (autonomy) but they are held accountable for learner performance. However, flexibility/autonomy and accountability are treated as two sides of the same coin. School management teams (SMTs) see them as two legs supporting student achievement:

We say to teachers, "the non-negotiable is that you have to teach the whole syllabus. You don't have a choice. How you do that, we leave it to you and your team. But you will get monitored by the HODs and the Principal, not because we don't trust you, because that's part of our job". (Principal, School GP-Quintile 2)

I get the freedom to conduct my classes in whichever way I see fit. If I have a problem I know my colleagues' and HODs' doors are open and I can go and ask for advice—which I regularly do—but I think it is very much appreciated that nobody is hovering and looking over your shoulder. You are trusted that you are good enough to do the job that you've been appointed to do. (Teacher, **School KH**-Quintile 4)

Because of this exchange of autonomy and accountability, all teachers in the school know that the way that their work is assessed, is if their learners are learning.

> **GOOD PRACTICE 3.3—BEING AN NSC marker:** Doing NSC exam marking provides continuous professional development opportunities

The overwhelming majority of schools indicated that exam marking is beneficial for their schools. Principals encourage teachers to apply to do exam marking because they know the benefits that it could bring, not just to individual teachers, but to their whole departments. Teachers are able to share their experience with their fellow teachers and effectively have in-house training. Teachers are able to offer training sessions to their fellow colleagues, particularly new teachers, within their own departments because they gained expertise in a particular paper.

*"I think [being markers] is the most important thing for us. We do get better results in the papers with which we are most familiar." (Teacher, **School LL**-Quintile 2). But why should teachers mark examination papers, and what is in it for their schools and their learners? In all schools in this study, teachers' responses to this question were almost identical. Teachers said they return to marking centres year after year because of the valuable impact the role of being an NSC exam marker has on their teaching. These teachers* identified the following as the benefits for being an exam marker:

- **Allows teachers to see common errors** made by candidates in the exam:

You can see the pitfalls of certain questions so you can advise your own learners and other teachers as to what they should pay attention to. (Teacher, **School KI**-Quintile 4)

As you mark, you are able to identify problematic areas or questions that learners do not understand. During revision, you stress those kinds of questions so that when learners go to the exam, they know how to answer such questions. (Teacher, **School LL**-Quintile 2)

- **Improves the ways teachers support learners** in their development of exam techniques (see **Best Practice 6.5** for more detail).

- **Allows teachers to have access to a whole range of previous question papers**:

  Looking at a range of papers is really helpful because you don't actually know what your students do in an exam. You think you do because you do mock exams but you don't know how they behave once they are under that additional pressure. Seeing a breadth of exam papers, you recognise frequent errors and you can guide your own learners against making those errors. (Teacher, **School WJ**-Quintile 4)

- **Enables teachers to develop exam style questions** and create model answers more easily:

  We find that learners do not fail because they do not have information to answer the question but because of the way the question is presented and also how learners answer the question. So it [being an NSC marker] helps us a lot because we get to know exactly what it is that learners must do. (Teacher, **School EE-**Quintile 4)

  Because we know what the examiners are looking for, we are able to show learners that it's not enough to answer a question like this to get full marks, but what is important is that if a question comes this way then they should answer it that way. (Teacher, **School KX-**Quintile 1)

- **Enables teachers to improve their teaching**:

  I think that confidence comes across in your teaching. (Teacher, **School WL**-Quintile 3)

  Most of our Grade 12 educators go for marking sessions. This helps them when they teach the following year. They know what to concentrate on, how to improve their teaching, and how to assess their learners. (Teacher, **School WK**-Quintile 4)

  From the time I started marking, every year I have learnt something new that I could actually implement in my class. So, I can actually teach and train my learners in a certain way, in order to give them a sense of security of how to go about answering the questions in the exam. (Teacher, **School GP**-Quintile 2)

- **Develops teachers' understanding of the mark schemes used**—having experience of the practical application of the mark scheme to a wide variety of responses:

  When it comes to doing things like the NSC exam marking, you know exactly how that mark scheme works. (Teacher, **School MG**-Quintile 4)

- **Strengthens teachers' subject content knowledge**, particularly in aspects which were not as strong:

  As they mark, teachers can see where, if they are masters in their subjects, they have a shortfall. If they are found wanting, then they can access specific professional development programmes to help them address the content gaps identified. (Principal, **School LI**-Quintile 3)

- **Enables teachers to recognise those groups of learners who need extra help:** They can work separately with those learners to try and solve those problems before they are confronted with the final examination paper:

  You look at the questions in which learners performed the lowest. You identify those questions in which the profiled learners did not do well, then you are able to know that it is these sections or this section which has a bearing in the results. This means that these learners must be given basic

knowledge and terminology that will ensure that by the time they write exam, they have learnt enough to pass. (HOD, **School KN**-Quintile 4)

We identify those who are weak, group them, and work with them separately from those who are performing. From there, we show learners how they can approach certain questions from previous question papers. (Teacher, **School LM**-Quintile 2)

BEST PRACTICE 3.4—TEACHER COMMITMENT AND DEDICATION: Teachers feel accountable for helping learners improve: They know learners are counting on them for their academic success

Teacher commitment and dedication is one of the highest-ranking factors that defines high-performing schools in this study. The teachers hold themselves accountable for helping learners improve. They know learners are counting on them for their academic success. Committed teachers are a key pillar supporting learner achievement. Teachers in high-performing schools show commitment and dedication in different ways including the following:

- **Teachers take responsibility for their own performance** as well as their learners' performance, and they take that seriously and personally. To these teachers, it is not just a job: "We know that this [good performance in the NSC examinations] might be our learners' last opportunity to get out of poverty because of the environment that they live in." (Principal, **School KV**-Quintile 2)

Teachers in these schools accept no excuses, they consistently tackle tough challenges, and have a "can-do" attitude:

At the end of the year I must get 100% pass rate in my subject. I must get distinctions—no excuses. You can't blame learners' poor background. You can't say, "Teachers in primary schools did not prepare learners well." You can't argue that you had not a single chemical to do experiments in Physical Science. You can't say parents did not play their part. Nor can you say learners were ill-disciplined and didn't want

> *At the end of the year I must get 100% pass rate in my subject. I must get distinctions—no excuses* (Teacher, **School KZ**-Quintile 2).

to study. While this may all be true, but you can't use these as excuses. In spite of these things, we still have to make sure that our learners pass, and they pass well. When we have a learning area that did not get distinctions, we hold ourselves accountable as teachers: "Hey what happened this year? Why did you let our learners down? " Remember, your response to these questions cannot be a string of excuses. (Teacher, **School KZ**-Quintile 2)

Our teachers are dedicated because who would come to school early in the morning at 6 am just to teach us rather than to have breakfast? They sacrifice their morning time that they could spend with their families to have breakfast. Instead, they are here at school by 6 am and sometimes leave as late as 8 pm. This means a lot to us—it means they do care. They want us to succeed in life. (Learner, **School Ml**-Quintile 1)

- **Teachers give learners more opportunities to learn** within and outside school hours (see **Best Practice 6.1** for more details):

Teachers do not stick to the stipulated time. They go beyond what is expected of them (Principal, **School KT**-Quintile 3).

Teachers at some schools in the district will not work one minute without being paid. At our school, every teacher is committed to more hours of teaching before and after school, during weekends and holidays, and not one person asked about being paid. (Teacher, **School KY**-Quintile 1)

For our teachers, teaching is not just a job. They are our second parents. They spend time with us almost 24/7. I know they don't get more money for doing this. But they do it because they care. (Learner, **School LF**-Quintile 3)

We have teachers who are here on Saturdays when they should be spending that time with their families—maybe attending funerals or weddings. But they trade all those important things for us. Just for us! We are blessed. (Learner, **School KD**-Quintile 4)

Our teachers put in a lot of extra effort to give us extra classes and we don't have to pay them. They give us extra classes for free and that helps us very much with the academics. (Learner, **School WG-**Quintile 4)

- **Teachers care deeply about their learners** (see Best Practice 1.3 for more details):

Our teachers have meetings with our parents. For instance, they requested our parents to minimize our chores at home, so that we can get enough time to study. It's like our teachers are spoon-feeding us to success. (Learner, **School GP**-Quintile 2)

Teachers are very passionate, they are not here for money but joined the profession because they care. Nowadays it is difficult to find young people who want to be teachers for that matter. But we are lucky at this school to have some young men and women who are dedicated, who want to improve the quality of education. (Principal, **School LM**-Quintile 2)

- **Teachers' own children attend school in the same school where they teach**:

Our own children attend or have attended this school. My last-born is currently at this school. If you believe that the school where you teach is not good enough for your own children and that your children are better off in another school, what you are basically saying is that the school where you teach is not a good school—you do not believe in what you do in your school. You are saying other schools are doing a better job than yours. But if your own child is in the same school where you teach, you are going to do everything possible to make sure your child succeeds because you are personally affected. No one wants his or her child to get an inferior education. This is why the level of commitment among our teachers is high. (Principal, **School KT**-Quintile 3)

Many schools in this study offer specific streams because, as one Principal notes: "It does not make sense to offer too many subjects or streams and then struggle to recruit qualified teachers in those subjects." (Principal, **School LL**-Quintile 2)

One Principal explained what focused curriculum meant in his school as follows:

We decided that we're going to focus on maths and science. It wasn't easy to convince parents to agree to this. We said 'History and Geography are important but we can't offer everything.' Mind you, I was a history teacher so I was basically saying I was redundant. (Principal, **School LN**-Quintile 1)

Another Principal, in a different province echoed similar sentiments:

The bottom line for us was the PPN [Post Provisioning Norm]. We simply could not offer the universe [all subjects] because the number of teachers allocated to our school remained the same. So, we decided that with our PPN we can only provide quality education if we offer one stream. We decided on the science stream. But then we did our homework before selling the idea to parents. We had had conversations with all high schools in the area. We agreed that each high school in the area would specialize in one stream. It worked! Parents had no objections. (Principal, **School EE**-Quintile 4)

> *Avoid offering too many subjects and then struggle to recruit qualified teachers in those subjects.* (Principal, **School EE**-Quintile 4)

4.5.3 THEME 4: SCHOOL LEADERSHIP AND MANAGEMENT

Very rarely have schools been turned around without the leadership from the Principal who has set clear priorities and goals that are followed through by the staff. Many other factors contribute to positive change in schools, but in high-performing schools in this study, leadership is the catalyst. Principals influence teaching in a number of ways, such as by establishing a climate conducive to learning, ensuring quality professional development for teachers, and providing ongoing feedback to help teachers improve their practice (Grissom *et al*, 2013; Sebastian & Allensworth, 2012).

The statement of best practices that follows expresses key study findings about the role of a *school leadership* in school improvement. These findings convey practices that are common to high-performing schools:

IN-SCHOOL FACTORS SUB-THEMES:	• **BEST PRACTICE 4.1. STRATEGIC/SCHOOL IMPROVEMENT PLANNING:** The School Improvement Plan is developed, implemented and reviewed regularly and includes priorities for action • **BEST PRACTICE 4.2. INSTRUCTIONAL LEADERSHIP:** The SMT monitors teachers' and learners' work to assess the progress that the school is making towards delivering the curriculum • **BEST PRACTICE 4.3. FACILITATIVE LEADERSHIP:** The Principal leads without controlling, while making it easier for all members of the school community to achieve agreed-upon goals
THEME 4:	• **SCHOOL LEADERSHIP AND MANAGEMENT**

The best practices are organised under three sub-themes namely: Strategic/school improvement planning; instructional leadership and facilitative leadership.

BEST PRACTICE 4.1—STRATEGIC AND SCHOOL IMPROVEMENT PLANNING: The School Improvement Plan is developed, implemented and reviewed regularly and includes priorities for action

Strategic planning melds short-term and long-term planning models and considers outside variables and school resources. Strategic planning provides a structure for accountability in school change. As an integral part of strategic planning, a School Improvement Plan (SIP) is a "road map that sets out the changes a school needs to make to improve the level of student achievement, and shows how and when these changes will be made." (North Carolina School Improvement Planning Implementation Guide, 2013).

A limited number of schools talked about using strategic planning to provide structure for accountability in school improvement endeavours. Equally, few schools mentioned having a SIP which sets out the changes a school needs to make to improve the level of learner achievement, and shows how and when these changes will be made. One school defined the planning process as follows:

The school improvement planning process involves defining a school's performance problems. A comprehensive needs assessment—determining needs and examining their nature and causes—precedes the school improvement planning process. After that, we identify areas for improvement and prioritise these areas. The focus is always on teaching and learning—that's our core business. (Principal, **School LD**-Quintile 4)

In order to do site-level strategic planning schools that work:

- **Develop a mission statement**, which defines where the school is and where it is headed:

    The vision and the mission of the school are very important and that the learners must have certain knowledge and skills so that when they go out into the world they are responsible and capable citizens. (Teacher, **School KP**-Quintile 4)

The first thing is that we have a whole school vision going from grade R all the way up to grade 12. We are able to communicate and share areas of weakness and strength with one another. I think it's because of the whole school vision that we are able to accomplish what we have done. (Teacher **School LI**-Quintile 4)

Guided by their mission statements, schools:

- ✓ **Reflect where the school is now and where the staff wants it to go**.
- ✓ **Express common purposes**, and identify the needs to which the school intends to address itself:

  We emphasise common values, which we all share, rather than focusing on rules. 'We will walk together as one,' as we sing our credo. It is something we strive for. We have a history of excellence in academics, and I think that motivates us—the teachers and the learners. (Principal, **School ED**-Quintile 4)

- ✓ **Are results-oriented** and use targets as a basis for measuring achievement of stated goals.
- ✓ **Judge decisions and actions** resulting from strategic planning, i.e. whether decisions and actions are consistent with the mission statement.
- ✓ **Reflect values** held by the school community.

- **Initiate school improvement planning** with a comprehensive needs assessment in order to determine high-need areas systematically. In schools that work, a comprehensive needs assessment (sometimes referred to as self-evaluation) precedes school improvement planning process. These schools systematically determine needs or problems and examine their nature and causes. In doing this, they:

  - ✓ **Incorporate both quantitative and qualitative data** in the needs assessment. Schools use different primary types of data to evaluate school improvement. These include learning outcomes, demographics, and school environment.
  - ✓ **Include analyses of both internal and external variables**, and explicitly link results with learning.
  - ✓ **Identify areas for improvement and select priority areas strategically** because financial resources allocated to schools are never sufficient. Schools that work believe in the "less is best" principle. That is, they prioritise the many identified needs and findings into two to five high-needs, high-impact areas and then ensure that they stay focused on those identified areas:

    It is essential that available resources be used in the most efficient and effective ways. School Improvement planning provides a method for SMTs, teachers, and parents to work together and come up with realistic solutions to local problems. (Principal, **School KV, Quintile 2**)

  - ✓ **Use findings of school self-evaluation** as a baseline against which to monitor improvement over time.

- **Formulate broad goals and objectives**. As a corollary to the identification of its most pressing needs, schools that work set clear and rigorous yet attainable goals to address areas of underperformance throughout the improvement planning process. These schools:

  - ✓ **Set goals for each of its priority areas**:

    Year in and year out we have to come here and map our way forward. We say, "Now that in the previous year we produced 100%, so what is our target this year?" And the kids say, "We

are tired of hearing about this 100% that was obtained last year. We want to attain 200% this year." (Teacher, **School LK**-Quintile 2)

✓ **Ensure that goals are measurable**, achievable and realistic to avoid frustration, a sense of futility, and a reluctance to try again when implementation does not live up to the promises. Schools that work first set goals for the school's academic year but also divide and back-map these goals by school term, month, and even week. This type of planning makes goals much more actionable, allowing schools to better identify reasonable steps needed to meet the end-of-the-year targets.

A statement of an objective has four parts: (a) something to be accomplished; (b) a level of proficiency to achieve; (c) means of measuring the level of proficiency; and (d) a time line for achieving the objective.

- **Establish the means to achieve goals**. Schools that work:

  ✓ **Include realistic and doable activities** in the plan required to achieve the set objectives;
  ✓ **Designate people responsible** for carrying out each activity;
  ✓ **Establish a time line** or check points; and
  ✓ **Estimate the costs and specifies the source of funds** required to complete activities successfully.

- **Develop a SIP** and implementing specific activities in the SIP to achieve the set goals. Schools that work:

  ✓ **Enlist the support of all relevant stakeholders** whose buy-in is crucial if the SIP is to be implemented successfully:
  ✓ **Make sure that all parties are familiar with the plan** prior to implementation.

  Having teachers participate in the planning process assures them that they have an element of control over the factors that impinge on their work in the classroom. (Teacher, **School WK**-Quintile 4)

  In our school, planners are also implementers, and implementers are also planners. (Teacher, **School KO**-Quintile 4)

  By participating in strategic planning, teachers become involved in such decisions as purchasing new LTSM or allocating funds for their own professional development programmes, all decisions that are directly related to what they do in the classroom. (Teacher, **School MG**-Quintile 4)

  ✓ **Share the completed plan with every relevant stakeholder** to make sure that each stakeholder knows the activities they are responsible for carrying out.
  ✓ **Update the plan each year and share it** with the appropriate stakeholders. The annual update, in effect, becomes an accountability document:

  There are opportunities at grade-level meetings or staff meetings for discussion and reflection on the progress made in implementing the plan. (Teacher, **School MI**-Quintile 4)

  If, for whatever reason, there have been problems or delays requiring modifications or changes in the plan, these are discussed openly but in such a way that staff do not feel guilty for failing to implement the plan as originally conceived. (Teacher, **School GN**-Quintile 3)

Schools that work emphasise that no plan is set in stone, to be implemented without any modifications. They acknowledge that changes do occur.

In terms of **Goal 21** in the Sector Plan (to ensure that the basic management processes take place across all schools in the country in a way that contributes towards a functional school environment), a SIP is one of the minimum set of management documents Principals are required to produce.

- **Establish a monitoring system** to ensure that the SIP achieves the set objectives. The schools that work:

  - ✓ **Have a built-in monitoring system** to identify problems, glitches, and other untoward events that might require modifications of the plan.
  - ✓ **Use the timelines built into the plan** to serve as checkpoints. As these dates approach on the calendar, the school checks to make sure that the plan is on track. If changes are called for, they are made in a timely manner.
  - ✓ **Measure progress against set targets**: "We have set ourselves target to reach. We realised that in order to reach our target, we needed to treat Grades 8 to 11 in the same way as we treat our Grade 12s." (Teacher, **School LH**-Quintile 3)

BEST PRACTICE 4.2—INSTRUCTIONAL LEADERSHIP: The SMT monitors teachers' and learners' work to assess the progress that the school is making towards delivering the curriculum

In each of the high-performing schools in this study, Principals and HODs provide instructional leadership in line with three broad indicators of instructional leadership reported in the literature:

- The amount of time Principals spend on educational matters compared to administrative and other tasks,
- Whether or not Principals appraise the performance of teachers, and
- The amount of time dedicated to instructional issues during staff meetings.

Instructional leadership in schools that work focuses on teaching and learning. This entails monitoring teachers' and learners' work and holding teachers accountable for curriculum coverage.

All schools in this study have a purpose of monitoring teachers' and learners' work, i.e. to assess the progress that the school is making towards delivering the curriculum. Monitoring involves the collection of evidence at first hand, checking data collected by the SMT and reviewing learners' and teachers' work. SMTs in high-performing schools have effective monitoring systems, which enable them to:

> *Principals in schools that work delegate some instructional leadership activities but do not abdicate them.*

- **Follow a planned cycle** for monitoring teaching and learning:
  Every single Wednesday the entire school has meetings. We have the learning area meetings, so every single department holds meetings. We put one teacher in charge of a particular subject in a particular grade. For example, in Grade 8 Natural Science there is a head. That person's responsibility is to control the entire subject. Subject heads meet every Wednesday with the rest of the teachers who teach the same subject in each grade. Together they discuss what they are going to do for the following week. They do lesson plans together. (Teacher, **School KL**-Quintile 4)

- **Review teacher's work regularly** (on a weekly basis) with regard to the schemes of work or annual teaching plans (ATPs) and lesson plans. On a weekly basis, teachers submit their lesson plans to the HODs for scrutiny:

During the weekly subject grade meetings, educators hand their books over to the Heads of Department, and the Heads of Department hand their books to the Deputy Principals and the Deputy Principals hand their books to the Principal. (Teacher, **School KL**-Quintile 4)

As managers, we have a curriculum monitoring plan. On a weekly basis, we check educators' files and provide them with support where necessary. We also check learners' books. (Principal, **School MG**-Quintile 4)

When teachers go to class, we [the SMT] make sure that they have lesson plans and they know that before they go to class, the HODs must first check the relevance of the lesson plan versus the annual teaching plan. We check the quality. Our monitoring systems assist us to make sure that teachers do not just teach anything or it is business as usual. We make sure that teachers give learners quality tasks. (HOD, **School ML**-Quintile 1)

We use a monitoring tool to control every lesson plan, preparation, the content coverage and subject improvement. We also monitor the informal tasks, i.e. the quality of the tasks. The educators need to set informal tasks that are of quality—checking whether the learners are mastering the subject matter or not. We monitor if teachers analyse those results and come up with a subject improvement plan to close any identified gaps. (Principal, **School MM**-Quintile 1)

- **Observe lessons**: SMT members in most schools could walk into teachers' classrooms to conduct informal classroom visits. In schools where team teaching is practiced, an open door policy allows other teachers to enter their colleagues' classrooms at any time. In schools that work, the following observations take place:

  ✓ **Observations by the Principal**:

  As the Principal, I do the class visits, classroom observation. These visits are unannounced— not to catch teachers out—but because we want to get to know what is actually happening in class and then provide support to educators. We do it on a weekly basis. This is above and beyond the requirements of IQMS. (Principal, **School FF**-Quintile 1)

  At a minimum, all teachers are observed by the Principal twice a year. (Teacher, **School FE**-Quintile 2)

  ✓ **Observations by the HODs**:

  We as the HODs we have the supervision or monitoring plan. In terms of plan, each HOD can walk into my class and observe how I do things. It's not like they critique my work, but he is here to observe how I do things. I can also go to his class and I observe what he does in his class. We then sit and discuss our observations. There's quite a lot of feedback from the SMT and it is very useful. (Teacher, **School EH**-Quintile 3)

✓ **Observations by fellow teachers**:

Because in our school we have an open-door policy, any teacher can walk into your class and observe you. So, this means that you must always be on your toes and be prepared. Other teachers can come to your class and say, "Hey man, you were not prepared for this lesson." So, you are not just reprimanded by the SMT but by your own colleagues. (Teacher, **School EH**-Quintile 1)

We plan together and we team-teach. So, other teachers are always in your class. In our case, we don't talk 'observation' language because other teachers do not come to your class to observe but to support you as you present the lesson. We give each other feedback about whether the lesson was presented as we had all planned it together or if the planned lesson had to be modified to meet all learners' learning styles. Our motto is that 'a lesson plan is not cast in stone.' You must modify it to suit your learners. (Teacher, **School KO**-Quintile 4)

- **Ensure that progress in terms of content coverage is matched to the identified timeline** (i.e. correct pacing):

The SMT makes sure that teachers cover the syllabus according to the prescribed timeframes. If they lag behind, it [the SMT] intervenes, way in advance, to make sure that teachers come up with catch-up strategies. (Teacher, **School MK**-Quintile 1)

I meet all the HODs on a weekly basis to monitor curriculum coverage. I check what is in the Annual Teaching Plan and check that against what is in the learners' books. Yes, I collect learners' books and I sit and look at these books. That's key for me. There are times when the teachers will be behind. I understand that but we have to have a catch-up plan because at the end of the day, the curriculum must be completed in every subject and in every grade by the end of the year. (Principal, **School KU**, Quintile 2)

We are also tightening our monitoring system so that we make sure that work schedules and pace setters are followed as planned. At the end of each and every term, we look at what we have done and discuss how teachers will make up for what has not been done. Monitoring is much tighter. (Teacher **School LH**-Quintile 3)

- **Scrutinise/monitor learners' work**. HODs can walk into any class and collect learners' work:

We monitor if teachers' plans, the learners' books and workbooks correlate. Every topic that appears in the Annual Teaching Plan must appear in the learners' book. (Principal, **School FF**-Quintile 1)

Learners' book perusal is conducted, at least twice a term, by Heads of Department. From a distance it may seem that a teacher is working very hard, but when you look closer, you discover that no homework or classwork is given. We tell teachers at the beginning of the year that we will monitor learners' written work every month. They know that we expect a specific number of tasks in the learners' books by the end of each month. (HOD, **School WJ**-Quintile 4)

- **Collect and analyse assessment results** (see Good Practice 6.4 for details):

After each test, we conduct item analysis. We analyse every item in the question paper in every subject. This gives us extremely useful data: 'So, this part of the question paper was difficult for the learners.' We are able to see questions and topics in which many learners got low marks. Then, as a team, we discuss what we need to do next to address the findings of the analysis. (Teacher, **School MK**-Quintile 1)

> *After each test, we conduct item analysis. We analyse every item in the question paper in every subject. This gives us extremely useful data.* (Teacher, **School MK**-Quintile 1)

We have a management meeting with the Principal in which we review the analysis [of assessment results]. We strategically identify areas of weakness and we discuss ways in which we can target those weaknesses in terms of remedial strategies. This is discussed further with teachers in our department meetings so everyone is on the same page. (Teacher, **School KQ**-Quintile 4)

We analyse Grade 11 results for the previous year to identify a group of learners who we call 'at risk'. In the first two weeks of the year, we have a meeting with their parents and set out a programme of work for the learners for the year. As the year progresses, two to three learners are assigned to each teacher to 'adopt.' These become 'our babies' and throughout the year, we support them as their 'parents' and monitor their progress with them. (Teacher, **School FD**-Quintile 3)

- **Ensure that staff fulfil their responsibilities**:

  ✓ **Principals monitor the work of HODs.** Each HOD is expected to have a monitoring plan showing when he or she will collect various types of learners' work—whether homework, tests, or projects to monitor curriculum coverage. In their planned cycle for monitoring teaching and learning, Principals in many schools also monitor learners' work directly. They ask for a range of learners' work: high-performers, mediocre, and low-performers to monitor both the quantity and the quality of the work done:

  There are weekly subject meetings with HODs. I expect HODs to give me minutes of their meetings so that I understand what it is that they discuss in their meetings and one of the things that I am always happy to see are the strategies that teachers implement to support underperforming learners. (Principal, **School EF**-Quintile 3)

  ✓ **Deputy Principals monitor HODs' work**: "Every second week, there is a one-on-one meeting with every HOD whereby, as the deputy, I review his or her work. I check how they control teachers' and learners' work, and how they support teachers." (Deputy Principal, School FH-Quintile 1)

  ✓ **Teachers are held accountable for learner performance**: Accountability and support are emphasized in each of the successful schools to determine where additional help is needed. Most schools reported that Principals held teachers, HODs, Deputy Principals, and, in some cases learners and parents, accountable for learner performance. Accounting sessions take place less than a week after learners write a test. Teachers' view in the schools that work is that if they delay looking at test results, "you are defeating the purpose of assessment," as one Principal observes.

During these accounting sessions, Principals sit down with teachers and do item analysis, asking a range of questions: Why each learner got some questions right and others wrong? Why did some learners drop their performance in relation to previous assessment? Why certain learners could not meet targets set for the school and the individual learner?

Accounting sessions are not restricted to teachers. In many schools, learners and parents are also held accountable for learner performance. This is discussed in sufficient detail in **Best Practice 6.4**.

> **BEST PRACTICE 4.3—FACILITATIVE LEADERSHIP:** The Principal leads without controlling, while making it easier for all members of the school community to achieve agreed-upon goals

While individual Principals sometimes have a direct influence on the quality of teaching, a growing strand of research suggests that successful Principals often cultivate the leadership of teachers to grow (Portin, 2009). Thus, although the Principal is in a critical position to lead change, he or she cannot do it alone. Empowering others throughout the school to develop and exercise leadership roles and to share in the leadership of change is both desirable and achievable. The Principals in most high-performing schools encourage broad participation of teachers and parents in decision making, school improvements, and increased academic performance. These Principals employ a distributive leadership style. They have outstanding and well-distributed leadership. HODs have more control over their departments.

> *If I were drop dead the next day, I would rest in peace knowing that the school will not fall apart because leadership does not reside in one individual but is shared.* (Principal in **School FE**-Quintile 2)

These Principals describe how they have "cultivated" facilitative leadership in their schools:

It is the leadership capacity within the school that drives the desire to improve teaching and learning. (Principal in **School MI**-Quintile 4)

It will be teacher leadership that continues to drive the reforms needed in the content areas and throughout the school. (Principal in **School WL**-Quintile 3)

You don't have to resolve to 'snooper-vising' to catch people because there is shared leadership among all staff members. (Principal in **School KX**-Quintile 1)

I'm the Principal; I'm the Head of the Institution but I know that if I am away for a week or longer, angeke kube kwampunzi idl'emini [the hell will not break loose]. Quality teaching and learning will continue without my presence—as if I'm here. (Principal, **School KY**-Quintile 2)

I have a good team of SMT members. They are all teaching Grade 12 and they produce good results and so it is easy to encourage others to also produce good results because they [the SMT members] are leading by example. (Principal, **School EF**-Quintile 3)

Each and every teacher is a member of a committee. If you come across any teacher he/she will tell you that 'I am serving in this particular committee'. These committees are empowered by the SGB to take very serious decisions. Everybody must be engaged. (Teacher School LG-Quintile 3)

The Principals who employ a distributive leadership style speak in one voice that shared leadership does not mean the abdication of responsibility on their part. On the contrary, their schools have an

effective monitoring, evaluation and review programme including regular reviews of planning, learner work analysis and lesson observations with evaluative feedback to hold staff members accountable.
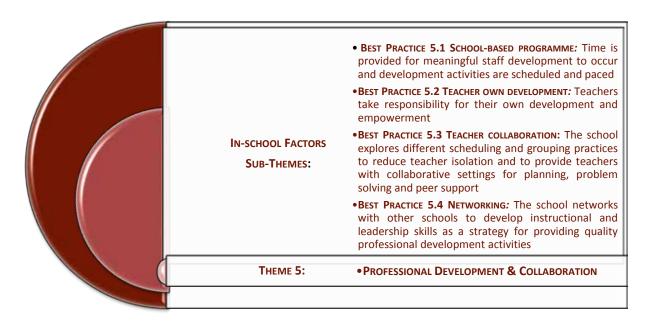
We have an Academic Co-ordinator and the Head of Academics, Deputy Principal, who literally steers the academic ship of the school. He makes sure that Subject Heads and Heads of Departments are on track and they are performing to certain standards and criteria. He holds regular meetings in keeping us up-to-date with changes or demands of the syllabus and what the Department is expecting. So, the fact that we have two very knowledgeable people in the academics guiding teachers, helps teachers in their specific departments to perform the way they should. (Principal, **School KP**-Quintile 4)

In the same vein, these Principals feel strongly that empowering all staff members to assume leadership responsibilities begins with the Principal setting the tone, forging and advocating a vision for school improvement. One Principal observes: "Everybody knows where they are going and why. The focus is on achieving a shared vision, and all understand their role in achieving the vision." (Principal in **School GP**-Quintile 2)

THEME 5: PROFESSIONAL DEVELOPMENT AND COLLABORATION

The statement of best practices that follows expresses key study findings about the role of *professional development and collaboration* in school improvement. These findings convey convictions and practices common to high-performing schools.

IN-SCHOOL FACTORS SUB-THEMES:	• **BEST PRACTICE 5.1 SCHOOL-BASED PROGRAMME***: Time is provided for meaningful staff development to occur and development activities are scheduled and paced* • **BEST PRACTICE 5.2 TEACHER OWN DEVELOPMENT***: Teachers take responsibility for their own development and empowerment* • **BEST PRACTICE 5.3 TEACHER COLLABORATION:** The school explores different scheduling and grouping practices to reduce teacher isolation and to provide teachers with collaborative settings for planning, problem solving and peer support • **BEST PRACTICE 5.4 NETWORKING***: The school networks with other schools to develop instructional and leadership skills as a strategy for providing quality professional development activities*
THEME 5:	• **PROFESSIONAL DEVELOPMENT & COLLABORATION**

Teachers receive professional development in a variety of ways, ranging from selecting workshops from a menu of options offered by the district to required attendance at workshops that take place in the school, facilitated by HODs. Most of the professional development programmes focus squarely on improving teachers' content knowledge and pedagogy.

Best practices are presented under four sub-themes namely, school-based programme, teacher own development, teacher collaboration, and networking.

BEST PRACTICE 5.1—SCHOOL BASED PROGRAMME: Time is provided for meaningful staff development to occur; and development activities are scheduled and paced

Emphasis in high-performing schools is placed on training staff in areas of most need as identified through the IQMS processes, the analysis of learner assessment results, and findings of SMT members' observations during class visits. These are schools with a strong sense of professional community. The schools devote time to departmental meetings and whole-school meetings, run by HODs or directed by teachers, to common planning, teacher conversations about curriculum issues and empowerment of teachers to deal with issues that affect learners beyond individual classrooms at the school such as bullying, racism and HIV/AIDS.

During formal and informal class visits, SMT members observe "a lot of good things going on" and then ask teachers if they would share some of the good teaching strategies at departmental meetings, so that teachers can learn from one other. Departmental meetings are also used as forums where teachers are given space and time to discuss problems that they experience in their respective classes and share possible solutions. Schools also use departmental meetings to analyse and discuss learners' work. Three schools describe their school-based teacher development programmes as follows:

Staff development that we provide here at school gives us space to engage with our colleagues and say "How come Sizwe is doing well in your subject, but not in mine? You must be doing something right." Then, we share. (Teachers, **School KI**, Quintile 4)

There is a wealth of expertise among teachers within our school. We cannot rely on the district support, not because subject advisors are not capable. They are a group of very committed and capable officials but they are not effective. How can you expect them to be effective when one Science subject advisor is responsible for over 100 schools? One school visit here or two workshops over there per term is not enough to provide teachers with adequate support. This situation is not going to change any time soon. The capacity to empower teachers must be built within individual schools—and that's what we've done in our school. We are taking charge of our own development. It's simple: I have something that I am good at; that's what I share with my colleagues in departmental and subject meetings. The other teacher has something that she excels in, and she also shares what she is doing right with all of us. That works like a bomb! (Teachers, **School GN,** Quintile 3)

We have given our HODs and Subject Heads flexibility and autonomy to manage their departments and experiment with things that would improve learning. We then told them that, in exchange, we are going to hold them accountable for the quality of teaching, which must translate to good results. So, I hold my SMT members accountable for the results. They, in turn, hold teachers in their departments accountable.

