

# **Report on the Implementation Evaluation of the National Curriculum Statement Grade R to 12 Focusing on the Curriculum and Assessment Policy Statements (CAPS)**

**POLICY SUMMARY, EXECUTIVE SUMMARY AND  
SUMMARY REPORT**

**25 May 2017**

National Evaluation Plan Report



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**JET** EDUCATION  
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It should be noted that any opinions expressed in this report are the responsibility of the service provider and not of the Evaluation Steering Committee, DPME, or Department of Basic Education.

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## GLOSSARY

ACER	Australian Council for Educational Research
ANA	Annual National Assessments
BEd	Bachelor of Education
CAPS	Curriculum Assessment Policy Statements
CHE	Council on Higher Education
CIPELT	Certificate in Primary English Language Teaching
CISELT	Certificate in Secondary English Language Teaching
CM	circuit manager
CPD	continuing professional development
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DPME	Department of Planning, Monitoring and Evaluation
EC	Eastern Cape
EDF	Education Deans Forum
EFAL	English first additional language
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ELRC	Education Labour Relations Council
FET	further education and training
FP	foundation phase
GET	general education and training
GP	Gauteng Province
HEMIS	Higher Education Management Information System
HL	home language
HOD	head of department
INSET	in-service education and training
IP	intermediate phase
ITE	initial teacher education
JET	JET Education Services
JICA	Japan International Cooperation Agency
KSV	knowledge, skills and values
KZN	KwaZulu-Natal
LA	learning area
LoLT	language of learning and teaching
LTSM	learning and teaching support materials

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MP	Mpumalanga
MRTEQ	Minimum Requirements for Teacher Education Qualifications
NCLB	No Child Left Behind
NCS	National Curriculum Statement
NDP	National Development Plan
NEEDU	National Education Evaluation and Development Unit
NSC	National Senior Certificate
PCK	pedagogical content knowledge
PIRLS	Progress in Reading Literacy Study
PLCs	professional learning communities
PrimTEd	Primary Teacher Education Project
R&D	research and development
SA	subject advisor
SACE	South African Council for Educators
SACMEQ	Southern and Eastern African Consortium for Monitoring Educational Quality
SBA	school-based assessment
SLA	service level agreement
SP	senior phase
TIMSS	Trends in International Mathematics and Science Study
ToC	Theory of Change
WC	Western Cape

## 1 POLICY SUMMARY

In July 2009, the Minister of Basic Education appointed a Task Team to investigate the challenges experienced in implementation of the school curriculum. Following the Task Team's wide-ranging recommendations, a re-packaged curriculum, the National Curriculum Statement Grades R-12 (NCS), was launched in schools, commencing in 2012, together with the establishment or improvement of a number of key support systems, including systemic testing, the provision of workbooks, and educator development. In 2016, the DPME commissioned an implementation evaluation of the NCS. The evaluation took the form of case studies in 12 primary and 12 high Quintile 1-3 schools in four provinces, supplemented by engagements with curriculum officials at national, provincial, and district levels.

There is unanimity among both officials and researchers that in its design, the NCS is superior to any of its predecessors and offers clear guidance to teachers. There is also general agreement that implementation is inefficient. A major problem, long known in the media and research literature alike, is the inability of leaders to ensure that teachers follow the timetable. On average, across the 24 schools, 18% of teachers were not in class during one or both of the two observation periods on each day of the field visit. In addition, there are frequent disruptions to the timetable for a variety of reasons: training, union meetings, memorial services, and choir competitions. Under these circumstances, no curriculum is implementable. Interviews conducted at system level indicate that district, provincial, and national officials are aware of and complain about this problem frequently. Yet most do not accept responsibility for school functionality, while those who do feel powerless to intervene.

A second major problem hampering curriculum delivery is poor teacher knowledge. On tests consisting of typical tasks encountered in the curriculum, only five of the 22 Grade 2 teachers tested achieved the modest benchmark of 60% in English First Additional Language (EFAL), and three achieved it in Mathematics. The picture for Grade 10 teachers is similar: on the same test administered to Grade 2 EFAL teachers, six of the 12 English teachers achieved 70%; on a Grade 10 level Mathematics test, four of the 12 Mathematics teachers scored 70%, and three of the 12 Mathematical Literacy teachers 60%. These results suggest that the majority of these teachers do not have the subject content required to teach effectively. Similarly, judging from the views of their peers, subordinates, and superiors, many instructional leaders at school and district level are not competent to fulfil the demands of their positions. The latter problem arises partly from the weak education of these officials and partly from the promotion of inappropriate candidates. The view that nepotism and corruption is rife in awarding promotion posts is widespread among system-level interviewees. The evaluation concludes that significant blockages occur at key points in the implementation of the curriculum and proposes five main recommendations to address these blockages:

- R1** DBE, DHET, SACE, and universities should devise curriculum and practice standards to guide the education and work of teachers.
- R2** DBE must review and apply merit-based appointment and promotion policies and processes for educators.
- R3** DBE must work with universities, NGOs, and corporate partners to conduct research on effective in-service education and training for educators.
- R4** DBE, in collaboration with Provincial Departments of Education, must develop an effective programme to achieve school functionality.
- R5** DBE and Provincial Departments of Education should develop an effective programme to support school leaders and teachers in curriculum implementation.

The five recommendations cannot be seen in a purely technical sense. Their implementation must be located within and energised by a vision of school excellence, a culture of service, and a strong sense of individual and institutional agency propelled from the highest political levels. There is likely to be resistance to certain elements of the programme, and it will require clear and consistent political leadership over at least a decade, coupled with strong administrative protocols and practices, to follow the interventions through to achieving the capable state envisaged by the National Development Plan.

## 2 EXECUTIVE SUMMARY

### 1 CONTEXT

#### 1.1 Introduction

In July 2009, the Minister of Basic Education appointed a Task Team to investigate the nature of the challenges experienced in the implementation of the school curriculum and to formulate a set of recommendations designed to improve implementation. The Task Team presented a set of recommendations for improving the design and implementation of the school curriculum. One of the outcomes was a re-packaged curriculum policy, the National Curriculum Statement Grades R-12 (NCS).

#### 1.2 Background to the intervention

The Department of Basic Education (DBE) took the recommendations of the Ministerial Task Team as a mandate for revision not only of the school curriculum, but also of the many support systems, including systemic testing, the provision of workbooks, and teacher development. The first step in fulfilling this mandate was to develop a plan, the *Action Plan to 2014: Towards the Realisation of Schooling 2025*.

New policies were issued at the same time as the *Action Plan*, most important of which is the NCS. The NCS was phased in as follows: Foundation Phase (FP) and Grade 10 in 2012, Intermediate Phase (IP) and Grade 11 in 2013, and Senior Phase (SP) and Grade 12 in 2014.

The recommendations of the Ministerial Task Team encompass much more than a redesign of the documents specifying what learners are expected to value, know, and be able to do. They encompass the eight key aspects of schooling around which the literature review for the evaluation was structured. The evaluation investigated all these elements in order to understand the role of each in facilitating or hampering delivery.

#### 1.3 Background to the evaluation

Following an open tender process, the DPME appointed JET Education Services to undertake an implementation evaluation of the NCS. A Service Level Agreement (SLA) was signed on 4 March 2016 and the commissioned evaluation was titled *Implementation Evaluation of the National Curriculum Statement Grade R to 12 Focusing on the Curriculum and Assessment Policy Statements (CAPS)*. The purpose of the study is to evaluate whether the new curriculum has been implemented (and to what extent it is being implemented), as specified in the CAPS documents, and how implementation may be strengthened.

## 2 METHODOLOGY

The Service Level Agreement (SLA) governing the evaluation specified that the method followed should focus on 24 case studies, consisting of 12 primary schools and 12 secondary schools sampled from all Quintile 1-3 schools (the poorest) in four provinces: Eastern Cape (EC), Gauteng (GP), Kwa-Zulu Natal (KZN) and Mpumalanga (MP). The case studies, based on a matched-pairs design, with an outlier, were supplemented by engaging with curriculum officials at national, provincial, and district levels.

## 3 KEY FINDINGS FROM THE LITERATURE/DOCUMENT REVIEW

The Literature Review was structured according to seven themes:

**3.1 Learner performance.** The evidence is unequivocal that the South African school system is gaining ground in terms of improved scores and a narrowing equity gap. Yet, there is universal dissatisfaction with performance, particularly in schools serving the poor.



**3.2 Curriculum design.** An emerging consensus around curriculum design is that the design should be considered for minor revision, but that the overwhelming problem lies in implementation.

**3.3 Learning and Teaching Support Materials.** The research evidence indicates that the DBE workbook programme has proved successful in the production and delivery of books to schools and classrooms.

**3.4 Summative and formative assessment.** International research evidence indicates a major challenge to policy makers in finding a balance between the need for data on systemic progress and school accountability, with the need to grow the capacities of educators to use formative assessment to improve pedagogic quality.

**3.5 Initial teacher education.** Younger teachers are more knowledgeable than their older peers, but much more needs to be done in equipping new teachers for the classroom.

**3.6 Continuous professional development.** There is a growing concern that the considerable resources spent on continuous professional development (CPD) are not succeeding in raising educator capacity.

**3.7 Instructional leadership.** All signs point to weak leadership at school and district levels.

**3.8 Pedagogy** is a topic about which there is a great deal of research, but few conclusive insights, except that a majority of South African teachers exhibit a poor grasp of the subjects for which they are responsible.

## 4 KEY EVALUATION FINDINGS

**4.1 Curriculum design.** Respondents at national, provincial, and district levels, almost without exception, agreed that CAPS is superior to any of its predecessors in terms of the guidance offered to teachers. At the same time, there was wide agreement that implementation is inefficient. Suggestions were made for reviewing CAPS with a view to refining the existing documents with respect to the number of assessment tasks, the breadth of content in some subjects, and providing more guidance for teachers in the area of assessment.

**4.2 Time-management.** The evaluation found that the majority of primary schools visited plan their timetables according to CAPS requirements, but most high schools do not, a number of them significantly so. Having a timetable which meets CAPS specifications is one thing, but adhering to the timetable is quite a different matter. At school level, fieldworkers observed how many classes were without teachers during the first period on the second day of the field visit and the last period on the first day. Only six of the 24 schools had, at most, one teacher not in class during one or both observation periods; on average, 18% of teachers were not in class during each of these times. In addition, in all the schools visited, frequent disruptions to the timetable occur for a variety of reasons: training, union meetings, memorial services, choir competitions, and the like. Under these circumstances, no curriculum is implementable.

Interviews conducted at system level indicate that district, provincial, and national officials are aware of this problem and complain about it frequently. Yet many officials do not accept responsibility for school functionality, although, in terms of their job specifications, they have not only the authority, but indeed the obligation, to intervene in these institutions.

**4.3 Teacher knowledge.** Three tests were constructed to measure the content knowledge of Grade 2 teachers in Mathematics and English and Grade 10 teachers in Mathematics, Mathematical Literacy and English. The tests consisted of typical problems encountered in the Intermediate or Senior Phase curricula, respectively. Of the 22 Grade 2 teachers tested in Mathematics and English, only five achieved the modest benchmark of 60% in EFAL, and three achieved it in Mathematics. The picture for Grade 10 teachers is very similar: six of the 12 English teachers reached 70% on the same EFAL test administered to Grade 2 teachers;

four of the 12 Mathematics teachers scored 70% on the Grade 10 Mathematics test; and three of 12 Mathematical Literacy teachers reached 60% on the same Mathematics test.

These results suggest that between two-thirds and three-quarters of these Grade 2 teachers do not possess the subject knowledge required to teach English or Mathematics, while half the Grade 10 English teachers are not competent to teach English and two-thirds to three-quarters of Mathematics and Mathematical Literacy teachers have fundamental gaps in their knowledge repertoires. The small and unrepresentative nature of the sample precludes the findings from being at all representative of the South African teacher population. However, the test scores of teachers in the present study confirm the findings of other research studies of teacher content knowledge which have emerged in recent years.

**4.4 Formative assessment.** Section 4 of the CAPS documents for each subject in the respective phases is concerned with assessment, where formative assessment is seen as a key lever in the implementation of CAPS. The evidence is strong that the majority of heads of department (HODs) are not exercising adequate instructional leadership regarding assessment in terms of checking teachers' assessment records, moderating test and exam papers, analysing test scores, and discussing the implications for pedagogy. Clearly, there is little coherence within most schools concerning the use of assessment to improve teaching and learning: while schools go through the motions of setting, administering, and marking tests and exams, their most important use is for promotion purposes, and their formative potential goes largely unrealised.

**4.5 Support by subject advisors and school heads of department.** There is wide agreement among curriculum officials at all three systemic levels that support for teachers is not optimally provided by districts and schools. Two issues were identified by respondents as problematic. First, there is a mismatch between expectations of how subject advisors and HODs should support teachers and the resources available for them to meet these expectations. It is generally expected that subject advisors should visit schools and support teachers directly in their classrooms, but this is quite unrealistic, given the large numbers of schools allocated to each subject advisor. Similarly, HODs generally have full teaching loads, with little time available for working with teachers. It can be argued that greatly increasing the number of subject advisors and HODs is not feasible, nor even desirable.

The alternative is to change the way these key instructional leaders work, so as to have maximum impact on the quality of classroom engagements. If we accept that in-school instructional leadership is an important element in any attempt to improve teacher competence and effectiveness on a system-wide basis, then HODs would be central to such an effort. It follows that subject advisors should focus their efforts on working with HODs to strengthen their capacity and build instructional leadership systems.

**4.6 Promotion practices.** Partly responsible for the weak instructional leadership exerted by HODs and subject advisors is the appointment of inappropriate candidates to these and other promotion posts. The view that nepotism, bribery, and the buying and selling of posts are rife in the awarding of promotion posts is widespread among system-level interviewees. These perceptions are associated with a widespread culture characterised by lack of respect of educators for their leaders and a feeling of helplessness. Curriculum delivery is a process which is highly dependent on the expertise and motivation of educators, whether situated at classroom, school, district, provincial, or national level. A system which does not carefully select and continuously educate this cadre of instructional leaders cannot optimise learning; a system which allows these processes to be abused on a wide scale is turning a blind eye to the destruction of its own best intentions.