You just can't hold anybody accountable when you have not given them any support. We decided that, because there is no effective support anywhere, our best bet is the school-based support. You cannot expect a few workshops or a once-off school visit by a district official to make a difference. Sustainable support can only occur when there is focused and regular support or collaboration among teachers but this needs a change in mind set: Teachers must accept that they cannot know-it-all and that they can learn from each other. There is always someone at the school who does something well who can teach others a thing or two but if you are stuck on the fallacy that says "I have been teaching this thing for years and so I can teach it with my eyes closed" then forget about your school-based staff development programme making a difference. (Principal, **School LN,** Quintile 1)

The information that teachers share with one another informs their teaching practices. It helps them to find other approaches to meet educational needs of learners in their classrooms, assists them to integrate new knowledge into regular classroom practices and encourages them to coach and support one another.

In some schools, the school-based development programme is also used as a team building exercise—allowing the staff to bond. These schools are concerned about the mental and emotional well-being of teachers:

We use school-based development programme as an occasion to bond as a staff. We group as a staff. A happy staff tends to work better. (Teacher, **School KI**-Quintile 4)

We are also using development programmes to boost teaching morale. It is quite low at different points of the year. (Teacher, **School EF**-Quintile 3)

Generally, the emphasis is on the academic, but during staff development, we don't forget the human factor. We need to uplift the individual, so that when we get in the classroom, we feel that we are in the right frame of mind to translate what we learnt into practice. So, the human factor is very important. (Teacher, **School LK**-Quintile 2)

Various topics are very pertinent and relevant to our teaching, for example stress management, multiple intelligence and emotional intelligence. First, you must have a healthy mind so that you can be able deliver as a teacher. (Teacher, **School MI**-Quintile 4)

> **BEST PRACTICE 5.2—TEACHER OWN DEVELOPMENT**: Teachers take responsibility for own development and empowerment

Teachers mentioned different strategies they used to take responsibility for their own empowerment. Among other things, these teachers:

- **Analyse and interpret learner data** in order to evaluate and review their teaching strategies:
  On a monthly basis, we do the analysis of the results to see the performance of learners—to see how best we can improve. The analysis of results shows us two things: (1) Learners who underperform, and (2) teachers who underperform. If there are two teachers who teach the same subject, and learners in another teacher's class are doing well but learners in my class are not doing well, it tells me that the problem is not leaners but the problem is definitely with me. This analysis helps me to do some introspection and soul searching. I don't need someone to tell me that I need to do something about this. In most cases, I know that the problem is not that I don't have the content knowledge. So, that cannot be the reason why my learners underperform. The next possible reason [for poor performance] would be my teaching strategies. Then, I take it upon myself to find more effective teaching strategies of teaching a particular concept that my learners are not mastering. (Teacher, **School GM**-Quintile 4)

- **Evaluate their own practice including feedback from learners:**
  Learner performance in any tests that I administer to my learners, is like a mirror. I see myself in that mirror. If learners perform badly, it reflects my image of failure but if they perform well, that's my image of success. When I see an image of failure in my 'mirror' I know I have to do something about it, until that bad image goes away. (Teacher, **School GQ**-Quintile 2)

I have such a good rapport with my learners to the extent that after every test I ask my learners who performed badly, 'Why?'. I also ask those who did well the same question. I always ask them to be brutally honest in their responses: 'Your response will help me become a better teacher,' I tell them. You will be amazed how valuable the information I get is. I get to know that learners have different learning styles—what appeals to one group of learners does not work for others. (Teacher, **School EI**-Quintile 2)

I have a comment box. After every lesson, I ask my learners to write a comment about the lesson that I presented: What worked or did not work for them. I get such good information about how my learners engage in the lesson. Where they raise something that I have not thought about, I do some research or find help so that I am able to reach all my learners. (Teacher, **School LH**-Quintile 3)

- **Engage with research:**

  I have made it my business to always research the topic that I am going to present. I browse the net to find how other teachers in different parts of the world have approached the topic. I always find very good strategies that have been tried and tested. This is important when you teach very abstract subjects like Physical Science. You always have to ask: "What is the best approach to present this very abstract material in the way that will make sense to all learners?" (Teacher, **School KF**-Quintile 4)

- **Use the internet:**

  All our teachers are computer literate. They make use of the internet, some use 'YouTube' videos. In my case, I also tell learners to use the 'YouTube' Videos, to look up for abstract things like molecular geometry. It is easy for them. (Teacher, **School LJ**-Quintile 3)

- **Participate in courses**, e.g., e-learning, distance learning opportunities and undertaking formal studies:

  I think that our staff is very committed to developing themselves as well. They take short courses. We don't remain static; we ensure that we're learning all the time to keep abreast of the latest developments in our subject areas. (Teacher, **School KQ**-Quintile 4)

> **BEST PRACTICE 5.3—TEACHER COLLABORATION:** The schools explore different scheduling and grouping practices to reduce teacher isolation and to provide teachers with collaborative settings for planning, problem solving and peer support

Teachers in the schools that work place a very high emphasis on teacher collaboration. Teachers are committed to working together in a culture of continuous improvement, not only to develop shared understanding of learners, curriculum and practice, but also to design and produce materials and activities to improve them. All members of the school community engage in reflective dialogue to consider new ideas, to openly evaluate the strengths and weakness of current practices, and to foster a shared sense of responsibility to the school and its learners.

I teach Mathematics and I liaise with teachers who teach other subjects like Physics. I work closely with Physics teachers. They often come to me and say 'I want you to teach my learners this mathematical concept because learners need to understand it before I can introduce my lesson.' So, as Mathematics and Physics teachers, we align our lessons so that Physics concepts that are dependent on Maths concepts, are introduced to learners first. So, before the Physics teachers introduce their concepts, we (Mathematics teachers) have made proper preparations and laid solid groundwork. (Teacher, **School GP**-Quintile 2)

A unique feature in these schools, which deviates from the norm, is that teachers *de-privatise* their practice by opening their classroom doors and sharing, observing and

A unique feature in these schools, which deviates from the norm, is that teachers de-privatise their practice by opening their classroom doors and sharing, observing and discussing their teaching.

teachers to achieve this (see **Best Practice 6.2A** for further discussion). When **de-privatising** their practice, teachers explore different ways to reduce teacher isolation and to provide teachers with collaborative settings for planning, problem solving and peer-support. Teachers learn with and from each other in different ways, they:

- **Observe colleagues conducting lessons and provide feedback:**

  Because we do team teaching and we have an open-door policy in our classroom, we are always in everybody's class observing how they present their lessons. You wouldn't know how empowering that is. You walk into a class and watch this teacher presenting this lesson so well and you say to yourself: 'Oh my word! I have been struggling all these years to teach poetry and there is an expert right here under my nose and I didn't know about it.' (Teacher, **School GP**-Quintile 2)

- **Mentor, coach, model and do team-teaching:**

  We do team teaching in Geography especially when we deal with topics which our learners find challenging such as map work. Different teachers are good at presenting different topics. So, when we are planning to present a topic that I am good at, I model in my class how I present it while my colleagues are observing. The same applies where I also struggle with a particular topic, I observe a colleague who is good at presenting that topic and learn. (Teacher **School WH**-Quintile 4)

- **Help colleagues identify development needs:**

  When an educator is honest enough and say 'I am having a challenge with this topic,' we find another teacher who is good in that particular topic to help out. We help one another. (Teacher **School LH**-Quintile 3)

  We decided and agreed in our staff meeting that each and every department must identify problem areas or topics which are difficult to teach. Once they have identified the problematic topics then we will conduct internal workshops on those topics. Where we need support from the district, we call subject advisors to support us to deal with a particular content gap. (Teacher, **School LH**-Quintile 3)

- **Lead staff meetings, workshops, etc**.:

  Teachers are given opportunities to lead presentations in our internal workshops based on their strengths. For example, one teacher trained the staff on the classroom management techniques at the beginning of the year. We have now produced a nice manual on that. We went through it with all the teachers on exactly how to run your classroom. If you don't have classroom discipline and classroom management skills you will never have an effective teaching environment. (Teacher, **School LG**-Quintile 3)

- **Provide teachers with common preparation time:**

  We create time and space for teachers to plan collectively in different departments and subject areas. We make sure that time for teachers to plan together is in the timetable. The meeting time must be planned and must become a routine—the way we do things. It must not happen by chance. We work together towards achieving all that we want to achieve. (Teacher **School GN**-Quintile 3)

  We create time and space for teachers to plan collectively in different department and subject areas. (Teacher, **School GN**-Quintile 3)

Teacher collaboration in high-performing schools extends beyond their individual schools to networking in a broader education community involving other schools. The school networks with other schools to develop instructional and leadership skills as a strategy for providing quality professional development activities. Teachers forge local networks so that they are not left to "flounder and struggle on their own." (Teacher, **School KV-**Quintile 2)

Some of the networking strategies mentioned by schools include the following. They:

- **Link with or set up links with other high-performing schools**. Following are benefits proffered by different schools for devising links with other schools:

We do networking with other schools like [one high-performing school in the same township], especially in Mathematics because they have been producing good results over the years. We are involved with them in lots of ways. If there is something new that we plan to introduce, we always liaise with them and share what works before we go to the class. (Teacher, **School KJ**-Quintile 4)

We do networking with [a quintile 5 school in town]. They have an excellent maths programme. Every Tuesday we meet with Mathematics teachers [in that school] and run workshops. We tackle certain topics before we go to teach them in our school. We share good practices. (Teacher, **School KJ**-Quintile 4)

We rub shoulders with the well-resourced quintile 5 schools. We work hand in hand with [one particular school], a well-resourced school, a quintile 5. That helped us a lot to place our learners in this deep rural school on par with the learners from a metropolitan town or city. (Teacher, **School KZ**, Quintile 1)

We network with teachers from other provinces, like Gauteng Province. Their past exam papers get forwarded to me. We have accepted that there is always someone out there who teaches something better than we do. (Teacher, **School EH**-Quintile 3)

I am planning to take two SMT members [from KwaZulu-Natal] to visit [a school] in Limpopo. We are going to observe what they do and learn from them. We also work with schools that are doing well in different subjects. Some schools may not do well overall but excel in certain subjects. We target them. It does not matter in which province they are. We contact them and I take some of my SMT members and spend a day or two at the school to learn and observe how they produce good results. So, the partnering is not always between schools but between departments. We have different department-to-department partnerships [in different schools] to learn and share the good practices. (Principal, **School KV**-Quintile 2)

We ask for help from other schools. If we know that teachers in the neighbouring schools are performing better in a particular topic, we approach them. We ask them to model how they present the topic in class while we observe and learn. We have learnt to swallow our pride and acknowledged that as professionals, we can learn from other professionals. This has helped us to achieve our set targets. (Teacher, **School LH**-Quintile 3)

> *We have learnt to swallow our pride and acknowledged that as professionals, we can learn from other professionals* (Teacher, **School LH-**Quintile 3)

Sometimes we outsource teachers from other schools. Say there is a chapter that we are not comfortable with and we know that somebody else from our neighbouring schools is excelling in it and he is more acquainted with the structure of the exam paper than we are, we call him to come and teach that chapter to our learners. We observe the teaching strategies he uses to present the subject matter. (Teacher, **School LI**-Quintile 4)

- **Set up and devise links with primary feeder-schools**. Two schools describe how they work collaboratively with their primary feeder-schools as follows:

We have realised that we are spending too much time trying to close the accumulative content gaps created in primary schools that Grade 8 learners have when they get here. And so we decided to reach out to our primary feeder-schools. We began to encourage our Senior Phase teachers in different subject areas to link up with the Intermediate Phase teachers in primary schools. In Mathematics, we discuss the importance of scaffolding of concepts. We emphasise why it is important that a Grade 4 teacher understands how important it is to lay a solid foundation when introducing a particular concept because when a learner gets to Grade 9 she will struggle to cope if that concept was not taught properly or adequately in the early grades.

*As teachers, we discuss the curriculum in detail. We illustrate how a concept that is introduced in Grade 1 builds up as learners progress through grades until Grade 12. We then review CAPS concept by concept. We say 'for this concept, in Grade 4, this is what you **must** make sure that it is addressed adequately. In Grade 5, this is how you build on this concept—and so on.' This helps teachers to see how each concept builds up from Grade 4 to Grade 12. This makes a lot of difference because primary school teachers, who are not familiar with Senior Phase and FET band curriculum, all of a sudden realise that they are part of an important value chain—what they do or don't do will affect learners long after they leave primary school. They become aware that if any part of the value chain becomes disconnected because a concept was not taught at all or was not taught well, it affects the whole value chain.* (Teacher, **School KU**-Quintile 3)

In our circuit, networking is not restricted to working with other high schools but we have started

> *In our circuit, networking is not restricted to working with other high schools but we have started to engage with our feeder primary schools.* (Teacher, **School KP**-Quintile 4)

to engage with our feeder-primary schools. We can't keep blaming primary schools for 'feeding' us with bad product. We have to do something about it. So, we have started to work with our fellow Principals from the primaries. It's still a challenge but we are forging ahead. Who says our Senior Phase teachers cannot form PLCs [Professional Learning Communities] with primary school teachers to plan together and share good practices? (Deputy Principal, **School KP**-Quintile 4)

- **Share practices, lesson plans and other materials in cluster/partnership networks**. Three schools provide examples how they got started:

I think the magic here is the interaction with other professionals outside our school. We don't work in isolation. We're always consulting—using social media and other new technologies that we have. We're always in contact with our subject advisors. We're also in contact with our clusters, from within our own area and other regions. (Teacher, **School KM**-Quintile 4)

We have formed WhatsApp groups for teachers in different subjects. This is extremely helpful because you know that you are not alone. You have a family to go to when you need help. And you are assured that you will always get the help you need. All the teachers in the area belong to subject-specific WhatsApp groups. All schools in our circuit are part of the network. (Teacher, **School KM**-Quintile 4)

Last year, we started an initiative to set common papers for English for all schools in our circuit. This is to make sure that all schools in the circuit maintain high standards. I am in the Grades 8 and 9 panel. Every term, learners in all our schools write a common paper that we have set together as teachers. (Teacher, **School KM**-Quintile 4)

We have WhatsApp groups in different subjects. We use it as a platform to share ideas and find help. If, for example, we have a challenge with a particular concept, we communicate as educators. You are looking for a good lesson plan or materials that will help you to teach a particular concept, you go to your WhatsApp group. That really helps us as educators. (Teacher **School WJ**-Quintile 4)

We have the WhatsApp for teachers in this area. And there is another one for teachers in the whole district, which is in town. So there are two different hosts that we communicate with. Those of us here have our programmes that we discuss with the bigger group. (Teacher, **School WK**-Quintile 4)

- **Take part in teacher exchanges**:
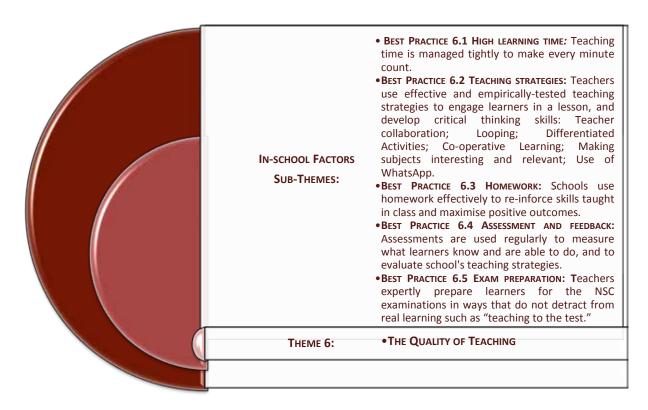
We partner with other good performing schools. We visit these schools and spend some time there observing things they do well and they also come over to see the things that we are good at. The partnership is beneficial to both schools. We are equals. It's not twinning where a school that 'knows-all' shows the school that 'knows nothing' how things should be done. (Teacher, **School LF**-Quintile 3)

We partner with other good performing schools. We visit these schools and spend some time there observing things they do well. (Teacher, **School LF**-Quintile 3)

4.5.5 THEME 6: QUALITY OF TEACHING

The statement of best practices that follows expresses key study findings about the role of *quality of teaching* in school improvement. These findings convey convictions and practices common to high-performing schools:

IN-SCHOOL FACTORS **SUB-THEMES:**	• **BEST PRACTICE 6.1 HIGH LEARNING TIME***:* Teaching time is managed tightly to make every minute count. • **BEST PRACTICE 6.2 TEACHING STRATEGIES:** Teachers use effective and empirically-tested teaching strategies to engage learners in a lesson, and develop critical thinking skills: Teacher collaboration; Looping; Differentiated Activities; Co-operative Learning; Making subjects interesting and relevant; Use of WhatsApp. • **BEST PRACTICE 6.3 HOMEWORK:** Schools use homework effectively to re-inforce skills taught in class and maximise positive outcomes. • **BEST PRACTICE 6.4 ASSESSMENT AND FEEDBACK:** Assessments are used regularly to measure what learners know and are able to do, and to evaluate school's teaching strategies. • **BEST PRACTICE 6.5 EXAM PREPARATION:** Teachers expertly prepare learners for the NSC examinations in ways that do not detract from real learning such as "teaching to the test."
THEME 6:	• **THE QUALITY OF TEACHING**

Teaching and learning is the first priority in high-performing schools. Teaching is judged to be at least 'good' across the high-performing schools. Five best practices relating to the *quality of teaching* are summarised below. In the sections that follow, they are each explained in more detail.

> **BEST PRACTICE 6.1—High learning time***:* Teaching time is managed tightly to make every minute count.

By far, the most common characteristic of the high-performing schools in this study is effective use of teaching time. Details of how schools use teaching time is provided in **Best Practice 6.1** below.

> **BEST PRACTICE 6.2—Teaching strategies***:* Teachers use effective and empirically-tested teaching strategies to engage learners in a lesson, develop critical thinking skills, and keep learners on task.

Most scholars agree that effective leadership is among the most important characteristics of effective schools, equally important is effective teaching. Put differently, school leadership matters as much as teacher quality. Learner achievement is affected not only by what children learn, but how they learn it. Teachers help their learners engage in their lessons and other educational tasks by varying their teaching methods, including the empirically-tested techniques detailed in **Best Practice 6.2** below. They do this by including some of the following strategies:

A. Teacher Collaboration
B. Looping
C. Differentiated Instructional Activities
D. Co-operative learning
E. Making subjects more interesting and relevant
F. Use of WhatsApp to enhance teaching and learning.

BEST PRACTICE 6.3—Homework*: Schools use homework effectively to strengthen or re-inforce skills taught in class, advance classroom lessons and maximise positive outcomes.*

Teachers use homework as an extension of class work to encourage parents' involvement in their children's learning. The effective use of homework to re-inforce skills taught in class is discussed in sufficient detail in the **Best Practice 6.3** below.

BEST PRACTICE 6.4—Assessment and feedback*: Assessments are used regularly to measure what students know and are able to do, and to evaluate school's teaching strategies.*

Teachers use assessments effectively, among other things, to: determine what their learners know and are able to do, identify any groups at risk of underachieving, check progress in relation to the goals and targets which have been set, and evaluate the success of their teaching strategies. In **Best Practice 6.4** below, high-performing schools describe how assessment provides useful measures of how their learners are learning.

BEST PRACTICE 6.5—Exam preparation*: Teachers expertly prepare learners for the NSC examinations in ways that do not detract from real learning such as "teaching to the test."*

With the greater emphasis on high-stakes assessments such as the NSC examinations, test anxiety has become a troublesome and common condition among learners in schools. **Best Practice 6.5** below details how teachers in the present study expertly prepare learners for the NSC examinations in ways that do not detract from real learning such as "teaching to the test."

Managing teaching time tightly to make every minute count is a prevalent practice in all high-performing schools. To do this, SMTs tighten up their monitoring systems to ensure that teachers use time within the day and across the year efficiently and effectively.

PLANNED TIME VS IMPLEMENTED TIME

There is a close match between time that teachers and learners actually spent at school by the end of each academic year (*implemented time*) and the allocated time in the school calendar (*planned time*).

At the outset, the high-performing schools do not have more teaching time than other schools but because they guard it jealously, by the end of the school year, learners in these schools are exposed to more learning opportunities owing to minimal time losses.

> *Pupils must be at the school until the very last day. On the last day, we still teach four periods–so there's nothing like us missing time at the end or we playing in the field or watching movies. We teach up to the end*. (Teacher, **School KM-**Quintile 4)

Effective use of learning time is not the standalone factor of high-performing schools, but a core component that functions within a multifaceted system to promote learning and growth. The centrality of learning time lies in the fact that if it is not managed effectively, it has a negative impact on learner proficiency owing to reduced learning opportunities.

Local and international scholars have used complex analytical tools to identify particular practices and policies that generate real and lasting improvements in learning outcomes. These practices are exhibited by high-performing schools in this study. Among the practices that generate real and lasting improvements in learning outcomes, the condition of schools adhering strictly to time allocated to teaching consistently emerges in research as one of the key elements that have the greatest impact on learning outcomes. A few of the more compelling research studies are discussed in Part II [Box C(a)].

In any class, learners do not learn at the same pace. It is for this reason that some learners need more time than others to learn. Because this, in reality, does not fit the time allocated to different subjects as prescribed in CAPS, teachers tend to "aim for the middle." That is, they teach in a way that will work for most learners—to the exclusion of struggling or lagging learners and gifted learners. Discussed below are different approaches how high-performing schools use time to generate better performance for *all* learners in their classes. These approaches include using allotted time efficiently and effectively; mitigating factors that lead to loss of teaching time; and creating more learning opportunities for learners. Each of these approaches is discussed in detail below.

USING ALLOTTED TIME EFFICIENTLY AND EFFECTIVELY

High-performing schools do not have more time than other schools, but they employ an integrated series of practices to maximize the use of that time. By the end of the school year, unlike in other schools where teaching time is wasted, these schools have lost little or no teaching time.

Schools in our sample ensure that learners have enough time to learn in school by adhering to planned schedules, improving teacher learner and attendance, and building skills for effective classroom management to minimise disruptions. They are able to do this because not only do they strictly adhere to allotted time (*planned time*) but they also use it properly:

It's our culture that you may not attend any other functions such as union meetings during school time or celebrations of any kind because we need to observe the time-on-task on a daily basis. (HOD, **School KH**-Quintile 4)

These schools structure the use of time within each day and across the year. They do not simply provide more classroom time, but they also strive to make classroom time as efficacious as possible. The purposefulness with which these schools structure time illustrates their priority for academics. They manage classrooms tightly to make every minute count. This enables them to maximize time-on-task.

In our school, we don't have scheduled morning, afternoon, weekend and holiday classes because we strongly believe that if teachers use every minute of the seven hours each day to teach, they should be able to complete the curriculum. If a learner is struggling with a particular topic, teachers support that specific learner. We believe learners need rest. How can they rest when they are at school seven days a week? (Principal, **School GH**-Quintile 5)

We have strong internal controls and accountability. For example, period registers are controlled by learners themselves. They check if the teachers come to class and on time. If a teacher does not come to class or comes late, the class captain records that. All class captains submit their records to the Principal's office. Learners are our clients and they have the right to demand that teachers do not rob them of the opportunity to learn, which is their constitutional right. So, we are always aware that learners are watching us. (Teacher, **School LL**-Quintile 2)

> *We have strong internal controls and accountability. For example, period registers are controlled by learners themselves.* (Teacher, **School LN**-Quintile 1)

MITIGATING FACTORS THAT LEAD TO LOSS OF TEACHING TIME

The meta-analysis of NEEDU findings (DBE 2017a) shows that in low-performing schools, the variation between *planned* time and *implemented* time is attributed to the following eight factors:

- Non-adherence to notional time allocation prescribed in the curriculum;
- Learner and teacher poor attendance;
- Learner and teacher late coming;
- Teachers leaving school early for a variety of reasons;
- Teachers and learners returning to class late after break;
- Poor time management for the National School Nutrition Programme; and
- Early commencement of mid-year and end-of-year examinations.

The schools that produce good results in the NSC, some of which serve large proportions of disadvantaged learners, understand the pivotal role of time. SMT members make sure that time loss is kept to a minimum. Thus, extra time in these schools is not used to compensate for time loss. "You do not waste time because you are counting on providing extra time. You must use the time that you have effectively. Lost time can never be replaced; it's gone forever," (Principal, **School KK**-Quintile 4). Accordingly, as discussed further below, the purpose of providing extra time is not to compensate for lost time. On the contrary, extra time teaching is the enhancement of classroom teaching that is based on assessed-learner-skill-deficit and

> *You do not waste time because you are counting on providing extra time. You must use the time that you have effectively. Lost time can never be replaced; it's gone forever* [Principal, **School KK**-Quintile 4**).**

is targeted to address specific and discrete knowledge or skill deficits. Such learning opportunities "provide a means of reaching learners which regular [school-time] programmes are not effectively serving and can be beneficial in schools' efforts to narrow achievement gaps and guide at-risk learners to succeed academically." (Teacher, **School EF**-Quintile 3)

CREATING MORE LEARNING OPPORTUNITIES FOR LEARNERS

More support and teaching time are provided, either during the school day or outside normal school hours, to learners who need more help. Teaching is adjusted based on frequent monitoring of learner progress and needs.

Most high-performing schools (97%) identified expanded time as a key ingredient in their ability to produce good results in the NSC examinations. An average school day has grown markedly in high-performing schools. These schools use more hours than the conventional school calendar (*planned time*). Teachers in these schools are effective within the conventional school calendar and use the time added to advance learning further.

The following sub-sections will make clear why an increasing number of teachers have found it worth sacrificing their time to expand school time.

RATIONALE/PURPOSE FOR EXTENDING PLANNED TIME*:* These schools employ an integrated series of practices to maximize the use of teaching time (i.e. *planned time*). If they have to extend teaching time (i.e. extra classes), there is a clear purpose for doing so. The use of additional time ranges from providing many opportunities for teaching and learning, to academic support to struggling learners, to teacher development and collaboration. The extension of the planned time in high-performing schools can be categorised into six purposes: to complete the curriculum; give more support to struggling or lagging learners; re-inforce what was taught in class; do remedial work, revise or catch-up; and build in many more opportunities for teacher development and collaboration. Each purpose is briefly discussed below.

- **To complete the curriculum:** In the majority of the high-performing schools, most of which are serving learners from disadvantaged backgrounds, teachers report that they use additional or extra-time to cover more material and examine topics in greater depth. These schools work hard to complete the curriculum as early as in May to allow more time for revision in preparation for both the trial (mock) exam in September and the final exam (NSC examinations) in October. Other schools complete the curriculum anywhere between June and September. The expected date to complete the curriculum is either prescribed by the district, PED or is self-imposed by the school. Completing the curriculum early, as teachers in most schools report, cannot be done without extending the allotted time in the school calendar (i.e. *planned time*).

  I spend three hours every Saturday trying to finish the syllabus alone because it is so extensive. You have to have your extra lessons because our syllabus is so wide in that we'll never be able to finish our work on time. (Teacher, **School KS**-Quintile 4)

  The syllabus is too long for you to just finish it in the normal school day. We want to cover the syllabus faster, so that we have enough time for revision. So, in the morning extra class, the teacher introduces a new lesson, then during the allocated period we just continue with what we started in the morning. That's why everyone must attend all morning extra classes at 6 o'clock. Most of us have taken it [getting to school early] as a habit. We have gotten used to this. This is the way we do things here. (Learner, School KH-Quintile 4)

- **To give more support to struggling or lagging learners:** Recognising that it is unreasonable to expect all learners to learn at the same pace, teachers use assessment results (as described in the **Best Practice 6.4**) to identify not only struggling or lagging learners who need extra help, but also learners who are gifted and are ready to accelerate.

One of the major things we learned was that if learners are already three to four years behind when they get here from primary schools, teachers do not have enough hours in the day to overcome those deficiencies. So, we extend our school day to allow teachers to provide more support. (Teacher, **School WL**-Quintile 3)

Teachers use additional time to focus on individual learners who are struggling or who need extra help and provide a vehicle for teamwork to strengthen their performance early, before educational problems increase in intensity. As described in **Best Practice 6.4**, ongoing assessment data about how well learners are learning and what each learner needs to be successful are examined. Support provided to learners during extra time is not one-size-fit-all but it is customised in that, informed by assessment data, it addresses areas of identified need, in specific topics or skills, and for specific learners.

> *We extend our school day to allow teachers to provide more support.* (Teacher, **School WL**-Quintile 3)

Teachers try to pull learners aside for extra help but "that's not enough," as some teachers explain, because "we only have seven hours in the day; and less than an hour of that time is allocated to maths," (Teacher, **School GO**-Quintile 3). Thus, these schools provide learners, especially those who lag most, with more time and more opportunities to learn than they would otherwise have. In the final analysis, because quality indicators such as fewer disruptions and the quality of teaching in class are prevalent in these schools, the effect of increased time on learning outcomes is greater:

Those who are not performing well, on Fridays, when other learners knock off, they remain behind and then teachers give them extra classes. (Teacher, **School LK**-Quintile 2)

In Mathematics, and in other subjects, we realised that the syllabus is too wide. This makes it difficult for learners who are slow to catch up in the 45 minutes allocated to a lesson. So, we find it necessary that we provide more time to cover the syllabus and to attend to learners who are struggling. (Teacher, **School LE**-Quintile 4)

- **To re-inforce what was taught in class:** Another reason for providing extra classes proffered by teachers in many of the high-performing schools is to re-inforce what is taught in class. "Sometimes it takes more time for a learner to understand a concept which another learner can grasp immediately," one teacher notes (**School KW**-Quintile 2). "You can't find time during school working hours to cover the breadth and scope of the curriculum. This is where providing extra time becomes unavoidable," another teacher in the same school adds. Many other schools share the same sentiments:

We use extra classes not only to cover curriculum but to revise and re-inforce what was taught in class. We don't introduce something new, but we use extra classes to re-inforce the concepts taught the previous day, that you feel as an educator you need to go over again. You know that you have this extra time that you can also use to do corrections with the learners and do remedial work. It is like a cushion time, if I can put it that way. (Teacher, **School KH**-Quintile 4)

In morning classes, if ever there is something we couldn't get or did not understand in class during the lesson, we tell the teacher and she uses extra time to re-teach and emphasise that which we missed during the lesson because the time was not sufficient. (Learner, **School FG**-Quintile 1)

Without extra time, quality would be compromised, because we would be rushing through the curriculum in order to complete the syllabus and leaving many learners behind. You know, there is a difference between curriculum coverage and learning. Curriculum coverage is easy; you can do that in few months but making sure all learners learn is not so easy. So, extra classes give us more time for us to teach so that learners can learn. The focus is not on curriculum coverage but to make sure that all learners learn. (Teacher, **School KH**-Quintile 4)

We use extra classes basically to re-inforce what has been done in the week. Sometimes, we have difficulty with a certain concept, we use that extra time to re-inforce that concept again. (Learner, **School KQ**-Quintile 4)

- **To do remedial work:** Some teachers use extra classes to support learners who need extra help, which teachers cannot do during a lesson because they are limited by time:

We use extra time for remedial classes. I know all my learners. As I present a lesson in class, I can tell by the look on their faces that John and Thandi are lost but if I have to stop and attend to them to bring them on board, I will derail the rest of the class, who are following what I am saying. So, in the extra class, I spent time with John and Thandi and give them more individual attention. (Teacher, **School KF**-Quintile 4)

- **To catch-up or revise:** It is unavoidable that teachers would miss some of their classes owing to many reasons such as illness, attending workshops, union meetings and memorial services. When time is lost, teachers use extra classes as catch-up sessions:

We also use extra lessons if we are behind. For instance, when we realize that in Business Studies there is a chapter that we have not done and there is no way that our learners can sit for the examination without mastering it, then we do extra classes. (Teacher, **School MJ**-Quintile 1)

In most cases, we offer extra lessons for catching up when we are behind because of the many workshops that we had to attend in a term. When we come back we have lost a lot of teaching time. There is not enough teaching time to teach. (Teacher, **School KS**-Quintile 4)

- **To build in more opportunities for teacher development and collaboration:** Because teachers have little time outside their classroom activities to prepare for their lessons, they use increased school time for teacher collaboration. Teacher collaboration involves meeting collaboratively for curriculum planning and professional development, sharing what works in their classes, discussing and reflecting on lessons, analysing learner performance data, coaching and supporting individual teachers, and peer observations See **Best Practice 6.2A** for more discussion on teacher collaboration.

AMOUNT OF TIME EXTENDED (IMPLEMENTED TIME)*:* High-performing schools are at the leading edge of the move to increase school time. Learners attend school for substantially more hours per day and more days per year than their peers in other schools. Additional time to afford learners more opportunities to learn is provided by schools, districts or parents through private tuition.

- **Extra classes provided by school:** Schools provide extra classes at different times in a school day: morning (62%), during break (negligible), afternoon (75%), or evening (20%). Some schools provide extra classes on Saturdays and Sundays (71%) or during school holidays (60%).

  > *High-performing schools are at the leading edge of the move to increase school time.*

  We start extra classes as soon as January—right at the beginning of the year. We offer the morning, afternoon and weekend classes. Morning classes start from 6 to 8. (Teacher, **School KZ**-Quintile 1)

  We are not subscribing to the seven-hour working time as prescribed by the Minister but our teachers go an extra mile. We have got morning classes, we have got afternoon classes, we have weekend programmes. We also sacrifice our family time during the holidays in order to assist these learners. (Teacher, **School KH**-Quintile 4)

- **Targeted subjects:** Subjects that are prioritised for extra classes vary from school to school. While other schools prioritise specific subjects, others target all subjects:

  We offer extra classes for all content subjects: Maths, Life Sciences, Science, Accounting, Economics, and Business Science, for all learners. (Teacher, **School KH**-Quintile 4)

  We only attend extra classes in maths, Physical Science and English. (Learner, **School EG**-Quintile 3)

  There are extra classes for all subjects but we make sure that the more difficult subjects, like maths and Physical Science, have more periods than other subjects. (Teacher, **School LL**-Quintile 2)

  Subjects that are targeted during weekend classes are Geography, Maths, Accounting and Physics. These subjects are targeted because there are learners who have been progressed. We use extra lessons to help these learners. (Teacher, **School KF**-Quintile 4)

- **Extra support provided by district/province:** Twenty-nine percent of the schools report that their learners attend revision "camps" during school holidays, provided by the districts, for a targeted group of schools. Tuition in these camps is provided either by district officials themselves or by good teachers selected by the district office.

- **Private tuition provided by parents:** Learners in 75% of the schools receive extra tuition offered by private providers at parents' extra cost ranging from R200 per subject per month to R1600 per subject per month. While teachers in a few schools value the benefits of extra private tuition and encourage learners to attend these private sessions, others discouraged learners from attending these sessions. Private tuition is discussed in Section 3.1.4 in Part III above.

HOW EXTENDED TIME IS USED: All schools emphasise that providing extra time is not done as a matter of routine. These schools also strongly believe that just adding more school time will not make a difference in learning outcomes unless the added time is used well. As one teacher cogently puts it, "you can add as much extra teaching time as you like, but if the quality of teaching is poor, extra time will not lead to achievement gains," (**School LM**-Quintile 2). How the schools use extra time, and how they have redesigned the school day varies as described below:

> *You can add as much extra teaching time as you like, but if the quality of teaching is poor, extra time will not lead to achievement gains.* (Teacher, **School LM**-Quintile 2)

- **Tracking learners:** Appreciating that not all learners advance through school with comparable skills and knowledge, teachers separate learners into groups based on where they are academically. Through this approach, sometimes called "tracking," teachers vary their approaches when teaching learners in separate groupings (see Grouping Format 2 and 3 below).

  Teachers are cautious not to use tracking to "label" or stigmatise learners. Instead, they use tracking as a two-way ratchet where learners who were shifted to a "lower" track in one topic or skill are moved to a "higher" one in another topic, or vice versa.

  We target learners who have a potential to rank among the top 100 learners in the province. We challenge them. Those who were progressed also have their own mentorship programme. (Principal, **School FH**-Quintile 1)

- **Differentiated instruction:** Extra time gives teachers block time to differentiate their classes in ways that enable struggling or lagging learners to receive extra support, while gifted learners are kept challenged. Using "differentiated instruction," teachers group learners according to their varying capabilities and learning styles. See **Good Practice 6.2C** for more details how teachers differentiate instruction in class:

  Learners are not the same and so I tend to differentiate my teaching to meet learners' different needs. I cannot use the same strategy for all learners because while one strategy can work for one group of learners, it does not work for the other. (Teacher, **School MK**-Quintile 1)

  Teachers provide targeted teaching based on learners' needs. One school, (**School GL**-Quintile 4), described that they use extra time in the following way:

  From Term 3 of Grade 12, the learners who average 40% or below, receive specialised tuition, focussing on content and lower-order questions, to try and ensure that they, at least, get over 40%. The learners who are at the opposite end of the scale, 70% and above, receive specialised tuition to try and ensure they can obtain as many distinctions as possible. The learners between these two groups, i.e., those who are averaging around 50 and 60 percent, receive specialized subject tuition to try and ensure they get the necessary symbols to obtain bachelor passes.

  Teachers in different schools use a number of different grouping formats, including the following:
  - ✓ **Grouping Format 1** *(All learners in class are taught as a group):* The focus of teaching is on all learners in class. However, within that structure, the teacher use differentiation so as to meet individual learner needs. Teachers group and teach learners in multiple ways, including whole group, small group, or one-on-one instruction, all of this within one class.

✓ ***Grouping Format 2** (Targeted teaching/intervention in homogeneous small groups of learners):* In a small group setting, teachers provide supplemental support to learners who struggle in the grouping format 1. Teachers assess learner progress on targeted skills regularly, as discussed in **Best Practice 6.4**.

We group our learners according to their performances and take them to smaller classes. We group learners in three groups: those who are performing at levels 1 and 2 together; levels 3, 4 and 5; and levels 6 and 7. So teachers meet and prepare a topic to present on Saturday. Teachers rotate classes so that teachers are not teaching one class every weekend. Each group is taught by different teachers. (Teacher, **School EE**-Quintile 3)

✓ ***Grouping Format 3** (Intensive intervention):* Here teaching is even more intensive, more focused and more individualised. The focus is on learners with marked difficulties. A common strategy that different teachers use to give individual attention in order to provide every possible opportunity to help struggling learners succeed is learner peer-support. **Best Practice 6.2D** describes in sufficient detail how teachers use this approach.

We work very hard with progressed learners. We have specific sessions with them to make sure that they can tackle all level 1 or lower-order questions in the exam. For example, in the Life Sciences, we make sure that they know definitions, and they are able to label the diagrams. Once they can deal with these lower-order questions, they then graduate to attempt more challenging or higher-order questions. (Teacher, **School FF**-Quintile 1)

Where possible, the principle of individualisation is used because some learners cannot learn in the midst of other learners. So we have to try and individualise our teaching and call that learner separately, especially the progressed learners. We have a specific programme for progressed learners. (Teacher **School MM**-Quintile 1)

Teachers in different schools use one grouping format, a combination of grouping formats or all grouping formats. The schools that navigate these grouping formats in their interventions afford their learners additional contact with the curriculum during extra time sessions. Providing learning opportunities through different grouping formats, also give teachers an assurance that poor teaching is not the reason for poor learner performance.

> *We have specific sessions with progressed learners to make sure that they can tackle all level 1 or lower-order questions in the exam.* (Teacher, **School FF**-Quintile 2)

- **Learner peer support:** Schools differ in how they group learners. Some are on an ad-hoc basis, where they stay after school and share ideas. Some are slightly more formal in that learners are required to stay after school and work in groups, but may choose the groups themselves. Other schools place learners in subject or stream specific groups, and each learner in the group has a chance to lead the group on a particular topic, which they have researched. This is discussed in detail in **Best Practice 6.2C**.

- **Study time and homework:** Some schools provide the space and supervision for learners to study and do homework at school because they know that their home circumstances would not allow for this. For more information, see **Best Practice 6.3**.

Teacher collaboration, in schools that reported it works, ranges from teachers working together in an informal, unplanned way to the implementation of more formal collaborative approaches, such as professional learning communities (PLCs). Teachers in these schools believe that learners could achieve at high levels, and saw working together to implement the curriculum as a strategy to improve their teaching practice and, at the same time, improve learner performance.

Five types of collaboration were identified in the high-performing schools: joint planning, team teaching, teacher observation, sharing ideas and good practices (or reflection sessions), and cross-curricula collaboration. Each of these is described below:

JOINT PLANNING

Teachers in these schools recognise that **teacher collaboration** is key to ensuring that change is promoted beyond individual classrooms and all teachers, working together, are responsible for learners' academic success. This recognition results in whole-school improvement because when teachers increase their expertise by learning together, they "work through the issues so everybody is on the same page and all learners benefit" (Teacher, **School LF**-Quintile 3). In other words, for these teachers, collaborative planning has both an individual and collective benefit.

A typical planning session among teachers starts with preparing their lesson for the following day, strategizing how they would present a lesson in class, and asking each other how they think their learners would respond to a lesson. Their lessons are often very similar. As collaborative teams, teachers bounce ideas off each other and multiple solutions to problems are generated:

> *A typical planning session among teachers starts with preparing their lessons for the following day, strategizing how they would present a*

We meet on Friday mornings and then we plan the week. We discuss content we are going to cover in line with the ATP and how we are going to present it to our learners. (Teacher, **School MK**-Quintile 1)

I think we are producing good results because of the way we work together and the way we plan together. What we do is at the beginning of each and every year, we sit together as the staff and review our planning before learners arrive. We review the results for the previous year, how we performed in the past year. We then come up with the improvement strategies or the maintenance plan if the results were good—to say how we are going to maintain whatever we were doing last year that made us to produce good results. (Teacher, **School LK**-Quintile 2)

After presenting lessons in class that have been jointly planned, teachers have follow-up meetings to talk about what worked and what did not:

We always regroup each day after presenting lessons in our different classes and say 'How did it go in your class?' We talk about what worked or did not work. If the lesson was successfully presented in another teacher's class, then all of us will go and observe how she does it. (Teacher, **School KN**-Quintile 2)

All schools in our sample were required to follow the ATPs prescribed by the district, the Provincial Education Departments (PEDs) or developed by teachers themselves. While these ATPs provide structured curriculum for each subject, teachers still have a room (autonomy) to determine what they would focus on and when, and how to teach each topic.

Meeting times for joint planning vary in different schools. In some schools, teachers make time to come earlier in the morning to work together. In others, they stay in the afternoon and work together. Making time for that collaboration is the responsibility of the school's leadership. The SMT, particularly the HODs, play a large role in scheduling time for teachers in their department to meet and plan.

Friday afternoon is our planning day. We plan for the week ahead. We sit down and talk to each other about what we are going to do in 12a, 12b and in 12c. We are all teaching Physical Sciences. We plan what we are going to teach, decide on which activities we are going to give to all our learners for classwork and homework. We go as far as giving the same homework, the same classwork to all our leaners in different classes in the same grade taught by different educators. They write the same class tests, the same monthly tests. There is a lot of interaction and conversation among the teachers because we are working towards the same product or a goal. So, we cannot be pulling in the opposite directions. We have to have a common vision, a common goal that we must work towards. (HOD, **School LK-**Quintile 2)

TEAM TEACHING

Team teaching is perceived among teachers as more helpful and extensive. There is strong teamwork among teachers teaching the same subject in Grade 12. Everybody is involved and connected to each other. Teachers work together to share the workload instead of doubling their efforts.

In our school, we have a team teaching room where we can put all our Grade 12 learners doing Mathematics and all the maths educators in the school will just choose specific topics, which learners find challenging and we team-teach those topics. How we do it is that one teacher teaches a topic whilst other teachers are there to support him—walking around, checking that all the learners are actively engaged. (Teacher, **School KK-**Quintile 4)

A team teaching room

Source: School KK-Quintile 4

Physics, when we are teaching the entire group [all Grade 12 learners] in the team teaching room, one teacher presents the lesson. Other teachers are not there as spectators but are there as participants in the lesson because we are co-teaching. If there's something that the teacher presenting the lesson omitted to mention, another teacher comes forward and fills that gap. We all answer the questions from the learners as a team. (Teacher, **School KK**-Quintile 4)

Different schools use different approaches to team-teaching. These include subject-splitting, inter-phase teaching and joint planning but separate teaching. Each approach is briefly discussed below.

- **'Subject splitting'**: One common team-teaching strategy that teachers teaching the same subject in Grade 12 use is 'subject splitting.' Subject splitting includes two types: splitting by topic or chapter and splitting by the NSC examination paper. These are briefly discussed below:

  - ✓ **Splitting by concept/topic/chapter**: Teachers teaching the same subject assign one another chapters or topics to teach, to match their strengths. Instead of teaching the whole subject, they specialise in specific chapters or topics. Three schools describe how they do this:

    In English, we have a teacher who excels in poetry. We decided that she should specialise in that in all classes while I also specialise in the language part in all classes. We did subject splitting to accommodate teachers' strengths. We also do the same in other subjects. (Teacher, **School WL**-Quintile 3)

    I am dealing with equations. I focus on equations, among other things. That means whatever questions have to do with equations, I will be like an expert on that. Our approach is that it is better to do one thing that you are good at because you prepare well for one topic, rather than doing all the topics. (Teacher, **School KH**-Quintile 4)

    Teaching specific topics in a subject has a positive impact compared to the teacher who is teaching one learning area alone. When I get into the class during my periods and I am specialising in specific topics, it's much easier for me to do a thorough job than somebody who is teaching the whole subject alone. The pace of teachers who teach the whole subject by themselves differs from the pace of teachers who specialise in specific topics. (Teacher, **School LF**-Quintile 3)

  - ✓ **Splitting by the NSC examination papers**: In other schools, teachers split the subjects according to how they are structured in the NSC examination. Following are examples how subject splitting is done in different schools:

    In maths, I teach Paper 1 and he [the other teacher] teaches Paper 2. Even though we do teach the different papers, we do help each other to make sure the learners don't think that I am the one who is focusing on Paper 1 and he is the one who is only focusing on Paper 2. We share throughout. (Teacher, **School** FG-Quintile 1)

    We are able to combine our efforts and abilities according to the papers in the exams. Based on my expertise and strengths, I am an expert in paper 1. This means that I am the leader for that paper. (Teacher, **School KZ**-Quintile 1)

    In terms of team teaching in English, there is a teacher responsible for each of the three papers in the exam: paper 1, paper 2, and paper 3. So when you are teaching that paper, you are treating it as a subject. The same applies in other subjects. That is what is helping us to produce good results. (Teacher, **School LN**-Quintile 1)

    English has three papers. I am responsible for paper 2, the other teacher is responsible for paper 1 and the other one is responsible for paper 3. We plan together but we specialise in those papers as if they were standalone subjects. (Teacher, **School MJ**-Quintile 1)

Subject splitting is understandable, because teachers are asked to be knowledgeable about a huge range of topics in the subjects they teach. This is difficult, even at the primary level. Many schools in this study have learned that it is best for teachers to specialise in specific topics in a subject to make sure learners are being taught by the expert.

Schools in this study ensure that teachers belong to a team or a professional learning committee (PLC) within the school, which focuses on learning. Each team meets throughout the school year to plan together, co-teach and monitor curriculum coverage. PLCs encourage teachers to develop a culture of cooperation with a shared objective of improving their instruction together.

- **Inter-phase teaching**: In some schools, team teaching is not limited to teachers teaching Grade 12. Instead, all teachers teaching the same subject in different grades form part of the team. They plan together so that all teachers are aware of curriculum expectations in different grades.

In these schools, it is a common practice that a teacher teaching in the lower grades is asked to teach a topic or a concept in Grade 12 because of the expertise they have. Similarly, a Grade 12 teacher is sometimes called upon to teach a topic in a lower grade. "It's not about a grade that you have been assigned but it's all about the skill or expertise that you bring to the table," one teacher notes. (**School KZ**-Quintile 1)

If there is a teacher who is in Grade 10 or 9, who can assist me in Grade 12, I don't hesitate to ask for help. The working relationship among teachers here is so harmonious that even learners know that if they have a challenge they can approach any of us, whether a teacher who teaches Grade 12 or any other grades. (Teacher, **School GM**-Quintile 4)

We are not teaching Grade 12 this year because we take our learners from Grade 8 up to Grade 12 [Looping]. We were doing Grade 12 last year and this year we are back in Grade 8 but that does not mean we are not part of what is happening in Grade 12 this year. Come the end of the year, or towards the end of the year, we will be all taking part when Grade 12 is doing the revision. During holiday interventions, all of us get involved because we are all familiar with the curriculum in every single grade. The advantage is that all teachers teaching a particular subject in different grades at the school team up and support Grade 12 learners. The pressure is not on teachers teaching Grade 12 in that particular year but all teachers in the school who teach that particular subject. (Teacher, **School KH**-Quintile 4)

- **Joint planning but separate teaching**: An approach that some schools use is planning together but teaching separately in their own classes:

Before we start with a certain topic, we would discuss as to what are important concepts to be taught in the week and brainstorm the best techniques how to approach those concepts. Then after discussion, each of us would then go to our individual classes and teach. We then regroup to reflect on what worked or did not work during lesson presentation. [As part of team teaching], teachers also involve teachers from other classes, from other grades. We also swop topics so that if I don't feel comfortable teaching Geometry, I ask [my colleague] to teach it for me. (Teacher, **School KF**-Quintile 4)

Schools have "taken the doors off the classroom" through their collaborative efforts. All schools that practice this type of collaboration maintain an open-door policy where teachers go in and out of each other's classrooms without offending anyone and without making teachers feel as though they are being violated. This practice is not always greeted with open arms in other schools. Teachers in this study acknowledge that, while in the past teachers were relatively successful working in isolation and viewed teacher observation as an invasion of their pedagogy and a waste of time, teacher peer-observation is now the culture in these schools. It is an accepted norm and

> *Teachers go in and out of each other's classrooms without offending anyone and without making teachers feeling as though they are being violated.* (Principal, **School KK-**Quintile 4**)**

culture in these schools that teachers observe their colleagues teach. It is an approach that has become a strong vehicle for improving teaching and learning. Teacher collaboration, through teacher peer-observation, is directed toward building a professional, collegial staff that examines best practices. Explaining how a culture of professional sharing, dialogue, experimentation and critique has become a commonplace in her school, one teacher notes:

We have literally demolished the classroom walls—allowing teachers to come in and out of each other's classrooms observing what we are doing at any time and unannounced. We don't have anything to hide in our classes but everything to benefit when we as teachers have conversations to reflect on what is going on in our classes and learning from each other's strengths and expertise. We are a group of professionals who have learnt and accepted that we have a lot to learn from one another to make a formidable force in order to provide our learners the best possible quality education. (Teacher**, School EF**-Quintile 3)

Peer observation involves teachers observing each other's practice and learning from each other. Teachers have the opportunity to give and receive feedback about teaching practice and develop awareness about their own teaching.

A unique feature in these schools, which deviates from the norm, is that teachers de-privatise their practice by opening their classroom doors and sharing, observing and discussing their teaching.

We have long moved away from a notion that says 'it's okay for a teacher to enter his classroom, close the door behind him and no one knows what happens in there because no one can dare come in.' It is now a common practice that any teacher can walk in my class, watch what I am doing and say. I liked that approach, or I find another approach works better." (Deputy Principal, **School MJ**-Quintile 1)

SHARING IDEAS AND GOOD PRACTICES

Teachers are open to sharing during the departmental curriculum reflection sessions, and they also collaborate informally. A professional culture where teachers are willing to share, support, and explore together exists in many high-performing schools. Such culture also enables teachers to engage in a professional dialogue to evaluate and modify teaching strategies and programmes.

> *The focus in these schools has shifted from individual teacher expertise to building a stronger learning and knowledge base of all teachers at the school.*

The time that schools devote for teacher collaboration has a clear focus, is informed by data and is linked to learning outcomes

These schools have made every effort to distribute a base of pedagogical knowledge among all teachers within a school as opposed to restricting it to individual teachers. Put differently, the focus in these schools has shifted from individual teacher expertise to building a stronger learning and knowledge base of all teachers at the school.

Time spent by teachers sharing is not merely an exercise in idle discussion nor an attempt to get along in a friendly and collegial fashion. Instead, collaboration meetings are focused on an examination of learners' and teachers' work.

We have regular and scheduled conversations or reflections about learner performance and curriculum coverage. In our departmental meetings, we are always reflecting and looking for the best strategies to address what the assessment data is telling us. (Teacher, **School FE**-Quintile 2)

Teachers use the opportunity to be part of a community that provides a sounding board for ideas and best practices without feeling pressured to hide their failures or vulnerabilities. The teamwork and feeling of trust prevails. This encourages teachers to confess their inadequacies knowing that they have the support system within their school to help address those inadequacies.

While there was strong teacher collaboration within schools in this study, few schools explored opportunities to collaborate with other schools in order to create a community working to achieve a common goal through the sharing of practice, knowledge and problems.

CROSS-CURRICULA COLLABORATION

While in most schools teacher collaboration is limited to teachers within a school teaching the same subject in the same grade, there are few cases of strong teamwork among teachers across different grades and subject areas, i.e. interdisciplinary collaboration. In a striking example of collaboration in some schools, the teachers in Mathematics, Physical Science and Economics collaborate to teach certain topics.

We always look for integration among different subjects. Learners must not see subjects as separate entities but must see interconnections between different subjects. You know, you can teach one concept in maths, and another teacher teaches the same concept in Economics but learners don't see that it's the same concept. So, what we do is that if a concept appears in different subjects, we agree that teachers in one specific subject must introduce that concept. Immediately after it has been introduced—a day after it was introduced—teachers in other subjects then re-inforce it in their subject areas. During that week, teachers in all subjects are re-enforcing the same concepts. Do you know how powerful that is? No learner will ever forget that concept because teachers in different subjects are talking about it at the same time from different perspectives. But for this to happen, it requires joint planning across different departments and subjects. In Economics, for example, if we are teaching something to do with Geography, in our planning, we would approach Geography teachers to tackle that topic because they are better placed and positioned to do that. (Teacher, **School KF**-Quintile 4)

There is an expectation within schools that they are going to do whatever is necessary for the learners to master the curriculum. There is also an internal drive among the teachers in different subject areas that they want learners to do well. Teachers offering different subjects are all feeding off one another and are all collaborating to share best practices.

BEST PRACTICE 6.2B—LOOPING (MOVING UP WITH LEARNERS): Teachers spend two or more years teaching the same group of learners.

Teachers in some schools reported that teaching the same group of learners for more than one school year as they move up in different grades enhances teaching and learning. This practice, which is often called *looping*, is embraced by teachers, because they understand its benefits. Thirty percent of schools described how they implement looping effectively and reap most benefits to enhance learning. In these schools, looping has been integrated as a regular procedure. It has become normal for teachers to spend more than one year with the same group of learners.

There are different variations among schools how they implement looping. In one variation, a teacher or team of teachers teach a subject in Grade 10 in year 1 and follow the same learners as they progressed to Grade 11 in year 2, and Grade 12 in year 3. Another very successful variation, is where one teacher is the class register teacher for a number of successive years, thus becoming au fait with each of the learners and their specific strengths and needs.

While good results in the NSC examinations cannot be linked to any one particular strategy or programme, some high-performing schools identified *looping* as one important contributing factor. Different schools derived different benefits from multi-year teaching or *looping*. These benefits include spending additional time with same learners, developing working relationships over time, understanding learner needs, and providing customised learner support. These are briefly discussed below.

ADDITIONAL TIME WITH THE SAME COHORT

One benefit of looping expressed by schools that work is that it saves time, which teachers use for different purposes including the following:

- Because teachers teach the same group of learners year after year for two or more years, "getting-to-know-you" time becomes virtually unnecessary during the second year and subsequent years. Time is not lost learning a new set of names and figuring out exactly what they learned the previous year:

  You know the learners very well. You don't have to start to get to know them in Grade 12. It is a bit easier if you know them quite well. They know your teaching methods and style. (Teacher, **School GK**-Quintile 4)

- Based on teachers' extensive knowledge of learners in their first year of engagement with them, they (teachers) have more time to prepare effectively for the upcoming year. As a result, teachers say they gain more teaching time in the second and subsequent years of looping:

  It's like you are given a second chance to teach your learners if you have another opportunity to teach them again in the next grade. (Teacher, **School KT**-Quintile 3)

- Teachers are able to start teaching on the first day of the second/third year of a looping cycle (without having to engage in the "getting to know you" process again). In other words, on the first day of the second/third year of looping, teachers start where they had left off in the previous year. Thus, as one teacher notes, "a start of a totally new school year does not feel as such but feels more like return from a long vacation." (**School EE**-Quintile 4)

  > *On the first day of the second/third year of looping, teachers start where they had left off in the previous year.*

- Additional time from looping gives teachers the opportunity to assess learner achievement and identify content gaps, diagnose potential academic problems and it affords teachers more time to close and address content gaps, thus closing achievement gaps among learners.

Moving up with learners through different grades addresses complaints you always hear from Grade 12 teachers about the quality of learners they receive in Grade 12. In our school, teachers take the same cohort of learners from Grade 9 to 12. So, I say to teachers "You've been with these learners for the last four years. What's your excuse? (Teacher, **School EE**-Quintile 4)

WORKING RELATIONSHIPS

The context of looping results in improved relationships among teachers, learners and parents. These relationships are briefly discussed below.

Teacher-to-learner relationship: Teachers describe how well they get to know their learners and how they have built up a rapport over the years. A level of trust between teachers and learners has been built up over time. As one learner observes, "teachers who teach us in Grade 12 have been teaching us since Grade 10; they are our second-parents now" (**School KX**-Quintile 1). Echoing the same sentiments about how teachers and learners have developed a high level of caring and respect in classrooms, another learner in **School KF** (quintile 4) has the following to say:

We understand the teacher from the previous year and when you come to matric everything becomes easier because you know her style of teaching. Time is not wasted trying to know the teacher. It takes maybe about two to three weeks to get used to how a teacher teaches; but if you had the teacher the previous year, then you get down to business immediately. (Learner, **School WG-**Quintile 4)

There is an understanding between you and the learners. They understand you and you **understand** *them. You get to know their strengths and their weaknesses and you know how to coach them individually.* (Teacher, **School WJ**-Quintile 3)

Learners in looping schools feel comfortable talking to their teachers as trusted mentors. In many schools, learners indicated that they would even share information that most students would not typically share with their teachers:

We don't get confused because if the same teacher teaches you the same subject in different grades, you get more used to the subject. You understand clearly because you are used to that teacher but if they start changing teachers, it is confusing because one teacher says this and another teacher says that, it becomes confusing. (Learner **School WJ**-Quintile 3)

The school make it a point that the teacher who teaches a class in grade 11 will also take that same class in grade 12 so the learners are comfortable with the teacher and the teaching style. Teachers and learners sit in a comfortable position where they can have that interaction with the same teacher who teaches them for a couple of years. (Teacher, **School GN**-Quintile 3)

Teacher-to-parent relationship*:* Not only do teachers credit looping for building rapport with learners, they also say it enables them to know their learners' parents very well. Teachers rely on parents to "do the right things" at home to support their [teachers'] work in class. This is why these teachers value and cherish a good relationship with parents because they need them to make sure that their children do their homework, study, get them to class on time and make sure that they attend extra classes.

Teachers report that because of looping, parents know the way they work, including what to generally expect during the year. Teachers feel that the rapport that has been built over time makes parents feel comfortable talking with teachers and sending questions about assignments or marks learners get, which could have been more complicated if parents had to adjust to new teachers' completely different ways of working each year.

Better rapport between parents and teachers is said to have resulted in more active parent involvement and therefore higher levels of learner achievement.

Benefits of developing relationships*: Looping schools also report that significant relationships have a direct impact on learning. This is because the relationships created during the first year of the looping cycle cause the second year of the loop to flow in a smoother fashion. Unlike in non-looping schools where teachers have to establish routines and procedures for almost everything at the beginning of the year, in looping schools teachers have observed that teaching time is not wasted. Because learners know the routines for everything from class rules to resolving conflicts with one another, schools identify two main benefits of looping: discipline issues are greatly minimised and classroom management improves significantly. As a result, class time is be devoted directly to learning:

Our school is a bit overcrowded. Once you are taken to a new class altogether, you start to learn to know these kids, their conduct, their names and so forth. However, if you are given an opportunity to move with them from one grade to the next, you already know learners' challenges. You already know their name. It is very important to learners when you call learners by their names. They have a sense of belonging. They feel that you care if you know and address them by their names. (Teacher, **School GM-**Quintile 2)

For me, I feel that moving up with learners is a good thing because when you get to Grade 12, you have established a very personal relationship with these learners. It's unlike having to teach new learners in Grade 12 for the first time. By May or June, it's the first time you realise this one is struggling but then it's too late. However, if you taught them the previous year, you know each and every learner's weaknesses and strong points. It tends to be easier, especially in Grade 12, to work with them when you know them individually. (Teacher, **School FD**-Quintile 3)

The major benefit [of looping] in Physics is that the Grade 12 paper is structured in the way it examines even things that were learnt in Grades 10 and 11. You will find that other teachers might have skipped a section of the work in Grade 10 or 11; but if you taught the same group of learners in Grades 10 and 11, you know exactly what was done in the lower grades. Learners still have their notes from Grade 10. (Teacher, **School KH**-Quintile 4)

UNDERSTANDING LEARNER NEEDS

Having taught the same subjects to the same group of learners over time, teachers say they know their needs, strengths, interests, personalities and how they learn best. "In other schools, often, when teachers only start to figure out their learners' needs and how best to address them, off they go into a new class with new teachers in the following year," (Teacher, **School LF**-Quintile 3). Teachers in looping schools say this is the least of their challenges. In these schools, teachers report that they know their learners' strengths and general weaknesses right from the first day of a new school year. They know where their learners started from, the progressions they have made and goals on which they still need to work. They know the skills that each learner struggled with the year before, as well as tasks in which they usually excel; and so, no time is wasted at the beginning of the year. A teacher in **School GN** describes how this works in her school:

Our teachers move up with a group of students for three years in a row. So, they know who's who in the zoo and they have invested, over those three years, time and energy on these children, particular the students needing intervention like the weaker students. (Principal, **School GN**-Quintile 4)

One of the big advantages that multi-year teaching offered in the schools in our sample is that it puts teachers in a better position to close the accumulative content gap among leaners in a way that is impossible to achieve in a single year. Teachers are able to re-inforce skills that learners are lacking and close achievement gaps among low-performing learners in a manner that is consistent over a looping cycle.

> *Multi-year teaching (looping) puts teachers in a better position to close the accumulative content gap among leaners in a way that is impossible to achieve in a single year.*

When you know where the gaps are, it's easy to patch them up [close]. As you move up the grades with your learners, it becomes easy for you to even cover the things you couldn't cover in the lower grades. You know exactly what is missing and how you must handle it. You know these kids, and they know you. They know what you want and they know how you do things. It becomes easier for them to cope in Grade 12. (Teacher, **School GM**-Quintile 2)

CUSTOMISED LEARNER SUPPORT

Because teachers, having looped understand learners' needs better and so they are able to differentiate more effectively in different ways—by academic needs, learners' learning styles, and learner interests.

When they loop, teachers feel that they are afforded another opportunity to improve on what they did not do as well the first year. Thus, they can focus on topics and skills that learners are struggling with and that they [teachers] did not emphasize enough the previous year:

We are fortunate that we can teach the same group of learners from Grade 10 to Grade 12. It makes it easier for us to know what to do in Grade 12. For example, now we are doing mitosis and we did mitosis in Grade 10. When I thought them in Grade 10, I told them not to forget because in Grade 12 they will get it in exam paper; so, now we are just revising it. (Teacher, **School GO**-Quintile 3)

I keep on reminding them that 'you have done this in Grade 10 under this topic, and, in Grade 11 you have done it under this topic.' In that way, it is easier for me to integrate what I taught them in previous grades. I remind them that in Grade 12 we are just doing 40% of the work. About 60% was covered in Grade 11. (Teacher, **School FH**-Quintile 1)

Teachers also feel that looping gives them a rare opportunity to have three full years in the FET Phase to make sure all learners, particularly the progressed learners, catch-up. "Teaching learners as they progress in different grades [looping] provides a second chance for teachers to reach individual learners who need support beyond one year of teaching them" (Teacher, **School EE**-Quintile 3). Each year during the looping cycle, teachers say they plan to 'hit the ground running' without any waste of time, providing targeted and differentiated teaching that caters for different learner academic needs, and communicating with their parents to make sure they are doing everything they can at home to support teachers' efforts at schools.

> *[Looping] provides a second chance for teachers to reach individual learners who need support beyond one year of teaching them.* (Principal, **School EE**-Quintile 3**)**

While there are many benefits to looping, there is plenty of literature that sounds a warning that disadvantages do also exist. Three most frequent arguments against looping are:

- What if a child gets stuck with a bad teacher?
- What if learners are not exposed to different teaching/learning methods by being stuck with one teacher?
- Can a teacher be adequately competent to teach a subject for two or more different grade levels?

In the present study, the looping schools feel strongly that the profound benefits have outweighed the drawbacks largely because *teacher collaboration* (see **Good Practice 6.2A**) "neutralises" the three arguments against looping. Data in the current study suggests that where looping is practised or implemented in an environment characterised by strong *teacher collaboration*, it has a powerful impact on learning:

As you come up with learners from Grade 10 you know exactly some of the key areas which learners will be tested on in the exam. It does help when you come with your learners from Grade 10. (Teacher, **School KH**-Quintile 4)

The strategy where each of my educators starts teaching from grade 8 right up to Grade 12 is making a difference because when teachers realise that learners have content gaps, they still have a reasonable amount of time to try to close it before learners get to Grade 12 and it's too late to do anything. (Teacher, **School KL**-Quintile 1)

BEST PRACTICE 6.2C—DIFFERENTIATED INSTRUCTION STRATEGIES: Teachers use differentiated teaching methods to reach learners of a wide range of abilities

Teachers are often given the additional challenge of differentiating teaching for learners with a wide range of abilities and varying exceptionalities.

All classrooms in schools in the present study had learners with a varying degree of diversity. Learners in the same classroom differ in respect of cognitive abilities, culture, language, prior knowledge, and learning styles or preferences. Faced with such diversity, schools provide various kinds of scaffolding through differentiated instruction to help all Grade 12 learners at different levels to learn.

HETEROGENEOUS AND HOMOGENOUS GROUPINGS

The most prevalent grouping is heterogeneous mixed-ability groups where lower achievers are taught the same but differentiated content from that taught to higher achievers:

I don't deal with one specific group of learners. If I realise some of my learners did not understand the concept I was teaching, I re-teach it to the entire class. This helps because whatever I repeat in class, it stays with them even more. (Teacher, **School GQ**-Quintile 2)

Most schools which practise mixed-ability groupings also indicated that they, at times, grouped learners homogeneously. Learners are placed in various groups mostly according to their performance level. Here, lower achievers, including the so-called "progressed learners" and lagging learners are pulled out for extra support and are taught separately:

We group learners according to their performance. The weaker ones will get special attention, but we also have a programme for the high performers. We do this so that we don't lose either of the group. Otherwise, if we concentrate on the weaker ones then you are totally ignoring the rest of other learners, and that's not right. (Principal, **School FH**-Quintile 1)

Our classes are homogenous in the sense that it's not every learner that will understand everything the first time you're teaching it. So that extra time gives you time to be able to go over certain things with those learners. (Teacher, **School GQ-**Quintile 2)

Homogeneous groupings are temporary and are formed for a specific purpose. Grouping of learners to ensure maximum and effective learner support is discussed in sufficient detail in **Best Practice 6.1**.

Different teachers explain the purpose of homogeneous groupings as follows:

To ensure that each and every learner in class is performing to his or her ability, we don't put a ceiling on what they can do. Those who are capable of achieving at level 7, we push them to do so. And those who are performing at level 1, we push them to perform at least at a level 3 or 4. (Teacher, **School KZ**-Quintile 2)

I am teaching Mathematics, say I give learners three problems on the board and I realise that while some learners are still busy with the first one, others have completed all three, then I can see that I am delaying these learners by limiting them to doing only three problems. They can do much more. (Teacher, **School KZ**-Quintile 2)

We identify the learners who are at risk of failing the exam and we encourage them to stay at school and work. Some of them do not work by themselves at home and sometimes the home situations are difficult for them to study and to work. We design interventions specifically for them. (Teacher, **School KU**-Quintile 2)

Conscious of the inadvertent harm that homogeneous groupings could cause to learners (e.g. stigmatization which can lead to low self-esteem), most schools that differentiate teaching hold a view that both low- and high-performing learners "must be pushed to perform at the best possible level they are capable of" (Teacher, **School LM**-Quintile 2). One teacher explains how learners of different abilities benefit from instruction differentiation as follows:

Differentiation is not meant only for slow learners, as some teachers would think; well, at least not in my book. You give attention to all learners: You want to push your slow learners from level 2 and 3 to level 5 so they can get Bachelor passes. The mediocre ones must be pushed to give you at least level 6 and you are pushing your high flyers to give you distinctions—not just the lower-end distinctions in the 80s.