**4.7 Presence and use of Learning and Teaching Support Materials.** Teachers and their HODs reported a dearth of learning and teaching support materials (LTSM) at schools throughout the sample. These reported shortages are puzzling in the light of large budget allocations for LTSM in the majority of provinces. Whatever the reasons for the reported shortage of books, the classroom observations show that in nearly two-fifths of the 96

classes observed, no LTSM of any kind were used. Something of an exception is provided by the DBE workbooks. All educators interviewed in all primary schools agreed that the books were available, and that generally there are sufficient numbers for each child to own one. Furthermore, they were the most widely used books in the 61 primary classrooms observed, where DBE workbooks were used in half the lessons.

**4.8 Learner writing.** At both primary and high school level, the high variation in quantity of writing produced by schools in the same district shows weak instructional leadership with respect to writing emanating from the district. Interestingly, in most schools, a relatively high correlation between the quantities of writing produced by learners of different teachers indicates a degree of leadership in this regard. The relative neglect of certain types of writing on important topics may also be related to teacher knowledge weaknesses. In this regard, the paucity in Mathematics exercise books of writing in Euclidean Geometry is noticeable, while the low quantity of extended writing in EFAL probably reflects weaknesses on the part of teachers.

**4.9 Pedagogy.** On the question of pedagogy, it is evident that teachers manage time and learner behaviour relatively efficiently in their classes. However, learners are not set sufficient quantities of individual tasks to engage them fully, while teacher explanations of concepts and procedures generally lack clarity and detail. Furthermore, while teachers ask a large number of questions and spread them around the class, they do not make the most of opportunities afforded by learners' questions and responses to correct misconceptions and build on existing knowledge: such techniques lie at the heart of formative assessment.

**4.10 Continuing professional development.** Despite the enthusiasm with which senior managers described various intervention programmes in Literacy and Mathematics, there was unanimity at national level that current approaches to educator development (CPD) are not working; one senior manager added that poor quality initial teacher education (ITE) was part of the problem. Similarly, for six of the 16 provincial level respondents, the CPD offered by provinces and districts is working only to a limited extent. The view that workshop training is ineffective is widespread among district level subject advisors and was expressed at least once in each of the four districts visited.

No in-school CPD was provided at all at half (12/24) of the sample schools, while in the remainder, the activities were generally confined to attending staff meetings, joint planning sessions, or end-of-year moderation. While these activities provide fertile opportunities for CPD, this potential is weakly exploited, at best.

## 6 CONCLUSIONS

The extent to which the goals of CAPS have or have not been achieved is examined through the lens of six evaluation criteria: effectiveness, appropriateness, equity, efficiency, impact, and sustainability.

**6.1 Effectiveness.** The criterion of effectiveness assesses the extent to which an intervention achieves its intended objectives and outcomes and identifies key factors influencing the achievement or non-achievement of these. The short answer to the question *Is CAPS being effective?* is that it is too soon to say. It is likely that the interventions which have been rolled out since 2011 – including the workbooks, promulgation of CAPS, and an increased focus on continuous professional development – are reinforcing the performance improvements which began showing in 2011. However, there is also widespread agreement that the system continues to underperform.

**6.2 Appropriateness.** The relevance of an intervention is a measure of the extent to which it is suited to the priorities of the target group. We prefer the term appropriateness, which is used in conjunction with relevance, but also addresses the tailoring of interventions to local needs, priorities and skills. Under present circumstances, it seems that CAPS is unlikely to achieve its ambitious goals in the near future. But in this respect, CAPS is no

different from any other curriculum which is likely to suffer the same fate under current conditions of poor time management and weak educator knowledge.

**6.3 Equity.** Equity refers to fairness and justice. As an evaluation criterion, it is used to consider the extent to which the implementation of CAPS is fair and does not exacerbate existing inequalities. The South African school system is manifestly inequitable, with children from more affluent homes out-performing their rural and township counterparts by at least two years of schooling by the end of Grade 5. The conclusion of the implementation evaluation is that this is not the fault of the curriculum, but of systemic non-curriculum causes and, in particular, weak educator knowledge capacity, very weak time-management practices, and a less than excellent ITE system. At the same time, scores on the TIMSS tests indicate that there has been a small improvement in the equity gap since 2011.

**6.4 Efficiency.** Efficiency is a measure of the extent to which the ratio of inputs - such as funding and human resources - required to achieve the desired outputs and outcomes are economical and productive. The evaluation found that the implementation of CAPS in the majority of schools in the sample is grossly inefficient, with part-days and whole days wasted on non-timetable activities. HODs claim to undertake many monitoring activities, but much of this activity is 'going through the motions', completing monitoring forms and other forms of 'evidence', while having little impact on teaching and learning. Similarly, subject advisors can spend a whole day travelling, paying superficial visits to at most two or three of the scores of schools in their charge.

**6.5 Likely impact.** Impact refers to the long-term effects produced by the intervention, whether directly or indirectly, intended or unintended. As an implementation evaluation, the present study did not explicitly look for evidence for the impact of the CAPS. However, no curriculum is likely to have an impact on the inequity gap exhibited by the South African school system in the short term, and the gap is only likely to be narrowed significantly under sustained implementation.

**6.6 Sustainability.** Sustainability is concerned with the continuation of benefits from the intervention after major development assistance has ceased. The evaluation found that the curriculum has experienced a period of consolidation since 2009. However, in the area of human resource management, some provinces and even the national department have undergone frequent changes of leadership and extended periods of senior officials in acting positions, a situation not conducive to systems change, according to the criteria for systems change recommended by the NDP.

### **Blockages to curriculum implementation**

The conclusions of the evaluation are that significant blockages to the implementation of the NCS occur at five key points in the curriculum cycle: the initial education of teachers (ITE), the appointment of inappropriate candidates to promotion posts, ineffective in-service training (CPD), the poor use of time in schools, and ineffective instructional leadership practices exercised by subject advisors and school leaders.

## **7 RECOMMENDATIONS**

Five recommendations are aimed at unblocking the inhibitions to curriculum implementation identified by the evaluation.

**R1** DBE, Department of Higher Education and Training (DHET), South African Council for Educators (SACE), and universities should devise curriculum and practice standards to guide the education and work of teachers.

**R2** DBE must review and apply merit-based appointment and promotion policies and processes for educators.

**R3** DBE must work with universities, NGOs, and corporate partners to conduct research on effective in-service education and training for educators.

**R4** DBE, in collaboration with Provincial Departments of Education, must develop an effective programme to achieve school functionality.

**R5** DBE and Provincial Departments of Education should develop an effective programme to support school leaders and teachers in curriculum implementation.

The recommendations cannot be seen in a purely technical sense. Their implementation must be located within and energised by a vision of school excellence, a culture of service, and a strong sense of individual and institutional agency propelled from the highest political levels. There is likely to be resistance, both political and administrative, to certain elements of the programme, and it will require clear and consistent political leadership over at least a decade, coupled with strong administrative protocols and practices, to follow the interventions through to achieving the capable state envisaged by the NDP (NPC, 2012).

Each recommendation is accompanied by a number of sub-recommendations aimed at operationalising the recommendation.

Recommendation	No	Sub-recommendation
<b>R1</b> DBE, DHET, SACE and Universities should devise curriculum and practice standards to guide the education and work of teachers.  <b>Motivation:</b> The work of learners in acquiring the KSV of the curriculum is directed and coordinated through the work of teachers, the competencies for which, in turn, must be inculcated and regulated with a view ultimately to facilitating learning in classrooms.	<b>R1.1</b>	<b>Implementation of Umalusi recommendations regarding CAPS</b>  It is recommended that DBE urgently consider the recommendations made by Umalusi regarding the maths and English (HL and EFAL) FET curricula. Following an evaluation of CAPS in 2014 it was recommended that this process be completed within 2 years.
	<b>R1.2</b>	<b>Raise the standard of EFAL in all phases</b>  Evidence indicates that raising the standard of EFAL - through the inclusion of higher cognitive functions in the NSC, other common assessment exercises, and LTSM in all four phases – would enable learners to strengthen performance across the curriculum. As such, this sub-recommendation should receive the highest priority.
	<b>R1.3</b>	<b>Review of CAPS assessment section</b>  The current review by DBE of Section 4 (Assessment) in the CAPS documents is supported. It is recommended that the following be included in the terms of reference for the review: <ul style="list-style-type: none"> <li>the number of formal tasks required by phase, and</li> <li>clarifying the current confusion among teachers, HODs and SAs around levels of difficulty. A good way of dealing with this problem is by providing teachers with examples of items which exemplify different cognitive processes and levels of difficulty.</li> </ul>
	<b>R1.4</b>	<b>Review of CAPS content</b>  It is recommended that DBE commission a review of the CAPS documents with a view to reducing content where appropriate. The priority should be on depth of understanding of the most important strands of the respective school subjects. DBE has identified this as a priority, and it is recommended that a wide range of experts be invited to participate in the review. This exercise should not result in major curriculum change. One way of addressing content overload, if it is found, is to label certain topics in CAPS as 'optional', or 'for further study', etc.

Recommendation	No	Sub-recommendation
	<b>R1.5</b>	<b>Distribution of NCS documents</b> School level audits of NCS documents among teachers should be undertaken every three years, and supplies to schools topped up.
	<b>R1.6</b>	<b>Review of national assessment for GET</b> Regarding the redesign of a national assessment instrument for the GET Phase, it is recommended that DBE, in partnership with the provinces and in discussion with psychometricians and other assessment experts, drawn from both the public and private sectors: <ul style="list-style-type: none"> <li>• Give careful consideration to the dangers inherent in implementing a poorly designed <i>summative assessment system</i> focusing on accountability (such as NCLB), taking account of the research; undertake a cost/benefit analysis before embarking on such an exercise.</li> <li>• Undertake a cost/benefit analysis before embarking on a <i>systemic evaluation</i> exercise. Particular consideration should be given to the marginal benefits of such a programme, over and above what is currently learned from SACMEQ, TIMSS, and PIRLS.</li> <li>• Pay particular attention to improving <i>formative assessment</i> at school and classroom levels. This is a central element of effective pedagogy, and formative assessment holds the key to linking the work of teacher educators, system-level officials, school leaders, and teachers. More detail on how to operationalise this recommendation is given in Sub-recommendations R1.7, R2.1, 3.1, and 5.1 – 5.4.</li> </ul>
	<b>R1.7</b>	<b>Teacher education and management</b> DHET should continue to lead the PrimTEd programme, with strong support from DBE, while SACE should continue to lead the initiative designed to develop professional practice standards for teachers. It is recommended that DHET, CHE, EDF, DBE and SACE communicate with respect to their work regarding curriculum content standards for ITE, professional practice standards for teachers, standards for the accreditation of CPD programmes, and standards for the assessment of educators'.
<b>R2</b> DBE, provinces and districts must review and apply merit-based policies and processes for the appointment and promotion of educators  <b>Motivation:</b> The delivery of education is a complex and highly technical task requiring on the part of educators a	<b>R2.1</b>	<b>Development of a merit-based promotion system</b> It is recommended that DBE, in collaboration with provinces: <ul style="list-style-type: none"> <li>• Gives priority to instituting a competence-based system for the appointment of principals within three years. The lessons learned in WC and GP should be built on.</li> <li>• Develops sets of standards for subject advisors and heads of department, linked to the Standards for Principalship.</li> <li>• Pilots a merit-based approach to the appointment of school-level HODs and subject advisors.</li> </ul>
	<b>R2.2</b>	<b>Implementation - provinces</b> Provincial officials should give particular attention to developing protocols for implementing the merit-based approach, in discussion with DBE.

Recommendation	No	Sub-recommendation
sophisticated knowledge which combines disciplinary (e.g., maths, English) and pedagogic (how to convey the discipline) knowledges. A key tenet of the NDP vision is that the capable state which delivers high quality services to its citizens is driven by the most responsible and competent people, selected according to their capacity to undertake the designated job.	<b>R2.3</b>	<b>Implementation – districts</b>  Circuit managers and subject advisors should support principals and monitor implementation of the promotions policy at school level, through direct observation and intervention where necessary.
<b>R3</b> DBE must work with universities, NGOs, and corporate partners to conduct and support research on effective in-service education and training for educators  <b>Motivation:</b>  The CPD system is ‘flying blind’: while large sums are spent annually by public, private and international sources, little is known about the effects this activity. DBE needs to take the lead in directing these efforts towards more efficient solutions, through the intelligent use of information.	<b>R3.1</b>	<b>Promote a research-focused approach to CPD</b>  It is recommended that DBE and private sector donors allocate at least 5% of any training initiative to R&D.  Areas requiring the most urgent attention are programmes which enable primary school teachers to teach literacy and basic maths, and to practice formative assessment in support of these disciplines.
	<b>R3.2</b>	<b>Knowledge management</b>  DBE should establish a Directorate for Knowledge Management, in the Research Coordination, Monitoring and Evaluation Chief Directorate. The task of the Dir: KM will be to collate research information on CPD and cumulatively build a knowledge base concerning the design and implementation of successful CPD programmes.
<b>R4</b> DBE in collaboration with Provincial Departments of Education must develop an effective programme to achieve school functionality  <b>Motivation:</b>  Government, from the highest level, has been condemning the poor use of time in schools	<b>R4.1</b>	<b>Developing a plan</b>  DBE should work with provincial officials to develop an effective programme to achieve school functionality. Adequate resources, including transport to schools for district officials, must be allocated to the programme.
	<b>R4.2</b>	<b>Implementation – provinces</b>  Each province should develop an implementation plan for achieving school functionality, which should include unannounced visits to schools by circuit managers. The statutory procedures governing the relationship between leaders and their subordinates are clear and even-handed in recognising both the responsibilities of managers and the rights of individuals. But in the end policy must be followed, even if it requires taking