We tell our high flyers that 'if you want to get to a medical school, 80% in maths and Physics is not going to get you there.' So, we push them harder. Then we say to our low achievers, 'don't aim for a 40% pass. What are you going to do with that? That's a useless pass; it won't get you anywhere.' So you see, everybody is pushed to their limit. (Teacher, **School ML**-Quintile 1)

> *Differentiation is not meant for only slow learners, as some teachers would think; well, at least not in my book. You give attention to all learners* (Teacher, **School ML**-Quintile 1)

Tomlinson (1999), an expert in the area of differentiated learning, identified four techniques that teachers can use to differentiate instruction in the classroom: the **content** (what students learn); the **process** (how students learn); the **product** (how students demonstrate their mastery of the knowledge or skills); and the **learning environment** (how the classroom works and feels). Below we discuss how schools in our sample differentiated instruction by adjusting each of these elements of differentiated teaching:

DIFFERENTIATING BY CONTENT

Teachers in some schools differentiate their teaching by adjusting the content, including knowledge, concepts, and skills that learners need to learn. These teachers use a variety of ways to explore the content to enable all learners to connect with it. To differentiate the content teachers:

- **Set different tasks for learners of different abilities**. When presenting a concept or topic in class, teachers are guided by a six-level Bloom's taxonomy or other taxonomies to differentiate content for different groups of learners. Teachers design activities in such a way that struggling learners are given tasks on the lower levels of the taxonomy (i.e. **remembering** and **understanding**). Learners would then progress through other levels to more challenging levels of the taxonomy so that a learner who has mastered a concept completes activities at the highest levels of the taxonomy namely, **evaluation** and **synthesis**:

  At times we have separate classes for very brilliant learners, where we present some of the very challenging material and then we allow them to go back and lead discussions. (Teacher, School KZ-Quintile)

  I group learners according to their performance and then I give them different tasks. (Teacher, **School GO**-Quintile 5)

It is very important that we should give appropriate opportunities to the gifted learners. My experience is that if gifted learners are not challenged they tend to relax and say 'as long as I beat this one, I'm fine.' They must perform at their best; so we also cater for their needs. (Teacher, **School LN**-Quintile 1)

After teaching a particular topic, teachers give learners different sets of worksheets or exercises in accordance with their levels of mastery of the concept.

- **Meet all learners' learning styles** by using various delivery formats such as video, print media, audio, WhatsApp or other technologies.

DIFFERENTIATING BY PROCESS

Differentiation by process is probably the most common and most regularly used form of differentiation in the schools in our sample. While the emphasis in the differentiation by content is on the **content** that the teacher has to adapt to meet all learners' needs, in this type of differentiation the focus shifts to the **process** that teacher has to adapt to present the content to learners of different abilities. Teachers in the present study use a variety of instructional strategies to present the same lesson to all learners at varying levels of difficulty based on two important factors: **ability** of each leaner and his or her **learning style**. The range of strategies that teachers in high-performing schools use to deliver lessons at varying levels of difficulty includes the following. They

- **Vary presentation skills** so that detailed explanations in simple language are given to struggling learners while quick or more sophisticated dialogue is reserved for high-performing learners:

> *Teachers use a variety of instructional strategies to present the same lesson to all learners at varying levels of difficulty based on two important factors: ability of each leaner and his or her learning style*

A strategy that I find useful is group-work. After I teach them, I give them a task to do in groups. I set up these groups myself. Learners do not just go to groups of their choice. Learners have the opportunities to discuss as peers. After doing the work in groups, they report back. (Teacher, **School GN**-Quintile 3)

When you go to the struggling learners' class, you don't start by teaching. Instead, you have to start first by checking where they are mentally—what they are thinking about themselves. Sometimes when I ask them 'Why are you in this class'? They will tell me, 'We are in this class because our marks are low.' You need to take much more time trying to motivate them, taking them out of that negative mind frame. (Teacher, **School LN**-Quintile 1)

- **Augment learning and teaching time** in the classroom by providing extra classes in the morning, during break, in the afternoon, during week-ends or holidays (see **Good Practice 6.1** for further detail about what teachers do during these sessions):

We provide extra classes in the afternoon for weaker learners because in class there is not enough time to differentiate. We stay until 4 pm to give our learners more support. (Teacher, **School EG**-Quintile 3)

We analysed learners' results in Grades 10 and 11 for the previous years. We found that there are learners who were progressed from Grades 10 and 11. We have therefore increased the contact time to give these learners more support—going back to the basics and re-teaching some concepts which are in the Grade 10 and Grade 11 syllabus. You can't start anything new until you have closed that gap. (Teacher, **School LH**-Quintile 3)

- **Adjust the pace of learning** by providing additional time and support for struggling learners to complete a task and allocating more challenging extension tasks to the more advanced learners, without holding them back to the pace of the less able ones:

In Saturday classes, we give more support to learners who are at risk of performing badly in the exam. We separate them - one Saturday we see the one group of learners, say underperforming learners. The next Saturday we see the other group, say average learners. These classes are useful because you are focused in your teaching. You are teaching learners with similar challenges. Your attention is not divided because you are focusing on one group without being worried about what the other group should be doing. When you deal with struggling learners, you have time to reduce the speed, allowing learners to move at their own pace. (Teacher, **School LG-**Quintile 3)

- **Encourage learner peer-support** to allow learners to help one another (see **Good Practice 6.2D** for further detail how this was done)

We allow our 'brilliant learners' to go back and lead discussions with their peers. They become what we call peer tutors; they help others in their groups. Some learners understand better when they are taught by their peers than teachers because they feel more relaxed and more comfortable to ask questions. (Teacher, **School KZ**-Quintile 1)

Teachers have allowed that we should be helped by our peers and I think that is what helped me. (Learner, **School KU**-Quintile 2)

By helping others you are helping yourself because you are re-enforcing what you know, so in that way you consolidate what you understand. Some learners understand better when they are taught by us and it is not about who is clever or not. (Learner, **School KU**-Quintile 2)

We have a peer tutor system at the school where some of our senior strong academic learners offer their services. If a learner comes to me and says 'Ma'am, I'm really battling with maths. Can you give me a peer tutor?' Then, I match him up with another learner who can help him. The benefits of peer tutoring are incredible. (Teacher, **School WL**-Quintile 3)

- **Deliver a lesson using a wide spectrum of materials** and means that appeal to different learning styles in order to attain a single learning outcome. These materials and means include but are not limited to manipulatives, visual aids, charts, audiotapes and other hands-on supports.

In Geography I download tutorials from other provinces, especial those from the Western Cape Department of Education. They have a lot of tutorials. I also show videos to the learners. Let us say, for example, we are talking about tropical cyclones, most of them don't know how a tropical cyclone is formed but if you download those videos you bring it class to show how a tropical cyclone takes place, it is easier for them to remember because they have seen it before. So, we go an extra mile by looking for those things that the learners are not exposed to and bring them to class. I have to make sure that the resources are available or I improvise. (Teacher, **School KU**-Quintile 2)

DIFFERENTIATING BY PRODUCT

Differentiation by outcome is defined as a technique whereby all learners undertake the same task but a variety of results is expected and acceptable. The **product** is what a learner creates at the end of the lesson to demonstrate the mastery of the content (Weselby, 2014). Teachers in the present study use different forms of assessment to enable learners to show mastery of an educational concept. Tests are the most commonly used form of assessment. However, teachers use other forms such as projects, reports and other activities.

Explaining how a product may range in complexity to align to respective levels for different learners, this is what one teacher has to say:

We focus on mastering skills at different levels. We give all learners the same tasks but expect them to work them out at different cognitive levels. So, for example, I pitch a task at different levels—from knowing (level 1) to synthesis (level 5)—if you use Bloom's taxonomy. I expect the top performers to complete that task at level 5; but I expect my struggling learners to do at least level 1 and 2 of the task. I then support my learners so that at some stage they 'graduate' from performing a task at levels 1 to performing at level 2, 3 and so on.

> *We give all learners the same tasks but expect them to work them out at different cognitive levels. I expect the top performers to complete that task at level 5 [in Bloom's taxonomy]. But I expect my struggling learners to do at least level 1 and 2 of the task.* (Teacher, **School EE-**Quintile 4**)**

The exam paper is also organised in such a way that 70% of the paper has higher order questions, and 30% middle and low order. So, we make sure all learners master all concepts so that they are able to answer at least all 30% middle and low order questions. If they can answer 30% of the questions correctly, all they need to get a good pass is answer at least 20% of the higher order questions to get 50%, which is a bachelor pass. (Teacher, **School EE**-Quintile 4)

Teachers use formative assessment to identify learners who need help and to monitor learners' progress after a teacher has differentiated instruction by process (as described above). Learners are assessed on an on-going basis in order to profile them with a view to identifying areas for improvement, reflect and continuously adjust methods of differentiation (content, process, product and learning environment) to ensure learning needs continue to be met. Learner assessment is discussed further in **Good Practice 6.4**.

After assessing, we analyse the assessment results and we identify questions that most learners performed badly. We also identify learners who performed badly in those questions. We then group learners by their performance and we re-teach those concepts that learners had not mastered, as revealed by the analysis of the results but learners are not stuck in the same groupings forever. We build the confidence of the struggling learners so that, at some point, they perform at acceptable levels and then they 'graduate' to another group.

If a learner performs well but drops performance in another test, then she goes to a high-level of support class. So there is a continuous movement of learners between the high-level of support class (for struggling learners) and low-level of support class (for the high performers). When you perform well, you go to the other class [low-level of support class] as if you are promoted. That makes learners to work hard to get out the high-level of support class—the intensive care unit. However, if a learner relaxes and drops performance, she goes to the intensive care unit to get a high dose of treatment— and they don't like that. (Teacher, **School LN**-Quintile 1)

To add on why we use categorisation according to ability, we know that we must also produce 'stars.'
It is very important that we should give opportunities to those gifted learners. (Teacher, **School LN**-Quintile 1)

DIFFERENTIATING BY LEARNING ENVIRONMENT

Few schools describe how they adjust the learning environment to support both individual and group work. Examples of differentiating the environment include furniture arrangement, sitting arrangement and routines that allow learners to get help when teachers are busy with other learners and cannot help them immediately. In one school, creating a supportive learning environment meant adjusting learners' seating arrangement, which one teacher describes as follows:

We do quarterly and monthly tests. Learners are seated according to their performance in class. Learners who performed well—we look at overall pass in all subjects—sit at the back and those who performed poorly sit right in front so that they are closer to the teacher to give them attention when they teach. It's easy to see that a learner looks confused when he is sitting right in front of you as opposed to when he is right at the back. This is particularly true in our case because we have large classes. (Teacher, **School KT**-Quintile 3)

In another school, differentiating the environment by arranging furniture differently makes a difference:

Because we have a smaller class in science, I arrange the furniture such that learners are seated in groups because I have realised that they learn much better if they do work in groups. Peer coaching works in my class. After presenting a lesson, I reserve a couple of minutes in my period and give learners a task to do in their groups to see if they can apply what I have just taught. (Teacher, **School GO**-Quintile 4)

BEST PRACTICE 6.2D—CO-OPERATIVE LEARNING (LEARNER PEER-SUPPORT): Learners work together and support one another for a mutual benefit

Johnson, Johnson, and Smith (1991) define *co-operative learning* as the instructional use of small groups so that learners work together to maximize their own and each other's learning. Some schools in this study share a belief that learners could and should help one another do well at school (co-operative learning) because they care deeply about what their peers think. As one teacher notes, "learners would do anything to live up to their peers' expectations. Often what we say and think come second." (Teacher, **School FD**-Quintile 3)

CO-OPERATIVE LEARNING APPROACHES

While all schools share a common purpose for using co-operative learning—i.e. learning together so that every learner subsequently can gain greater individual competency—they differ in their approach in the following respects:

- **Types of co-operative groups**: In some schools, learner co-operative groups are organised by teachers, while in other schools, co-operative groups are initiated by and controlled by learners with little or no teacher participation.

- **Nature of peer programmes**: Most schools prefer heterogeneous groups than homogeneous groups because they strongly believe that different learners have more to learn from each other. In each co-operative group (whether heterogeneous a homogeneous), there is a mentor and a mentee or mentees. Different schools in this study use one or all forms of mentor-mentee relationships briefly discussed below:

  ✓ **Older learner-younger learner** peer support (cross age/grade support):

    In this mentor-mentee peer relationship, learners are not on the same or equal footing. An older learner, for example, in a senior grade (often Grade 12) mentors a younger learner or a group of learners in the lower grades (Grade 8 to 11) in a structured environment sanctioned by teachers.

    I am in matric and during break, I have extra lessons for learners in Grades 10 to Grade 12 but I support mostly learners in Grades 10 and 11 in Maths and the Physical Sciences. The learners whom I support are those that are struggling and who approach me. (Learner, **School GN**-Quintile 3)

    We formed groups where learners in higher grades mentor learners in lower grades in different subjects. We target those subjects which are problematic. For example, many Grade 8 learners come here with huge content deficit, especially in maths and English. Our Grade 12 learners are matched with learners in Grade 8 to help close the gap. (Teacher, **School MK**-Quintile 1)

  ✓ **Academically stronger learner-weaker learner** peer support (heterogeneous peer support):

    This is another mentor-mentee peer relationship where, in some schools, a learner mentors another learner because the mentor possesses more "superior knowledge" than the learner he or she mentors.

    I pick a strong candidate and match him or her with a weak learner. (Teacher, **School WG**-Quintile 4)

In our group, we have one good performing learner and that learner will have a group of learners who are falling behind. (Learner, **School KV**-Quintile 2)

We divide learners into small groups. We match the best one [with weaker ones]. One tutor is responsible for two learners. (Teacher, **School KF**-Quintile 4)

The brighter learner sits with a group of weaker learners and helps them understand the subject content, with a teacher being present. It's really assisting us to understand the content better and ultimately this improves the matric results. (Learner**, School KM-**Quintile 4)

> *The brighter learner sits with a group of weaker learners and helps them understand the subject content.* (Teacher, **School KM-**Quintile 4**)**

✓ **Academically strong learner-academically strong learner** peer support (homogeneous peer support):

We spend time helping each other. We don't compete with other although we are all in the Top 10. I may be good in maths but not in all subjects. Someone is doing much better than me in Physics; so I approach a learner who is good at it to work with me. (Leaner, **School LN**-Quintile 1)

Here, schools encourage peer support between two learners or a group of learners who are on the same footing academically. That is, both learners or a group of learners are high performers who, instead of competing between themselves to achieve better marks, they work together co-operatively for a mutual benefit, i.e. to provide growth and learning opportunities for both mentors and mentees.

- **Setting up a learner-peer support programme:** When schools embark on a peer tutoring system, it is important to set up systems to ensure that the relationships work to the benefit of all learners. When setting up peer tutoring systems, schools that work:

  ✓ **Define roles and responsibilities of mentors and mentees***: A limited number of schools have well-defined roles for mentors and mentees in a peer mentoring relationship. In most cases, mentors and mentees operate haphazardly without any defined roles and ground rules:

  We guard against those learners [peer tutors], becoming arrogant and feeling that they are better than others. That is very dangerous if you use peer tutoring. They [peer tutors], mustn't forget that they are still learners; they are fortunate to have grasped that concept far better than others but they are not better than others. (Teacher, **School KZ**-Quintile 1)

  ✓ **Train peer-mentors***: Some schools train mentors to ensure that they take a developmental approach to working with their mentees to decrease the likelihood of mentors engaging in negative behaviour or causing harm to mentees, whether intentionally or not:

  I teach them [peer tutors] how to work with other learners—how to cascade information to the rest of the class during the 'batting lesson' [a lesson presented by learners when teachers are not at school attending a workshop]. This is working for us. (Teacher, **School KK**-Quintile 4)

✓ **Recruit mentors**: In all schools practicing co-operative learning, peer mentors are recruited from student populations within the schools, although there are few cases where schools invite former learners (alumni) to provide occasional peer support to learners. The only criterion all schools use to choose mentors is good academic performance, i.e. learners with strong abilities in a particular subject area:

Teachers choose the best learners and ask them to tutor other learners. (Learner, **School KF**-Quintile 4)

We normally invite our former learners who are doing well out there to come to school as motivational speakers or as peer-tutors. We have a group of our former learners, about 50 of them. They organise themselves to come here to support learners. (Teacher, **School LE**-Quintile 4)

✓ **Recruit mentees:** Low performing or struggling learners are identified as the target population that teachers believe would benefit most from having peers, rather than teachers, as mentors:

Tutoring is based on the concepts or skills that learners are struggling with. Learners who are struggling in a particular topic or concept are identified and paired with a learner who understands that topic or concept better. It's not about a smart learner tutoring a so-called 'weak' learner; it's about a learner who understands a particular concept better assisting those who don't. (Teacher, **School KF**-Quintile 4)

When we have identified a weak learner, we then ask him which of the bright learners he would want to work with. They are not ashamed to identify a learner that they prefer. We make sure that a learner is comfortable with his or her mentor. That is how we match learners. (Teacher, **School LL**-Quintile 2)

✓ **Match mentors and mentees**: Few schools have specific procedures for matching mentors and mentees. Low performing or struggling learners are simply assigned to learner with a good academic performance:

As members of the RCL [Representative Council for Learners], we come up with innovative ways to reach out to learners. In our school, you have to perform well in order to be a member of the RCL. For example, the president is a high performer.

In the RCL, we have the 'Department of Education,' we have a member who is responsible for Education Department. Every month, we write tests and we use the results to reflect how we are performing as learners. The head of the 'Education Department' sits down with learners and discusses why some learners get 100% and some get 30%. We then support the head of the 'Department of Education' to match high performing learners with those who need help. (Leaner, **School LN**-Quintile 1)

I had a learner that was battling in Accounting. He was barely getting 40%. Using the peer-support intervention helped him and he ended up obtaining a distinction in matric. I think it was my best distinction and it wasn't my work. It was the work of a peer tutor. He worked with him and identified his challenges. I suppose that individual attention from the peer tutor impacted positively. So, I definitely am for peer teaching. (Teacher, **School KM**-Quintile 4)

- ✓ **Consider the size of groups**: The number of learners in a group ranges between one mentor to one mentee (1:1) to one mentor to five mentees (1:5). *One tutor is responsible for two learners.* (Teacher, **School KF**-Quintile 4)

In their model of co-operative learning Johnson, Johnson and Smith (1991) identified five essential elements or pillars of co-operative learning: Positive interdependence, individual accountability, promotive interaction, interpersonal skills, and group processing. The extent to which high-performing schools in this study use co-operative learning is consistent with these research-tested pillars of co-operative learning. Each pillar is briefly discussed below.

POSITIVE INTERDEPENDENCE

Positive interdependence is linking students together so one cannot succeed unless all group members succeed. What differentiates schools in the current study from others are practices that help learners take ownership and responsibility for their own academic success. Teachers in this study structure co-operative groups so that learners are less competitive but support one another. One teacher provides a good reason why his school follows this approach:

We've got to pay attention to learners who are struggling so that they, at least, can get a bachelor pass but paying more attention to these learners often means ignoring high performers. We deal with large classes so it is practically impossible to give every learner individual attention. We need the high performers to give us more distinctions and best way to do this is to encourage learners to support one another. (**School FG**-Quintile 1)

Teachers use different strategies to encourage learners in their co-operative groups to learn from each other. They do the following:

- **Assign work to be done in co-operative groups** such as homework, revision of work done in class and practising past exam papers:

When I give homework I don't mind that [learners] sit together, discuss it and work on it as a group. In that way, you are giving learners the opportunity to help one another instead of copying from each other. Learners who might not have understood a concept in class, get another chance to understand it better when they listen how other learners explain it in different ways. I have learnt over the years that some learners don't do their homework at all. Some don't do it and come to school in the morning and copy it from their friends. This defeats the purpose of the doing homework but if you tell learners to do homework in groups and you assess learners' performance as a group and not as individuals, you are putting pressure on each individual learner to be accountable to the group. What better way to inculcate a sense of internal accountability among learners—making learners to hold each other accountable for their own success. (Teacher, **School LN**-Quintile 1)

> *When I give homework I don't mind that [learners] sit together, discuss it and work on it as a group. In that way, you are giving learners the opportunity to help one another instead of coping from each other.* (Teacher, **School LN**-Quintile 1)

I shy away from that term 'high achievers' in group work because I think it has a dependency connotation—that some learners are dependent on a learner who knows it all. In my groups, learners are simply mixed so that they work together and help one another without one learner feeling he is superior than others and others feeling they have nothing to offer in the group. (Teacher, **School GQ**-Quintile 2)

- **Give every member of the co-operative group opportunities to teach a skill or a concept** they understood better than others to their peers:

  Learners feel more relaxed, more comfortable, and at ease to ask any question to their peers. (Teacher, **School KZ**-Quintile 1)

  Each group gets a topic and we discuss it as a group in the hall. We stand in front and teach each other. (Learner, **School MK**-Quintile 1)

  We also work together as tutors. If I explain something and realise learners don't understand, I ask another tutor to explain differently. We work together as a team. (Learner, **School KF**-Quintile 4)

- **Give learners a problem-solving assignmen**t, an investigation or a project to be accomplished by a co-operative group (where each group member is assigned specific roles) and requiring it to produce a group product, solution or a consensus answer:

  After teaching a concept, I give learners a task to investigate further in their groups. I leave it to the groups to assign different roles when doing the task. I tell all groups that I will assign one group mark and so I don't expect excuses about who did what or who didn't to what. 'If you allow someone to let you down and get a low mark, well that's your problem,' I tell them. Do you think a group will allow one person to lower their mark? No. They apply pressure on each other. They hold each other accountable, while I am watching on the side. (Teacher, **School MJ**-Quintile 1)

- **Assign the same marks or points** for any piece of work completed by each member of the co-operative group;

- **Assign a task to a co-operative group** that must be done sequentially where one group member must first complete his or her task before the next task could be completed by another group member; and

- **Give learners in their co-operative groups past NSC exam papers** and require them to answer different questions as a group. (Preparing for the NSC exam is discussed in **Best Practice 6.5**)

INDIVIDUAL ACCOUNTABILITY

Individual accountability exists when the performance of each individual learner is assessed and the results are given back to the group and the individual in order to ascertain who needs more assistance, support, and encouragement in learning (Johnson, Johnson and Smith, 1991). In co-operative groups, each individual learner is held accountable for his or her academic performance and learning. Teachers hold individual learners in a co-operative group accountable for their performance by assessing learners and assigning a score for the whole group (a group average). The benefit for doing this is that:

No matter what you do as a teacher to motivate learners to work harder, many just don't care. It's worse when they have already failed a phase, they know that they will be progressed to the next class without any effort on their part. But if they know that they would be letting their group members down if they don't pull up their sleeves, pressure from the team members makes a big difference. (Teacher, School MI-Quintile 4)

Assertions from learners suggest stronger effects of individual accountability exerted by collaborative groups than that exerted by teachers. One learner reports as follows:

We motivate each other but we also put pressure on each other as learners to do well at school. We have futures to prepare for. The road does not end here. We have a life ahead of us that we must prepare for. (Learner, **School LE**-Quintile 4)

PROMOTIVE INTERACTION

Johnson, Johnson and Smith (1991) define promotive interaction as a set of characteristics in the task or learning activity that requires ongoing conversation, dialogue, exchange, and support. Teachers give learners skills to help them engage in challenging academic work and build learners' confidence and understanding of how they could take responsibility for their own academic success. Among other things, teachers encourage learners to promote each other's learning, thereby creating interpersonal dynamics among learners. Teachers encourage this because:

When learners work individually, they compete and excel as individuals. Often the competition is not a healthy one. It causes rivalry among learners but when learners understand that they don't have to compete in order to get good marks and see the value of supporting each other, they perform even better. Their fellow learners also perform well and so does the whole school. (Teacher, **School WG**-Quintile 5)

In their co-operative groups, learners report that they work together and promote each other's success by sharing resources and helping, supporting, encouraging, and applauding each other's efforts to learn and achieve. Learners also said they help each other to master a concept or a skill learnt in class. "Discussions allow us to bond while teaching one another." (Learner, **School LM**-quintile 2)

Another thing that helps us is that when there is no teacher in class, we choose a learner who is good in a subject to go in front and teach us a topic that most of us are struggling with. In other schools, if there is no teacher in class, all hell breaks loose. (Learner, **School GO**-Quintile 3)

Teachers assign each group different activities. Learners in their co-operative groups are expected to assist each other to complete a group activity because the final product would depend on contributions from all group members. A widely used group activity is asking learners to form individual responses to a question focused on a particular concept and to reach consensus on an answer as a team. Another common group task is asking teams to generate possible applications of a concept introduced in class.

> *Teachers assign each group different activities. Learners in their co-operative groups are expected to assist each other to complete a group activity because the final product would depend on contributions from all group members*

INTERPERSONAL SKILLS

Teachers build student ownership by promoting self-efficacy and scaffold learning of both academic and social behaviours to guide them in assuming ownership and responsibility for their own learning. Thus, when selecting mentors, some schools train them on, among other things, interpersonal skills. In addition to academic performance, other criteria that are considered for choosing a mentor include social and interpersonal skills. Teachers teach teamwork skills, how to provide effective leadership, decision-making, trust-building, communication, and conflict-management. Teachers feel this is important because, as one teacher observes:

You can throw learners into groups but if they don't know how to behave in their discussions, nothing will come out of those discussions. You will simply be wasting your and the learners' time. If you want to reap the benefits of learners working as teams, start by teaching them how to work in a team. (Teacher, **School KN-**Quintile 4)

A teacher in another school feels the same:

If you want learners to work effectively as teams, interpersonal skills are a prerequisite. Interpersonal skills are not confined to group work at school. These are life skills that learners will need in their lives. So, as teachers, we ought to teach them. Teaching teamwork skills is as important as teaching academic skills. (Teacher, **School FD**-Quintile 3)

The success of co-operative groups is attributed to learners' knowledge of procedures and skills for managing conflicts constructively.

GROUP PROCESSING

Group processing is careful analysis of how members are working together. Some schools assess how effectively learner groupings are functioning, achieving their goals and maintaining effective working relationships. Teachers use different approaches to accomplish this. In the present study, teachers:

- **Use the analysis of continuous assessment** (formal or informal) to evaluate how well individual learners in a co-operative group perform and whether a co-operative group has achieved its goals:

  One learner is a tutor for one term. After a term, we renew [the tutoring relationship] based on the performance. Every Friday learners write a test. We set a short test of about 15 marks on the topic they were working on just to see how learners perform. When learner performance improves, then we know that the tutor is successful. If a tutor is doing well, [he/she] continues to be a tutor. If there is no improvement, the tutor is dropped and we choose others to be tutors. (Teacher, **School KF**-Quintile 4)

- **Check randomly**, e.g. randomly calling on specific learners to give an explanation after talking about the question or problem in a group;

  I monitor what groups are doing. I don't wait until I give a test to see if there is improvement in learner performance. After a group has worked on a topic that was assigned to them, I call different learners at random and ask them few questions to see if they understand what they were discussing. (Teacher, **School EG**-Quintile 3)

- **Ask individual learners to demonstrate a skill** (e.g., to demonstrate competency with specific experimental skills in a laboratory) that a co-operative group was assigned to practise.

  You need to continuously assess whether peer support in groups is working; otherwise how do you know if these groups are making a difference or causing more damage. On what basis do you decide to let a group to continue working together or dismantle it because it is not paying any dividends? (Teacher, **School KK**-Quintile 4)

.

One of the most pressing challenges confronting good teachers on a daily basis in their classes is finding ways to keep learners engaged and interested in their lessons. Teachers often grapple with one pertinent question in their classes: Do I simply go through all of the topics to complete the syllabus but leave my learners confused, bored and unmotivated, or do I spend some time getting them excited about my lesson?

Having recognized that learners learn better when they find their classes more interesting and personally relevant, teachers in the high-performing schools in the present study make concerted efforts to ensure that instruction is engaging for learners and that its relevance and rigour is increased. Some schools in this study provide a range of approaches they use to make their lessons interesting and relevant to their learners. These approaches include making a subject meaningful;

> *Teachers in high-performing schools make concerted efforts to make instruction engaging for learners and increase its relevance and rigour*

starting a lesson with an interesting, real-life problem; starting a lesson with concrete examples; using technology to do the drudge work; and engaging learners in a lesson through creativity and ownership. Each approach is discussed further.

MAKING A SUBJECT MEANINGFUL

Often when learners cannot see the relevance of what they have to learn in their daily lives, in frustration they ask questions such as: "Why do we have to learn this?" "Why is this subject necessary anyway?" Many teachers usually use expressions such as, "It's in the exam," "Because the government says so;" or worse, "Because it's good for you" to respond to these reasonable questions. In contrast to this, teachers in the high-performing schools understand that many learners do not perform well not necessarily because they are not capable but because "they are not interested in the subject and are not motivated to succeed because they cannot find meaning in what they are learning at school." (Teacher, **School EH**-Quintile 3)

Teachers in this study have good responses beyond, "It's in the exam." In their efforts to make their subjects meaningful, teachers are pro-active in planning and preparing their lessons so that learners could see the relevance of what they were learning in every lesson. These teachers present their lessons in a manner that does not give learners reasons to ask, "But why do we have to learn this?"

Amongst other things, these teachers use highly engaging teaching techniques that their learners find more relevant and meaningful. These techniques include hands-on activities, cross-curricula linkages (subject integration) and individualized instruction that meet the needs of different types of learners. Teachers consistently use research to find out where and how learners would use or apply each topic they teach (particularly in more abstract subjects). For example, Mathematics teachers use actual examples from other subjects to show learners how mathematical concepts can be applied. That is, through subject integration, teachers show learners how a concept in Mathematics can find application when solving a problem in Physical Science, Geography, Economics, etc.

STARTING WITH CONCRETE EXAMPLES

Teachers describe how they start their lessons with concrete examples—leaving the abstract concepts for later. For example, a Mathematics teacher said instead of starting each topic with a formula, she would begin with concrete examples of the problems that can be solved using that concept in Mathematics. Then, she would help the learners see how the mathematical theory can help to solve such problems by showing them "the thinking behind the solution." (Teacher, **School KF**-Quintile 4)

Large parts of our country are rural. Finding practical and local examples in Physical Science, for example, that learners can identify with can be challenging for many teachers who teach in these areas. So, when teachers say "imagine….," learners often find it hard to imagine what teachers are talking about due to lack of concrete experience with that concept. In these circumstances, teachers in the current study first research their environment as part of lesson preparation before presenting a lesson to find out what is available within the reach of their learners

> *Teachers first research their environment as part of lesson preparation before presenting a lesson to find out what is available within the reach of their learners that they could use in class as concrete examples.*

that they could use in class as concrete examples. Teachers use alternative visual reminders, in the absence of any good local examples, such as diagrams, images and pictures from different sources as ways to connect concepts visually for learners:

Teachers make subjects more interesting by playing videos. This is done in Biology, Science, maths and languages. We find this [watching videos] helpful to understand and it makes it easier to remember. (Learner, **School LM**-Quintile 2)

USING INTERESTING, REAL-WORD PROBLEMS

Teachers in the current study also make attempts to motivate the learners to enjoy what they are learning by helping learners to make connections between the concepts they are learning in class and the "real world". They research to find out how the concepts they teach in class could be applied in the real world.

Relating class content to learners' lives is important to these teachers because they strongly believe that when they create a localized real-world connection to what students are learning, "it will give them a greater understanding of why they need to learn it" (Teacher, **School WJ**-Quintile 4). They feel they would lose credibility with their learners, when every time learners ask why they need to learn something, their [teachers'] response is always "because you have to" (Teacher, **School KW**-Quintile 2). Such a response, teachers argue, causes learners "to continue to not be interested in what they are learning."

Different subject teachers describe how in their lesson introduction they pique curiosity with a news clipping, photograph, a short video, a diagram, or perhaps a joke. They find that this trigger outlines an interesting problem in their local area so learners can relate to it better. Different teachers describe how they make the connection between what goes on in the classroom and in the real world as follows:

> *Teachers strongly believed that when they create a localized real-world connection to what students were learning, "it will give them a greater understanding of why they needed to learn it."* (Teacher, School **WJ**-Quintile 4)

- *I teach __Tourism__. The most important thing is to create passion for the subject among the learners. We do this in many ways. Amongst other things, we usually organise trips because Tourism is about travelling and creating memories as you travel. Through these trips, we want to motivate learners to develop passion towards this subject.* (Teacher, **School GO**-Quintile 3)

- *In __Accounting__, I try to keep it realistic. For example, we start by looking at what's happening in the economy, we talk about the JSE, we talk about share prices. Recently, there was this thing about King IV Code in the media. So I cut out the articles from the newspapers and I use them to connect to the concept I am teaching in class. I try to make the content as practical as possible, because it's easy to do that in Accounting.*

  We still have to deal with theory, which can be very cumbersome and boring but we always couple it with its practical application by watching topical 'YouTube' clips of companies when, for example, we are dealing with a topic on companies. Right now we are dealing with a topic on companies. To make this topic relevant and practical, we follow share prices of branded companies on the JSE. Every day over a two-week period, we collect newspaper clips and stick them here in class. We follow the fluctuating share prices and I ask learners to forecast which company will have the most profit and which one will make the biggest loss. A learner who makes the correct forecast, gets a prize. Doing this helps learners to know that what they are learning is not just written in the book but it's actually part of our daily life, it's news and it's all world around us. (Teacher, **School LC**-Quintile 4)

- *In __Economics__, I encourage learners to listen to the news and read newspapers. The first thing I do when I get to class is ask learners to tell me about the current affairs that are affecting our economy. We have a small session at the beginning of the lesson to talk about the current news. I say to them: 'Tell me what is affecting our economy. What is the rand value to the dollar? What caused a change in the rand-dollar exchange rate?' I use this to link what I am going to teach in class.* (Teacher, **School KJ**-Quintile 4)

- *In __Business Studies__, our teacher makes it easy for us to understand the subject. For example, in Business Studies, there is a chapter where we talk about strikes and industrial actions. The teacher uses examples of strike actions that we witness in our communities to show us how they affect our economy negatively. It is easy for us to understand the subject because our teacher shows us how what we learn in class relates to what is happening in the world in our own communities. The teacher also encourages us to keep buying the business-related magazines and newspapers.* (Learner, **School WL**-Quintile 3)

- *As a teacher, you need to make your subject alive. For instance, I teach __English__ and to make it more interesting I bring movies to help learners understand Shakespeare, like Macbeth, and other prescribed set works like 'Cry the Beloved Country.' I bring a movie for learners to watch and let learners act different roles. We do dramatization of the book. The book that we study now is a drama—'My children of Africa.' It is full of songs, so you are able to relive the moment, you dramatize the moment, they sing and they get motivated. They participate in the lesson and they understand better. This helps them enjoy their set works.* (Teacher, **School GM**-Quintile 4)

- *In our Department of **Physical Sciences**, we expose our learners to science experiments in the laboratory as early as in Grade 8 so they move across the grades with the love for the subject.* (Teacher, **School GM**-Quintile 4)

- *In **Mathematics**, before we start with a topic, I give learners a scenario in real life situation related to the topic that I am planning to present in class and then I direct them to the topic. Learners are able to understand what they are doing because Mathematics is life. It's not just to calculate and get the answer and say I have passed. For example, when we are doing geometry, it is all about finding angles. When I was giving statements and reasons why we are saying this angle equals to that, then one learner asked, "Why are we doing these things?" I gave that learner a very simple response that if in life you are unable to give a statement, and then reason, you cannot succeed. You cannot make a statement that you cannot reason about at the end.* (Teacher, **School LJ**-Quintile 3)

- *When I am in a class, I try to make sure that **History** is not all about the past. In Grade 12, I teach about the Berlin Wall, for example. I always encourage learners to watch the news. What's on the news these days is that the new President of the USA is talking about building a Mexican Wall. I say to them, 'You can see that history is repeating itself.' Connecting the past and the present makes History interesting because it's not just about learning about the dead men who died many years ago. Learners begin to appreciate and love the subject. In the end, they pass it in the exam.* (Teacher, **School GO**-Quintile 3)

- *In **Geography**, we have introduced excursions whereby we send learners out to feel, see and touch what they learn in class. I think that allowing learners to 'experience' Geography in real life is actually helping us.* (Teacher, **School KS**-Quintile 4)

- *In **Geography**, learners have to learn about weather abnormalities, natural disaster, cyclones, and tropical cyclones—and we had one recently. I showed them a video of how a tropical cyclone occurs. Seeing it and not hearing about it helps learners to understand a concept better.* (Teacher, **School KL**-Quintile 2)

Referring back to various real-world problems as the learners learn different concepts in class help them to come to an "a-ha" moment when they see all the pieces come together—the point where abstractions and theory in class find expression in real-life applications. There could be no "a-ha" moment when a lesson, for example, starts with "here's the new formula for today, here's how you plug in values, here's the correct answer." (Teacher, **School FC**-Quintile 3)

USING TECHNOLOGY TO DO THE DRUDGE WORK

While some schools in our sample have computer labs, how they use computers varied significantly. Without doubt, teachers said the use of technology enhances teaching and excites learners to enjoy what they are learning. In a few schools, teachers made every effort to make learners understand the concepts they teach in class before they referred them to technology to get another view on the concept. Teachers also guided learners how to use technology when confronted with different real problems. However, these teachers believe that technology, no matter how advanced, cannot replace good teaching. Instead, they saw technology as assistive devices that help learners understand concepts better but as one teacher observes "the best technology in the world in the hands of an incompetent teacher is useless." (Teacher, **School KV**-Quintile 2)

In the Life Sciences, English and other subjects, we have a 'DropBox' where we keep 'PowerPoint' presentations. We teach with 'PowerPoint' presentations and those 'PowerPoint' presentations get

loaded on to the 'DropBox'. After learners have written a test, we put the test and the memo in the 'DropBox' so that learners can have access to them. We also put old exam papers in the 'DropBox' so they can practice them at home. Few educators have given their email addresses to learners so that they [learners] can ask questions via email. The learners that do not have access to the Internet and the 'DropBox' are always welcome to bring CDs or a flash drive to school to load information. They get printed notes if they do not have computers. (Teacher, **School WH**-Quintile 4)

ENGAGING LEARNERS THROUGH CREATIVITY AND OWNERSHIP

Making a lesson interactive is what drives teachers in high-performing schools in the current study to move away from teaching practices that bore learners in class. These teachers have realised that a traditional classroom setting where the teacher is standing in the front of the classroom lecturing to learners as they sit passively listening—or worse, their minds wandering—was not working. "Learners switch off if you give a boring lecture," one teacher observes, "because they are not interested in what we are teaching them," he added (**School LK**-Quintile 2). Consequently, teachers make their lessons interactive by getting learners involved in the lessons to make them interested in the content that they needed to learn.

Teachers use different approaches to avoid talking *at* learners but encouraging their involvement. "Interactive lessons encourage creativity and generate a sense of ownership among learners. Learners are not passive recipients of knowledge but active participants in their own acquisition of such knowledge" one teacher (**School WI**-Quintile 4) points out. Teachers encouraged learners to use creative means to learn new concepts. A learner explains this cogently when he says:

Our teachers have a hands-on approach. So, instead of only teaching the theory straight from the book—like just spewing out words that we might not even understand—they are very good at making us see the real world application of what they teach. They link what they teach with what actually happens in real life. This makes it easy to remember and easy to understand. (Learner, **School KM**-Quintile 4)

Anything to do with technology, learners want to learn and they want to do more. We have to keep abreast of the latest developments in our subjects and use technology whenever it is possible. You can't be boring when you present your lesson in class because learners will sleep. You've got to keep them interested. (Teacher, **School KL**-Quintile 2)

In Accounting I think a big part of our success is the fact that we have all the technology that we need to be able to teach our subject effectively. You know children nowadays are very visual. They want to see things. Over a couple of years we've all developed a lot of 'PowerPoint' presentations for every single section of work that we do with the boys. Apart from the 'PowerPoint' presentations we used to introduce the stuff to them, we also have a 'muddle' programme, the 'muddle' App. We put subject matter on and boys can, at home when they're absent or they try to remember what was done in class, go back onto the power point and look at it again and study. I mean even at my age, where I did not grow with technology, I'm converted because it really opens up the world of Accounting to these boys and makes it so much easier. (Teacher, **School KA**-Quintile 5)

The children we have these days are technologically minded. I have also noted the Vodacom e-school is useful in Physical Science. Therefore, I have encouraged my learners in Grade 11 and 12 to make use of Vodacom because there are other instructors who can present better than I do. (Teacher, **School LH**-Quintile 3)

The results of the present study support the results of the study by Bouhnik and Deshen (2014) that WhatsApp can be an effective tool for mobile learning if properly managed. Schools using this tool in the present study reported similar social and academic benefits as noted in the Bouhnik and Deshen (2014) study, namely in-depth acquaintance with fellow students, the accessibility of learning materials, teacher availability, and the continuation of learning beyond class hours.

Schools in the present study have different reasons for using WhatsApp. However, the principal and common objective for creating WhatsApp groups is to create a safe milieu where learners and their teachers could extend learning beyond the classroom borders.

The main goals that motivated the creation of a WhatsApp group in our school sample are similar to those reported in the international literature (Chokri Barhoumi Taibah University, 2015; Bouhnik and Deshen, 2014). These goals or purposes are as follows:

- Communicating with learners to reach learners and extend in class teaching beyond the classroom walls
- Creating dialogue and encouraging sharing among learners
- Creating a secure learning platform for learners to access learning materials
- Enabling learners to learn any time and any place outside the classroom
- Nurturing the social atmosphere where learners share experiences and ask for advice.

These purposes are briefly discussed below:

COMMUNICATING WITH LEARNERS

Teacher participation: Teachers use WhatsApp to communicate with their learners for educational purposes. However, there are variations how teachers in different schools do this. There are variations with regard to the number of teachers who participate in WhatsApp groups, the nature of their participation and their level of participation. While in some schools almost all teachers in different departments have created WhatsApp groups to communicate with their learners, in others, communicating with learners through WhatsApp is limited to one or a handful of teachers. In some schools, other teachers were not even aware that their colleagues had created a WhatsApp group. They only learned about this during the focus group discussion with NEEDU researchers.

We have a WhatsApp group in Accounting. It involves every Accounting learner in Grade 12 and the teacher. Say, something is giving me a problem, I send it to the group and the teacher helps me to solve it. I think WhatsApp groups should be introduced in every subject because sometimes you are at home and you are confused and there is no one to help you. (Learner, **School ML**-Quintile 1)

Level of participation: There were also differences among schools in respect of teachers' level of participation in WhatsApp groups. Learner participation is either non-formal or more academic and formal. Learners express themselves in a non-formal manner particularly where teachers are quiet and passive observers in a WhatsApp group. Teachers who chose to be actively involved in a WhatsApp group as group managers do so because of a positive influence or effects they believe their participation has on learners. Positive effects of high teacher visibility, as teachers report, include a sense of security knowing that they have someone who they count on when they need help; learners treating one another with respect, exercising some restraints with regard to the improper use of language, and expressing themselves in relation to the content learned.

Sometimes, I take pictures of what I have done and send it to the group to share or check if I got it right. Sometimes other learners respond before the teacher responds. When the teacher responds later, he either confirms if what other learners have said is correct or he corrects us, if we got the wrong answers. He [the teacher] helps us with other things we don't understand. (Learner, **School KS**-Quintile 4)

While participation in some schools is haphazard, in others, teachers have a set of clear ground rules

> *Teachers provide prompt responses to learners' queries within the negotiated timeframes.*

that all group participants have to abide by to stay in the group. Amongst other things, ground rules include respecting teachers' private space and knowing when to send teachers a message and when to expect a response from a teacher. This relieves teachers from unreasonable learner demands and being swamped by too many learner messages. Teachers in some schools provide prompt responses to learners' queries within the negotiated timeframes. Some teachers report that they decide to mute the alert signal when learners sent a message outside the negotiated timeframes. In that way, teachers do not feel bothered or that the group is a burden.

We have a WhatsApp group for Accounting students where we discuss and share different things. We have a group admin that communicates with the teacher. If a learner has a problem he or she tells the admin to communicate with the teacher. This helps to minimise burdening the teacher with too many messages. (Learner, **School EF**-Quintile 3)

If there's a question that is challenging to learners, they are free to ask me [through WhatsApp] but I have arranged the times when it is okay for them to chat with me. 'I can be online by this time and I can't be online any other time because I'm a family man. I can't always be online,' I tell my learners. (Teacher, **School KS**-Quintile 4)
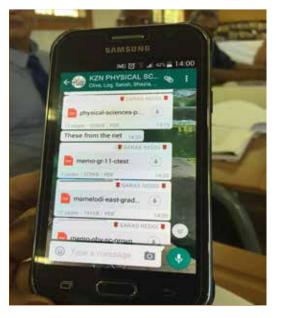
Nature of participation: The nature of teacher participation in the WhatsApp groups also varies in schools. Teachers within the same school and in different schools use WhatsApp for different reasons.

How teachers use WhatsApp to enhance teaching and learning
Source: School K0-Quintile 4

Schools that work use WhatsApp to:

- **Post assignments, homework and revision question papers** for learners;

- **Help learners with their queries** and questions which can potentially enhance the learning process;

- **Address learners' misconceptions** and correct their mistakes immediately;

- **Encourage and monitor learners quietly** and letting them provide peer-support, share information and help one another; and

- **Get to know learners better**--what bothers them, what helps them, what are the areas in which they excel, who responds aggressively and who is balanced.

No doubt, operating WhatsApp groups takes a lot of strength and determination as teachers invest time beyond their regular work hours. Active involvement by teachers in WhatsApp groups as group managers is another indication of teacher dedication and commitment, which is discussed in sufficient detail in **Best Practice 3.4**.

> *Learner participation in the WhatsApp group encourages even those learners who are lazy to study to participate in the group. They feel pressured to get involved.* (Teacher, **School KK**-Quintile 4)

If learners have a question like how to calculate a financial indicator, they would send a pic of the question to the WhatsApp group. Other learners would attempt the answer. I also get involved to guide learners as they engage in peer conversations and as they attempt to support one another.

Learner participation in the WhatsApp group encourages even those learners who are lazy to study to participate in the group. They feel pressured to get involved. (Teacher, **School KK**-Quintile 4)

I am English teacher. We started a WhatsApp group for English learners. In the group, learners ask questions, sometimes we post homework. (Teacher, **School FE**-Quintile 2)

CREATING DIALOGUE AND ENCOURAGING SHARING AMONG LEARNERS

In some schools, a WhatsApp group is initiated and is controlled by learners and only learners who are invited to the group could participate. Participation in the group is spontaneous and not directed by the teachers, it is non-formal and there are no rules of engagement. The use of WhatsApp is limited to one purpose, i.e. creating a dialogue between learners outside the classroom to work together to solve problems, share information, co-operate and work as a team, help each other, answer each other's questions, upload their work for the entire group to see and share their discoveries.

WhatsApp is one way learners use to work as a team and to support one another. See **Good practice 6.2D** for further discussion on learner peer-support.

WhatsApp gives us space as learners not to gossip or use our cell phones for the wrong reasons but to share and help each other when we are at home studying. When I get confused or stuck, I don't have to struggle in isolation because I have a support system to go to. (Learner, **School MJ**-Quintile 1)

CREATING A LEARNING PLATFORM

Teachers in different departments have different objectives for creating WhatsApp groups as a learning platform. While in some departments the WhatsApp groups are used as a learning platform to share knowledge to improve learning, exchange experiences and ideas, in others the emphasis is on providing a space where learners could access learning materials, information, content and support provided by teachers. Others see WhatsApp groups as an extension of in-class teaching after the normal school hours. Most schools in the present study discourage learners from bringing their cell phones to school. Learners could only use cell phones outside the school premises. In other schools, teachers use WhatsApp to target:

- shy learners who often say nothing in class even when they are confused,
- low-performing learners (including "progressed" learners) who need more support and encouragement, and/or
- lazy learners "who get guilty when they realise that other learners are working at home while they are loafing," as one teacher in **School LN**-Quintile 1 notes.

Describing how WhatsApp is used as a learning platform in Geography, one teacher said:

We have realised that these children like cell phones. We are capitalising on that because they like their cell phones more than books. In Geography, we've created a WhatsApp group where they can help or support each other with their school work at home because they are not allowed to bring cell phones at school. (Teacher, **School KS**-Quintile 4)

NURTURING THE SOCIAL ATMOSPHERE

For most teachers, the principal objective for creating a WhatsApp group is for no other reason but educational purposes. It turns out that for some learners, WhatsApp has become a pleasant environment and a community where they have a sense of belonging. This is where learners share their thoughts, "private world", successes, fears and frustrations. Because this deviates from the original objectives, some teachers do not know how to handle this information and what to do with it. Others find the exposure to the personal lives of their learners useful because it helps them to understand, as one teacher puts it "why learners exhibit certain attitudes and behaviours in class". He adds:

You think your job is to teach them algebra and what happens in their lives outside the school is none of your business, guess what, if their minds are pre-occupied with what happened at home last night, you can shout algebra all you want, but you'll be talking to yourself. I am better prepared in my lesson because I am fully aware of my learners' frame of mind when they get to class—all thanks to WhatsApp! (Teacher, **School FE**-Quintile 2)

Not only does WhatsApp contribute to the interpersonal relationship between teachers and learners, it also provides more learning time after school. Teaching and learning does not end when the school closes; it continues beyond the classroom's borders. However, one major challenge which undermines the effective use of WhatsApp as a learning tool is that not all learners possess a cell phone and/or could connect to the App.

> *Through WhatsApp, teaching and learning does not end when the school closes; it continues beyond the classroom borders.*

BEST PRACTICE 6.3—EFFECTIVE HOMEWORK: Schools use homework effectively to strengthen or re-inforce skills taught in class, advance classroom lessons and maximise positive outcomes

Schools that work use a "community approach," characterised by a working environment where teachers, parents, and students work together as partners, to ensure that homework assignments maximise positive outcomes. In this approach, teachers design effective homework, assist learners to self-regulate and take responsibility for their work, and empower parents to support their children at home. Explaining why homework is important, one teacher notes:

In class, you only have 45 minutes or 90 minutes, if you have a double period, to present your lesson. This is not nearly enough to give learners opportunities to master a concept presented in class. As teachers, we have to extend learning time beyond the classroom to re-inforce what was done in class and to give learners more opportunities to practise what they learned in class but not all learners are motivated to work in class, let alone at home. In fact, most of them hate homework. So, you need to find effective ways to make learners see the importance of doing homework and don't see it as a burdensome task or some form of punishment." (**School EH**-Quintile 2)

Discussed next are research-tested strategies that teachers, learners and parents in this study, working as a formidable trio, use to improve the utilization of homework.

TEACHER STRATEGIES

Teachers use a wide range of strategies to make homework effective, more meaningful and to maximize positive outcomes. Summarised below are strategies that teachers in this study commonly use:

- **Assign work that learners already know.** Teachers give homework to re-inforce skills or concepts taught in class and advance classroom and not to deal with topics that have not been taught. They make sure that learners understand the concepts and possess the skills needed to complete homework assignments by themselves without expecting parents to become teachers at home. Homework is used to provide teachers with feedback about how successful their lessons were to ensure learners understand concepts taught in class:

  You cannot expect parents to get from work and teach at home. Teaching is our job (Teacher, **Schools KV**-Quintile 2)

- **Review homework before learners go home**. Teachers spend time before learners go home clarifying what learners are expected to do at home "so that they don't get home and start troubling their parents because they are confused." (Teacher, **School KT**-Quintile 3)

- **Create homework that applies skills taught in the classroom to real-life situations**. Where possible, teachers re-inforce skills or concepts and adds relevance to classroom lessons by asking learners to do research by reading newspaper, magazine, or internet articles:

  Where it is possible, we give learners homework, which encourages them not to regurgitate what they have learnt in class but to apply it. (Teacher, **School FG**-Quintile 1)

- **Differentiate homework—no one-size-fits-all**: Teachers use a variety of ways to differentiate and scaffold homework so that it is pitched at the appropriate level of difficulty for individual learners to ensure success (differentiating teaching is discussed **in Good Practice 6.2C**):

  When learners get here in Grades 8 and 9, many of them are way behind, especially in Mathematics. They are at different levels. The homework that is given to learners is differentiated quite

dramatically. Our aim is that by time they get to Grade 10, they are all on the same page. (Teacher, **School KO**-Quintile 4)

- **Accommodate learners with disadvantaged background***:* Teachers take into consideration factors that make it difficult for economically disadvantaged learners to complete homework because of inequities in their home environments, e.g., lack of parental supervision for a variety of reasons. Aware of these inequities, teachers provide after-school homework support for learners in the under-served communities "because when they get home, they don't have time and space to do work," one teacher reports. (Teacher, **School MK**-Quintile 1)

  Many learners don't write homework. They copy from each other. Maybe in a class of 40, you will find that only two did it and the rest copied. Many learners, especially those from poor backgrounds have legitimate reasons for not doing homework. You can't fault them. In our school we don't give homework. They do the work here at school. (Principal, School GR-Quintile 4)

- **Hold learners accountable for completing homework and provide immediate feedback**: Teachers create and enforce rules for completing homework, design and administer the consequences of missed homework. The consequences of not completing homework are communicated to learners and parents clearly. Learners are given prompt feedback after homework is marked and discussed in class before the start of a new lesson.

  We give learners homework almost every day and we check up if they do it. There are consequences if homework is not done. These [consequences] are clearly communicated to parents and learners at the beginning of the year and are included in the learners' code of conduct. Before we start a lesson, the school rule says 'start by reflecting on or making corrections on homework given.' You can't give homework and not give immediate feedback to learners. (Teacher, **School MI**-Quintile 4)

- **Co-ordinate homework given to learners** so that teachers in different departments do not all give homework on the same day:

  We have a homework timetable to avoid a situation where any teacher gives homework as he or she pleases and we end up overloading learners with too much homework. There are subjects where learners don't get a lot of homework, like Economics but for subjects like Mathematics and languages, homework must be given more regularly, if not daily. (Teacher, **School KH**-Quintile 4)

LEARNER SELF-REGULATING STRATEGIES

Teachers in this study feel they do everything they can in class to teach "but there is a point where learners must also take responsibility for their own learning" (Teacher, **School KJ**-Quintile 4):

We teach in class, that's our job but we can't always hold learners' hand, we cannot study for them nor can we do homework for them. That's their responsibility and they must take it seriously. Some learners just don't know how to organise themselves and get down to business of working at home. This is where we come in as teachers. We need to show them that it pays to delay gratification in favour of academic success." (Teacher, **School WL**-Quintile 1)

To encourage learners to take responsibility for their own learning, teachers use different approaches including:

- **Teaching learners self-regulatory skills** they need to help them do work at home such as how to set-up a suitable work environment, manage time, handle distraction, and control negative emotions.

Next year, Grade 12 learners will be attending institutions of higher learning. Will teachers or parents be there to tell them to do their work? For the first time in their lives, they will have to exercise self-control and discipline. They have to start now working independently and taking charge of their own learning. (Teacher, **School GN**-Quintile 3)

- **Asking learners to share their work with their peers in the classroom**. To save time and to encourage learners to take responsibility for their work, some teachers ask learners to share and discuss their homework, including any difficulties they experienced and approaches they used when completing homework, in their peer co-operative groups. The use of co-operative groups is discussed in **Good Practice 6.2D:**

We started a homework club a few years ago and it caters for different subjects. It takes two hours after school. Sometimes teachers help learners, but most of the time learners help each other. There is no need for them to do homework at home because it is done at school. (Teacher, **School KN**-Quintile 4)

When I give homework I don't mind that [learners] sit together, discuss it and work on it as a group. In that way, you are giving learners the opportunity to help one another instead of coping from each other. Learners who might not have understood a concept in class, get another chance to understand it better when they listen how other learners explain it in different ways. I have learnt over the years that some learners don't do their homework at all. Some don't do it and come to school in the morning and copy it from their friends. This defeats the purpose of the doing homework but if you tell learners to do homework in groups and you assess learners' performance as a group and not as individuals, you are putting pressure on each individual learner to be accountable to the group. What better way to inculcate a sense of internal accountability among learners—making learners to hold each other accountable for their own success. (Teacher, **School LN**-Quintile 1)

PARENT STRATEGIES

Taking into account varying exceptionalities in learners' homes, teachers provide opportunities for positive parent involvement:

'Parents are a very important component in educating children. When learners come back to school having not done their homework, half the time, parents have not bothered to check if homework was assigned and if it has been done or they [parents] simply don't know how to support them [their children]. We reign supreme in class and parents must reign supreme at home.'(Teacher, **School LH**-Quintile 3)

Schools that work use highly effective strategies to encourage parents and to keep them committed to serving in a supporting role in the education of their children. Parents are not expected to play the role of a teacher at home but teachers empower them at the beginning of the school year on how best to assist their children with their homework. Empowering parents includes providing some guidance to enable them to:

- **Understand the purpose of homework** so that they could understand why it is important that learners should complete homework at home;
- **Create a home environment** that is conducive to learning. This includes giving parents suggestions how to set a specific time and provide a distraction-free environment where learners can complete their homework and study; and
- **Know how to monitor and what to check** if homework is completed without being experts in the subject area.

Teachers use different means such as school newsletters and parent–teacher meetings to convey these suggestions.

Teachers described how they use the assessment loop as a routine teaching process in their work to help learners know what to do to move from their current position to the final learning goal.

While encouraging teachers to use different forms of assessment to enhance learning and teaching appears counterproductive considering the most frequently heard complaint across the educational landscape that learners are over-tested, Reeves (2003) cogently argues that "many students are over-tested; but they are under-assessed."

> *It's only natural that you first establish a baseline, then you continuously assess if all learners understand what you teach, provide immediate feedback after writing tests. Therefore, there are no surprises in the final exams.* (Teacher, **School LN**-Quintile 1)

Teachers in the present study use different phases of the **assessment loop** effectively to improve learning and teaching. The **assessment loop** can be expressed as follows:

PHASE 1 DIAGNOSTIC ASSESSMENT to assess learners' prior knowledge → PHASE 2 FORMATIVE ASSESSMENT to monitor learner progress during the learning process → PHASE 3 ANALYSIS OF RESULTS to identify areas of underperformance and decide on actions to take → PHASE 4. FEEDBACK TO LEARNERS that is prompt, specific and frequent → PHASE 5 TAKING ACTION to respond to assessment results and retesting to assess the impact of the intervention →. PHASE 6 SUMMATIVE ASSESSMENT to assess what learners have learned at the conclusion of a learning programme

Many schools continue to rely upon the idiosyncratic assessment practices of individual teachers. In contrast, schools in the current study develop common assessment practices. They re-inforce those common practices using quality and well-developed assessment items to determine whether or not learners have learned the content taught.

Teachers in all content areas use a wide range of research-based and empirically tested assessment practices to advance learning and teaching.

Classroom assessment practices that teachers use to provide the kind of specific, personalized, and timely information needed to guide both learning and teaching are consistent with those reported in research findings. They are discussed below.

EFFECTIVE USE OF DIFFERENT FORMS OF ASSESSMENT

Teachers use three forms assessment (diagnostic, summative and formative) to serve different purposes.

SUMMATIVE ASSESSMENT

Data gained from ***summative assessment*** (sometimes referred to as ***assessment of learning***) is used to assign marks, summarise learning and used as a baseline to set future goals. However, teachers understand that summative assessments are insufficient tools for maximizing learning "because by the time learners and their parents get to know how well learners have learned, the assessment results are ancient history in their eyes" (Teacher, **School KK**-Quintile 4). It is for this reason that

> *Diagnostic & formative assessments are "fuel for the teaching and learning engine [which] offer descriptive feedback along the way."* (McTighe and O'Connor 2005: 11)

teachers use two other classroom assessment forms—diagnostic and formative—to provide, what McTighe and O'Connor (2005: 11) call, the "fuel for the teaching and learning engine [which] offer descriptive feedback along the way."

DIAGNOSTIC ASSESSMENT

Teachers use **diagnostic assessments** (also called **pre-assessments**) to pre-test learners' prior content knowledge for different objectives. Armed with diagnostic information, teachers said that they are able to:

- **Gain insight into learners' prior knowledge**, before delivering a lesson, including such things as skill gaps, skill levels, learners' misconceptions, abilities, strengths and weaknesses:

In the case of Mathematics, I am unable to continue teaching Grade 10 syllabus if learners don't have the required pre-knowledge. Before I start teaching Grade 10, I test learners to find out the pre-knowledge. I give a diagnostic test. This helps me to detect those learners who need support before I can teach them Grade 10 material.(Teacher, **School LC**-Quintile 4)

We are one of the schools where, each and every year, on the first day of the school opening, learners write a pre-test. This is a diagnostic test. We give them a pre-test so that teachers know the type of learners they are getting in maths, the type of learners they will be teaching. We analyse the pre-test results and then we know exactly which learners need extra classes to close the content gap. (Teacher, **School MI**-Quintile 4)

- **Establish a baseline** to which future learning can be compared:

When we establish a baseline in each subject, we are able to set a starting point. As we do weekly, monthly and quarterly assessments, we are able to measure the progress learners are making against the baseline. Otherwise, without a baseline score, you have nothing to measure progress against. (HOD, **School MM**-Quintile 1)

- **Assist lesson planning** in terms of knowing how to pitch the lessons and guiding differentiated instruction:

What I like the most about diagnostic assessment is that it tells me at which level each of my learners is operating.. It tells me that this group of learners has this content deficit in this subject and in this topic. This information is valuable because I am able to say 'for this group of learners, I need to give them extra classes to close the content gap otherwise they will not be able to handle the curriculum for this grade.' (HOD, **School LM**-Quintile 2)

FORMATIVE ASSESSMENT

The beneficial outcomes of **formative assessment**, otherwise known as **assessment for learning**, which have been highly touted by researchers and educators alike, are prevalent in top performing schools in our sample. Used as a teaching practice focused on continual checks for learner understanding, teachers report that they use both formal and informal formative assessments methods regularly to:

- **Provide teachers and learners with specific feedback** on learning progress for the purpose of guiding teaching to improve learning:

What we do is that every small piece of work that we teach, we assess. We mark learners' work ourselves and give feedback to learners immediately. We do this in all grades, not just in Grade 12. The analysis of the results points us to learners who are not achieving the set targets and the topics that they are struggling with. (Teacher, **School LD**-Quintile 4)

- **Gain more information about learner proficiency** to adjust or modify their teaching and maintain or remediate the learning process on a continual basis with a view to helping learners realise their full potential in the classroom:

For me, when after analysing the test results I find that some learners did not do well, it says to me 'learners have not grasped what you taught.' So, I must go back to the drawing board and reteach that concept but I cannot teach it again the same way I taught it last time because that strategy obviously did not work for some learners, hence they did not grasp the concept. I have to try other approaches. Better still, I approach other teachers in the school or other schools and find out what strategies for teaching this specific concept has worked for them. (Teacher, **School KU**-Quintile 2)

> *If learners are given multiple opportunities to improve, they are not discouraged by bad results in one test but they respect and welcome teachers' feedback because they have another chance to do better* (Teacher, **School KT**-Quintile 3)

The frequency of monitoring learner progress ranged from monthly to weekly formative assessments among schools. Variations also existed among different subjects within the same schools. It is important to note that a common practice among most schools is that these assessments are not constructed by teachers. Teachers prefer to draw questions from the NSC past papers. (See **Best Practice 6.5** for more details about how and why teachers chose this approach). One beneficial outcome of regular formative assessment that is widely touted in many schools resonates well with Reeves' (2003) findings that the consequence of learners performing badly is not an admonishment to "wait until next year" but rather the promise that "you can do better next week."

We conduct weekly tests. Maths and Science teachers insist that learners must write a test on a weekly basis. It is one of the strategies, which helps to monitor learner progress on a regular basis. We can't wait until the end of the month or end of the term to check how learners are progressing. That would be too late to take the necessary corrective action. (Teacher, **School ML**-Quintile 1)

ANALYSIS OF ASSESSMENT RESULTS

Teachers describe the analysis of assessment results as an important phase of the assessment loop. The next step that teachers take after administering an assessment is the analysis of results to inform actions: "whether to proceed and teach the next concept or re-teach the concept if most learners did not perform well," (Teacher, **School EF**-Quintile 3). In this phase, schools do four interrelated activities: Analyse assessment results, identify teachers and learners who are having problems with particular topics, identify topics or concepts which are commonly found to be challenging, and discuss results and actions to take.

To derive meaning from assessment results teachers dig deeper into their results than just calculating average percentages per class and presenting the spread of performance in terms of the proportions of learners who achieved specific levels of performance. These teachers conduct item and error analysis to:

- **Track questions** where learners are performing well and badly
- **Identify topics** which are commonly found to be challenging:

After giving a test, we analyse the results immediately. One of the things that we look for in the analysis of the results are questions that many learners did not get right. Identifying those questions leads us to the concepts or topics those questions were assessing so that we can reteach them. (Teacher, **School LF**-Quintile 3)

- **Identify teachers and learners who are having problems with particular topics:**

The analysis of results tells us not only learners who underperform but also teachers whose classes underperform. Where learners perform badly, we find different strategies to teach them again. As for teachers whose classes underperform, they get supported by exposing themselves to other teaching strategies or by empowering them with regard to content knowledge. (Principal, **School LI**-Quintile 4)

> *The analysis of results tells us not only learners who underperform but also teachers whose classes underperform.* (Teacher, **School LI**-Quintile 4)

- **Establish the nature and extent of the common errors** and misconceptions made by learners in the questions where poor performance is noted:

We have this system in our school where we let certain learners sit in the staffroom and mark [test scripts]. We give them a memorandum. We want them to see the mistakes they make in the test not to hear from us telling them. When they mark, they quickly say, 'Oh, this is the kind of mistakes that we make'. (Teacher, **School LN**-Quintile 2)

- **Identify causes of errors**:
Once we identify errors that learners make when answering a question, the next step is to have a conversation as teachers to establish the possible causes of these errors—whether it's sheer carelessness among learners or misconceptions. You can't deal with the errors unless you know the cause. (Teacher, **School KO**-Quintile 4)

- **Establish the basic concepts, skills and content areas** that would help learners to correctly answer the questions in which they made common errors:

Sometimes we find that learners make errors because they lack the prior-knowledge that was required to answer the question. We then have to address it. (Teacher, **School GN**-Quintile 3)

Analysing assessment data in this way, stands out in striking contrast to many of the teachers in the typical performing schools who conduct assessment only to comply with the prescribed assessment requirements. Unlike schools which blame the learners, government, lack of parental involvement, or something else, but not themselves, when their learners perform poorly, teachers in the high-performing schools take some responsibility for their learners' performance. Expressing views held by many teachers in these schools, one teacher said:

When learners perform badly, it's a bad reflection on both the learner and the teacher. It's not always about the learner. It may be that I did not teach the concept well or that there is no match between my teaching technique and some of the learners' learning styles or that I am not comfortable teaching a particular concept. If learners in another teacher's class performed well but not in my class, then it's obvious—the problem is with me. (Teacher, **School GN**-Quintile 3)

> *If learners in another teacher's class performed well but not in my class, then it's obvious—the problem is with me.* (Teacher, **School GN**-Quintile 3)

Discussing assessment results among teachers is another good practice that distinguish top performing schools from typical-performing or low-performing schools. In the former, assessment results are discussed among teachers in department meetings to determine further meaning behind the results and what actions to take. Discussing results among teachers is only natural in some schools given that, as one teacher notes, "we do team-teaching and so we are 'team-assessing'" (Teacher, **School KF**-Quintile 4). Team-teaching is discussed in **Good Practice 6.2A.** However, in typical or low performing schools, learner assessment is an idiosyncratic activity between a teacher and his or her class,

FREQUENT AND REAL TIME FEEDBACK TO LEARNERS

Analysing assessment results is not the end in the top-performing schools. Teachers give feedback to learners based on the careful analysis of formative assessment results. There is consistency in research findings about criteria that must be met if formative assessment feedback given to learners has to enhance learning. Feedback practices in the top-performing schools measure up in that feedback given to learners meet at least three of the empirically-tested criteria namely, that it must be **frequent** or regular, **prompt** or timely, and **specific** or understandable to the learner.