Recommendation	No	Sub-recommendation
<p>since 1998. Until there is a movement from rhetoric to action, schooling cannot undergo the accelerated rate of efficiency proposed by the NDP. While the ELRC provides an important space for cooperation, at the end of the day activity cannot be held up indefinitely by any one party, and government needs to exercise its authority to move forward.</p>		disciplinary measures against repeat offenders.
	<b>R4.3</b>	<b>Implementation - districts</b> <p>It is recommended that circuit managers monitor implementation of time-use policy at school level, through direct observation. Principals and circuit managers who cannot maintain effective time management practices in the institutions under their jurisdiction must be rendered assistance, while repeated inability must lead to redeployment or dismissal, as prescribed by the law.</p>
	<b>R4.4</b>	<b>Implementation – schools</b> <p>School principals must ensure adherence of teachers to CAPS timetable. Recalcitrant teachers must be disciplined.</p>
<p><b>R5</b> DBE and Provincial Departments of Education should develop an effective programme to support school leaders and teachers in curriculum implementation</p> <p><b>Motivation:</b></p> <p>Monitoring and supporting the work of teachers involves much more than checking teacher documents and training workshops: it should include directing the daily work of teachers through lesson study, peer observation, and the analysis of test scores.</p>	<b>R5.1</b>	<b>Developing a plan</b> <p>DBE should work with provinces to incorporate best evidence of effective CPD programmes into the planning and rollout of support activities, with particular attention to literacy, basic maths and the use of formative assessment to promote learning in these foundation disciplines.</p>
	<b>R5.2</b>	<b>Implementation – provinces</b> <p>Provincial level curriculum leaders should work with subject advisors on the design, implementation and evaluation of such activities.</p>
	<b>R5.3</b>	<b>Implementation - districts</b> <p>Subject advisors should work with school-level HODs, meeting regularly at a rotating central venue, on running in-school PLCs to focus on matters of curriculum, assessment and pedagogy. Particular attention should be given to using assessment data to identify learner misconceptions and pedagogical effectiveness in literacy and basic maths.</p>
	<b>R5.4</b>	<b>Implementation - schools</b> <p>Principals should coordinate and direct the team of HODs within the school to promote engagement by teachers with curriculum issues. The promotion and quality assurance of PLCs in the relevant phase/subject areas should be central to the principal's role in exercising instructional leadership, as envisaged in the Standard for Principalship.</p> <p>It is recommended that HODs:</p> <ul style="list-style-type: none"> <li>• Work with teachers in in-school PLCs to focus on formative assessment and effective pedagogy, in this way strengthening teachers' understanding of and skill in applying PCK in class, constructing test papers, and analysing the results.</li> <li>• Part of this exercise must be to shift the focus of monitoring from inputs to outcomes, for example, using the Early Grade Reading Assessment (EGRA, and the Early Grade Maths Assessment (EGMA) tools to test directly the literacy and numeracy skills of learners.</li> </ul>



## SUMMARY REPORT

### 1 INTRODUCTION

#### 1.1 Context

In July 2009, in response to wide-ranging comments from a variety of actors, the Minister of Basic Education appointed a Task Team to investigate the nature of the challenges experienced in the implementation of the school curriculum and to formulate a set of recommendations designed to improve implementation of curriculum policy (DBE, 2009). The Task Team presented a five-year plan to improve teaching and learning via a set of short-term interventions aimed at providing immediate relief and focus for teachers and medium- and longer-term recommendations with the vision of achieving real improvement in student learning. These included recommendations for a re-packaged curriculum policy, which gave rise to the National Curriculum Statement Grades R-12 (NCS) (see, for example, DBE, 2011b), implemented in the first classrooms in 2012.

Following an open tender process, the DPME appointed JET Education Services (JET) to undertake an implementation evaluation of the NCS. A Service Level Agreement (SLA) was signed on 4 March 2016.

Although the body of research on curriculum in South Africa has grown in the last five years, relatively little is known about the experiences of schools and particularly of teachers, concerning the implementation of the curriculum. The present study is aimed at addressing this gap.

#### 1.2 Background to the intervention

The Department of Basic Education (DBE) took the recommendations of the Ministerial Task Team as a mandate for reform of the school curriculum. The first step in fulfilling this mandate was to develop a plan, the *Action Plan to 2014: Towards the Realisation of Schooling 2025* (DBE, 2011a).

At the same time, three new policy documents were issued: *the National Curriculum and Assessment Policy Statements Grades R – 12 in schools (CAPS)*; *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grades R – 12*; and *the National Protocol for Assessment Grades R – 12*.

The NCS was phased in as follows: it was introduced into the Foundation Phase (FP) and Grade 10 in 2012, the Intermediate Phase (IP) and Grade 11 in 2013, and the Senior Phase (SP) and Grade 12 in 2014. The logic underlying the NCS is that a curriculum which clearly specifies what children should know and be able to do and is adequately resourced and supported will lead to improved teaching and learning.

#### 1.3 Background to the evaluation

The evaluation commissioned to JET is entitled *Implementation Evaluation of the National Curriculum Statement Grade R to 12 Focusing on the Curriculum and Assessment Policy Statements (CAPS)*. The purpose of the study is to evaluate whether the new curriculum has been implemented (and to what extent it is being implemented), as specified in the CAPS documents, and how implementation may be strengthened. The SLA set seven evaluation questions as the starting point:

1. To what extent has CAPS been implemented?
2. Do teachers understand CAPS and do they have the necessary capabilities and motivation to implement the NCS according to CAPS and associated policies?
3. Are the support systems to support CAPS implementation working?
4. Is the theory of change working as expected? Based on how the theory of change is working, are we likely to see the planned outcomes of CAPS?

5. Based on the likelihood of achieving the outcomes, is the conceptualisation of CAPS and the systems for its implementation relevant and appropriate for the context in which CAPS operates?
6. Are there any gaps and challenges in the CAPS design and content? If any, are they hampering implementation?
7. How should the CAPS design and the systems for implementing it be strengthened?

## 1.4 Evaluation Criteria

Four following main evaluation criteria were used to assess the extent to which CAPS is being implemented.

**Effectiveness** refers to the extent to which an intervention achieves its intended objectives and outcomes and identifies key factors influencing the achievement or non-achievement of these;

**Appropriateness** includes an assessment of the relevance of the intervention and also addresses its tailoring to local needs, priorities, and skills;

**Equity** is a measure of the extent of disparities between performance of children from poor homes and that of their more affluent peers; and

**Efficiency** is a measure of the proportion of inputs required to achieve the desired outputs and outcomes.

**Likely impact and sustainability.** As an implementation evaluation, the present study did not directly study the impact (long-term effects produced by the intervention) or sustainability (continuation of the benefits of the intervention after it has ceased) of CAPS; but some evidence is presented concerning its *impact* and *sustainability*.

## 1.5 Methodology

The SLA governing the evaluation specified that the method followed should focus on 24 case studies, consisting of 12 primary schools and 12 secondary schools sampled from all Quintile 1-3 (the poorest) schools in four provinces: the Eastern Cape (EC), Gauteng (GP), KwaZulu-Natal (KZN), and Mpumalanga (MP). A matched pairs design was used to identify two primary and two high schools in each of the four provinces. Within each pair, schools were matched as closely as possible in terms of key variables such as school district, socio-economic status of learner community, geographical location, and governance and management. The key variable which distinguished the two schools in each pair was learner performance, with one school showing above average performance and the other performing below average. The theory behind a matched pairs design is that since all the variables known to influence learner performance, except school leadership and pedagogy, are kept constant, differences in performance will largely be attributable to differences in instructional leadership and teaching quality.

Performance measures were the Grade 2 Mathematics average in the 2014 Annual National Assessments (ANA) for primary schools and the 2014 National Senior Certificate (NSC) pass rate for secondary schools. A third 'outlier' school in the same district as the matched pair was then selected so as to provide a different perspective (for example, urban or rural) to the findings derived from the matched pair.

The case studies were pursued through interviews with the principal, heads of department (HODs) and teachers in the 24 schools, together with school- and classroom-level observations, document analysis, and the administration of subject content tests to a selection of teachers at Grade 2 and 10 levels in the primary and high schools, respectively. The case studies were supplemented by analysis of the relevant curriculum policies and semi-structured interviews with national, provincial, and district officials concerned with the design and implementation of the curriculum.

Data collection was governed by 10 instruments. The majority of instrument items were structured and amenable to quantitative capture. Free response items were kept to a

minimum, but were necessary to understand educators' views and the motivation behind their behaviour. Even here, an attempt was made to guide field observations toward objective criteria: for example, the 'qualitative' instrument for classroom observation required fieldworkers to make judgements on a 4-point descriptive scale regarding the quality of teacher/learner interactions on 11 key pedagogical dimensions.

The first point to note regarding the validity and reliability of the kind of data on which this report is based is that it is not representative in any sense: for example, the interviews conducted with three teachers in a school of a total staff of 20-30 cannot represent the views of all teachers in that school, let alone the district, province, or the country. What this kind of data does provide, and which makes it complementary and often superior to large-scale survey data, are insights into behaviours and attitudes that are typical in a part of the system, in this case Quintile 1-3 schools and their districts. Furthermore, the data provided by the present study enables subtleties of comportment and culture to emerge, which would not necessarily be apparent in a survey: how people regard one another and the work they are doing is best captured in open-ended responses, through the words and anecdotes chosen by the speakers themselves.

A second limitation is posed by what is referred to as 'socially desirable' responses. This is where respondents do not report what is actually happening or what they actually feel about an issue, but reflect rather what they consider to be the 'right' answer. This problem is addressed through the technique of triangulation, where two or more respondents are asked the same question and their answers compared.

In reporting on the evaluation, the initial intention was to write eight mini-case studies, grouping the three members of each triplet of schools together and focusing on similarities and differences within the group, with a view to identifying best practices among high-performing schools. However, this approach proved to be unsatisfactory, since the 24 schools in the sample differed very little from each other with respect to the key indicators of good pedagogy at school and classroom level, such as time-management, presence and use of books, pedagogy, assessment practices, questioning techniques, and the like. The most likely reason for this is that the performance measures used are not reliable indicators of school performance. As a result, should the results have been written up in the form of the case studies originally envisaged, three very similar pictures would have emerged, with variation between schools in each case study of the same order of magnitude as those between schools across categories. The evaluation report is therefore structured according to the evaluation questions. These are presented largely in the form of tables showing performance on the sub-questions, supported by narrative text and, where appropriate, 'thick descriptions' and quotes from participants to provide detail of particularly illuminating examples.

## 2 THE PROGRAMME

The recommendations of the Ministerial Task Team are summarised in **Table 1**. They are based on a situation analysis of eight key areas in which difficulties of curriculum implementation were being experienced. The evaluation investigated all these elements in order to understand the role of each in facilitating or hampering delivery.

**Table 1: Recommendations of the Ministerial Task Team**

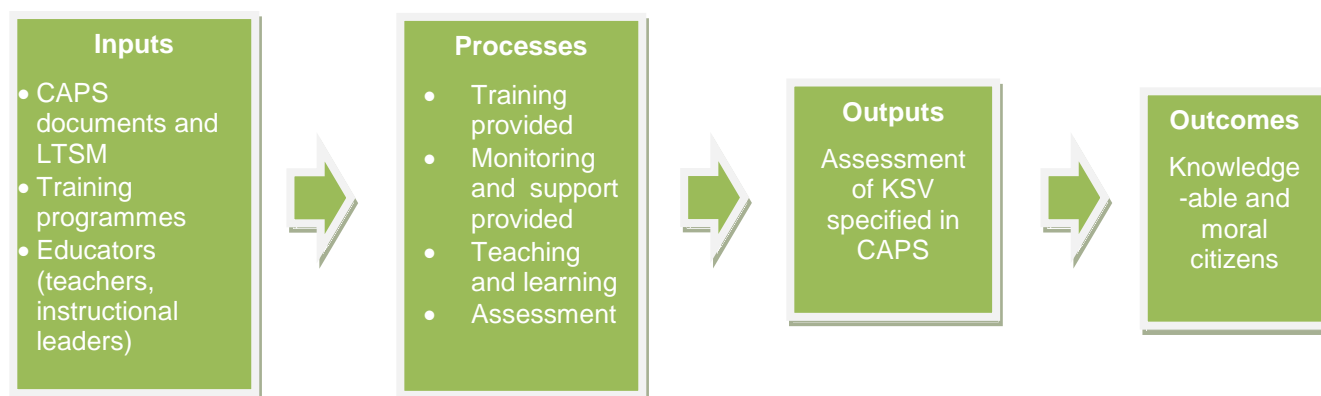
Recommendation	Action
<b>Develop a five-year plan</b> to provide a vision and 'bigger picture' in terms of what education and the curriculum set out to do and achieve, specifically with regard to the learners. The implementation of the plan must be monitored.	<i>Action plan to 2014: Towards the realisation of schooling 2025</i> (DBE, 2011a), updated in 2015 (DBE, 2015a).
<b>Streamline and clarify policies</b> in the face of a plethora of policies, guidelines, and interpretations. These must be available to all teachers.	CAPS: single, coherent document per subject or learning area per phase from Grade R to Grade 12.

<b>Subject advisor roles.</b> Clarify nationally and specify the exact nature of the classroom and school support they should provide to teachers.	Policy sent for comment regarding allocation of subject advisors, their roles and functions; policy declared.
<b>Teachers' workload.</b> Reduce, particularly with regard to administrative requirements and planning, to allow more time for teaching.	Anecdotal evidence indicates that this goal is not being achieved, with teachers complaining about curriculum crowding and onerous assessment policies.
<b>Assessment has been a challenge.</b> Simplify and streamline assessment requirements and improve the quality and status of assessment. Conduct regular national systemic assessment of Grade 3, 6, and 9 learners in Mathematics, Home Language and English. The analyses of these systemic and national tests should be used to diagnose what to prioritise and target for teacher and learner improvement.	Introduction of Annual National Assessments in 2011 in all primary and senior phase up to Grade 9, but discontinued in 2015.
<b>Transition and overload in the Intermediate Phase.</b> Reduce the number of learning areas to six subjects, including two languages.  Introduce English as a First Additional Language in the Foundation Phase.	Learning areas reduced to 6 subjects: Incorporated into CAPS.  English as a First Additional Language introduced in Foundation Phase.
<b>LTSM (textbooks).</b> Quality assurance and development of a catalogue of textbooks and other LTSM need to be centralised at the national level. Each learner from Grade 4 to Grade 12 should have a textbook for each learning area or subject.	Centralisation of catalogue accomplished.  Provinces generally make an effort to comply with the textbook requirements, although significant shortfalls in certain areas persist.  Workbooks distributed annually to learners in Grades 1-9 in Mathematics and Languages.
<b>Teacher Training.</b> The training of teachers to support curriculum implementation should be subject specific and targeted only where needed; and all support staff, including school management, subject advisors, and district officers, should also undergo training on the school curriculum.	Initial teacher education expanded; introduction of Funza Lushaka Bursary Scheme.  R1,1bn allocated to continuous professional development in 2014, with R435m spent.