- Firstly, the schools with good results provide significantly more **frequent** feedback to learners than is typically the case with quarterly reports. "We provide feedback on a weekly basis. This is beneficial on two fronts: One, it keeps learners on their toes—no time to sit on your laurels. Two, it says to learners 'Don't be discouraged if you got it wrong this time, you'll have another chance very soon to do better." (Teacher, **School LH**-Quintile 3)

- Secondly, teachers provide feedback, either positive or negative, **promptly** designed to improve learners' performance by identifying any gaps between a desired learning goal and the learner's present status towards that learning goal. "Making learners wait for weeks before they find out how they did in a test will not help them identify their weak points in time to do something about it." (Teacher, **School EG**-Quintile 3).

- Thirdly, schools comply with the '**specificity test**.' McTighe and O'Connor (2005) argue that pinning a symbol (B-) or a number (82%) on a student's work is no more helpful than such comments as "nice job" or "you can do better." Contrast this to the best practice in top performing schools in the present study, in which teachers provide feedback that helps learners understand both their strengths and the areas in which they can improve. NEEDU researchers heard many examples of feedback from different schools, which met the '**specificity test**.' Following is one such example:

So we literally give them back the exam and go through every single item," asking students why they answered the way they did and then explaining why they got it wrong. [**School KF**-Quintile 4]

What I love about our teachers is that we don't just write a test and not get our results back. We get to know immediately how we performed, where we got it wrong, and where to improve. (Learner, **School LH**-Quintile 3)

In other schools, complying with the '**specificity test'** means reporting progress against set goals and targets. One school has set a "goal line" for every learner. Goal line is the line between where the learner is in relation to where he or she should be in terms of the set goals and targets. Depicting a learner's performance to indicate whether it falls significantly above or below the goal line provides useful feedback about the rate of progress a learner is making to reach the set goal from the current baseline or the lack of progress.

Taking actions based on the results of assessment is identified in literature as the final step in assessment, hence this phase of the assessment loop is sometimes called "closing the loop." Top performing schools in the current study identify gaps between a desired learning goal and the learners' present status towards that learning goal. These schools respond to the analysis of formative assessment results by holding everybody accountable for learner performance, taking actions to improve teaching methodologies, and empowering learners to take responsibility for their education. These post-learner assessment actions are discussed below.

- **Holding everybody accountable for learner performance:**

  Driven by the analysis of assessment data, the top performing schools hold everybody accountable for learner performance. Teachers take actions to modify their teaching practices and learners are challenged to take ownership of their own learning and parents are expected to play their role at home.

  Schools hold a view that learning (including learner performance) is a shared responsibility among teachers, learners and their parents. Different mechanisms are used to hold the trio accountable for learner performance. Echoing the sentiments of teachers in most schools, teachers quoted below describe how this is done in their schools.

  ✓ **Holding teachers accountable:**

  After every assessment, there are accounting sessions where teachers are required to account for the quality of the results. Every teacher has to account why the performance has dropped or why learners have not reached school and/or individual learner targets that have been set. (Teacher, **School GN**-Quintile 3)

  We discuss the results after every monthly assessment. As the staff, we review how learners have performed, if they have met the set targets. We look at the trends. We compare learner performance for individual learners, across different classes, and in different grades. We ask a lot of questions: Why did the performance for this learner drop? Why has the average mark dropped in this subject as compared to other subjects? Why does this group of learners consistently underperform? Why do learners taught by this teacher perform badly in this subject when learners taught by another teacher in the same subject do well? The answers to these questions give us good insight in terms of what actions to take. (Teacher, **School LK**-Quintile 2)

  > *After every assessment, there are accounting sessions where teachers are required to account for the quality of the results.* (Teacher, **School GN**-Quintile 3).

  ✓ **Holding learners accountable:**

  When we issue our report cards we invite parents, we sit down with them (together with their children) and say 'Look, this is how your child has performed.' We call parents whose children have performed badly. So, learners work very hard to avoid being called to account why they performed badly in front of their parents. (Teacher, **School GN**-Quintile 3)

✓ **Holding parents accountable:**

Parents are also held accountable for their children's level of attainment because they also have a very important role to play. They must make sure that their children attend school regularly, they [learners] are at school on time every day, they do their homework at home, proper environment is provided at home for learners to do their work. If parents are found wanting on any of these issues, they are taken to task during the accounting sessions. A parent cannot expect her child to do well at school if he [the learner] is absent from school or arrives late most of the time. (Teacher, **School KV**-Quintile 2)

✓ **Holding all parties accountable:**

One school, **School LN**-Quintile 1, described how different role players are held accountable for improved learner academic achievement as follows:

*We have one accountability session for teachers, learners and parents. We have a session for one grade at a time. In one sitting, we call a teacher, a learner and a parent. One SMT member, including the Principal, must also be present. The process starts by reviewing the school targets for different subjects and the learner's own targets for different subjects. We ask the question: Has the learner achieved both the school and his personal targets in all subjects? [See how schools set targets in **Best Practice 2.2**]. If the answer is 'yes', the learner, the teacher and the parent are congratulated by the SMT member for the work well-done because it takes all three to produce good results. If the answer to the question is 'no,' we ask a string of questions: Why did the learner perform badly in this subject and not in that? Why did he drop in this subject compared to his last performance? The learner, the teacher, the parent and the member of the SMT must each respond to these questions.*

We then look for possible explanations in the evidence about each learner, teacher, parent and SMT member that we keep at the school. This evidence is prepared ahead of time and is brought to the accounting session:

o *About the learner:*

> *We look at*
>
> ➢ *his/her attendance and tardiness record*
> ➢ *whether she/he 'bunks' classes (plays truant)*
> ➢ *her/his conduct in class and at school*
> ➢ *whether she/he attends extra classes as required*
> ➢ *whether she/he does her /his class work and homework*
>
> *If the record shows that she, for example, bunks classes and she does not do her homework, then we put it to her that she is contributing to her lack of success. The* **recommended action** *for her is that she has to improve on these two things next time.*

o **About the parent:**

> We show him [the parent] the number of times he has been informed by the school that his child:
>
> ➢ is absent from schools
> ➢ arrives late in the morning
> ➢ bunks
> ➢ misbehaves in class and at school
> ➢ does not attend extra classes as required
> ➢ does not do his class work and homework
>
> We then put to him [the parent] that his failure to respond when the school notifies him about these issues and his failure to work with the school to address them have contributed to his child not doing well. The **recommended action** for the parent is to take the necessary actions immediately when the school alerts him about things that would results in his child not achieving the set targets.

o **About the teacher:**

> We present evidence about:
>
> ➢ the number of occasions when he or she came late to class
> ➢ the number of occasions he or she missed a period (for whatever reason)
> ➢ the number of occasions he or she arrived late at school in the morning
>
> We then put to him that there is no way learners would learn if he continues to miss his periods or whatever the case may be. The **recommended action** is that the teacher must improve on these indicators. He or she must make-up for the lost time and this must be documented.

o **For the SMT member:**

> We present evidence about what he did when he realised that the parent was not responding to the communique from the schools, and when the teacher was not honouring her periods. If he sat with this information and did nothing with it, then we put it to him that he contributed to the learner's poor performance.

At the end of it all, everybody is held accountable. We all don't like accountability sessions because we all have to account in front all four stakeholders [the learner, the parent, the teacher and the SMT member]. We all have to sit on that hot seat. Imagine when you have to account in front of the learner for not doing your work. Who wants that? So, to avoid making yourself look bad, you make sure that you cross all your t's and dot all your i's. (Principal, **School LN**-Quintile 1)

A common thread in all accounting sessions referred to in the quotes above is that formative assessments are conducted regularly to track progress in learner performance against two very important yardsticks—the baseline and learner performance target. The latter was discussed above. As already mentioned, high-performing

> *Formative assessments are conducted regularly to track progress in learner performance against two very important yardsticks—the baseline and learner performance target.*

schools use formative assessment data to measure against a **baseline** to which future learning can be compared.

Following is an example how schools use baseline to track progress in learner performance against the baseline:

Establishing the baseline is very important. If you don't know your starting point, how would you know if you are making progress? It is therefore important that you know the starting point, which is your baseline and the end point— where you intend to go, which is your target. It is only then that you will be able to track progress over time by comparing how a learner has performed in this assessment in relation to where we started [the baseline] and where we intend to be [the target]. (Principal, **School KV**-Quintile 2)

> *It doesn't work if teachers are the only ones who must monitor learner performance. We make sure that learners also take some responsibility for and ownership of their learning goals.* (Teacher, **School LN**, Quintile 1)

Teachers, learners and parents also monitor progress learners are making against learners' individual performance targets. Teachers encourage learners not only to set individual goals but also to set performance targets. This is done for three main reasons:

✓ To help them (learners) decide what they want to achieve, not only at school but also in preparation for their post-school careers

✓ To encourage learners to assess their current position in relation to set goals and targets

✓ To equip learners with the tools to bridge the gap between their current performance (in any given assessment) in relation to set goals and set targets

Teachers provide *frequent*, *prompt* and *specific* formative assessment feedback to learners to enable them to monitor and analyse progress made toward attaining their goals and targets. Different schools describe how this is done as follows:

Students track and analyse their own test results, creating bar graphs to show whether their scores are rising or falling. (Teacher, **School GN**-Quintile 3)

When there are multiple distractors, identifying and setting valuable personal and academic goals can direct learners' attention to important activities that will help in achieving their goals. (Teacher, **School KV**-Quintile 2)

- **Actions taken by teachers:**

Following their discussion of the formative assessment results, teachers make continual adjustments on the part of both teacher and student as the means to achieve maximum performance. Teachers make the following adjustments:

✓ **Engage in professional development programmes to empower themselves** to address deficiencies revealed by formative assessment data;

✓ **Adapt aspects of teaching** or revising methodologies in the classroom to improve learning with a view to meeting learners' needs;

- ✓ **Use team-teaching for specific skills that learners find challenging** in formative assessments in order to ensure academic growth (team teaching is discussed at length in **Good Practice 6.2A**);

- ✓ **Re-teach 'problematic' topics** or provide extra classes (see **Good Practice 6.1** for detail);

- ✓ **Differentiate instruction to address learners' diverse learning needs—**paying more attention to struggling learners (differentiated teaching is discussed in **Good Practice 6.2C**);

- • **Learners taking ownership of their education:**

  Teachers provide formative assessment feedback to move learning forward (by closing the gap between the baseline or individual performance targets and formative assessment results) and create a structure for learners to act on the feedback provided.

  In their own words, learners describe how they take responsibility for and ownership of their own academic achievement:

  Teachers provide quick feedback after writing a test. They show us how we answered each question and how it should have been answered. We discuss the results to figure out whether it's a question of having misunderstood what was required in the question, or it's a question of not answering the question properly, or it's a question of not knowing the answer because we did not study or we did understand the teacher when he or she was teaching. If the reason for doing badly is that we did not study, then the fault falls squarely on us as learners. Teachers cannot study for us. In our school, as members of RCL, we always remind our fellow learners that we have exceptionally good teachers in our school, who are dedicated, and bend over backwards and forwards to make us excel but we will not get good results based on good teaching only. After good teaching, the rest is up to us. Teachers can teach well but they cannot study for us. (Learner, **School KJ**-Quintile 4)

  Learners in this study described what it means to have a sense of ownership and responsibility for their learning. In order to take ownership and responsibility for their learning they:

- ✓ **Exhibit appropriate behaviours** such as coming to class prepared, completing assignments and homework well and on time, and seeking additional help when they are struggling (e.g. attending extra classes).

- ✓ **Engage actively in class activities**, asking questions when they are confused, studying, monitoring their own progress in meeting school and their own academic performance targets, and using kids-teach-kids (peer-support) programme to master material with which they struggle.

- ✓ **Demonstrate life skills** such as initiative, self-direction, and accountability.

As Langer (2001) found in her study, data in the present study also suggests that teachers use both *integrated* and *separated* approaches to prepare learners for the NSC exams. In many schools, teachers use an integrated approach, which means that exam preparation is integrated into the ongoing class teaching throughout the year, as part of the curriculum. In majority of schools, exam preparation is allocated its own space in class time, often before exams start, apart from the rest of the year's work. Langer (2001) calls this the "separated approach". In schools where teachers follow the separated approach, exam preparation mostly starts after teachers have completed the syllabus—between May and September. Few schools use a combination of both approaches, either with a slant towards separated approach or towards an integrated approach.

When we have completed the syllabus we start working on the past papers. (Teacher, **School GL**-Quintile 4)

Schools following the separated approach tend to be data-driven in that they are driven by what results would look like in the NSC examinations. For this reason, teachers focus a lot of energy on teaching a strand that is heavily emphasized in the exam. In data-informed schools, on the other hand, the primary focus is the infusion of the exam preparation into the curriculum throughout the year (an integrated approach).

Extensive research-based exam preparation practices can be grouped into four categories: teaching the content domain, providing practice tests, giving timed tests, and preparing learners to deal with test anxiety. The extent to which high-performing schools in this study prepared learners for the exams is consistent with effective means of exam preparation reported in the literature. How schools in the present study used each of these research-based exam preparation practices is discussed below.

TEACHING THE CONTENT DOMAIN

Although there is pressure on schools to engage in extensive exam preparation to prepare learners for the NSC examinations, most schools in this study adequately and appropriately prepare learners for the NSC examinations without detracting from real learning and without emphasising the objectives from the content domain that are sampled in the NSC examinations or "teaching to the test." These schools focus on learning rather than just raising exam scores. They do this because, as one school notes:

> *Schools adequately and appropriately prepare learners for the NSC examinations without detracting from real learning or "teaching to the test."*

We found out that if we delay revising until after we complete the curriculum, then we are forced to spend more time drilling at the last minute to prepare them for the exam rather than teaching. When we did that, learner fatigue crept in and learners got burnt out". (Teacher, **School KF**-Quintile 4)

The integrated approach is not about the NSC examinations per se but teachers align the curriculum and assessment by integrating appropriate exam preparation practices into regular classroom teaching and, in the end, this helps learners to do well in the exams.

In order to integrate the skills and knowledge that are to be tested in the NSC exams into the ongoing curriculum implementation, schools that work:

- **Teach to the curriculum** (not teaching to the test) and use various assessment approaches and formats from previous NSC examination papers to assess if learners have mastered concepts or skills teachers have taught;

- **Routinely practise those skills** and knowledge taught in class (e.g., giving learners "warm-up" **assessments**, homework and class assignments) so that learners are familiar with the content when they write the NSC exams;

- **Analyse learners' scores** and use the analysis results to identify where learners are strong and where they need extra support, and to gain a deeper understanding of what learners need to know and be able to do to achieve various levels of performance; and

- **Change school timetables** into longer blocks of time to give teachers in critical content areas more uninterrupted time.

Explaining how teachers in his school integrated exam preparation practices into regular classroom teaching, teachers note:

We don't wait until the end of the year to say 'Now we are giving you the previous exam questions.' What I do is, after teaching a concept, e.g. calculus, I use calculus questions from the previous years to evaluate if my learners understood what I was teaching them. I use questions from past exam papers to assess what I have taught. Before the end of June, you might find that I have done 90% of the previous exam questions. (Teacher, School GN-Quintile 3)

> *We don't wait until the end of the year to say 'now we are giving you the previous exam questions.'* (Teacher, **School GN**-Quintile 3)

We use previous question papers from our districts, [our] province, and other provinces to help show learners how to answer the NSC exam questions correctly. We give different groups different questions but on the same topic that we have taught. After that, groups report how they have answered the questions. Then, we discuss their answers in class: Did they get it right? What is missing in their answers to get full marks? (Teacher, **School LL**-Quintile 2)

PROVIDING PRACTICE TESTS

Schools use different ways to prepare learners for exams and taking exams less distressing and depressing to learners. One teacher explains the rationale for giving learners test-taking skills as follows:

Learners don't do well in exams because the way we assess them in class is different from the way they are tested in the exam in terms of the cognitive demand, style and format. There is no better way to address this misalignment than to give learners tests using samples of past exam papers to help learners get familiar with the exam style and format. And so, there are no surprises when they finally write the exam." (Principal, **School KT**-Quintile 3)

> *Learners don't do well in exams because the way we assess them in class is different from the way they are tested in the exam in terms of the cognitive demand, style and format.'* (Teacher, **School GN**-Quintile 3)

Applying the old adage "practice makes perfect," most schools collect NSC exam papers from prior years that are administered within a province and, sometimes, administered in other provinces and use them as practice tests. Schools use different approaches to practise past exam papers: an integrated approach

or a separated approach or a combination of the two approaches. The purposes for providing practice tests also differ among teachers. Following are purposes that teachers mentioned for using practice assessments:

- **To help learners understand the exam structure and format** for each subject so that they know what to expect in the exam question paper;
- **To teach learners test-taking strategies and examination techniques**, e.g., how to carefully read instructions, how to look for key words in the instructions (e.g., differentiating between *'discuss'*, *'analyse',* and *'explain'*), how to scan the exam for easy questions for which they may immediately know the answer, spending the first five minutes of any exam reading the instructions carefully before writing.

> *Learners don't necessarily do badly in exam because they don't know the answers but they don't manage time well.* (Teacher, **School MI**-Quintile 1)

- **To acquaint learners with what the markers are looking for** when they are marking. Teachers and learners go through old exam papers and discuss what each question is testing.
- **To discuss the quality of answers** with learners—analysing learners' answers to identify appropriately those that would earn learners good marks and help learners hone their answering skills, so as to maximise getting the possible marks.
- **To use the results** of the periodic benchmark practice assessments diagnostically to guide their teaching and to monitor learner performance over time as they engage in a number of practice tests.
- **To drill as a way to help students solidify problematic** or difficult skills and concepts and gain a full understanding of the material taught in class
- **To give learners tests with time limits** to enable them to manage time properly in the exam and be able to answer all questions adequately:

It is very important to let learners understand technique in answering questions. When they say 'analyse,' or 'discuss' in the exam, learners need to know the difference. (Teacher, **School LL**-Quintile 2)

We do all papers from different provinces. The teachers go through the answers with us. They guide us as to when you get full marks. They show us how to answer questions properly so that you don't lose marks. (Learner, **School MG**-Quintile 4)

GIVING TIMED TESTS

Following integrated or separated approaches (or a combination of both), some schools give learners different questions, one topic at a time, from a set of past exam papers and set a timeframe very similar to what it should be in exam conditions. For example, learners are given the same amount of time they would have during the actual NSC exam to practise answering a question. In every practice, teachers monitor not only whether learners improve their time management skills, but they also check the quality of answers.

We tell them, 'Look at the mark allocation. You cannot spend the same amount of time for a two-mark question and a ten-mark question. (Teacher, **School MG**-Quintile 4)

In Accounting, we prepare learners to write the 3-hour paper, which they probably need five hours to write it properly; so, we hone exam techniques to help them do all questions within three hours. We help them to develop stamina to sit for three hours while maintaining the same concentration span. In

Accounting, learners don't have two papers like in other subjects. They only have one shot at it. (Teacher, **School GP**-Quintile 2)

Other schools give much longer timed tests covering different topics. In these schools, learners are given a couple of practices to write a full-length paper—two or three-hours depending on the NSC requirements for each subject. This is discussed further in the next sub-heading. Expressing the sentiments of most teachers, one teacher explains why her school gives learners opportunities to write full-length papers as follows:

As senior markers in the national exams, we always observe that learners don't necessarily do badly in exam because they don't know the answers but they don't manage time well and so they don't finish the paper or do not give all questions enough attention. (Teacher **School MI**-Quintile 1)

Teachers find this strategy helpful because it gives learners an opportunity to practise writing an exam paper under the same NSC exam conditions. Teachers also feel that this strategy helps learners to understand the criteria necessary to write quality answers within strict time limits.

PREPARING LEARNERS TO DEAL WITH EXAM ANXIETY

Teachers give learners practice tests under the same strict conditions that are similar to the actual NSC examinations to help them reduce exam anxiety. That is, learners take practice tests in exactly the same way and under the same conditions as it would be on the day of the exam. These conditions include making learners write practice tests and:

- **Use the same room** where they would write the NSC exam;
- **Use the same seating arrangement** they would use on the exam day;
- **Follow the same strict rules** prescribed for the NSC exams; and

- **Write full-length exam papers using past NSC papers**, as discussed in the sub-heading above.

Different teachers explain how taking mock exams under conditions similar to that of the exam helps learners so that they no longer face the unknown on the exam day:

Learners have never had to write a test for three hours, never had to sit alone in a desk confronted with question paper in front of them with a stranger monitoring their every move. This is enough to make any learner nervous and this affects their performance in the exam negatively." (Teacher, **School EH**-Quintile 3)

All [internal] exams are run strictly according to the policies of the Department of Education—the way the matric exams are run. From Grade 8 to matric, all our exams are run the same way. We are actually training learners from Grade 8 how to write exam under strict conditions: You are not allowed to take anything in, you are only allowed to take what you need for that paper. We search all the learners even before they go into the venue. We follow that from Grade 8 through to matric. Learners get used to what is expected of them from the mid-year exam, to end of year exam.

Matric learners know they write three exams in the same way as they would write matric exams in October. So, there are three opportunities which they go through following the same exam strict procedures. We prepare learners for the main exam at the end of the year. It's not easy but you need to get them used to these rules and regulations. (Teacher, **School LI**-Quintile 3)

4.6 LEARNING OUTCOMES

Learning outcomes are not only defined in terms of what learners will know but also what they will be able to do or demonstrate as they progress through each grade and phase. Thus, learning outcomes, as defined in this study, refer to observable and measurable outputs with regard to knowledge, skills, and attitudes. This study sought to establish how high-performing schools:

- Achieved the outcomes relating to attainment and what learners learn, as encapsulated in the Action Plan to 2019 (the Basic Education Sector Plan) and the NDP; and
- Developed social skills to furnish learners with experiences that nurture aptitude in critical thinking, problem solving, teamwork and the like.

Briefly discussed below is how high-performing schools in this study work towards achieving these outcomes of the schooling system.

4.6.1 ACADEMIC ACHIEVEMENT

First and most importantly, the high-performing schools have a laser-like focus on learner achievement. The focus on academic achievement in these schools, especially those in quintile 1 to 3, are driven by a quest to change their conditions where many learners come to school with academic skills that are substantially below grade level. These schools described how the considerable scale of challenges they faced necessitated spending more time on interventions designed to get learners to desired achievement levels.

All quintile 1 to 3 schools and some quintile 4 schools, mostly located in townships, described circumstances that led to them spending more time supporting learners to improve their academic achievement and paying less attention on enrichment programmes. These circumstances include the following:

- They have a large proportion of learners who come from poor or disturbed home backgrounds, where support for their learning, and expectations of their achievement, are low.
- Many learners are subject to emotional and psychological tensions, owing to their circumstances.
- The communities in which they live are subject to severe urban ills, such as drug and alcohol abuse as well as gangsterism that often characterise poorer communities.

It is interesting to note that these schools significantly out-perform their peers with regard to the pass rate and the quality of results, as illustrated in Figure 12 to Figure 23 in Part III in this report. As they collected data from schools, NEEDU researchers saw many certificates acknowledging schools' outstanding academic performance pinned on the walls in the Principals' office and in the reception area. Researchers also saw school cabinets full of trophies in recognition of schools' academic excellence. In short, these schools make it clear to the most casual observer that academic performance is highly prized.

The aspects of teaching featured in this report are positively associated with improving academic achievement. A focus on improving learner attainment in the high-performing schools in this study resonates well with the vision of both the NDP and the Sector Plan to achieve the following output goals:

- **Goal 3:** Increase the number of learners in Grade 9 who, by the end of the year, have mastered the minimum language and Mathematics competencies for Grade 9

- *Goal 4:* Increase the number of learners in Grade 12 learners who become eligible for a bachelors programme at a university

- *Goal 5:* Increase the number of learners in Grade 12 learners who pass *Mathematics*

- *Goal 6:* Increase the number of learners in Grade 12 learners who pass *Physical Science*

- *Goal 9:* Increase the average performance of Grade 9 learners in *Mathematics*

- *Goal 12:* Improve the grade promotion of learners through Grades 1 to 9

4.6.2 SOCIAL SKILLS

In order to meet increasing pressures for greater accountability of academic outcomes, many schools in this study focus more on curriculum delivery (academics). As a result, the second facet of schools' mission—affording learners a well-rounded education—tends to take a back seat, even though research indicates that these "secondary" educational opportunities can have enormous impact on learning and growth (Allis and Frederickson, 2006). This trend of favouring academics over a well-rounded education is patently obvious just by looking at how learners are spending their time in school.

Without a doubt, the primary purpose of school is to prepare every learner to read, write, and calculate. However, schools are also held to a more far-reaching mandate, in addition to developing academic skills. However, many schools in this study, are shedding other enrichment programmes to make room for interventions in the academics. Only a 29% of schools in the lower quintiles in this study provide enrichment, or extra-curricular programmes. This can be contrasted with 100% of the quintile 5 schools which provide strong extra-curricular programmes. Schools, which provide enrichment programmes, describe the benefits of these programmes as follows:

As much as academic excellence is emphasised, we still have time for social events and sports. This helps you relax a bit. If a learner achieves in sports, he or she gets an award. This motivates that learner to do better. (Learner, **School GL**-Quintile 4)

A quintile 2 school which excels in both academics and other enrichment programmes. This high-performing school is also the 2017 national champion in the ABC Motsepe South African Choral Eisteddfod having gotten first position in four categories, i.e., male voice, Afrikaans, African, and the National Anthem.

The Principal, who is also the Grade 12 Physical Science teacher, was declared the best High School Conductor in the Country for 2017.

Source: School KV-Quintile 2

What makes our academics better is the fact that the learners have something to do in the afternoon other than studying. Some learners do culture, while others do sports. Everyone has something to do. (Learner, **School WL**-Quintile 3)

Perhaps not surprising, the effect of this shedding of enrichment programmes usually affects low-income learners attending schools in the lower quintiles harder than their more affluent peers and does so in two ways.

Firstly, schools in the lower quintile, which serve learners from poor backgrounds are shedding enrichments at a faster rate in favour of the academics. For example, schools in the lower quintiles, were silent about time spent on the enrichment programmes. Instead, they were vocal about increased time spent giving learners extra classes in different subjects or remediation sessions. Many of these schools have either scaled back their capacity to furnish an array of enrichments or they simply cannot afford to offer such programmes, in contrast to more affluent parents who are able to support their schools to supply these types of activities. Thus, more affluent learners not only have ready access to schools and other places that offer enrichment programming, they also have the financial wherewithal to participate in those activities.

Secondly, poorer learners in schools serving learners from poor backgrounds have little or no access to enrichment learning during hours outside of school. Poorer learners tend to have much less access to these types of opportunities, so the resulting phenomenon becomes what Farbman (2015) calls the "opportunity gap."

There is a growing body of evidence that suggest that for children to lead fulfilling and productive lives, it's not enough for schools to focus exclusively on academics (Steedly et al, 2008, Feitosa et al, 2012). These studies conclude that, one of the most powerful and cost-effective interventions is to help children develop core social and emotional strengths like self-management, self-awareness and social awareness. These are strengths that are necessary for learners to fully benefit from their education, and succeed in many other areas of life. A limited number of schools in this study make an effort to provide a well-rounded education, as some schools note:

We are passionate about bringing children up properly. So, here it's not only about the academics, it's a holistic thing. The Bible says "Turn up a child in the way that they should go and then when they are older, they will depart from you." So we start from little things. (Teacher, **School GQ**-Quintile 2)

We usually have what we call the team building camps at the beginning of the year. This team-building camp is where learners must know each other, they must know us. We interact with learners. We give them skills, such as teamwork skills, perseverance skills, everything they would really need to go through the whole year and beyond the school. (Teacher, **School WJ**-Quintile 4)

The Principal invites certain groups of people or Foundations that motivate and inspire us. They also show us other perspectives in life and that life is much more than academics. They encourage us to have a positive mentality of what we want to achieve in life. (Learner, **School GP**-Quintile 2)

We do allow spaces for children just to relax because the old adage still works, "All work and no play makes Jim a dull boy." So, we do afford them time for relaxation, for leisure—just to be children. (Teacher, **School GN**-Quintile 3)

The literature is clear: School improvement efforts that attend to just academic programmes miss important elements of what makes schools successful. These important elements include the non-cognitive and socio-emotional needs of learners that lay the foundation for ultimate academic success

Teachers go in and out of each other's classrooms without offending anyone and without making teachers feeling as though they are being violated.

(Principal, **School KK**-Quintile 4)

In our school, teachers take the same cohort of learners from Grade 9 to 12. So, I say to teachers "You've been with these learners for the last four years. What's your excuse?

(Principal, **School EE**-Quintile 4)

Moving up with learners [looping] provides a second chance for teachers to reach individual learners who need support beyond one year of teaching them.

We group learners by their performance. The weaker ones get special attention. We also have a programme for the high performers. We do this so that we don't lose either of the group.

(Principal, **School FH**-Quintile 1)

Learners in higher grades mentor learners in lower grades in different subjects. We target those subjects which are problematic, e.g., Grade 8 learners have huge content deficit in maths.

(Teacher, **School MK**-Quintile 1)

As members of the RCL (Representative Council for Learners), we come up with innovative ways to reach out to learners. In our school, you have to perform well in order to be a member of the RCL.

(Learner, **School LN**-Quintile 1)

Our teachers have hands-on approach. Instead of only teaching the theory straight from the book, they are very good at making us see the real world application of what they teach.

(Learner, **School KM**-Quintile 4)

We have a WhatsApp group in Accounting. Say, something is giving me a problem, I send it to the group. Other learners and the teacher help me to solve it.

(Learner, **School ML**-Quintile 1)

WhatsApp gives us space as learners not to gossip or use our cell phones for the wrong reasons. When I get confused or stuck, I don't have to struggle in isolation.

(Learner, **School MJ**-Quintile 1)

Learner participation in the WhatsApp group encourages even those learners who are lazy to study to participate in the group. They feel pressured to get involved and, in that way, they learn.

(Teacher, **School KK**-Quintile 4)

You need to find effective ways to make learners see the importance of doing homework and don't see it as a burdensome task or some form of punishment.

(Teacher, **School EH**-Quintile 2)

Many learners don't write homework. They copy from each other. That defeats the purpose of doing homework. So, in our school we don't give homework. Learners do the work here at school.

(Principal, **School GR**-Quintile 4)

If learners in another teacher's class performed well but not in my class, then it's obvious— the problem is with me.

(Teacher, **School GN**-Quintile 3)

After every [formal] assessment, there are accounting sessions where teachers, learners and parents are required to account for the quality of the results.

(Teacher, **School GN**-Quintile 3)

As much as academic excellence is emphasised, we still have time for social events and sports. Our teachers say we can't be academic giants and stay social dwarfs. We must have a correct balance.

(Learner, **School WL**-Quintile 3)

I know that if I am away for a week or longer, angeke kube kwampunzi idl'emini [the hell will not break loose]. Quality teaching and learning will continue without my presence—as if I'm here.

(Principal, **School KY**-Quintile 2)

There is a wealth of expertise among teachers within our school. The capacity to empower teachers must be built within individual schools—and that's what we've done in our school.

(Teacher, **School GN**-Quintile 3)

Learner performance in any tests that I administer to my learners, is like a mirror. I see myself in that mirror. If learners perform badly, it reflects my image of failure.

(Teacher, **School GQ**-Quintile 2)

You just can't hold anybody accountable when you have not given them any support. Since there is no effective support anywhere, our best bet is the school-based support.

(Principal, **School LN**-Quintile 1)

As Mathematics and Physics teachers, we align our lessons so that Physics concepts that are dependent on Maths concepts, are introduced to learners first in maths lessons.

(Teacher, **School GP**-Quintile 2)

We have learnt to swallow our pride and acknowledged that as professionals, we can learn from other teachers. This has helped us to achieve our set targets.

(Teacher, **School LH**-Quintile 3)

Networking is not restricted to working with other high schools but we also engage with our feeder primary schools. We can't keep blaming primary schools for 'feeding' us with bad product.

(Teacher, **School KP**-Quintile 4)

We have strong internal controls and accountability. For example, period registers are controlled by learners themselves. They check if the teachers come to class and on time.

(Teacher, **School LN**-Quintile 1)

I am planning to take two SMT members [from KwaZulu-Natal] to visit [a school] in Limpopo. We are going to observe what they do and learn from them.

(Principal, **School KV**-Quintile 2)

Pupils must be at the school until the very last day. On the last day, we still teach four periods–so there's nothing like us missing time at the end or they are playing in the field. We teach up to the end.

(Teacher, **School KM**-Quintile 4)

If learners are already three to four years behind when they get here from primary schools, we extend our school day to allow teachers to provide more support.

(Teacher, **School WL**-Quintile 3)

In extra classes, we teach learners in three groups: those who are performing at levels 1 and 2 together; levels 3, 4 and 5; and levels 6 and 7. This allows us to pitch support at the correct level.

(Teacher, **School EE**-Quintile 3)

Friday afternoon is our planning day. We plan for the week ahead: What we are going to teach, decide on which activities we are going to give to all our learners for classwork and homework.

(HOD, **School LK**-Quintile 2)

In our school, we have a team-teaching room, e.g., all the maths educators in the school will just choose specific topics, which learners find challenging and we team-teach those topics.

(Teacher, **School KK**-Quintile 4)

In English, there is a teacher responsible for each of the three papers in the exam: Paper 1, 2, and 3. We treat each paper as a subject. The same applies in other subjects.

(Teacher, **School LN**-Quintile 1)

When I see how our teachers go beyond the call of duty to help us succeed, I always say to myself 'I can't let them down.'

(Learner, **School KS**-Quintile 4)

Our present circumstance cannot and will not dictate our future. We may be poor, but our minds are filthy rich and with that, the sky is the limit.

(Learner, **School EI**-Quintile 2)

The climate has to be right. If it's not right, then forget it. No best teacher in the world can be effective in an environment where there is no order and discipline.

(Principal, **School WL**-Quintile 3)

Discipline is the mother of all. The beginning for success is discipline.

(Teacher, **School GO**-Quintile 3)

Anything below 95% is just not good enough but 100% pass rate of certificate or diploma passes is 100% of nothing. It's absolutely useless!

(Learner, **School KS**-Quintile 4)

It's all in the mind. All you need when you work under such desperate conditions as ours is a right attitude—and lots of it. If you have a right attitude, the impossible will become possible.

(Learner, **School KY**-Quintile 1)

We don't have the best of everything—few resources, large classes, poor and sometimes hungry children. All we have are committed teachers and the love they have for their learners.

(Principal, **School KV**-Quintile 2)

Our teachers are dedicated because who would come to school early in the morning at 6 am just to teach us? Sometimes they leave as late as 8 pm. This means a lot to us—it means they do care.