Source: Constructed from DBE, 2009

These recommendations encompass much more than a redesign of the documents specifying what learners are expected to value, know and be able to do. Taken together, they address every aspect of schooling involved in implementing the curriculum and collectively provide the motivation for, broad structure of, and supporting systems for CAPS. The theory of change (TOC) adopted for the evaluation takes its starting point from these recommendations.

The seven evaluation questions are at different levels of abstraction, the most abstract being Q1: *To what extent has CAPS been implemented?* This question, in turn, poses the practical question: *How will we know when the new curriculum has been implemented?* The answer, ultimately, is: When learners acquire the ultimate outcome targeted by CAPS, that is: high level cognitive skills expertly practiced by responsible and moral citizens (DBE, 2011b). Achieving this outcome requires a complex interplay of sets of inputs, processes and outputs, as summarised in the simplified Theory of Change shown in **Figure 1**.

**Figure 1; Simplified theory of change**

At its simplest, the answer to Q1 is about whether educators at various levels of the system, from the smallest classroom to the DBE, are following the specifications of CAPS. Understanding the mechanics of whether or not and why this is happening entails a detailed examination of the inputs, processes, outputs and expected short and medium term outcomes. This, in turn, requires that these components be unpacked in an elaborated TOC, summarised in Figure 2, which puts these elements of schooling together in a set of logical relations. Essentially, the theory of change assumes that attention to the objectives detailed in nodes 1, 2, 4, 5 and 6 will narrow the learning gap between nodes 7 (assessment of learner performance) and 3 (expected standards of learner performance). But blockages can occur through malfunction in one or more of the 7 nodes (objectives) of curriculum delivery. The implementation evaluation therefore examined each of the nodes shown in Figure 2, in order to understand its functionality, and establish factors that may be inhibiting or facilitating its optimisation.

The theory of change can be understood as follows:

The knowledge skills and values (KSV) which society espouses are translated into topics, activities and attitudes outlined in the curriculum. The curriculum (CAPS) is developed such that it provides clear guidance to educators on the KSV to be taught in South Africa schools (node 1).

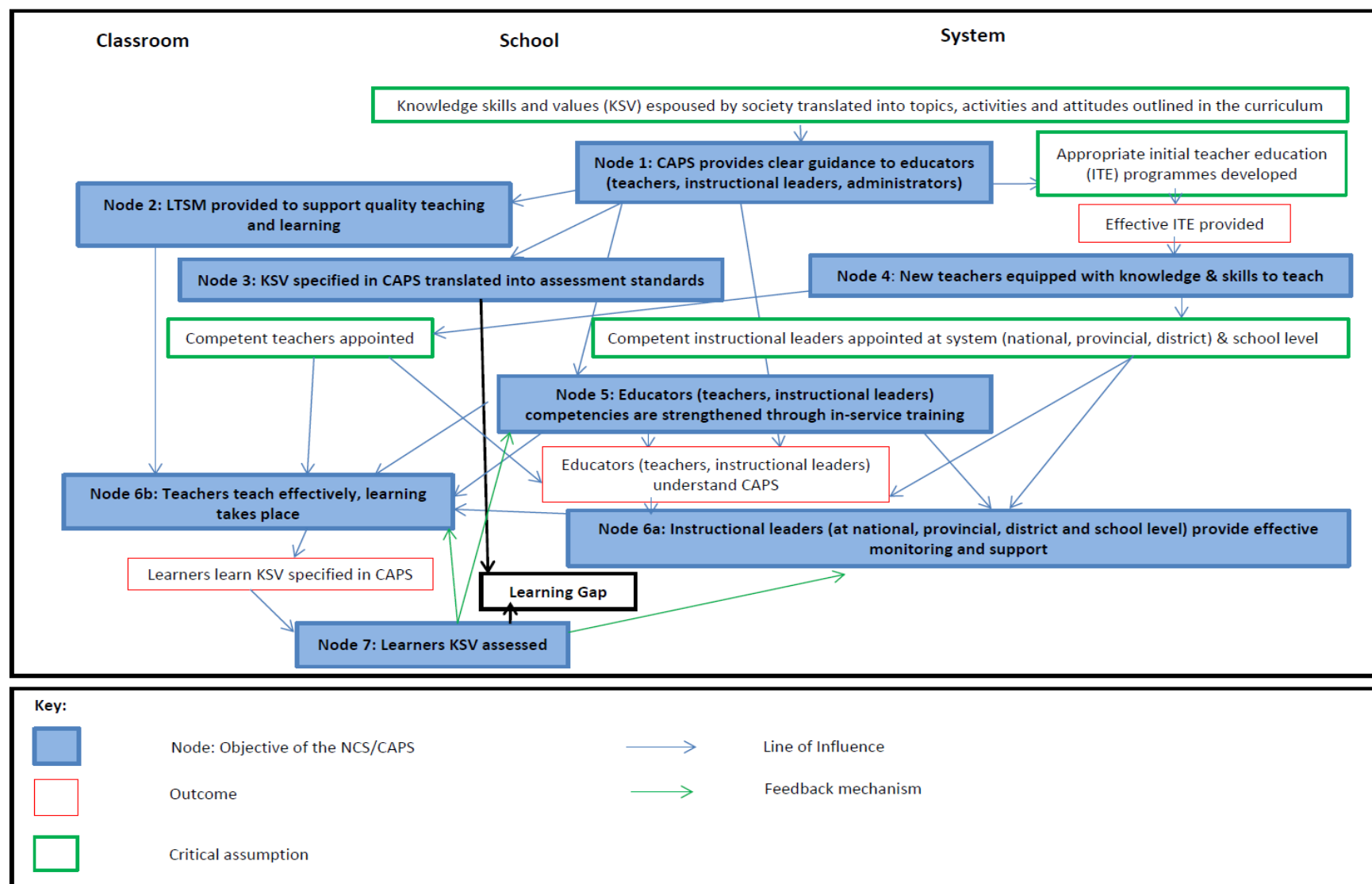
The curriculum (node 1) also informs the development of learning and teaching support material (LTSM) (node 2). The KSV specified in the curriculum are translated into assessment standards (node 3). The curriculum (node 1) informs the development of appropriate initial teacher education (ITE) programmes (node 4), which are effectively implemented resulting in new teachers being equipped with the knowledge and skills required to teach the curriculum.

The curriculum (node 1) informs the development of appropriate in-service training programmes for instructional leaders and teachers (node 5). These programmes are also informed by the analysis of learner assessment data (node 7) and the learning gap.

Provided that competent instructional leaders are appointed, who understand CAPS and appropriate in-service training is provided (node 5), these leaders will be able to support and monitor teaching (node 6a). The monitoring and support provided is also informed by the analysis of learner assessment data (node 7).

Provided that competent teachers are appointed, who understand CAPS and LTSM is available to support teaching and learning (node 2), appropriate in-service training is provided (node 5) and effective monitoring and support is provided by instructional leaders (node 6a), teachers will teach effectively and learning will take place (node 6b). Teaching is also informed by the analysis of learner assessment data and the learning gap (node 7).

Figure 2: Theory of Change for the NCS and CAPS





If teaching is effective (node 6b) and in line with CAPS, learners will learn the KSV specified in CAPS. This is ascertained through learner assessment (node 7). Learner assessment measures the difference between what learners know and can demonstrate and the standards which are expected (node 3). The difference between the measurement and what is expected in the learning gap, which informs the provision of in-service training (node 5), monitoring and support (node 6a) and teaching practice (node 6b).

The theory of change spans several levels, vis-à-vis: classroom, school, district, provincial and national (subsumed under the label “system”). The Figure is, of necessity, at a relatively high level of abstraction and without substantive detail. Each node could be expanded into a more detailed theory of change

In Node 1, CAPS sets out what is to be taught and learned by school subject and grade and how this content is to be assessed. The evaluation did not investigate the design of CAPS, but one focus of the evaluation was the views of educators, at all four levels of the school system, on the clarity and usability of the curriculum statements.

Node 2 concerns Learning and Teaching Support Material (LTSM): books, wall charts, manipulative materials, etc. It goes without saying that reading and writing cannot occur without books, while manipulatives (such as counters, geometric shapes, and the like), charts, and other aids assist the development of concepts. Furthermore, while CAPS describes what is to be learnt, printed books and other materials embody the knowledge, skills, and values (KSV) in activities, exercises, and examples, and thus are not only aids to learning, but indeed form an essential component of explicating the curriculum. A major focus of the evaluation looked at access to and use of LTSM in schools and classrooms.

Node 3, together with Nodes 1 and 2, completes the process of curriculum specification. It is here that assessment tasks contained in tests, exams, class quizzes, and written assignments set the standards – the learning goals or expected performance – of the curriculum. A major focus of the present evaluation was to investigate the extent to which formative assessment is being practiced at district, school, and classroom levels, and to consult educators on how the intensity and effects of such practices may be enhanced.

Nodes 4 and 5 are about teacher education, both before entering service as a qualified teacher (initial teacher education, or ITE) and while on the job (continuing professional development, or CPD). The standard of teacher education is of crucial importance to the quality of teaching. The present evaluation conducted no original investigation into the terrain of ITE, but this is an important factor to bear in mind in considering the influences impacting on the implementation of CAPS, since the failure to equip teachers with the necessary foundation skills during their initial training may have irrevocable consequences throughout their working lives.

The question of continuing professional development (CPD) was investigated during the evaluation by gauging the views of educators regarding the frequency, nature, and quality of training, particularly with respect to CAPS training, but also more widely to understand the kind of CPD that is currently provided.

Direct evidence of the state of teachers’ knowledge and skills was obtained directly during the evaluation by testing teachers and talking to them about their CPD experiences and needs, and indirectly through the research literature.

Node 6a is about curriculum management, or instructional leadership. It is exerted at all systemic levels – national, provincial, district, and school – and is directed toward assisting teachers to implement the curriculum. Instructional leadership consists of a variety of monitoring and support systems, including policy and materials issued by the Ministry and DBE, a host of activities undertaken by subject advisors at provincial and district levels, school policy and, most importantly, the work of school level heads of department (HODs), subject heads, deputy principals, and principals. These leadership activities coordinate the

practices of and provide for the needs of teachers. The quality of instructional leadership was a particular focus of the current evaluation.

Node 6b represents the daily interface between teaching and learning in classrooms. All other curriculum processes depicted in Figure 2 are ultimately directed towards supporting teachers and learners as they engage with the curriculum. Direct evidence on the quality of teaching and learning was obtained through classroom observations, while the analysis of learner books and teacher records provided indirect evidence of the kinds of pedagogical practices prevalent in the schools under study.

At Node 7, learner scores on the various assessment tasks described under Node 3 above provide learners, teachers, and instructional leaders with valuable evidence on the results of the teaching and learning process. Data from Node 7 is therefore an indispensable pedagogical tool for teachers and monitoring instrument for instructional leaders.

In addition, international comparative exercises such as the Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) and the Trends in International Mathematics and Science Study (TIMSS) are important for objectively tracking long term trends in the school system. The evaluation used this evidence to gauge the extent to which the learning goals of CAPS are being met.

### 3 KEY FINDINGS FROM THE LITERATURE/DOCUMENT REVIEW

The Literature Review follows the logic encapsulated in Figure 2 and summarises the research evidence pertaining to each node. Each of the seven nodes in the TOC depends on a number of conditions to function optimally in playing its part in delivering the curriculum. The principal purpose of the Literature Review was to identify these dependencies and understand the current state of knowledge concerning each, internationally and locally, in order to investigate them during the fieldwork.

The review of the literature commenced with an examination of published and unpublished government policy and policy-related documents and presentations concerned with the curriculum, including speeches by politicians and senior administrators. The research literature published in journals, books, and conference proceedings was searched, as well as the 'grey literature' produced by policy researchers, NGOs, and donor agencies.

On the question of learner attainment (Node 7 in Figure 2), the evidence is unequivocal that across a broad front, the South African school system is gaining ground in terms of improved scores on international comparative tests (Reddy et al., 2015; 2016; Gustafsson, 2017). Yet there is universal dissatisfaction with performance, particularly in schools serving the poor, from many sources, including senior members of government (Motshekga, 2016; 2017; Zuma, 2017). In this regard, a key question presents itself: has the system reached the maximum rate of improvement, or is further acceleration possible? Are there levers which, if applied appropriately, will catapult the system into higher quantum levels of performance within a decade or two? It is the ultimate purpose of this evaluation to illuminate these questions, starting with the research evidence.

Regarding curriculum design (Node 1), the literature review notes over the last two decades developments in South Africa have run in parallel to those in Australia, where outcomes-based education was introduced at the same time as Curriculum 2005 was implemented in locally. More recently, an exhaustive Umalusi study found that, at FET level, CAPS largely achieves the recommendations of Minister Motshekga's review undertaken in 2009 (Grussendorff, Booyse and Burroughs, 2014). Nevertheless, the Umalusi evaluation strongly recommends that the DBE look carefully at the English Home Language (EHL), English First Additional Language (EFAL) and Mathematics curricula at the Further Education and Training (FET) Phase level. In particular, the following should be considered: providing more guidance for teachers on the selection of appropriate texts at different levels of cognitive depth (EHL), reducing the breadth of content and increasing depth (EFAL), and reducing the number of topics (Mathematics).



Regarding materials (Node 2), the research evidence indicates that book supplies to South African schools have increased significantly in recent years. In particular, the DBE workbook programme has proved to have been a success in terms of the production and delivery of books to schools and classrooms (Hoadley and Galant, 2016; NEEDU, 2013; Outhred et al., 2013).

A number of important points arise from local and international experience in the field of setting and measuring the learning targets (Node 3) expected by the curriculum. It is clear from the literature that assessment has the potential to provide teachers with a powerful mechanism for linking the goals of the curriculum with everyday classroom activities and to provide instructional leaders with the tools to engage with the work of teachers, assess pedagogical needs, and create professional development opportunities within the school. CAPS recognise the potential of formative assessment in particular to achieve these ends.

International research evidence indicates a major challenge to policy makers in finding a balance between the need for data on systemic progress and school accountability, on one hand, and the need to grow the capacities of educators to use formative assessment to improve pedagogic quality in schools and classrooms, on the other. In the United States (US), after nearly 15 years of the *No Child Left Behind* programme, assessment for accountability has not been a success. The lesson to be drawn is that venturing into this territory requires paying careful heed to research evidence and cautious piloting before embarking on a major new initiative. The current impasse regarding ANA bears ample testimony to what can go wrong should international lessons not be followed.

On the question of systemic evaluation, the question has to be asked what a new initiative launched by government would add that is not already provided by the numerous international comparative programmes the country participates in.

With respect to educator capacity (Nodes 4&5), evidence from the SACMEQ teacher tests (Armstrong, 2015; Gustafsson, 2016) indicates that younger teachers are considerably more knowledgeable than their older peers, and that these higher levels of teacher knowledge are translating into improved learner scores. But here too, there is no room for complacency: direct research on current ITE programmes indicate a high variability in quality across the system and a general inclination not to equip newly graduated teachers adequately for the challenges of South African schools (Bowie, 2014; CHE, 2010; Deacon, 2016; Reed, 2014;).

On the question of in-service training, there is evidence to indicate that the considerable resources spent on programmes for educators are not achieving impact in terms of increasing capacity, let alone resulting in more effective pedagogy (DBE, 2015b; NEEDU, 2013). While evaluations of such programmes are becoming more common, the large majority continue to be driven more by faith than science, and if progress is to be made in improving the traction achieved by CPD initiatives, then a research-focused approach needs to be adopted. The present evaluation paid particular heed to the experience of educators with CPD, with special reference to CAPS training, but also casting the net wider in an attempt to understand current practices and needs of teachers and instructional leaders.

Finally, with respect to educator capacity, it is clear that the system is not making the most of existing expertise, with recruitment and promotion policies subject to manipulation and corruption (DBE, 2016b; 2016c). Curriculum implementation is an expert task, requiring high levels of skill in subject knowledge, pedagogical content knowledge, and practical classroom expertise. These considerations underline the need to appoint educators with the strongest knowledge resources and track records of effective teaching into positions of instructional leadership at all levels of the system, commencing with school-level HODs. The evaluation probed attitudes towards promotion practices commonly employed in schools and higher levels of the system to better understand their effects on curriculum implementation.

Node 6a in is the terrain of instructional leadership. This is where the principal who follows the recently published Standards for Principalship (DBE, 2016a), supported by her deputy

and HODs, leads an on-going cycle of quality assurance, analysis of test scores, diagnosis, and staff development aimed at pooling educator resources to improve teaching and learning. Evidence indicates that this function is not currently being performed with any degree of expertise in a large proportion of South African schools (NEEDU, 2013) and requires extensive support mounted by district, provincial, and national levels. The quality and nature of instructional leadership in schools and districts was a major focus of the evaluation, directed towards understanding how such practices can be improved. The work of Hoadley and Galant (2015) was instrumental in shaping the indicators and instruments for investigating instructional leadership.

The purposes of Nodes 1-6a are to collectively equip and support teachers to exercise effective pedagogy (Node 6b), and the evaluation spent significant effort observing teachers in class, talking to them about CAPS and its implementation, and examining their documentation regarding planning and assessment. A wide range of research (for example, Ball, Hill and Bass, 2005; Bansilal, 2015; Hoadley, 2012; Venkat and Spaul, 2015) and, in particular, the work of Coe et al (2014) was consulted in identifying classroom level factors most strongly associated with improved learning in order to develop indicators and sources of evidence for this aspect of the evaluation.

#### 4 KEY EVALUATION FINDINGS

The evaluation findings are discussed under the evaluation questions listed in section 1.3 above. In this process, the relevant data, across the instruments, is integrated to compose three dimensional responses to the respective questions.

##### Question 1: To what extent has CAPS been implemented?

###### *Planning*

An examination of the timetables in the schools sampled indicated that the majority of primary schools plan their timetables according to CAPS requirements. The majority of high schools do not follow CAPS requirements with respect to timetabling, a number of them significantly so. This results in a significant reduction of time allocated to EFAL and Mathematics, two of the most important subjects in the high school.

###### *Time-management*

Having a timetable which meets CAPS specifications is one thing, but adhering to the timetable is quite a different matter. At school level, fieldworkers observed how many classes were without teachers during the first period on the second day of the field visit and the last period on the first day. The results are shown in **Table 2**.

**Table 2: Time keeping practices in sample schools**

SCHOOL	No. of teachers	Teachers not in class			
		DAY 1: LAST PERIOD		DAY 2: FIRST PERIOD	
		No.	%	No.	%
APRH	21	7	33.3	7	33.3
APRL	20	4	20.0	3	15.0
APUO(L)	24	n/av	n/av	3	12.5
ASRH	46	13	28.3	3	6.5
ASRL	17	4	23.5	4	23.5
ASUO(L)	42	2	4.8	6	14.3
BPUH	n/av	1	n/av	1	n/av

<b>BPUL</b>	n/av	4	n/av	2	n/av
<b>BPRO(H)</b>	24	3	12.5	3	12.5
<b>BSUH</b>	21	1	4.8	4	19.0
<b>BSUL</b>	20	0	0.0	8	40.0
<b>BSRO(L)</b>	n/av	0	n/av	1	n/av
<b>CPRH</b>	16	3	18.8	2	12.5
<b>CPRL</b>	13	n/av	n/av	n/av	n/av
<b>CPUO(L)</b>	24	0	0.0	0	0.0
<b>CSRL</b>	27	21	77.8	17	63.0
<b>CSRL(1)</b>	17	8	47.1	4	23.5
<b>CSUO(H)</b>	58	2	3.4	0	0.0
<b>DPUH</b>	17	3	17.6	n/av	n/av
<b>DPUL</b>	20	1	5.0	1	5.0
<b>DPRO(L)</b>	15	0	0.0	0	0.0
<b>DSUH</b>	48	3	6.3	8	16.7
<b>DSUL</b>	47	13	27.7	13	27.7
<b>DSRO(H)</b>	17	n/av	n/av	n/av	n/av
<b>Mean</b>	26.4	4.4	18.4	4.3	18.1

Key: A-D indicate province; P or S indicate primary or secondary level; U or R indicate urban or rural location; H or L indicate high or low performing; O indicates outlier school.

Time is very loosely managed in 18 of the 24 schools sampled. Only six had, at most, one teacher not in class in one or both of the last period of the first day of the visit and the first period on the second day. In addition, in all the schools visited, frequent disruptions to the timetable occur for a variety of reasons: training, union meetings, memorial services, choir competitions, and the like. Under these circumstances, no curriculum is implementable, no matter how well educated the teachers are, nor how well they teach. There is simply not enough time to get through any halfway ambitious curriculum, and CAPS is certainly an ambitious curriculum.

Institutional dysfunctionality, of which poor time-management is the most obvious manifestation, is a long-standing problem in the school system, raised repeatedly by political leaders and senior public sector officials for almost 20 years. Yet this is a problem which persists and which fundamentally undermines teaching and learning.

Interviews conducted at system level indicate that district, provincial, and national officials are aware of this problem and complain about it frequently. Yet, and most ironically, many officials do not accept responsibility for school functionality, although in terms of their job specifications, they have not only the authority, but indeed the obligation to intervene in these institutions. The point is well illustrated in Box 1. Essentially, these teachers are stealing time from the public purse by not working the hours they are paid for. At the same time, school level curriculum leaders deny that time is being very poorly used in their schools. They too are not doing what they are paid to do, as are the district officials who know it is happening, but feel powerless to intervene.

**Box 1: Time-management at school X**

School X is a high school located in a peri-urban township some 40km from a large metropolitan area. According to the sampling procedure followed by the evaluation, this is a high-performing school. It is also a public school on private property which is owned by the Catholic Church. The school offers a rare insight into what seems to be a common problem in the school system: responsible officials turning a blind eye, or feeling powerless, in the face of blatant disregard by schools of timetable requirements.

At a superficial level, according to the instructional leadership factors assessed by the evaluation, this was a reasonably functional school, except in one regard: time-management. Four classes were unattended during period 1 on both days of the school visit. After the noon break on day 1, one-third of classes were unattended, with learners standing around chatting and playing. At 13h00, the school closed because the Grade 12 teachers had to attend SmartBoard training, and the rest of the teachers and learners went home. Over the two days of the field visit, learners received around half of the teaching time allocated by the timetable.

Surprisingly, the school was visited by the circuit manager (CM) at least 20 times in the year preceding the fieldwork, each visit distinguishable because the visitor wrote comments in the visitor's book and appended his/her title. There were also a number of visits on curriculum matters (at least 20), especially for the Secondary School Improvement Project (SSIP). On one of his/her visits, about six months prior to the evaluation visit, the CM wrote a detailed description of many classes without teachers, learners roaming free, and the school in a very dirty and unkempt state. The CM was upset by this situation, but that was the end of the matter: no effective action was taken and no change in these practices had happened. It seems that the CM felt s/he had discharged his/her duties by recording the incident in the visitor's book. Part of the problem at this school is the fact that there has been no principal for over 2 years, with the two senior HODs taking it in turns to act. The appointment of a principal is also an issue for which the CM holds responsibility.

**Attitude**

A feature which arose frequently during district-level interviews was the poor regard in which teachers are held by district officials; teachers have a very low status in the eyes of their leaders. Yet despite their frequent complaints about teachers, subject advisors and other instructional leaders exhibit a sense of powerlessness in the face of what they see as laziness and lack a sense of agency. This attitude is often attributed to the power of the unions.

Similarly, at the school level, principals and teachers are largely resigned to the fact that they will not complete the curriculum over the school year, and the overwhelming number of teachers' explanations for not keeping pace with the curriculum involved factors beyond their control, such as having teaching time eroded due to unplanned timetable disruptions, or having to attend workshops. Yet, the observations made during the present evaluation showed that the loss of teaching time was simply due to teachers not being in class when required.

**Assessment**

Section 4 of the CAPS documents for each subject in the respective phases is concerned with assessment, which is seen as a key lever in the implementation of CAPS. One would thus expect instructional leaders at schools, and particularly the HODs who are closest to teachers, to drive a structured programme for tracking the progress of learner performance and using the results to improve pedagogy, enabled by peer learning groups and other forms of in-school professional development. In other words, formative assessment is central to the implementation of CAPS.

The evidence is strong that the majority of HODs are not following CAPS policy regarding assessment in terms of checking teachers' assessment records, moderating test and exam papers, analysing test scores, and discussing the implications for pedagogy. There is little

coherence within most schools concerning the use of assessment to improve teaching and learning: while schools go through the motions of setting, administering, and marking tests and exams, their most important use is for promotion purposes, and their formative potential goes largely unrealised.

### ***Presence and use of Learning and Teaching Support Materials (LTSM)***

Teachers and their HODs reported a dearth of LTSM at schools throughout the sample and, in most cases, the shortage was acute. In the primary sample, the only resource available at all schools was the DBE workbook. Meanwhile, in the secondary sample, one-third of the schools (4/12) reportedly did not have textbooks for Mathematics, Mathematical Literacy, and/or EFAL, and two of these schools did not have calculators either. Where textbooks and calculators were available, there were usually not enough for every learner.

These reported shortages are puzzling in the light of the large budget allocations for LTSM in the majority of provinces, and this issue requires further investigation by district officials. Whatever the reasons for the reported shortage of books, the classroom observations show that in nearly two-fifths of the 96 classes observed, no LTSM of any kind were used.

Something of an exception is provided by the DBE workbooks. All educators interviewed in each primary school agreed that the Grade 2 HL, EFAL and Mathematics workbooks were available, and that generally there were sufficient numbers for each child to own one. Furthermore, they were the most widely used books in the 61 primary classrooms observed. In Grade 2 Language and Mathematics classes, DBE workbooks were used in half the lessons observed. The next most frequently used form of LTSM were Mathematics textbooks, which were observed in use in 42% of Mathematics or Mathematical Literacy classes.

### ***Learner writing***

At primary school level, the high variation in the quantity of writing produced by schools in the same district shows weak instructional leadership with respect to writing emanating from the district. For example, the number of days on which writing occurred was assessed by counting pages in the DBE workbooks and expressing the number as a percentage of the total number of school days which had elapsed since the start of the school year. Assuming that learners should write every day and that this would fill up around one page of the DBE workbook, a maximum number of pages which could have been covered by the time of the visit was calculated. The results showed a wide variation between schools and between districts (Table 3).

**Table 3: Percentage of school days on which work was done, DBE workbook, Mathematics Grade 2**

District	Max	Actual average	Range	Percent of max
<b>A</b>	120	53	12 – 82	44
<b>B</b>	65	59	25 – 85	91
<b>C</b>	65	43	31 – 54	65
<b>D</b>	120	109	101 - 119	91

In the high schools, similar levels of variation in learner writing between schools within the same district, as determined by the number and types of exercises seen in learner exercise books, confirms that weak instructional leadership is exercised from the district regarding writing. There were also variations in terms of how much of each topic was covered, and, in some cases, the low quantities of certain types of writing could be traced to a shortage or absence of suitable books (e.g. literature, grammar). The relative neglect of some types of

writing on certain topics may also be related to teacher knowledge weaknesses. In this regard, the paucity of writing in Euclidean Geometry in Mathematics exercise books is noticeable, probably reflecting an area in which training is needed. Similarly, low quantities of extended writing in EFAL, particularly noticeable in some schools, probably reflects weaknesses on the part of teachers.

### **Pedagogy**

On the question of pedagogy, it is evident that teachers manage time and learner behaviour relatively efficiently in their classes. However, learners are not set sufficient quantities of individual tasks to engage them fully, while teacher explanations of concepts and procedures generally lack clarity and detail. Furthermore, while teachers ask a large number of questions and spread them around the class, they do not make the most of opportunities afforded by learners' questions and responses to questions to correct misconceptions and build on existing knowledge: such techniques lie at the heart of formative assessment. Similarly, teachers generally do not differentiate between learners of different abilities in their classes, tending to adopt a one-size-fits-all approach.

Regarding the seven principles on which CAPS is based, the evidence is as follows. Only five examples of *social transformation* were observed in the 96 lessons viewed, although this principle is difficult to define and thus open to a wide variety of interpretations; furthermore, it is far less likely to be manifest in Mathematics and Mathematical Literacy lessons than in Language classes. The extent to which individual learners engaged in reading, writing, or speaking tasks during the lesson was taken as an indicator of the principle *active and critical learning*, and the fact that it was one of the lowest scoring indicators across the lessons observed indicates that it is not strongly manifest in these classrooms. The country's relatively low scores on international comparative tests is taken to indicate that the principle *high knowledge and high skills* is not being achieved to anywhere near the desired extent. Similarly, the principle *progression from simple to complex* is not being achieved in the majority of classes. In contrast, the principle *human rights, inclusivity, environmental and social justice* was recognised in a quarter (24 of 96) of the lessons, making it the most frequently observed of the seven principles. However, *valuing indigenous knowledge systems* was seen in only 12 classes. Finally, the principle *credibility, quality and efficiency* is also difficult to define and hence to recognise in individual lessons.