(Learner, **School MI**-Quintile 1)

In other schools, the best teachers are earmarked for Grade 12 and if they are placed in the lower grades, it's a demotion. In our school, it's the opposite. We value laying a solid foundation here

(Learner, **School KZ**-Quintile 3)

You must appreciate that we teach learners who come from child-headed families. Some of these learners are heads of these families. They have become 'parents' to their younger siblings.

(Principal, **School LH**-Quintile 3)

At the end of the year I must get 100% pass rate in my subject. I must get distinctions—no excuses. I can't blame learners' poor background when learners fail.

(Learner, **School KZ**-Quintile 2)

For our teachers, teaching is not just a job. They are our second parents. They spend time with us almost 24/7. I know they don't get more money for doing this but they do it because they care.

(Learner, **School LF**-Quintile 3)

Before teachers go to class, we make sure that they have lesson plans. The HODs first check the relevance of the lesson plan and its correlation vis-a-vis the ATP.

(Learner, **School MK**-Quintile 1)

Our target is 100% pass rate—which we have achieved for the past five years—100% bachelors, and we want to get 100% pass in all the subjects.

(Learner, **School KF**-Quintile 4)

We say to teachers, 'the non-negotiable is that you have to teach the whole syllabus. You don't have a choice. How you do that, we leave it to you and your team.

(Principal, **School GP**-Quintile 2)

We have teachers who are here on Saturdays when they should be spending that time with their families but they trade all those important things for us. Just for us! We are blessed.
(Learner, **School KD**-Quintile 4)

We decided that were going to focus on maths and science. It wasn't easy to convince parents to agree to this. We said 'History and Geography are important but we can't offer everything.'
(Principal, **School LN**-Quintile 1)

We create time and space for teachers to plan collectively in different departments and subject areas. We make sure that time for teachers to plan together is in the timetable.
(Teacher, **School GN**-Quintile 3)

I do the class visits, classroom observation. These visits are unannounced—not to catch teachers out—but because we want to give them support that they need.
(Principal, **School FF**-Quintile 1)

Our own children attend or have attended this school. If you believe that the school where you teach is not good enough for your own children, you are saying other schools are doing a better job than yours.

We have formed WhatsApp groups for teachers in different subjects. This is extremely helpful because you know that you are not alone. You have a family to go to when you need help.
(Teacher, **School KM**-Quintile 4)

We simply could not offer the universe [all subjects] because the number of teachers allocated to our school remained the same. Each high school in the area specialises in one stream.
(Principal, **School EE**-Quintile 4)

Because in our school we have an open-door policy, any teacher can walk into your class and observe you. So, this means that you must always be on your toes and be prepared.
(Teacher, **School EH**-Quintile 1)

If I were to drop dead the next day, I would rest in peace knowing that the school will not fall apart because leadership does not reside in one individual but is shared
(Principal, **School FE**-Quintile 2)

I meet all the HODs on a weekly basis to monitor curriculum coverage. I check what is in the ATP and check that against what is in the learners' books. That's key for me.
(Principal, **School KU**-Quintile 2)

We don't have scheduled afternoon, weekend and holiday classes because we strongly believe that if teachers use every minute of the seven hours each day to teach, they should be able to complete the curriculum.

After each test, we conduct item analysis. We analyse every item in the question paper in every subject. This gives us extremely useful data, e.g., learners and educators who underperform.
(Teacher, **School MK**-Quintile 1)

There are weekly subject meetings with HODs. I expect HODs to give me minutes of their meetings so that I understand what it is that they discuss in their meetings.
(Principal, **School EF**-Quintile 3)

We monitor if teachers' plans, the learners' books and workbooks correlate. Every topic that appears in the Annual Teaching Plan must appear in the learners' book.
(Principal, **School FF**-Quintile 1)

We use extra time to support learners who need it but, you can add as much extra teaching time as you like, if the quality of teaching is poor, extra time will not lead to achievement gains.
(Teacher, **School LM**-Quintile 2)

This report has documented best practices that are exhibited by high-performing schools. They are intended to assist school improvement planning by focusing on essential 'supports' for learning. School managers and teachers may not endorse all best practices presented here, but they could help them to sharpen and focus their own vision of school improvement.

5.1 CONCLUSIONS

There are five important conclusions that were drawn from the assessment of a variety of strategies and practices exhibited by the high-performing schools.

Firstly, there are no magic potions, no single golden bullet or any earth-shattering practice to delivering improved learning outcomes and reducing achievement gaps.

Secondly, while certain quintessential learning variables like time management were identified, an interplay exists between in-school practices and the quality of teaching. The interconnected practices blend in a web-like fashion to produce conditions that lead to higher learning outcomes. There is no one best practice presented in this report that is a standalone factor of effective schools, but each practice is a core component that operates within a multifaceted system to promote student learning and growth.

Thirdly, the schools that work focus on learning rather than just improving the NSC examination results. That is, the focus is not about the NSC examinations per se but how teachers align the curriculum and appropriate assessment practices into regular classroom teaching so that in the end this helps learners to do well in the exams.

Fourthly, the more the schools produce good results, the more they want to beat the previous record, i.e., success breeds success. All schools that work have actually internalised success, and they will not settle for anything less.

Finally, while school staff members interviewed by researchers talked often about the satisfaction they experienced when learner achievement improved, they did not minimize the hard work involved. As Ofsted notes:

Experts can make the difficult appear easy; to a visitor, the outstanding school may not appear a challenge. Such schools seem to run like clockwork: oases of calm purpose, highly focused on learning, with well-turned-out students and staff. These schools are extraordinary communities, exceptionally well-led and managed (Thapa, 2013).

5.2 RECOMMENDATIONS

Every child deserves a high-quality education, regardless of his or her family's income or background. There is a need, therefore, to think beyond what is known as the traditional means of education and find a new vision for academics in our education system. This new vision must encompass several forward-thinking, innovative strategies aimed at meeting the needs of all learners in all schools. Seven recommendations have been made towards making this vision a reality. These recommendations are organised according to different layers of the system, namely schools, district offices and provincial/national offices.

5.2.1 RECOMMENDATIONS RELATING TO SCHOOLS

Our analysis leads us to the conclusion that it is the collective work of teachers, learners, parents, and different structures in the community that will ultimately lead to all children "accessing and benefitting from a high quality education" as envisioned by the National Development Plan (NDP, p. 264). Although many suggestions can be made to ensure that "schools provide all learners with an excellent education" (NDP, 2011: 264), we make the following three school-level recommendations, which can be actioned by the members of the school management teams led by the Principals:

> RECOMMENDATION 1—INTRA-AND INTER-SCHOOL NETWORKING: Sharing successes should be an integral part of the work of an improving school. There are aspects in every teacher's work and every school's work which reflect the best practice which others can learn from.

It is recommended that sharing of good practice should begin with teachers having regular professional conversations about curriculum delivery among themselves within their department, across departments (inter-disciplinary discussions), and across different phases within a school, as well as across schools within a circuit, district, province and across provinces. High-performing schools, in **Best Practice 5.4 (Networking)**, have provided some ideas how teachers and SMTs:

- Develop a climate of openness and sharing within school and across schools—sharing practice within school and beyond;
- Develop networking systems within school and between schools; and
- Link schools and teachers to address specific training needs and develop networking opportunities.

It is recommended that high schools do baseline assessments in Mathematics and the language of learning and teaching. These baseline assessments should be analysed in terms of curriculum coverage and learners' skills knowledge. The high schools can then begin to address these shortfalls within their school. These results can also be fed back to the feeder primary schools, particularly if there are noticeable trends - in terms of content and skills gaps- in learners from the same primary schools.

> RECOMMENDATION 2—TEACHER COLLABORATION AND EMPOWERMENT: Schools need to foster a collaborative culture among teachers that puts the students' learning first, and turns a teacher's best practice into a school wide best practice.

Many districts do not have the capacity to provide regular support to all teachers in every school. It is for this reason that school-based teacher support and empowerment becomes crucial. High-performing schools in this study argue, in **Best Practice 6.2A**, that when teachers work collaboratively, share good practices and engage in on-going professional conversations, they distribute a base of

pedagogical knowledge among all teachers within a school as opposed to restricting it to individual teachers. Put differently, the focus shifts from individual teacher expertise to building a stronger learning and knowledge base of all teachers at the school.

SMTs need to:

- Provide time and space for teachers to be part of a community that provides a sounding board for ideas and best practices without feeling pressure to hide their failures or vulnerabilities.
- Make sure that conditions for teacher collaboration, including a feeling of trust, a mutual or common goal, shared participation, and shared accountability, prevail. This would encourage teachers to confess their inadequacies among their peers knowing that they have a support system within their school.

> **RECOMMENDATION 3—SCHOOL IMPROVEMENT PLANNING:** If school improvement planning is to make an impact on the standards achieved by learners, then effective planning processes must be at the heart of the school and drive its development.

Schools must produce an annual School Improvement Plan (SIP), informed by school self-evaluation, as required, in terms of the national Policy on Whole School Evaluation (WSE). Towards the end of the school improvement planning cycle, schools must begin auditing activities to find out what impact has been made by the improvement strategies implemented during the year. The school improvement planning process needs to address the following important questions:

- **How well are we doing?** This stage requires the school to conduct self-evaluation to get answers to this question.
- **How well should we be doing?** In this stage, the whole school targets are determined. The schools should set targets from a top-down—setting targets that bring them into line with other similar schools, as well as from bottom-up, whereby schools set targets for individual learners. The school target is arrived at by identifying the borderline learners who will bridge the gap between the bottom-up target, and the top-down target. **Best Practice 2.2** (Academic press) provides ideas how other schools set targets.
- **What will we do to make it happen?** To achieve the targets set, the school should identify a range of **improvement** strategies to be implemented at whole-school and classroom-level. These should be summarised in the SIP, providing a focus for practical action throughout the school. This report provides 30 strategies (referred to as "best practices") that high-performing schools in this study implemented to meet their targets. These practices are listed in Appendix D.

  It is important to focus on a few indicators of improvement in the SIP rather than to include a large number of unfocused and unmanageable activities. The indicators should be specific and measurable.
- **Are we there yet?** Schools should review their progress towards meeting their targets. The SIP should be reviewed and action plans adjusted every year. Staff development should be identified and met to ensure that improvement strategies are effectively implemented. Performance data will need to be regularly collected and analysed to check progress in relation to the targets which have been set. The purpose of evaluation is to judge the effect of the action taken on learners' attainment and progress and the quality of education.

The ultimate goal for school improvement is effective learning. This report describes the key drivers of curriculum delivery and best practices that inform them. These best practices are detailed in the report and are summarised in Appendix D. In addressing the question "How well are we doing?" it is recommended that schools follow four steps listed below to think critically about the best practices that could be used to increase learner achievement based on the needs of each specific school through a permanent cycle of inquiry and action:

- **STEP 1:** Read and discuss each best practice and think about how it applies to your school, and discuss what you believe to be most appropriate for your particular circumstances. The best practices presented in this report are neither the only route to improvement nor are they meant to be a definitive answer to school improvement. A school may decide to have separate teams, composed of staff and other relevant stakeholders, work on each of the six themes around which the best practices are presented in Part IV in this report.

- **STEP 2:** Decide whether you would endorse the best practices for your school or develop alternatives that are more appropriate for your school. Indicate the best practices that you have endorsed or modified by completing the last column in Appendix D.

- **STEP 3:** Once you have settled on a set of best practices that are appropriate for your school, ascertain how close you think your school is to the ideal as expressed by each best practice (either as presented in this report or as modified by your school). This will entail collecting, analysing and discussing concrete evidence where your school is in relation to the best practice. What evidence does your school have to support a conclusion about how your school can be described in relation to the best practice or your alternative version?

- **STEP 4:** Determine your school's priorities for improvement. The priorities identified must inform your school improvement plan.

Some schools are already implementing these best practices, others need assistance so that they can implement them better. The intention to share the best practices presented in this report is to:

- Assist schools to develop the habits of collaboration that is necessary for ongoing improvement;
- Provide practical information to help schools identify and carry out the tasks that support continuous improvement; and
- Support and extend internal capacity for analysis, reflection and planning that leads to change and continuous improvement within each school.

5.2.2   RECOMMENDATIONS RELATING TO DISTRICTS

Our findings point to the need for major departures from business-as-usual for many district office staff in order to realize effective learning in all schools. Because many districts have limited capacity, they need to consider limiting improvement initiatives to a few fundamental efforts. Three areas that can be prioritised as a starting point are:

- Improving co-ordination among different units in the district,
- Better use of data to take decisions and to inform improvement strategies, and
- Supporting Principals as instructional leaders in their respective schools.

RECOMMENDATION 4—REORGANIZING DISTRICT RESOURCES TO SUPPORT IMPROVEMENT EFFORTS: Individual parts of the district need to strategically co-ordinate their work better so that they operate in concert with one another as opposed to working in separate silos or in competition for limited district resources.

Findings in this study suggest that strong, co-ordinated support from the district office is essential to realising effective learning for all schools and all learners. No matter how committed individual district officials may be to school improvement, their plans will likely be stymied unless they find ways to bring every part of the system into alignment with the goals of excellent teaching and learning for all learners. High-performing schools described how officials from different units in their district offices worked together as cross-functional teams to support them (see **OSF 2**-District support) in Part IV of this report.

RECOMMENDATION 5—EFFECTIVE USE OF DATA: In addition to setting the expectation of data-driven decision-making, districts need to take responsibility for collecting data, analysing it, and using it effectively to support learning.

Districts need to develop a data-driven culture. Managers in district offices must have access to the "right data" to help them answer questions that are fundamental to system-wide improvement. "Right data" can loosely be defined as data that addresses specific measurable outputs. Right data would assist districts to address important questions such as:

- Which of our learners are chronically low-performing across grades and subject areas?
- Which teachers and Principals, if any, have these learners had in common?
- What other features of these schools might help explain such results?

Among other things, such data can be arrived at by doing *question, item* and *error* analyses. This is described in detail in **Best Practice 6.4** (effective use of assessment to advance learning). Districts need to ensure that, when requesting data from schools, the data can be used to inform specific decisions regarding school improvement. Having access to better data and using it effectively to inform its decisions, districts will resist the temptation to blanket their schools with professional development offerings, in the hope that some of them might pay off. Instead, they would be careful to target their efforts on the areas of greatest need, to focus their school improvement efforts and to refine their supports for individual schools. See **OSF 2** how some districts use data effectively to support their schools.

RECOMMENDATION 6—FOCUSING ON SUPPORTING PRINCIPALS' INSTRUCTIONAL LEADERSHIP: In pursuit of quality education, districts need to take deliberate steps to reduce the amount of time circuit managers spend on operational or administrative issues and monitoring schools' compliance, and shift their focus toward improving teaching and learning in schools.

District office staff influence teaching and learning not directly, but their support influences the behaviour of those who do have a more direct impact on the learning outcomes, i.e., teachers and Principals. Therefore, circuit managers would have the greatest impact on their districts' efforts to improve teaching and learning when they dedicate their time to specific teaching strategies such as modelling effective instructional leadership, both in one-on-one settings and in professional learning communities. However, circuit managers can become progressively more capable of helping Principals become effective instructional leaders only if they receive ongoing support, too. It is recommended

that circuit managers receive intensive professional development as well, in order to perform their role effectively. (See **OSF 2**-District support).

It also recommended that circuit managers and district directors encourage a "cross-pollination" of ideas among the Principals and create platforms where Principals freely share good practices among schools within a circuit and across a district. A "District Good Practice Register" could be created where schools can share what works in their schools for other schools to learn.

5.2.3 RECOMMENDATIONS RELATING TO PEDs AND DBE

RECOMMENDATION 7—MINIMISING THE LOSS OF TEACHING TIME: A standard must be set regarding the number of teacher days in each term that cannot be exceeded attending workshops, union meetings, memorial services, sporting events and cultural activities.

There are substantial variations among schools in respect of planned time and *implemented* time or "time-on-task." The Minister determines the school calendar *(planned time),* which specifies the number of days that teachers and learners must attend school in a given academic year. However, the amount of time that teachers and learners actually spend at school by the end of each academic year *(implemented time)* relative to planned time is significantly reduced in many schools. The implemented time spent in different schools varies remarkably among schools owing to a number of factors.

The variation between *planned time* and *implemented time* among schools is attributed to the following seven factors:

- Non-adherence to notional time allocation prescribed in the curriculum,
- Learner and teacher poor attendance,
- Learner and teacher late coming,
- Teachers leaving school early for a variety of reasons,
- Teachers and learners returning to class late after break,
- Poor time management for the National School Nutrition Programme,
- Early commencement of mid-year and end-of-year examinations.

The centrality of learning and teaching time lies in the fact that if time is not managed effectively, it has a negative impact on learner proficiency owing to poor curriculum coverage and limited learning opportunities.

More compelling research findings consistently argue that the impact of time lost is often more detrimental in schools serving economically disadvantaged learners, who tend to trail behind their more affluent peers academically, continue to lag as they proceed through each grade, and have fewer opportunities outside of school for learning. For these millions of learners, reduced time in school has a debilitating effect. There needs to be a zero-tolerance approach to the factors listed above and detailed records need to be kept so that different officials at different levels in the system can be held accountable.

A standard needs to be set, i.e. a point at which teachers can no longer leave their classes because too much teaching time has been lost already—where any additional loss of time would result in the school not being able to complete the curriculum adequately.

Adeogun, A. A., & Osifila, G. I. (2008): "Relationship between educational resources and students' academic performance in Lagos State Nigeria." *International Journal of Educational Management*, 5(6) 144-153.

Aden, A. A., Yahye, Z. A., and Dahir, A. M. (2013): "The effect of student's attendance on academic performance: a case study at Simad University Mogadishu." *Academic Research International*, 4(6) 409-417 Retrieved from http://www.savap.org.pk/journals/ARInt./Vol.4(6)/2013(4.6-44).pdf

Ali. S and Frederickson, N. (2006): "Investigating the evidence-base of social stories." *Educational Psychology in Practice* 22(4) 355-377.
Retrieved from http://www.tandfonline.com/doi/full/10.1080/02667360600999500

Barhoumi, C.& Rossi, PG. (2013): "The effectiveness of the instruction oriented hypertext systems compared to direct instruction in e-learning environment." *Contemporary Educational Technology*, 4(4) 281-308. Retrieved from http://dergipark.gov.tr/cet/issue/25734/271494

Bembenutty, H. (2011): "Meaningful and maladaptive homework practices: The role of self-efficacy and self-regulation." *Journal of Advanced Academics*, 22(3) 448–473. Retrieved from: http://journals.sagepub.com/toc/joac/22/3

Bennett, S., & Kalish, N. (2006): "The case against homework: How homework is hurting our children and what we can do about it." New York, NY: Crown. Retrieved from:
http://www.schoolcommunitynetwork.org/SCJ.aspx

Bennett-Conroy, W. (2012): "Engaging parents of eighth grade students in parent–teacher bidirectional communication." *School Community Journal*, 22(2) 87–110.
Retrieved from http://www.schoolcommunitynetwork.org/SCJ.aspx.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). "Working inside the black box: Assessment for learning in the classroom." *Phi Delta Kappan*, 86(1) 8–21. Retrieved from: http://journals.sagepub.com/toc/pdka/86/1

Bogart, V. S (2002): "The Effects of Looping on the Academic Achievement of Elementary School Students." *Electronic Theses and Dissertations*. Paper 707. Retrieved from http://dc.etsu.edu/etd/707

Bouhnik, D., & Deshen, M. (2014): "WhatsApp goes to school: Mobile instant messaging between teachers and students." *Journal of Information Technology Education: Research*, 13, 217-231. Retrieved from http://www.jite.org/documents/Vol13/JITEv13ResearchP217-231Bouhnik0601.pdf

Camburn, E. M. (2010): "Embedded Teacher Learning Opportunities as a Site: An Exploratory Study," *American Journal of Education*, 116(4) 463-89.
Retrieved from: http://www.journals.uchicago.edu/toc/aje/2010/116/4

Card, D., & Krueger, A. (1996): "School resources and student outcomes: An overview of the literature and new evidence from North and South Carolina." *Journal of Economic Perspectives*, 10, 31-40. http://dx.doi.org/10.1257/jep.10.4.31

Carr, N. S (2013): "Increasing the Effectiveness of Homework for All Learners in the Inclusive Classroom." *School Community Journal* 170
Retrieved from http://www.adi.org/journal/2013ss/CarrSpring2013.pdf

Cauley, K. M., and McMillan, J. H. (2010): "Formative assessment techniques to support student motivation and achievement." *Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(1) 16. Retrieved from: http://www.tandfonline.com/toc/vtch20/83/1?nav=tocList

Cawelti, G., & Protheroe, N. (2001): *High student achievement: How six school districts changed into high-performance systems.* Arlington, VA: Educational Research Service.

Center on School, Family, and Community Partnerships." Johns Hopkins University. Retrieved from www.csos.jhu.edu/p2000/center.htm

Chokri Barhoumi Taibah University, Saudi Arabia (2015): "The Effectiveness of WhatsApp Mobile Learning Activities Guided by Activity Theory on Students' Knowledge Management." *Contemporary Educational Technology*, 6(3) 221-238.
Retrieved from: http://www.cedtech.net/past2.asp?numara=63

Christie, P., Butler, D. & Potterton, M. (2007): Ministerial Committee on Schools that Work. Department of Education: Pretoria

Clauley, K. M. and McMillan, J. H. (2009): Formative assessment techniques to support student motivation and achievement. *Clearing House: A Journal of Educational Strategies, Issues and ideas* 83(1), 16

Claus, R.N. and C.J. Girrbach (1985): An assessment of the Saginaw successful schools project. Paper presented at a meeting of the Evaluation Research Society in Toronto, Ontario, Canada.

Cohen, D. K., and Hill, H. C. (2000): "Instructional policy and classroom performance: The Mathematics reform in California." *Teachers College Record*, 102(2) 294–343. Retrieved from: https://www.tcrecord.org/search.asp?kw=cohen&x=18&y=11

Conley, D. T.; Goldman, P. (1994): "Facilitative leadership: How principals lead without dominating." OSSC *Bulletin*, v37 n9 Aug . Retrieved from:
https://eric.ed.gov/?q=Facilitative+leadership%3A+How+principals+lead+without+dominating+

Corcoran, T., & Foley, E. (2003): The promise and challenge of evaluating systemic reform in an urban district. *Research Perspectives on School Reform: Lessons from the Annenberg* Challenge. Providence, RI: Annenberg Institute at Brown University.

Coleman, J., Campbell, B., Hobson, C., McPartland, J., Mood, A., Winefeld, F. & York, R. (1966): Equality of educational opportunity report. U.S. Government Printing Office, Washington, D. C.

Cooper, H. M (1996): "The Effects of Summer Vacation on Student Achievement Test Scores: A Meta-analytic and Narrative Review," *Review of Educational Research*, 66:3. 227-268. Retrieved from: http://journals.sagepub.com/toc/rera/66/3

Cooper, H. M. (2007): *Battle over homework: Common ground for administrators, teachers, and parents* (3rd ed.). Thousand Oaks, CA: Corwin Press.

Cooper, H., & Nye, B. (1994): "Homework for students with learning disabilities: The implications of research for policy and practice." *The Journal of Learning Disabilities*, 27(8) 470–479. Retrieved from: http://journals.sagepub.com/toc/ldxa/27/8

Cooper, H., Robinson, J. C., & Patall, E. A. (2006): "Does homework improve academic achievement? A synthesis of research, 1987–2003." *Review of Educational Research*, 76(1), 1–62. Retrieved from: http://journals.sagepub.com/toc/rera/76/1

Cox, J. (2016): Teaching Strategies to Keep Class.
Retrieved from Interesting http://www.teachhub.com/5-teaching-strategies-keep-class-interesting

Dailey, D., Fleischman, S., Gil, L., Holtzman, D., O'Day, J., & Vosmer, C. (2005): "Toward more effective school districts: A review of the knowledge base. Washington, DC: American Institutes for Research.

Darling-Hammond, L. (2000): "Teacher Quality and Student Achievement: A Review of State Policy Evidence." *Education Policy Analysis Archives*., 8(1) 31. Retrieved from: https://epaa.asu.edu/ojs/search/authors/view?

Darling-Hammond, L. *Powerful Teacher Education: Lessons from Exemplary Programs* (2006): San Francisco: John Wiley and Sons, Inc. 21.

Department of Basic Education (2015): *Action plan to 2019—Towards the realisation of schooling 2030.* Pretoria

Department of Basic Education (2017a): Meta-analysis on the use of teaching time. Department of Basic Education: Pretoria

Department of Basic Education (2017b): The National Report 2014 Report on Senior and FET Phases: The quality of learning outcomes: Reducing the inequalities at the higher levels of schooling in South Africa. Pretoria

Department of Basic Education (2017c): Plan for the implementation of the 2017 inclusive basket of criteria as part of the NSC resulting. Pretoria

Department of Education (2009): Ministerial Committee on a National Education Evaluation and Development Unit: Final Report. Government Gazette No. 32133, Notice 389 of 2009, 17 April 2009. Pretoria: Department of Education.

Dheeraj, D. & Kumari, R. (2013): "Effect of co-operative learning on achievement in environmental science of school student." *International Journal of Scientific and Research Publications*, 3(2) 2-3. Retrieved from: http://www.ijsrp.org/research-journal-0213.php

Downey, D., von Hippel, T., & Broh, B (2004): "Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year." *American Sociological Review*, 69(5) 613-635. Retrieved from: http://journals.sagepub.com/toc/asra/69/5

DuFour, R., Eaker, R., & DuFour, R. (Eds.). (2005): On Common Ground: The Power of Professional Learning Communities. Bloomington, IN: National Educational Service.

Duke, Daniel L. and Griesdorn, J (1998): *Where our children learn matters: A report on the Virginia school facilities impact study.* Charlottesville, VA: University of Virginia.

Dyer, K. (2015): Ways to Understand if Your Classroom Assessments are Working. Retrieved from [https://www.nwea.org/blog/2015/7-ways-understand-classroom-assessments-working/]

Elias, M., & Arnold, H. (2006): The connections between academics and social-emotional learning. In M. J. Elias & H. Arnold (Eds.), *The educator's guide to emotional intelligence and academic achievement: Social-emotional learning in the classroom* (chap. 1). Thousand Oaks, CA: Corwin Press.

Elias, M., & Haynes, N. (2008): "Social competence, social support, and academic achievement in minority, low-income, urban elementary school children." *School Psychology Quarterly*, 23(4) 474-495. Retrieved from: http://psycnet.apa.org/PsycARTICLES/journal/spq/23/4

Epstein, J. (2001). School, family, and community partnerships. Boulder: Westview Press.

Epstein, J. and Sanders (2000): Back to school: How parent involvement affects student achievement. Center for Public Education. http://www.centerforpubliceducation.org/Main-Menu/Public-education/Parent-Involvement/Parent-Involvement.html

Epstein, J. L., et al. (2009): *School, family, and community partnerships: Your handbook for action*, second edition. Thousand Oaks, CA: Corwin Press.

Epstein, M. L., Epstein, B. B., & Brosvic, G. M. (2001): "Immediate feedback during academic testing." *Psychological Reports*, 88(3),889-894. Retrieved from: http://journals.sagepub.com/toc/prxa/88/3

Farbman, D.A. (2015): The Case for Improving and Expanding Time in School: A Review of Key Research and Practice. Retrieved from:
[http://www.timeandlearning/sitesresources/morelearningtime.pdf]

Feitosa, F.B., Prette Z. A. P., & Prette, A. D. (2012): "Social skills and academic achievement: The mediating function of cognitive competence." *Temas, em Psicologia* 20(1) 61-70 Retrieved from http://pepsic.bvsalud.org/pdf/tp/v20n1/v20n1a06.pdf

Ferguson, R. (2015): "Teachers' Perceptions and Expectations and the Black-White Test Score Gap," in Jencks and Phillips.

Fisher, C. and Berliner, D. (1998): Teaching and Learning in the Elementary School: A Summary of the Beginning Teacher Evaluation Study (San Francisco, CA: Far West Lab for Educational Research and Development, 1998)

Friend, M and Cook, L. (1990): "Collaboration as a predictor for success in school reform." *Journal of Educational and Psychological Consultation,* 1(1) 69–86. Retrieved from: http://www.tandfonline.com/toc/hepc20/1/1?nav=tocList

Frymier, A.B., & Schulman, G.M. (1995): "What's in it for me? Increasing content relevance to enhance students' motivation." *Communication Education,* 44(1) 40-50. Retrieved from: http://www.tandfonline.com/toc/rced20/44/1?nav=tocList

Fryer, R. G. and Dobbie, W (2011): "Getting Beneath the Veil of Effective Schools: Evidence from New York City," *The National Bureau of Economic Research. NBER*. Retrieved from: http://admin.nber.org/custom?q=Getting+beneath+the+veil&restrict_papers

Fuller, B., and Clarke, P. (1994): "Raising school effects while ignoring culture? Local conditions and the influence of classroom tools, rules and pedagogy." *Review of Educational Research*, 64(1) 199-157. Retrieved from: http://journals.sagepub.com/toc/rera/64/1

Gettinger, M. (1985): "Time allocated and time spent relative to time needed for learning as determinants of achievement." *Journal of Educational Psychology*, 77(1) 3-11.

Glazer, J. (2008): "Educational Professionalism: An Inside-Out View." *American Journal of Education*. 114 (2) 169–189. Retrieved from: http://www.journals.uchicago.edu/toc/aje/2008/114/2

Goldhaber, D. & Anthony, E. (2007): "Can Teacher Quality be Effectively Assessed? National Board Certification as a Signal of Effective Teaching." *Review of Economies and Statistics* 89(1) 134-50.

Gordon, D. T. (2002): "Moving instruction to center stage." *Harvard Education Letter*, 18(5) 5–7. Retrieved from: http://hepg.org/hel-home/issues/18_5/helarticle/moving-instruction-to-center-stage_221

Green, E.E., Cook, P.F & Bolt, L (1996): Fitting new technologies into traditional classrooms: Two case studies in the design of improved learning facilities. *Educational Technology*.

Green, R. L. (2005): *Expectations: How teacher expectations can increase student achievement and assist in closing the achievement gap*. Columbus, OH: SRA/McGraw-Hill.

Greenwald, R., Hedges, L.V., & Laine, R. (1996): The effect of school resources on student achievement. *Review of Educational Research* 66 (3), 361-396. Retrieved from: http://journals.sagepub.com/toc/rera/66/3

Grissom, J., Loeb, S., & Master, B. (2013): "Effective Instructional Time Use for School Leaders: Longitudinal Evidence from Observations of Principals." *Educational Researcher*. 42(8) 433-444. Retrieved from: http://journals.sagepub.com/toc/edra/42/8

Hamlin, P. (2016): Qualities of Effective Assessment of Student Learning. Retrieved from http://www.nafme.org/three-qualities-effective-assessment-student-learning/

Hampton, F. M., Mumford, D. A., & Bond, L. (1997): Enhancing urban student achievement through multi-year assignment and family-oriented school practices. *ERS Spectrum*, 15, 7-15. Retrieved from: https://www.learntechlib.org/j/ISSN-0740-7874/

Hanover Research (2014): *Improving student achievement and closing the achievement gap*. District Administration Practice.

Hanover Research (2014): The Impact of Formative Assessment and Learning Intentions on Student Achievement. *District Administration Practice.*

Hanushek, E. A. (1997): "Assessing the effects of school resources on student performance: An update." *Educational Evaluation and Policy Analysis*, 19(2) 141-164. Retrieved from: http://journals.sagepub.com/toc/epaa/19/2

Hanushek, E. A., and Luque, J. A. (2003): "Efficiency and equity in schools around the world." *Economics of Education Review*, 22, 481-502. Retrieved from http://dx.doi.org/10.1016/S0272-7757(03)00038-4.

Haq, A. & Chand, S. (2012): "Pattern of Facebook usage and its Impact on Academic Performance of University Students." *Bulletin of Education and Research*, 34(2) 19-28. Retrieved from: http://pu.edu.pk/home/journal/32/Online-Contents.html

Harter, E. A. (1999): "How educational expenditures relate to student achievement." *Journal of Education Finance* (Winter). Retrieved from: https://www.jstor.org/stable/40704068?

Hattie, J. (2009): *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Hawkins, H.L. & B.L. Overbaugh (2008): The interface between facilities and learning. *Council of Educational Facility Planners Journal* (July, August).

Haycock, K. (2001): *Dispelling the myth, revisited*. Washington, DC: The Education Trust.

Henderson, A.T. and Berla, N (1994): *A New Generation of Evidence: The Family Is Critical to Student Achievement*. Washington, DC: Center for Law and Education, 14–16.

Henderson, A. T. & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.

Heneveld, W. & Craig, H. (1996): Schools count: World Bank project designs and the quality of primary education in sub-Saharan Africa. World Bank, Washington, DC.

Hindu, H. (2011): "WhatsApp comes to the rescue." *Education Plus Journal*, 3, 23-26. Retrieved from: www.thehindu.com/todays-paper/tpfeatures/ tp

Honig, M.I. (2003) "Building Policy from Practice: District Central Office Administrators' Roles and Capacity for Implementing Collaborative Education Policy." *Educational Administration Quarterly*, ol. 39(3) 339-369. Retrieved from: http://journals.sagepub.com/toc/eaqa/39/3

Honig, M.I. (2012): "District Central Office Leadership as Teaching: How Central Office Administrators Support Principals' Development as Instructional Leaders." *Educational Administration Quarterly,* 48(4), 733-774. Retrieved from: http://journals.sagepub.com/toc/eaqa/48/4

Honig, M.I., Copland, M., Rainey, L., Lorton, J., & Newton, M. (2010): *Central Office Transformation for District-Wide Teaching and Learning Improvement*. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Honig, M.I. & Rainey, L.R. (2014): "Central Office Leadership in Principal Professional Learning Communities: The Practice Beneath the Policy." *Teachers College Record*, 116(4). Retrieved from: http://www.tcrecord.org/library/abstract.asp?contentid=17404

How to Form Partnerships." California Department of Education. Retrieved from http://www.myboe.org/portal/default/Content/Viewer/Content?action=2&scId=100026&sciId=934

Hoxby, C & Murarka, S. (2008): "New York City Charter Schools: How Well are They Teaching Their Students?" *Education Next*, 8(3) 54-61. Retrieved from: http://educationnext.org/new-york-city-charter-schools/

Jeynes, W. (2005): "Effects of Parental Involvement on the Academic Achievement of African American Youth." *Journal of Negro Education*, 74(3) 260-274. Retrieved from: https://www.jstor.org/action/doBasicSearch?Query=Effects+of+parental+involvement+on+the+&filt

Jiménez, M., & López-Zafra, E. (2009): "Inteligencia emocional y rendimiento escolar: estado actual de la cuestión." *Revista Latinoamericana de Psicología*, 41, 69-79. Retrieved from https://www.journals.elsevier.com/revista-latinoamericana-de-psicologia/

Johnson, R. (1997): *Equal access to quality school facilities*. San Antonio, TX: Intercultural Development Research Association.