### **Question 2: Do teachers understand CAPS and do they have the necessary capabilities and motivation to implement the National Curriculum Statements according to CAPS and associated policies?**

The evidence bearing on Question 2 which comes most insistently to the fore is contained in the teacher scores on elementary tests in English and Mathematics. Three tests were constructed to measure the content knowledge of Grade 2 teachers in Mathematics and English and Grade 10 teachers in Mathematics, Mathematical Literacy, and English. The tests were not standardised, benchmarked to the curriculum, or designed to measure particular constructs, but consisted of *typical problems encountered in the IP or SP curricula*, respectively.

For example, Grade 2 teachers were required to multiply 53.03 by 100 (only six of 22 teachers could do this correctly), express 0,4 as a fraction (one correct answer), and identify the main idea in a simple paragraph (five correct). The item which was most poorly answered involved writing a four to six sentence description of a family member, following a rubric. The mean score out of 10 was 4.4, indicating the very low ability of these teachers to write even a short paragraph in English. The results suggest that between two-thirds and three-quarters of these Grade 2 teachers do not possess the subject knowledge required to teach English or Mathematics (**Table 4**).

**Table 4: Grade 2 teacher scores on English and Mathematics tests (per cent)**

School	Teacher	English	Math
APRH	APRH-1	38	35
APRL	APRL-1	62	35
APUO(L)	APUO(L)-1	48	45
	APUO(L)-2	57	45
BPUH	BPUH-1	48	40
	BPUH-2	71	25
BPUL	BPUL-1	71	50
	BPUL-2	43	60
BPRO(H)	BPRO(H)-1	57	50
	BPRO(H)-2	43	25
CPRH	CPRH-1	19	5
	CPRH-2	48	60
CPRL	CPRL-1	43	30
	CPRL-2	43	35
CPUO(L)	CPUO(L)-1	10	20
	CPUO(L)-2	57	20
	DPUH-1	43	50
	DPUH-2	33	25
DPUL	DPUL-1	14	25
	DPUL-2	48	25
DPRO(L)	DPRO(L)-1	67	15
	DPRO(L)-2	81	90
	<b>Mean</b>	<b>47</b>	<b>37</b>

The picture for Grade 10 teachers is very similar, with six of the 12 English teachers reaching 70% on the same test administered to Grade 2 teachers, four of the 12 Mathematics teachers scoring 70% on the Mathematics test, and three out of 12 Mathematical Literacy teachers reaching 60% on the same Mathematics test. Although significantly better than the scores produced by the Grade 2 teachers on the English test, with two exceptions, Grade 10 teachers' results were also very disappointing. In particular, the poor writing ability in English of Grade 10 teachers is noteworthy, with the teachers achieving a mean score of 5.5 out of 10 on the simple descriptive writing task. These results suggest that fully half the Grade 10 English teachers tested are not competent to teach English, while around two-thirds to three-quarters of Grade 10 Mathematics and Mathematical Literacy teachers have fundamental gaps in their knowledge repertoires.

Two caveats apply to the interpretation of the test scores produced. First, the items were not standardised, benchmarked to the curriculum or designed to measure particular constructs, but consisted of typical problems encountered in the IP or SP curricula, respectively. Thus, for example, because teachers scored poorly on the item 53.03 x 100, for example, does not necessarily mean that they do not understand the concept of place value. The second caveat derives from the small sample sizes, around 22 teachers per test at Grade 2 level and around 12 for each Grade 10 subject. Because of the small, and unrepresentative sample, no conclusions can be drawn with respect to the South African teacher population. However, the test results do confirm the findings of other research studies of teacher content knowledge.

It should be clear from these results that the large majority of teachers tested do not possess adequate levels of content knowledge. While a high level of content knowledge on the part of a teacher does not constitute a sufficient condition for effective pedagogy, the low levels detected in the majority of teachers tested must place an absolute limit on their ability to convey curriculum knowledge to their learners. With these scores in mind, the question as to whether teachers understand CAPS requirements is almost redundant: while they may understand when the respective topics are to be completed and how many tests should be set each term, they cannot understand the level of knowledge to be attained by their learners if they do not possess that knowledge themselves.

At the same time, there was general agreement across all levels of the system that, comparatively speaking, CAPS provides clearer guidance to teachers, compared with Curriculum 2005 and the Revised National Curriculum Statement (RNCS), the difference being that CAPS specifies content and assessment requirements. In this regard, the evaluation findings support the conclusions of the Umalusi evaluation of the design of CAPS (Grussendorff et al., 2014). However, a majority of respondents thought that CAPS can be improved. Thus, at provincial level, 10 of the 16 respondents said that teachers lacked motivation, collectively citing the following reasons: CAPS is overloaded, containing too much content; it requires too much administration from teachers; and assessment presents a problem. Similar sentiments were expressed at district level, with curriculum leaders across the board identifying content gaps on the part of teachers as a major inhibition to effective teaching.

On the question of motivation, most respondents at both national and provincial levels thought that this was even more of a problem than teachers' capability to teach the new curriculum. One district official summed up this perception as follows: *They take any opportunity to do something other than their job. Unionisation is a factor: any innovation has to be negotiated before teachers accept it. Learner discipline has become a major factor: during strikes they even attack teachers and stone their cars.*

### **Question 3: Are the support systems to support CAPS implementation working?**

This question goes to the heart of the TOC summarised in **Figure 2**, which comprises a network of interacting forces which support teachers to deliver the curriculum. It can be argued that the entire school system is designed to support teachers, but the following discussion is confined to those elements most immediately concerned with curriculum delivery.

#### ***Instructional leadership in schools***

Principals are pivotal to effective instructional leadership in schools. They are responsible for delegating and overseeing the work of HODs so that the latter can best support the teachers in their departments in achieving the overriding goal of improving learning outcomes. There is evidence to indicate that instructional leadership occurs to some degree in most schools: for example, most schools plan the timetable according to CAPS requirements, yet following the curriculum appears in some schools to be honoured more in the breach than otherwise.

On the very important topic of formative assessment, the high frequency of contradictory answers between teachers and HODs within schools on key leadership practices – including moderating assessment tasks, using test scores to identify areas of weakness for both learners and teachers, and devising intervention programmes to address these – indicates that school leadership is weakly provided in this area. In short, most of the instructional leadership activities are complied with in a superficial manner in almost all schools, lacking in substance and hence unable to impact on teaching and learning.

One exception to this conclusion appears to be the coordination of learner writing activities in DBE workbooks at the school level, where the numbers of pages covered in the workbooks by learners of different teachers in the same school show moderate to high degrees of correlation. The evidence for this is indirect, and it may occur through teachers working



together without the participation of HODs; whatever the explanation, it is a promising development. Another glimmer of improvement is indicated by evidence that the frequency of classroom observations undertaken by HODs has increased significantly in recent years. These are signs of movement in the right direction.

### ***Support by subject advisors and school heads of department***

There is wide agreement among curriculum officials' at all three systemic levels that support for teachers is not optimally provided by districts and schools. Two issues were identified by respondents as problematic. First, there is a mismatch between expectations of how subject advisors and HODs should support teachers, on one hand, and the resources available for them to meet these expectations. It is generally expected that subject advisors should visit schools and support teachers directly in their classrooms; subject advisors themselves feel that this is where they are most effective, and this view is corroborated by teachers. But this is a quite unrealistic expectation, given the large numbers of schools allocated to each subject advisor, sometimes as high as 200. Similarly, HODs generally have full teaching loads, with little time available for working with teachers.

Two options are available to rectify this situation: either the model of teacher support must be changed, or far greater numbers of subject advisors must be appointed, with adequate transport to visit schools frequently and HODs must be allocated reduced teaching loads in order to fulfil their instructional leadership functions effectively. These measures will necessitate hiring more educators. It can be argued that greatly increasing the number of subject advisors is unlikely to be feasible, particularly under current conditions of financial austerity; in any case, this may not be the most effective use of curriculum experts, given their dire shortage at the classroom and school levels.

The alternative to increasing significantly the numbers of educators in instructional leadership posts, which does not seem possible, is to change the way they work so as to have maximum impact on the quality of classroom engagements. If we accept that in-school instructional leadership is an important element in any attempt to improve teacher competence and effectiveness on a system-wide basis, then HODs would be central to such an effort. It follows that subject advisors should focus their efforts on working with HODs to strengthen their capacity and build the systems needed to take instructional leadership from a disparate set of superficial practices to an integrated school-wide focus on curriculum, assessment, and pedagogy.

### ***Promotion practices***

Partly responsible for the weak instructional leadership exerted by HODs and subject advisors is the appointment of inappropriate candidates to these and other promotion posts. The view that nepotism, bribery, and the buying and selling of posts is rife in the awarding of promotion posts is widespread among system-level interviewees, supporting the findings of the Ministerial Task Team established to investigate 'jobs for cash' allegations. In the face of this scourge, talk of strengthening promotion procedures is another topic which has been under discussion for some time, most recently raised by the DBE in a press release following the presentation of the 'Jobs for Cash' Report in Parliament in November 2016 (DBE, 2016c).

Curriculum delivery is a process which is highly dependent on the expertise of educators, whether situated at classroom, school, district, provincial or national level. A system which does not carefully select and continuously educate this cadre of instructional leaders cannot optimise learning; a system which allows these processes to be abused on a wide scale is turning a blind eye to the destruction of its own best intentions.

### ***Continuing Professional Development***

Despite the enthusiasm with which senior managers described various intervention programmes in Literacy and Mathematics, there was unanimity at national level that current

approaches to educator development (CPD) are not working; one senior manager added that poor quality ITE was part of the problem. Another was of the view that CPD should begin at school level, facilitated by school management team (SMT) members, and a third noted that the cascade model of training is ineffective because of the dilution effect.

For six of the 16 provincial level respondents, the CPD offered by provinces and districts is working only to a limited extent. The view that workshop training is ineffective is widespread among district level subject advisors and was expressed at least once in each of the four districts visited.

In-school CPD is the process where learning opportunities are structured for teachers who require assistance with one or other aspect of curriculum, pedagogy, or assessment. Within-school CPD is best carried out through peer learning experiences, where teachers expert in the topic under discussion take the lead, providing insights and novel practices to their colleagues. It is a key element of any thoroughgoing instructional leadership system. As the curriculum leaders closest to the classroom, it is incumbent on HODs to maintain a systematic CPD programme, under the leadership of the principal. Throughout the four districts visited, there was no in-school CPD provided at all at half (12/24) of the sample schools, while in the remainder the activities were generally confined to attending staff meetings.

**Question 4: Is the theory of change working as expected? Based on how the theory of change is working, are we likely to see the planned outcomes of CAPS?**

One senior official claimed that the improvement in the SACMEQ IV scores is indicative of the impact of CAPS. However, the SACMEQ IV tests were written by Grade 6 learners in 2013, at the same time as CAPS were being introduced into the IP. Similarly, the improvements seen in the last two iterations of the TIMSS tests have their roots in the curriculum which preceded CAPS. ANA scores are also not suitable for measuring change because they are not comparable from one year to the next. But it does seem that the system is slowly improving – confirmed by the TIMSS 2011 and 2015 scores and even the most conservative view of the SACMEQ IV results – and it seems too that CAPS is providing better support than was provided by the NCS; CAPS can therefore only add momentum to the forward movement of the system that began some time before its launch.

Respondents at national, provincial, and district levels were, almost without exception, in agreement that CAPS is superior to any of its predecessors in terms of the guidance offered to teachers, and that the *Action Plan to 2014*, and the updated *Action Plan to 2019*, provide an appropriate theory of change. At the same time, there was wide agreement that implementation of this ensemble is inefficient. Most system-level interviewees thought that achievement of the CAPS outcomes is conditional on implementation being made more effective and, in particular, on educator capacity being improved and a stop being put to interference in the procedures governing promotions.

The overall conclusion of this evaluation regarding the TOC for CAPS is that the logic of the theory, showing as it does the relationships between educators operating in seven implementation nodes, is appropriate. The reason the theory is not meeting expectations does not relate to its structure, but to the fact that blockages occur in three main areas: Nodes 4 (ITE), 5 (CPD) and 6a (Instructional leadership). The recommendations which follow below are directed towards unblocking these channels.

**Question 5: Based on the likelihood of achieving the outcomes, is the conceptualisation of CAPS and the systems for implementing it relevant and appropriate for the context it operates in?**

The current evaluation found no systematic association between indicators of good practice and school performance. In primary schools, this is most likely due to the unreliability of ANA scores in assessing the performance of any school, leading to a selection of primary schools

for the evaluation which did not differ appreciably from each other. A second complicating factor is that the schools studied are not coherent organisations with respect to curriculum delivery. In the absence of a coordinated instructional leadership programme, teacher behaviour is idiosyncratic and highly variable within any school. Some teachers in the school may be producing excellent results, while the learners of others score very poorly. How is one to judge the quality of *school* performance under these conditions?

Since the NSC results are more reliable than the ANA scores, one might argue that the selection of high schools for the present evaluation would more accurately reflect school level performance, and therefore systematic differences between high- and low-performing high schools in the sample would be apparent. But here too, few, if any differences in the curriculum and pedagogic practices between high schools categorised as high- and low-performing were discerned by the evaluation. The explanation here might be that relatively good NSC performance may be obtained through cramming during the Grade 12 year (holiday schools, trial exams, early-morning or evening classes), against a background of very poor general institutional functionality. The point is amply illustrated by the case of School X (**Box 1**), which was classified during the sampling process as a high performing school.

However, what is striking about a number of differences that do emerge from the data is a distinct rural disadvantage: schools situated in the most remote rural district performed more poorly than their urban counterparts on a number of indicators, as did their district level instructional leaders. This begs the question: should a 'watered-down' version of CAPS be implemented in rural contexts, or indeed in Quintile 1-3 schools, since, as a group, they are disadvantaged compared with those in Quintiles 4 and 5? Such views found no favour among system-level respondents, who said that rural children live in a global world and they need to learn to navigate it, whether they stay in their rural homelands, or, more likely, migrate to towns and cities.

It would seem that a far more equitable approach to the problem of rural disadvantage is to strengthen rural institutions and expand current mechanisms designed to attract the best educators to rural areas. Part of this project would be to make rural towns, many of which are manifestly badly managed at municipal level, more attractive places to live in through the provision of better services.

On the question of context, a firm view, encountered at national, provincial, and district levels, is that schooling is a modernist enterprise which attempts to offer the same opportunities to children in all spheres of society. This idea was well captured by one of the DBE respondents: *The curriculum is bringing equity into the system. All learners no matter which context have the same NSC that enables them to compete in the global market.* The same idea was well expressed at district level: *We are rural but we still need to be scientific: our children will be moving to cities. The curriculum is fine: most homes have television and we do have libraries. So, yes we are rural, but we don't need a special curriculum. Excursions to see the wider world would help.*

#### **Question 6: Are there any gaps and challenges in the CAPS design and content? If any, are they hampering implementation?**

It has become a cliché that South Africa has excellent policies but indifferent application leads to low and inefficient impact. The present evaluation confirms this characterisation and identifies the two biggest obstacles to implementation as institutional dysfunctionality (exemplified by the use of time) and poor teacher knowledge. These factors have nothing to do with the design and content of CAPS. While it is true that CAPS could do with some tweaking (the section on Assessment stands out in this regard, as does the suggestion to reduce the content somewhat), documents could be better distributed, and schools more frequently maintained, important as these resources are, their effects on learning pale into insignificance when compared to the very inefficient use of the more fundamental resources of time and educator expertise.

Another area requiring closer investigation is the supply and use of LTSM to schools. There was consensus in many schools that textbook shortages occur, many of them severe. Yet provinces budget for and, in most cases, spend significant sums on LTSM annually. What can be responsible for this anomalous situation? Are books so badly managed in schools that top-up supplies cannot keep pace with annual losses? Whichever interpretation is correct, promoting the more frequent use of DBE workbooks, which teachers are already using in preference to other materials, would provide an excellent starting point.

### **Question 7: How should the CAPS design and the systems for implementing it be strengthened?**

The sand in the machine of schooling – inefficient use of time, and scarcity and inappropriate deployment of expertise – slow the cogs of learning to a crawl. The first is located in a culture which permeates schools in Quintiles 1-3 and whose adherents, while condemning the patterns of behaviour that they themselves maintain, explain this away in terms of factors beyond their control. This lack of agency undoubtedly has its roots in the past, where poor people were dominated by an authoritarian state of one or other composition.

Effecting significant change with respect to these problems will require a very significant, system-wide change process, which will take sustained effort, consistency, and commitment over this period. Policy makers and practitioners alike are loath to commit to such a long term programme, impatient to see effects during their own terms of office. It is against this background that the National Development Plan (NDP) (NPC, 2012) emphasises the importance of policy continuity and coherence: reforming the educational civil services will require careful management, support from all interested parties and perseverance over time for at least a decade until a service-centred culture and an appreciation for expertise begins to have significant effects.

#### ***Valuing and building expertise***

Three measures are at the disposal of policy makers to address capacity constraints among educators. First, promote measures to improve the quality of ITE by paying attention to the size, shape, and substance of pre-service education and training. Not only does good ITE provide teachers with the knowledge and skills needed to teach their respective areas of specialisation, but it is here that professional habitus is nurtured. In this regard, the profound lack of agency exhibited by educators across the system points to the need to nurture the qualities of initiative and responsibility in student teachers. Second, there is a need to ensure that the large but largely ineffective in-service education and training system is placed on a scientific, evidence-based trajectory through allocating adequate resources for evaluation, research, and development and basing the design of programmes on research results. Third, as part of systematically building a culture of excellence, recruitment and promotion procedures should be strengthened, using expertise as the primary criterion for appointments and adopting more objective selection techniques. Each of these measures is important in its own right; together they form a coherent strategy to build the human resources necessary to deliver a high knowledge/high skills curriculum like CAPS.

#### ***Improving time-management in schools***

Increasing teachers' knowledge resources is likely to impact not only on the quality of their teaching, but also their attitudes: teachers are likely to gain more satisfaction from doing a job well and be more enthusiastic about going to class. At the same time, public perceptions of teachers will improve as learners begin to achieve higher comparative scores, and the status of the profession will rise. In addition, more coherent and supportive instructional leadership practices should be focused on coordinating the work of teachers. This is the true meaning of in-school CPD.

At the same time, recalcitrant schools need to be engaged with a firm hand. It is the duty and responsibility of circuit managers to ensure that schools follow the timetable, and abdication of responsibility in this regard shown by the official in **Box 1** is shocking, all the more so

because such behaviour seems likely to be fairly common. Circuit managers and school principals should be involved in a structured programme to address this problem; principals who are unable to perform their allocated leadership roles should be taken through appropriate training, mentorship, and, ultimately, disciplinary procedures. And the same should apply to district officials who are unable to maintain their leadership roles adequately. Discipline and dedication need to be prioritised in building the capable state on which effective implementation of the curriculum rests.

### **Assessment**

In the short- to medium-term, one priority that would benefit from focussed attention is assessment. Promoting more effective formative assessment practices on a school-wide basis has the potential to integrate the work of SMT members and teachers and for them to share expertise in seeking more effective pedagogy. At the same time, the crossroads currently occupied by policy on ANA presents an opportunity to overhaul the system, integrating ANA more closely with district, school, and classroom level processes, providing a coherent assessment regime which powers teaching and learning to new heights. However, lessons from other countries highlight a number of dangers in the design and administration of tests designed to hold schools accountable for learner performance, and caution needs to be exercised in following this path.

## **5 CONCLUSIONS**

The purpose of the discussion below is to examine the extent to which the goals of CAPS have or have not been achieved through the lens of six evaluation criteria: effectiveness, appropriateness, equity, efficiency, impact and sustainability.

### **5.1 Effectiveness**

The criterion of effectiveness assesses the extent to which an intervention achieves its intended objectives and outcomes and identifies key factors influencing the achievement or non-achievement of these. In short, is CAPS achieving what it sets out to - which is to impart a high-knowledge/high-skills curriculum to all children?

There is convincing evidence that the performance of the school system is improving, with substantially rising scores and a shrinking equity gap on international tests beginning to appear in 2011. But the short answer to the question *Is CAPS being effective?* is that it is too soon to say. An undertaking of this magnitude will take up to 10 years to begin to show significant effects. It is likely that the interventions which have been rolled out since 2011 – including the workbooks, the promulgation of CAPS, and an increased focus on continuous professional development – are reinforcing the performance improvements which began showing in 2011.

However, there is also widespread agreement, including the Minister's own view, that the system continues to underperform, and that things must be significantly improved. In other words, the purposes of CAPS have not yet been achieved. Evidence from the present evaluation is that accelerating the pace of improvement is dependent on the five main recommendations discussed below.

### **5.2 Appropriateness**

The term *appropriateness* refers to the extent to which a programme is suited to the priorities of the target group, including the tailoring of interventions to local needs, priorities, and skills. Under present circumstances, it seems that CAPS is unlikely to achieve its ambitious goals in the near future. But in this respect, CAPS is no different from any other curriculum which is likely to suffer the same fate under current conditions of poor time-management and weak educator knowledge.

This is not to say that CAPS is not open to improvement in terms of its design. Indeed, a number of respondents pointed out issues requiring attention, including a revision of the assessment section, reduction in the number of assessment tasks, and reduction in content in order to promote in-depth understanding. These ideas deserve investigation, but on the strict understanding that the object of the exercise is to tighten the curriculum and not to institute another round of major reform.

### 5.3 Equity

Equity refers to fairness and justice. As an evaluation criterion, it is used to consider the extent to which the implementation of CAPS is fair and does not exacerbate existing inequalities. The South African school system is manifestly inequitable, with children from more affluent homes out-performing their rural and township counterparts by at least two years of schooling by the end of Grade 5. The latest round of TIMSS results indicates that the poorest-performing provinces are improving more rapidly than those already performing at moderate levels, indicating that the equity gap has closed somewhat in the four years between 2011 and 2015. The next round of TIMSS results will indicate to what extent the 2015 results were anomalous or indicate a trend. Nevertheless, the TIMSS reports point out that South African learners continue to perform below expectations, given the resources supplied to the system. This situation is not the fault of the curriculum, but the result of systemic non-curriculum causes and, in particular, weak educator knowledge capacity, very weak time-management practices, and a less than excellent ITE system. At the same time, CAPS holds the promise of narrowing the equity gap, on condition it is implemented far more effectively and efficiently than is currently the case.

### 5.4 Efficiency

Efficiency is a measure of the extent to which the ratio of inputs - such as funding and human resources - required to achieve the desired outputs and outcomes are economical and productive. The evaluation found that the implementation of CAPS in the majority of schools in the sample is grossly inefficient, with part days and whole days wasted on non-timetable activities. HODs claim, often with support from teachers, to undertake many monitoring activities. Yet much of this activity is 'going through the motions', completing monitoring forms and other forms of 'evidence', while having little impact on teaching and learning. Similarly, subject advisors can spend a whole day travelling, paying superficial visits to at most two or three of the scores of schools in their charge.

Another important efficiency question concerns in-service training: are the considerable resources currently spent on CPD achieving optimal traction? Until the design, implementation, impact, and unintended consequences of school and teacher development initiatives are systematically investigated, the system is groping in the dark.

Finally, the long-term future of the South African school system rests heavily on the extent to which universities are training teachers to address the demands of Quintile 1-3 schools. The overriding priority must be to develop a programme for all primary school teachers to teach reading, writing, and basic numeracy effectively, since all other school learning depends on these fundamental proficiencies.

### 5.5 Likely Impact

Impact refers to the long-term effects produced by the intervention, whether directly or indirectly, intended or unintended. As an implementation evaluation, the present study did not explicitly look for evidence for the impact of the CAPS. As an implementation evaluation, the present study did not explicitly look for evidence of the impact of CAPS. In any event, as previously stated, it is too soon to expect the new curriculum to have any noticeable effect on learning. However, a consideration of its *likely impact* does offer a fruitful avenue in the search for ways of improving the design and implementation of CAPS. No curriculum is likely to have an impact on the inequities exhibited by the South African school system in the short

term; the gap is only likely to be narrowed significantly under sustained implementation of the curriculum over many years. Stability and continuity in the fields of policy and administration are key to long term change.

### 5.6 Sustainability

Sustainability is concerned with the continuation of benefits from the intervention after major development assistance has ceased. Is such stability and continuity sustainable? A global view of curriculum developments in the South African school sector over the last two decades reveals a great deal of change and discontinuity in the years 1994 – 2009. This was followed by a stock-taking exercise and consolidation phase, and since the institution of CAPS in 2011, the system has stabilised. However, the area of human resource management shows very patchy achievement across the system, with some provinces and even the national department undergoing frequent changes of leadership and extended periods of senior officials in acting positions. In short, less than optimal human resource management does not promote the development of the well-motivated and efficient civil service requirement for sustainable change.

## 6 Revised Theory of Change and proposed interventions

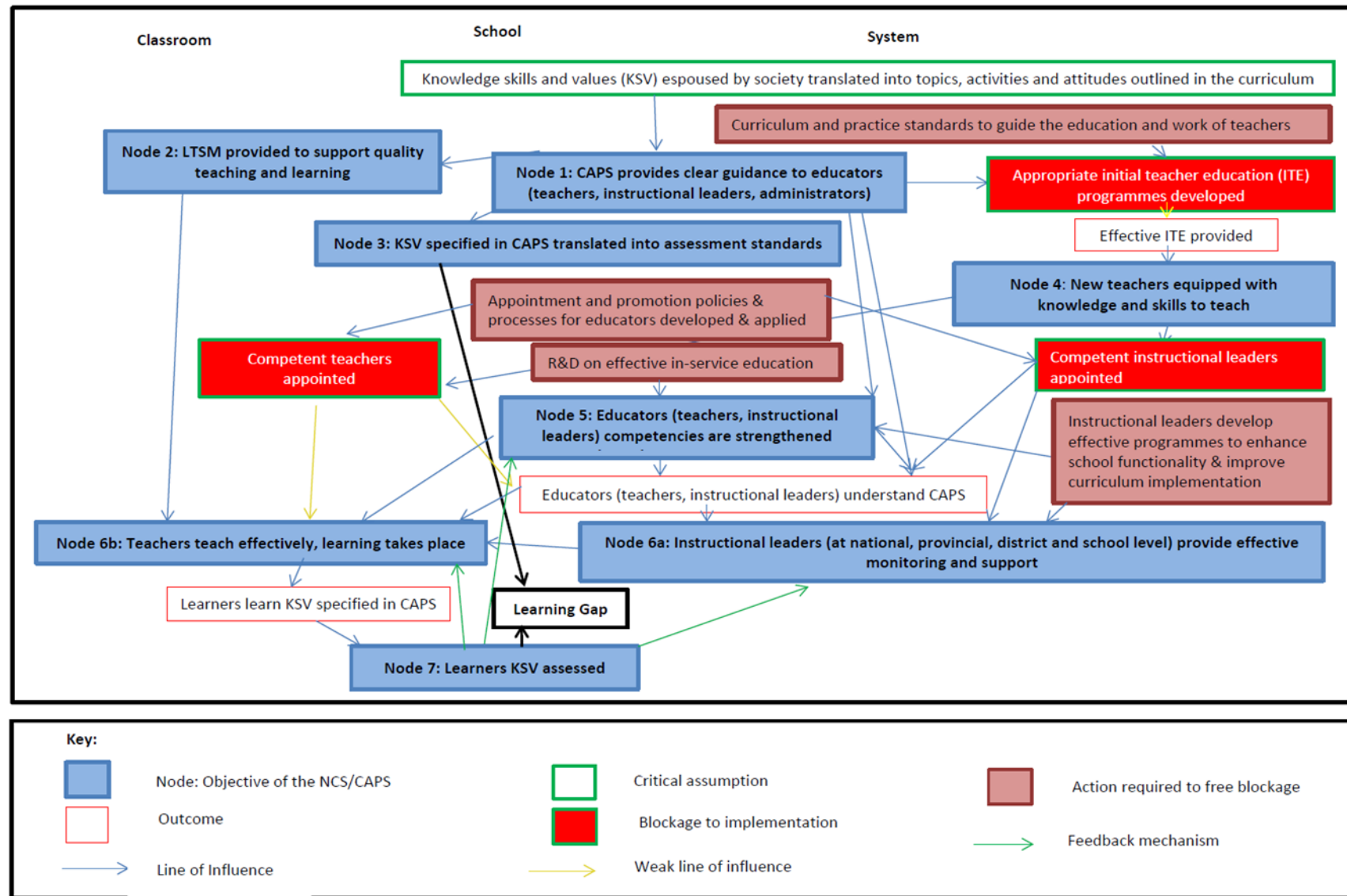
The analysis of the present evaluation is that significant blockages to the successful implementation of the NCS/CAPS occur at key points in the TOC depicted in Figure 2. Related to these are areas where the lines of influence between elements in the theory of change are weak, these are: appropriate ITE programmes have not been developed, compromising the provision of effective ITE and the attainment of Node 4 – competent educators graduate. The action recommended to release this blockage is the development of curriculum and practice standards to guide the education and work of teachers.