Johnson and Duffett, (2003): Back to school: How parent involvement affects student achievement. Center for Public Education. Retrieved from http://www.centerforpubliceducation.org/Main-Menu/Public-education/Parent-Involvement/Parent-Involvement.html

Johnson, R.T., & Johnson, D.W. "An overview of cooperative learning." Available from the World Wide Web: http://www.cooplearn.org/pages/overviewpaper.html.

Johnson, D.W., Johnson, R.T., & Smith, K.A., (1991): "Cooperative learning: increasing college faculty instructional productivity," ASHE-ERIC
Retrived from: [http://www.foundationcoalition.org]

Kennedy, M. (1998): Form and substance of in-service teacher education (Research Monograph No. 13). Madison, WI: National Institute for Science Education, University of Wisconsin–Madison.

Killion, J. (2012): *Meet the promise of content standards: Professional learning required*. Oxford, OH: Learning Forward.

King, J. (2016): Asked students to help each other understand ideas or concepts. Retrieved from http://www.ideaedu.org/Resources-Events/Teaching-Learning-Resources/Asked-students-to-help-each-other-understand-ideas-or-concepts

Knapp, M.S. (2003): "Professional Development as a policy pathway." *Review of Research in Education,* 27 (1) 109-157. Retrieved from: http://journals.sagepub.com/toc/rrea/27/1

Kober, N (2001): It takes more than testing closing the achievement gap. *The Center on Education Policy*. Retrieved from www.ctredpol.org.

Koeze, P. A., (2007): "Differentiated Instruction: The Effect on Student Achievement in an Elementary School". *Master's Theses and Doctoral Dissertations*. Retrieved from
http://commons.emich.edu/theses

Kohn, A. (2006): The homework myth: Why our kids get too much of a bad thing. Cambridge, MA: DaCapo Press.

Kotter, J. P. (2007): "Leading change: Why transformation efforts fail." *Harvard Business Review, 85*(1) 96–103. Retrieved from: https://hbr.org/2007/01/leading-change-why-transformation-efforts-fail?autocomplete=true

Koutselini,M. (2006): *Towards a meta-modern paradigm of curriculum: Transcendence of a mistaken reliance theory, 28(1), 55-68.*
Retrieved from: http://www.ingentaconnect.com/contentone/jnp/ept/2006/

Kralovec, E., & Buell, J. (2000): The end of homework: How homework disrupts families, over burdens children, and limits learning. Boston, MA: Beacon.

Langer, J.A. (2001). Succeeding against the odds in English. *English Journal*, 91(1) 37-42. Retrieved from: http://www.ncte.org/journals/ej/issues/v91-1

Lawrence-Brown, D. (2004): "Differentiated instruction: Inclusive strategies for standards-based learning that benefit the whole class." *American Secondary Education,* 32(3), 34. Retrieved from: https://www.questia.com/library/journal/1P3-678679271/differentiated-instruction-inclusive-strategies-for

Lee, S. K. (2016): Knowledge Adventurer & Technology Explorer in Optimum Performance Technologies https://www.quora.com/What-are-some-ways-to-make-studying-more-interesting

Maguire, P. (2003): *District practices and student achievement: Lessons from Alberta*. Kelowna, British Columbia: Society for the Advancement of Excellence in Education.

Martin, A.J., & Dowson, M. (2009): Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research,* 79(1) 327-365. Retrieved from:
http://journals.sagepub.com/doi/full/10.3102/0034654308325583

Marzano, R. J., Waters, T., & McNulty, B. (2005): *School leadership that works: From research to results*. Aurora, CO: ASCD and McREL.

Maxwell, L. E. (2013): *School building renovation and student performance: One district's experience.* Scottsdale, AZ: Council of Educational Facility Planners International.

McNary, S., Glasgow, N., & Hicks, C. (2005): *What successful teachers do in inclusive classrooms: 60 research-based teaching strategies that help special learners succeed*. Thousand Oaks, CA: Corwin Press.

McQuarrie, L., McRae, P., & Stack-Cutler, H. (2008): Differentiated instruction provincial research review. Edmonton: Alberta Initiative for School Improvement.

McTighe, J and O'Connor. K (2005): "Seven practices for effective learning." *Educational Leadership,* 63(3) 10-17 Retrieved from: http://www.ascd.org/publications/educational leadership/nov05/vol63/num03/Seven-Practices-for-Effective-Learning.aspx

McVeigh, T. (2015): Are private tutors for children just the latest educational 'arms race'? Retrieved from: https://www.theguardian.com/education/2015/oct/04/private-tutors-arms-race-schools-parents

Minkel. J (2015): Why Looping Is a Way Underappreciated School-Improvement Initiative. Retrieved from: http://www.edweek.org/tm/articles/2015/06/17/looping-a-way-underappreciated-school-improvement-initiative.htm

Monseau, V. R. (Ed.). (2001): "Assessing ourselves to death." *English Journal*, 91(1). Retrieved from: http://www.ncte.org/journals/ej/issues/v91-1

Moolenaar, N. M., Sleegers, P. J., & Daly, A. J. (2012): "Teaming up: Linking collaboration networks, collective efficacy, and student achievement." *Teaching and Teacher Education*,*28*(2) 251-262. Retrieved from: https://www.sciencedirect.com/science/article/pii/S0742051X11001156

Moore, D. P. & Warner, E. (1998): *Where children learn: The effect of facilities on student achievement.* Scottsdale, AZ: Council of Educational Facility Planners International.

Murphy, J. (2014): "Closing Achievement Gaps: Research-Based Lessons for Educators." Vanderbilt University. Retrieved from www.esc-cc.org/Downloads/ACH_GAP_PARTS_A_B_C Murphy 1 26 112.ppt

National Clearinghouse for Educational Facilities (2002): *Resource list: Impact of facilities on learning*. Washington, DC: National Institute of Building Sciences.

National Coalition for Parent Involvement in education (2006): R*esearch Review and Resources*. Retrieved September 16, 2011, from www.ncpie.org/WhatsHappening/researchJanuary2006.cfm.

National Development Plan: Vision for 2030 (2011). The Presidency. Pretoria

National Education Knowledge Industry Association (2007): *Designing school facilities for learning. Washington*, DC: NEKIA.

National PTA. (2000): *Building Successful Partnerships: A Guide for Developing Parent and Family Involvement Programs*. Bloomington, Indiana: National Education Service, 11–12.

North Carolina School Improvement Planning Implementation Guide, North Carolina Department of Public Instruction, September, 2013, p. 18. Retrieved from
http://www.ncpublicschools.org/docs/councils/lea/previous/templates/sipguide.

Northern, A. M. (2016): The effects of good teacher professional development on student achievement. Retrieved from https://edexcellence.net/articles/the-effects-of-good-teacher-professional-development-on-student-achievement

Ormrod, J.E. (2006): *Educational psychology: Developing learners* (5th ed.). Upper Saddle River, N.J.: Pearson Education, Inc.

Patall, E. A., Cooper, H, and Allen, A. B. (2010): "Extending the School Day or School Year: A Systematic Review of Research (1985 – 2009)." *Review of Educational Research*, 80(3) 401–436. Retrieved from: http://journals.sagepub.com/doi/full/10.3102/0034654310377086

Patton, J. R. (1994). Practical recommendations for using homework with students with learning disabilities. *Journal of Learning Disabilities*, 27(9) 570-578.
Retrieved from: http://journals.sagepub.com/doi/pdf/10.1177/002221949402700904

Payton, J. W., Graczyk, P. A., Wardlaw, D. M., Bloodworth, M., Tompsett, C. J., & Weissberg, R. P. (2000): "Social and emotional learning: A framework for promoting mental health and reducing risk behavior in children and youth." *Journal of School Health*, 70, 179-185. Retrieved from
http://onlinelibrary.wiley.com/doi/10.1111/j.1746-1561.2000.tb06468.x/full

Perez. J (2009): Taking the doors off the classroom through collaboration. Retrieved from http://www.hotchalkeducationnetwork.com/collaboration-with-purpose/

Portin, B., Knapp, M., Dareff, S., Feldman, S., Russell, F., Samuelson, C., & Ling, T. (2009): *Leading for Learning Improvement in Urban Schools*. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Pratt, M. W. (2009): Looping to meet the needs of gifted children. *Principal, 88*(5), 22–24. Retrieved from: https://www.naesp.org/sites/default/files/resources/2/Principal/2009/M-J_p22.pdf

Protheroe, N. (2009): Good homework policy = Good teaching. *Principal*, 89(1), 42–45. Retrieved from: https://www.naesp.org/sites/default/files/resources/2/Principal/2009/S-O_p.42.pdf

Putwain, D.W. (2008): "Do high stakes examinations moderate the test anxiety–examination performance relationship?" *Educational Psychology*, 28(2) 109–118. Retrieved from: http://www.tandfonline.com/doi/full/10.1080/01443410701452264

Ramsuran, A (2005): "Scientific literacy, ideology and the Natural Science Curriculum." *African Journal of Research in Mathematics, Science and Technology Education,* 9(1) 1-11. Retrieved from: http://www.tandfonline.com/doi/abs/10.1080/10288457.2005.10740572

Redding, S. (2000): Parents and learning. Geneva: UNESCO Publications. Retrieved from http://www.ibe.unesco.org/publications/EducationalPracticesSeriesPdf/prac02e.pdf

Reeves, D.B (2003): *High performance in high poverty schools: 90/90/90 and beyond.*

Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005): Teachers, schools and academic achievement. *Econometrica*, 73(2), 417-458. Retrieved from http://dx.doi.org/10.1111/j.1468-0262.2005.00584.x

Rocca, A. K. (2003): "Student Attendance: A Comprehensive Literature Review. *Journal on Excellence in College Teaching*, 14(1) 85-107. Retrieved from: http://celt.miamioh.edu/ject/issue.php?v=14&n

Rock, M., Gregg, M., Ellis, E., & Gable, R. A. (2008). REACH: A framework for differentiating classroom instruction. *Preventing School Failure*, 52(2), 31–47. Retrieved from: http://www.tandfonline.com/doi/abs/10.3200/PSFL.52.2.31-47

Rockoff, J. (2004): "The Impact of Individual Teachers on Student Achievement: Evidence from Panel Data." *American Economic Review Papers and Proceedings*, 94(2) 247-252. Retrieved from: https://www.aeaweb.org/articles?id=10.1257/0002828041302244

Ronfeldt, M., Farmer, S., McQueen, K., & Grissom, J. (2015): "Teacher collaboration in instructional teams and student achievement." *American Educational Research Journal*, 52 (3) 475-514. Retrieved from: http://journals.sagepub.com/doi/full/10.3102/0002831215585562

Rowan, B.R., Correnti, R. and Miller, R. J. (2002): "What Large-scale Survey Research Tells Us about Teacher Effects on Student Achievement: Insights from the Prospects Study of Elementary Schools." *Teachers College Record* 104, 1525–1567. Retrieved from:
https://www.tcrecord.org/content.asp?contentid=11041

Ryan, R.M., & Deci, E.L. (2000): "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being." *American Psychologist,* 55(1), 68-78. Retrieved from: http://psycnet.apa.org/PsycARTICLES/journal/amp/55/1

Savasci, H. S. & Tomul, E. (2013): The Relationship between educational resources of school and academic achievement*." International Education Studies* 6(4) 114-123. Retrieved from: https://www.questia.com/read/1P3-3113723521/the-relationship-between-educational-resources

Schmoker, M. (2007): "A chance for change: Key levers for improving teaching and learning." *American School Board Journal*, *194*(4) 45-46. Retrieved from: http://www.asbj.com/MainMenuCategory/Archive/2007/April/A-Chance-fpr-Change.html

Sebastian, J. & Allensworth, E. (2012): "The Influence of Principal Leadership on Classroom Instruction and Student Learning: A Study of Mediated Pathways to Learning." *Educational Administration Quarterly*, 48(4). Retrieved from: http://journals.sagepub.com/doi/full/10.1177/0013161X11436273

Shannon, G.S. & Bylsma, P. (2004): *Characteristics of improved school districts: Themes from Research.* Olympia, WA: OSPI.

Shepherd, J (2013): State schools paying private tutors thousands for extra help. Retrieved from [https://www.theguardian.com/education/2013/may/06/state-schools-private-tutors]

Shumow, L. (2011). Homework and study habits. In S. Redding, M. Murphy, & P. Sheley (Eds.), *Handbook on family and community* engagement(pp. 77–80). Charlotte, NC: Information Age. Retrieved from http://www.schoolcommunitynetwork.org/Default.aspx (see "FACE Handbook")

Silva, E. (2008): The bentwood plan: A lesson in comprehensive teacher reform. Washington, DC Education Sector.

Slavin, R. E. (1995): Cooperative Learning: *Theory, Research and Practice.* Massachusetts: Allyne and Bacon.

Steedly, K.M., Schwartz, A., Levin M. and Luke, S.D. (2008): Social skills and achievement. *Evidence for Education.* 3(2)

Stevenson, C. (1992): *Teaching ten to fourteen year olds*. New York: Longman.

Stipek, D., & Miles, S. (2008): Effects of aggression on achievement: Does conflict with the teacher make it worse? *Child Development,* 79(6), 1721-1735. Retrieved from:
http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8624.2008.01221.x/full

Strand, S. (2010): "Do some schools narrow the gap? Differential school effectiveness by ethnicity, gender, poverty and prior achievement." *School Effectiveness and School Improvement*, 21 (3), 289-314. Retrieved from: http://www.tandfonline.com/doi/full/10.1080/09243451003732651

Strauss, A and Corbin, J (1990). *Basics of qualitative research. Ground theory procedures and techniques.* Newbury Park, CA: Sage Publishers.

Stronge, J. H. (2010): Effective Teachers=Student Achievement: What the Research Says (Larchmont, NY: Eye on Education, 2010).

Supovitz, J., Sirinides, P., & May, H. (2010): "How principals and peers influence teaching and learning." *Educational Administration Quarterly*, *46*(1), 31-56. Retrieved from:
http://journals.sagepub.com/doi/pdf/10.1177/1094670509353043

Thapa, A., Cohen, J., Guffey, S., and Higgins-D'Alessandro, A. (2013): "A review of school climate research." *Review of Educational Research*, 83, 357-385. Retrieved from: http://journals.sagepub.com/doi/full/10.3102/0034654313483907

The Quality Imperative: A State Guide to Achieving the Promise of Extended Learning Opportunities." The Council of Chief State School Officers and the National Governors' Association, 2009. Retrieved from www.nga.org/Files/pdf/0904ELOQUALITYIMPERATIVE.PDF

Therriault, S. B. (2010): Out of the debate and into the schools; Comparing Practices and Strategies in Traditional, Pilot and Charter Schools in the City of Boston (Boston, MA: American Institutes for Research).

Thompson, N. L., Franz, D. P & Miller, N. C. (2016): *Looping*. Retrieved from *https://www.amle.org/BrowsebyTopic/WhatsNew/WNDet/TabId/270/Art*

Togneri, W., & Anderson, S. E. (2003). *Beyond islands of excellence: What districts do to improve instruction and achievement in all schools*. Alexandria, VA: Learning First Alliance.

Tomlinson, C. (1999): *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA. Association for Supervision and Curriculum Development.

Tomlinson, C. & McTighe, J. (2006): *Integrating differentiated instruction and understanding by design: Connecting content and kids.* Alexandria, VA: Association for Supervision and Curriculum Development.

Uline, C. L. (2010): Decent facilities and learning. *Teachers College Record* .University of California–Irvine, University of Wisconsin–Madison, and Policy Studies Associates, Inc. 2007, p. 2. Retrieved from http://www.nccap.net/media/pages/_NDLHIllPromisingPracticesReportfinal1.pdf

Vandell, D., Reisner, E., & Pierce, K. October (2007): "Outcomes linked to high-quality afterschool programmes: Longitudinal findings from the study of promising afterschool programmes."

Vatterott, C. (2010): "Five hallmarks of good homework." *Educational Leadership*, 68(1), 10–15.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997): Learning influences. In H. J. Walberg & G. D. Haertel (Eds.), *Psychology and educational practice* (pp. 199-211). Berkeley, CA: McCutchan.

Wang, L., Wu, M., Shi, Y., Chen, Y., Loyalka, P., Chu, J., Kenny, K., and Rozelle, S (2017): The effect of teacher looping on student achievement: evidence from rural China. Retrieved from:

Wenglinsky, H. (2000): *How teaching matters: Bringing the classroom back into discussions of teacher quality.* Princeton, NJ: Milken Family Foundation and Educational Testing Service.

Wenglinsky, H (2007): When money matters: How educational expenditures improve student performance and how they don't. Princeton, NJ: Educational Testing Service.

Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance*. San Francisco: Jossey-Bass.

Willingham D. (2012): "Why Does Family Wealth Affect Learning?" *American Educator*, Spring 2012, p. 33. Retrieved from http://www.aft.org/pdfs/americaneducator/spring2012/Willingham.pdf

Wilson, D., & Sperber, D. (2004): Relevance theory. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 607-632). Oxford: Blackwell.

Winn, J., & Blanton, L. (2005): "The call for collaboration in teacher education." *Focus on Exceptional Children, 38*(2) 1-10.

Woolfolk, A. (2004): *Educational Psychology.* Singapore: Person Education, Inc.

Yaman, E. (2006): "One of the dimensions in the education system: Large classrooms and classroom management." *Journal of Turkish Educational Sciences*, 4(3) 261-274.

Yeboah, J. and Ewur, G. D. (2014): "The impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana." *Journal of Education and Practice*, 5 (6) 222-1735, 2014. Retrieved from: http://iiste.org/Journals/index.php/JEP/article/view/11241

Yoon, K. S., Duncan, T., Lee, S. W.Y., Scarloss, B., & Shapley, K. (2007): Reviewing the evidence on how teacher professional development affects student achievement. Washington, DC.

Appendix A

THE COMPUTATION OF THE BASKET SCORE

The inclusive basket of performance indicators is a more integrated approach to NSC reporting assessment results that reflects the key indicators of learner performance. The final score or basket score for each indicator is computed as follows:

- **OVERALL PASS PERCENTAGE:** Number of learners achieved a pass ÷ total learners that wrote x 100

- **MATHEMATICS PASS PERCENTAGE:** Number of Mathematics learners Achieved 30% and above ÷ Total Mathematics learners that wrote x 100

- **PHYSICAL SCIENCES PASS PERCENTAGE:** Number of Physical Sciences learners Achieved 30% and above ÷ Total Physical Sciences learners that wrote x 100

- **BACHELOR ATTAINMENT PERCENTAGE:** Number of learner Achieving A Bachelor Pass ÷ Total learners that wrote x 100

- **DISTINCTION PERCENTAGE:** Number of learners obtaining 80% and above for any subject ÷ Total Potential Distinctions (i.e. number of candidates per subject) x 100

- **MATHEMATICS PARTICIPATION RATE:** Number of Mathematics learners that wrote ÷ Total Learners that wrote x 100

- **THROUGHPUT RATE**: Current Grade 12 Passed ÷ Grade 10 Cohort (two years back) x 100

SOURCE: DBE (2017c)

THE LIST OF SCHOOLS IN THE 2007 STUDY

PROVINCE	DISTRICT	SCHOOL			QUINTILE	CANDIDATES WROTE	% ENDORSEMENT IN 2006
		NO	CODE				
FREE STATE	T Mofutsanyana	1	FI		5	86	72
NORTH WEST	Ngaka Molema	2	WK		4	244	32
FREE STATE	Fezile Dabi	3	FJ			12	42
GAUTENG	Jo'burg West	4	GR			95	33
EASTERN CAPE	Port Elizabeth	5	EJ		3	103	76
WESTERN CAPE	Metro East	6	CH			55	5
GAUTENG	Tshwane South	7	GS			142	10
KWAZULU-NATAL	Umkhanyakude	8	ZA			127	12
FREE STATE	Lejweleputswa	9	FK			69	39

Schools that Work II Lessons from the Ground

Appendix C
THE LIST OF SCHOOLS IN THE 2017 STUDY

PROVINCE	DISTRICT	SCHOOL			QUINTILE	CANDIDATES WROTE	BASKET SCORE
		NO	CODE				
EASTERN CAPE	East London	1	EA		5	143	91.3
	Port Elizabeth	2	EB			122	90.6
	Port Elizabeth	3	EC			150	86.9
	Cradock	4	ED			100	78.5
	East London	5	EI			139	73.8
	Umthatha	6	EE		4	394	77.9
	Cofimvaba	7	EF		3	263	73.9
	Umthatha	8	EG			190	72.0
	Cofimvaba	9	EH			257	70.0
EC: TOTAL		**9**					
FREE STATE	Motheo	10	FA		5	164	89.5
	Motheo	11	FB			144	87.3
	Motheo	12	FC		3	131	73.5
	TMofutsanyana	13	FD			185	72.9
	Motheo	14	FE		2	100	71.1
	TMofutsanyana	15	FF		1	107	74.1
	TMofutsanyana	16	FG			122	70.5
	TMofutsanyana	17	FH			144	70.3
FS: TOTAL		**8**					
GAUTENG	Tshwane South	18	GA		5	208	90.7
	Jo'burg North	19	GB			100	90.4
	Gauteng West	20	GC			270	82.8
	Gauteng West	21	GD			281	81.5
	Gauteng West	22	GE			276	78.7
	Gauteng West	23	GF			169	77.1
	Gauteng West	24	GG			170	75.5
	Gauteng West	25	GH			200	73.1
	Gauteng West	26	GI			269	69.9
	Jo'burg East	27	GJ		4	153	82.8
	Gauteng East	28	GK			199	73.7
	Jo'burg South	29	GL			197	72.5
	Tshwane South	30	GM		3	185	72.1
	Jo'burg Central	31	GN			148	69.7
	Gauteng West	32	GO			165	70.0
	Jo'burg West	33	GP		2	127	70.0
	Gauteng East	34	GQ			125	70.0
GP: TOTAL		**17**					
KWAZULU-NATAL	Umgungundlovu	35	KA		5	254	89.7
	Pinetown	36	KB			226	89.6
	Amajuba	37	KC			205	80.8
	Amajuba	38	KD			183	79.0
	Amajuba	39	KE			156	70.0
	Umlazi	40	KF		4	156	83.2
	Zululand	41	KG			105	81.0
	Umlazi	42	KH			186	79.7
	Umlazi	43	KI			192	76.0
	Umlazi	44	KJ			202	75.9
	Uthukela	45	KK			102	75.4
	Ugu	46	KL			158	75.2

Province	District	School			Quintile	Candidates Wrote	Basket Score
		No	Code				
KwaZulu-Natal	Pinetown	47	KM		4	194	73.0
	Umlazi	48	KN			200	72.7
	Pinetown	49	KO			131	72.2
	Umlazi	50	KP			123	72.0
	Umlazi	51	KQ			140	70.0
	Umgungundlovu	52	KR			100	70.0
	Harry Gwala	53	KS			101	70.0
	Uthukela	54	KT		3	158	78.0
	Harry Gwala	55	KU		2	131	73.7
	Amajuba	56	KV			219	72.2
	Umgungundlovu	57	KW			149	70.0
	Zululand	58	KX		1	136	75.6
	Ugu	59	KY			124	71.7
	Uthungulu	60	KZ			453	70.0
KZN: Total		**26**					
Limpopo	Gr Sekhukhune	61	LA		5	119	82.9
	Capricon	62	LB			250	81.5
	Capricon	63	LJ			195	71.4
	Capricon	64	LG			231	71.9
	Vhembe	65	LC		4	156	74.5
	Vhembe	66	LD			406	75.1
	Capricon	67	LE			131	71.2
	Vhembe	68	LF		3	367	75.6
	Vhembe	69	LH			255	71.6
	Vhembe	70	LI			295	71.5
	Gr Sekhukhune	71	LK		2	134	78.3
	Capricon	72	LL			178	71.3
	Vhembe	73	LM			223	70.7
	Capricon	74	LN		1	265	83.3
LP: Total		**14**					
Mpuma-langa	Ehlanzeni	75	MA		5	229	83.6
	Gert Sibande	76	MB			162	80.9
	Gert Sibande	77	MC			117	80.4
	Ehlanzeni	78	MD			131	77.4
	Ehlanzeni	79	ME			204	76.5
	Ehlanzeni	80	MF			189	74.8
	Nkangala	81	MG		4	226	80.9
	Gert Sibande	82	MH			110	76.5
	Ehlanzeni	83	MI			168	70.0
	Gert Sibande	84	MJ		1	148	70.4
	Bohlabela	85	MK			158	71.3
	Ehlanzeni	86	ML			105	70.4
	Ehlanzeni	87	MM			156	70.0
MP: Total		**13**					
North West	Dr. K. Kaunda	88	WA		5	126	82.4
	Ngaka Molema	89	WB			209	81.8
	Bojanala	90	WC			191	81.5
	Dr. K. Kaunda	91	WD			148	79.3
	Bojanala	92	WE			197	75.8
	Ngaka Molema	93	WF			102	70.0
	Dr. K. Kaunda	94	WG		4	185	86.7
	Bojanala	95	WH			105	83.3
	Bojanala	96	WI			250	83.0
	Ngaka Molema	97	WJ			177	72.6

Province	District	School			Quintile	Candidates Wrote	Basket Score
		No	Code				
North West	Ngaka Molema	98	WK		4	144	72.3
	Bojanala	99	WL		3	139	71.2
NW: Total		**12**					
Northern Cape	Frances Baard	100	NA		5	140	84.0
	Frances Baard	101	NB			123	83.6
	Z F Mgcawu	102	NC			167	80.2
	Z F Mgcawu	103	ND			105	79.1
	Frances Baard	104	NE			179	77.7
NC: Total		**5**					
Western Cape	Metro Central	105	CA		5	149	94.0
	Cape Winelands	106	CB			137	92.7
	Metro Central	107	CC			180	92.7
	Cape Winelands	108	CD			139	91.7
	Metro Central	109	CE			150	91.0
	Metro Central	110	CF			141	90.6
	Overberg	111	CG			177	80.9

* Five of the 18 schools in the 2007 *Schools that Work* sample obtained a *basket score* of $\geq$ 70% had $\geq$ 100 candidates who wrote the NSC examinations in 2016.

LIST OF BEST PRACTICES

THEME	SUB-THEME	BEST PRACTICE NO.	BEST PRACTICE DESCRIPTOR	ENDORSEMENT OF BEST PRACTICES*		SPECIFY THE MODIFIED BEST PRACTICE
				UNMODIFIED	MODIFIED	
1. System's support and partnership	Parent/Family Involvement	No. 1.1	• Map out ways to broaden parental or family involvement			•
	Community Support/Partnerships	No. 1.2	• Develop partnerships with agencies to provide a coordinated set of key social and educational services to learners			•
	Learner well-being	No. 1.3	• Take initiatives to understand learners' diverse learning challenges, and always strive to meet learners' needs			•
	Safety, order and discipline	No. 2.1	• Provide an orderly and secure environment that ensures a supportive context for learning			•
	Emphasis on academic success	No. 2.2	• Send strong messages about the importance and value of school work and have high expectations			•
2. Learner-centred climate	Reward and incentive	No. 2.3	• Create a strong culture of academic achievement by celebrating learner successes			•
	Positive teacher & learner attitude	No. 2.4	• Inculcate a belief that all learners can learn and live up to the expectations			•
	Culture and values	No. 2.5	• Identify and develop a strong unique culture and set of values, which underpin everything the school stands for			•

* Use "X" to indicate the best practice or best practices that your school plans to put into action in 2018 as part of your School Improvement Plan.

Theme	Sub-theme	Best Practice No.	Best Practice Descriptor	Endorsement of Best Practices*		Specify the Modified Best Practice
				Unmodified	Modified	
3. Enabling conditions	A capable teaching force	No. 3.1	• Recruit good teachers, retain them, and create good conditions for them to excel			•
	Flexibility and autonomy	No. 3.2	• Place decision-making closer to the classroom to increase learner achievement			•
	Being an NSC exam marker	No. 3.3	• Encourage teachers to become markers in the NSC examinations and to share their experiences with their fellow teachers			•
	Teacher commitment and dedication	No. 3.4	• Appoint, identify and develop teachers who feel accountable for helping learners improve their performance			•
	Focused curriculum	No. 3.5	• Specialise in few subjects or academic streams and stay focused			•
4. School leadership	Strategic and improvement planning	No. 4.1	• Develop the School Improvement Plan, which includes priorities for action, implement it and review it regularly			•
	Instructional leadership	No. 4.2	• Monitor or control teachers' and learners' work to assess the progress that the school is making towards delivering the curriculum			•
	Facilitative leadership	No. 4.3	• Lead without controlling, while making it easier for all members of the school community to achieve agreed-upon goals			•

THEME	SUB-THEME	BEST PRACTICE NO.	BEST PRACTICE DESCRIPTOR	ENDORSEMENT OF BEST PRACTICES*		SPECIFY THE MODIFIED BEST PRACTICE
				UNMODIFIED	MODIFIED	
5. Professional development and collaboration	School-based programme	No. 5.1	• Provide time for meaningful staff development as well as scheduling and pacing development activities			•
	Teacher own development	No. 5.2	• Take responsibility for own development and empowerment			•
	Teacher collaboration	No. 5.3	• Explore different scheduling and grouping practices to reduce teacher isolation and provide teachers with collaborative settings for planning, problem solving and peer support			•
	Networking	No. 5.4	• Network with other schools to develop instructional and leadership skills as a strategy for providing quality professional development activities			•
6. Quality of teaching	High learning time	No. 6.1	• Use allotted time efficiently and effectively • Mitigate factors that lead to loss of teaching time • Create more learning opportunities for learners			•
	Variety of innovative teaching strategies	No. 6.2A	• *Teacher collaboration:* Provide time and space for teachers to do the following: joint planning, team teaching, teacher observation, sharing ideas and good practices (or reflection sessions), and cross-curricula collaboration			•
		No. 6.2B	• *Looping:* Teach the same group of learners for more than one school year as they move up in different grades			•

THEME	SUB-THEME	BEST PRACTICE NO.	BEST PRACTICE DESCRIPTOR	ENDORSEMENT OF BEST PRACTICES*		SPECIFY THE MODIFIED BEST PRACTICE
				UNMODIFIED	MODIFIED	
6. Quality of teaching	Variety of innovative teaching strategies	No. 6.2C	• *Differentiated instructional strategies*: Design and deliver lessons to best reach different learners with a wide range of abilities and varying exceptionalities			•
		No. 6.2D	• *Cooperative learning (learner peer support)*: Use small groups so that learners work together to maximize their own and each other's learning			•
		No. 6.2E	• *Make subjects interesting and relevant*: Make lessons engaging for learners and increase their relevance and rigor			•
		No. 6.2F	• *Use WhatsApp as a teaching tool*: Create a safe milieu where learners and their teachers could extend learning beyond the classroom borders			•
	Frequent homework which is monitored	No. 6.3	• Design effective homework to assist learners to self-regulate and take responsibility for their work, and to empower parents to support their children at home			•
	Regular assessment	No. 6.4	• Use different phases of the assessment loop effectively to improve learning and teaching			•
	Thorough exam preparation	No. 6.5	• Prepare learners for the examinations adequately and appropriately without detracting from real learning and or "teaching to the test."			•

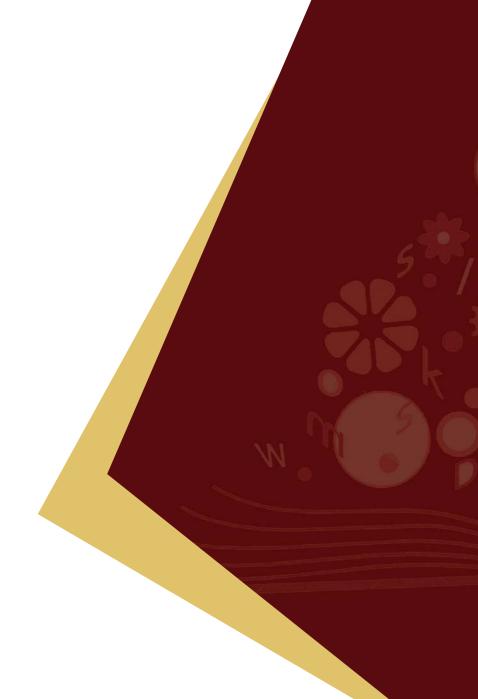## ACKNOWLEDGEMENTS

NEEDU MISSION

The National Education Evaluation and Development Unit (NEEDU) was established in 2009 and is semi-independent. It is accountable to the Minister of Basic Education for the performance of its functions. The Report of the Ministerial Committee that investigated the establishment of NEEDU and the NEEDU Bill, which was based on the recommendations of the Committee, frame the work of the Unit. NEEDU focuses on the improvement of schooling, and its principal functions, as set out in the NEEDU Bill. The functions of NEEDU are to:

- Identify, on a system-wide basis, the critical factors that inhibit or advance school improvement, including evidence of good practice
- Analyse and identify approaches and strategies necessary for achieving eqaulity in the provision of quality education
- Evaluate the monitoring and evaluation of schools by the provincial and national departments, including their structures
- Evaluate the support provided to schools and school governing bodies by the national and the provincial departments, including district offices
- Evaluate the state of South African schools--in particular, the quality of schoool leadership and learning
- Provide the Minister of Basic Education with an authoritative, analytical and accurate account on the state of schools in South Africa, in particular the status of teaching and learning in all schools
- Make focused recommendations for redressing the problem areas that undermine school improvement and, in this respect, to recommend appropriate developmental interventions to support schools

Notes

Celebrating the achievements of Schools that work

Department of Basic Education
222 Struben Street, Pretoria, 0001
Private Bag X895, Pretoria, 0001, South Africa
Tel: (012) 357 3000   Fax: (012) 323 0601

Private Bag X9035, Cape Town, 8000, South Africa
Tel: (012) 486 7000   Fax: (021) 461 8110

Hotline: 0800 202 933