A blockage also occurs in the appointment of competent instructional leaders and teachers, which impacts negatively on teachers' understanding of CAPS and Node 6b – teachers teach effectively and learning takes place. The action recommended to release this is the development and application of policies and processes regarding the appointment and promotion of educators.

An action recommended to strengthen Node 5 – strengthening educators' competencies through in-service training – is that research and development (R&D) is conducted on effective in-service training. Similarly, an action recommended to strengthen Nodes 5 and 6a is that instructional leaders develop effective programmes to enhance school functionality and improve curriculum implementation.

Dealing with these blockages necessitated the development of the Revised Theory of Change, shown in **Figure 3**.

Figure 3: Revised theory of Change





The revised TOC can be understood as follows:

The knowledge skills and values (KSV) which society espouses are translated into topics, activities and attitudes outlined in the curriculum. The curriculum (CAPS) is developed such that it provides clear guidance to educators on the KSV to be taught in South African schools (Node 1).

The curriculum (Node 1) informs the development of learning and teaching support material (LTSM) (Node 2). The KSV specified in the curriculum are translated into assessment standards (Node 3). The curriculum (Node 1) AND curriculum and practice standards which guide the education and work of teachers inform the development of appropriate initial teacher education (ITE) programmes (Node 4), which are effectively implemented, resulting in new teachers being equipped with the knowledge and skills required to teach the curriculum.

The curriculum (Node 1) and R&D inform the development of appropriate in-service training programmes for instructional leaders and teachers (Node 5). These programmes are also informed by the analysis of learner assessment data (Node 7) and the learning gap. In-service training for educators is also informed by input from instructional leaders regarding the enhancement of school functionality and improvement of curriculum implementation.

The application of policies and processes regarding the appointment and promotion of educators results in the appointment of competent instructional leaders, who understand CAPS. Provided appropriate in-service training is provided (Node 5), these leaders will be able to develop effective programmes to enhance school functionality and improve curriculum implementation and support and monitor teaching (Node 6a). The monitoring and support provided is also informed by the analysis of learner assessment data (Node 7).

The application of policies and processes regarding the appointment and promotion of educators results in the appointment of competent teachers, who understand CAPS. Provided LTSM is available to support teaching and learning (Node 2), appropriate in-service training is provided (Node 5) and effective monitoring and support is provided by instructional leaders (Node 6a), teachers will teach effectively and learning will take place (Node 6b). Teaching is also informed by the analysis of learner assessment data and the learning gap (Node 7).

If teaching is effective (Node 6b) and in line with CAPS, learners will learn the KSV specified in CAPS. This is ascertained through learner assessment (Node 7). Learner assessment measures the difference between what learners know and can demonstrate and the standards which are expected (Node 3). The difference between the measurement and what is expected is the learning gap, which informs the provision of in-service training (Node 5), monitoring and support (Node 6a) and teaching practice (Node 6b).

## 7 RECOMMENDATIONS

Five main recommendations are proposed with a view to operationalising the Revised TOC. The recommendations, together with their sub-recommendations, should not be seen only in a technical sense. Implementation of the Revised TOC must be located within and energised by a vision of school excellence for all, a culture of service, and a strong sense of individual and institutional agency. In order to succeed, it will need to be propelled from the highest political levels. There is likely to be resistance from vested interests, both political and administrative, to certain elements of the programme, and it will require clear and consistent political leadership over at least a decade, coupled with strong administrative protocols and practices, for South Africa to achieve the capable state envisaged by the NDP. This is a long-term project that should transcend political differences.

**R1** DBE, DHET, SACE, and universities should devise curriculum and practice standards to guide the education and work of teachers.

**R2** DBE, provinces, and districts must review and apply merit-based policies and processes for the appointment and promotion of educators

**R3** DBE must work with universities, NGOs, and corporate partners to conduct research on effective in-service education and training for educators

**R4** DBE, in collaboration with Provincial Departments of Education, must develop an effective programme to achieve school functionality

**R5** DBE and Provincial Departments of Education should develop effective programmes to support school leaders and teachers in curriculum implementation

The recommendations are elaborated in the following set of sub-recommendations:

Recommendation	No	Sub-recommendation
<p><b>R1</b> DBE, DHET, SACE and Universities should devise curriculum and practice standards to guide the education and work of teachers.</p> <p><b>Motivation:</b></p> <p>The work of learners in acquiring the KSV of the curriculum is directed and coordinated through the work of teachers, the competencies for which, in turn, must be inculcated and regulated with a view ultimately to facilitating learning in classrooms.</p>	<b>R1.1</b>	<p><b>Implementation of Umalusi recommendations regarding CAPS</b></p> <p>It is recommended that DBE urgently consider the recommendations made by Umalusi regarding the maths and English (HL and EFAL) FET curricula. Following an evaluation of CAPS in 2014 it was recommended that this process be completed within 2 years.</p>
	<b>R1.2</b>	<p><b>Raise the standard of EFAL in all phases</b></p> <p>Evidence indicates that raising the standard of EFAL - through the inclusion of higher cognitive functions in the NSC, other common assessment exercises, and LTSM in all four phases – would enable learners to strengthen performance across the curriculum. As such, this sub-recommendation should receive the highest priority.</p>
	<b>R1.3</b>	<p><b>Review of CAPS assessment section</b></p> <p>The current review by DBE of Section 4 (Assessment) in the CAPS documents is supported. It is recommended that the following be included in the terms of reference for the review:</p> <ul style="list-style-type: none"> <li>the number of formal tasks required by phase, and</li> <li>clarifying the current confusion among teachers, HODs and SAs around levels of difficulty. A good way of dealing with this problem is by providing teachers with examples of items which exemplify different cognitive processes and levels of difficulty.</li> </ul>
	<b>R1.4</b>	<p><b>Review of CAPS content</b></p> <p>It is recommended that DBE commission a review of the CAPS documents with a view to reducing content where appropriate. The priority should be on depth of understanding of the most important strands of the respective school subjects. DBE has identified this as a priority, and it is recommended that a wide range of experts be invited to participate in the review. This exercise should not result in major curriculum change. One way of addressing content overload, if it is found, is to label certain topics in CAPS as 'optional', or 'for further study', etc.</p>
	<b>R1.5</b>	<p><b>Distribution of NCS documents</b></p> <p>School level audits of NCS documents among teachers should be undertaken every three years, and supplies to schools topped up.</p>

Recommendation	No	Sub-recommendation
	<b>R1.6</b>	<b>Review of national assessment for GET</b> <p>Regarding the redesign of a national assessment instrument for the GET Phase, it is recommended that DBE, in partnership with the provinces and in discussion with psychometricians and other assessment experts, drawn from both the public and private sectors:</p> <ul style="list-style-type: none"> <li>• Give careful consideration to the dangers inherent in implementing a poorly designed <i>summative assessment system</i> focusing on accountability (such as NCLB), taking account of the research; undertake a cost/benefit analysis before embarking on such an exercise.</li> <li>• Undertake a cost/benefit analysis before embarking on a <i>systemic evaluation</i> exercise. Particular consideration should be given to the marginal benefits of such a programme, over and above what is currently learned from SACMEQ, TIMSS, and PIRLS.</li> <li>• Pay particular attention to improving <i>formative assessment</i> at school and classroom levels. This is a central element of effective pedagogy, and formative assessment holds the key to linking the work of teacher educators, system-level officials, school leaders, and teachers. More detail on how to operationalise this recommendation is given in Sub-recommendations R1.7, R2.1, 3.1, and 5.1 – 5.4.</li> </ul>
	<b>R1.7</b>	<b>Teacher education and management</b> <p>DHET should continue to lead the PrimTEd programme, with strong support from DBE, while SACE should continue to lead the initiative designed to develop professional practice standards for teachers.</p> <p>It is recommended that DHET, CHE, EDF, DBE and SACE communicate with respect to their work regarding curriculum content standards for ITE, professional practice standards for teachers, standards for the accreditation of CPD programmes, and standards for the assessment of educators’.</p>
<b>R2</b> DBE, provinces and districts must review and apply merit-based policies and processes for the appointment and promotion of educators  <b>Motivation:</b> <p>The delivery of education is a complex and highly technical task requiring on the part of educators a sophisticated knowledge which combines disciplinary (e.g., maths, English) and pedagogic (how to convey the discipline) knowledges. A key tenet of the NDP vision</p>	<b>R2.1</b>	<b>Development of a merit-based promotion system</b> <p>It is recommended that DBE, in collaboration with provinces:</p> <ul style="list-style-type: none"> <li>• Gives priority to instituting a competence-based system for the appointment of principals within three years. The lessons learned in WC and GP should be built on.</li> <li>• Develops sets of standards for subject advisors and heads of department, linked to the Standards for Principalship.</li> <li>• Pilots a merit-based approach to the appointment of school-level HODs and subject advisors.</li> </ul>
	<b>R2.2</b>	<b>Implementation - provinces</b> <p>Provincial officials should give particular attention to developing protocols for implementing the merit-based approach, in discussion with DBE.</p>
	<b>R2.3</b>	<b>Implementation – districts</b> <p>Circuit managers and subject advisors should support principals and monitor implementation of the promotions policy at school level, through direct observation and intervention where necessary.</p>

Recommendation	No	Sub-recommendation
is that the capable state which delivers high quality services to its citizens is driven by the most responsible and competent people, selected according to their capacity to undertake the designated job.		
<b>R3</b> DBE must conduct and support research on effective in-service education and training for educators  <b>Motivation:</b> The CPD system is 'flying blind': while large sums are spent annually by public, private and international sources, little is known about the effects this activity. DBE needs to take the lead in directing these efforts towards more efficient solutions, through the intelligent use of information.	<b>R3.1</b>	<b>Promote a research-focused approach to CPD</b>  It is recommended that DBE and private sector donors allocate at least 5% of any training initiative to R&D.  Areas requiring the most urgent attention are programmes which enable primary school teachers to teach literacy and basic maths, and to practice formative assessment in support of these disciplines.
	<b>R3.2</b>	<b>Knowledge management</b>  DBE should establish a Directorate for Knowledge Management, in the Research Coordination, Monitoring and Evaluation Chief Directorate. The task of the Dir: KM will be to collate research information on CPD and cumulatively build a knowledge base concerning the design and implementation of successful CPD programmes.
<b>R4</b> DBE in collaboration with Provincial Departments of Education must develop an effective programme to achieve school functionality  <b>Motivation:</b> Government, from the highest level, has been condemning the poor use of time in schools since 1998. Until there is a movement from rhetoric to action, schooling cannot undergo the accelerated rate of efficiency proposed by the NDP. While the ELRC provides an important space for cooperation, at the end of the day activity cannot be held	<b>R4.1</b>	<b>Developing a plan</b>  DBE should work with provincial officials to develop an effective programme to achieve school functionality. Adequate resources, including transport to schools for district officials, must be allocated to the programme.
	<b>R4.2</b>	<b>Implementation – provinces</b>  Each province should develop an implementation plan for achieving school functionality, which should include unannounced visits to schools by circuit managers. The statutory procedures governing the relationship between leaders and their subordinates are clear and even-handed in recognising both the responsibilities of managers and the rights of individuals. But in the end policy must be followed, even if it requires taking disciplinary measures against repeat offenders.
	<b>R4.3</b>	<b>Implementation - districts</b>  It is recommended that circuit managers monitor implementation of time-use policy at school level, through direct observation. Principals and circuit managers who cannot maintain effective time management practices in the institutions under their jurisdiction must be rendered assistance, while repeated inability must lead to redeployment or dismissal, as prescribed by the law.
	<b>R4.4</b>	<b>Implementation – schools</b>  School principals must ensure adherence of teachers to CAPS

Recommendation	No	Sub-recommendation
up indefinitely by any one party, and government needs to exercise its authority to move forward.		timetable. Recalcitrant teachers must be disciplined.
<b>R5</b> DBE and Provincial Departments of Education should develop an effective programme to support school leaders and teachers in curriculum implementation  <b>Motivation:</b> Monitoring and supporting the work of teachers involves much more than checking teacher documents and training workshops: it should include directing the daily work of teachers through lesson study, peer observation, and the analysis of test scores.	<b>R5.1</b>	<b>Developing a plan</b> DBE should work with provinces to incorporate best evidence of effective CPD programmes into the planning and rollout of support activities, with particular attention to literacy, basic maths and the use of formative assessment to promote learning in these foundation disciplines.
	<b>R5.2</b>	<b>Implementation – provinces</b> Provincial level curriculum leaders should work with subject advisors on the design, implementation and evaluation of such activities.
	<b>R5.3</b>	<b>Implementation - districts</b> Subject advisors should work with school-level HODs, meeting regularly at a rotating central venue, on running in-school PLCs to focus on matters of curriculum, assessment and pedagogy. Particular attention should be given to using assessment data to identify learner misconceptions and pedagogical effectiveness in literacy and basic maths.
	<b>R5.4</b>	<b>Implementation - schools</b> Principals should coordinate and direct the team of HODs within the school to promote engagement by teachers with curriculum issues. The promotion and quality assurance of PLCs in the relevant phase/subject areas should be central to the principal's role in exercising instructional leadership, as envisaged in the Standard for Principalship. It is recommended that HODs: <ul style="list-style-type: none"> <li>• Work with teachers in in-school PLCs to focus on formative assessment and effective pedagogy, in this way strengthening teachers' understanding of and skill in applying PCK in class, constructing test papers, and analysing the results.</li> <li>• Part of this exercise must be to shift the focus of monitoring from inputs to outcomes, for example, using the Early Grade Reading Assessment (EGRA, and the Early Grade Maths Assessment (EGMA) tools to test directly the literacy and numeracy skills of learners.</li> </ul>



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## Annex 2: Detail of the methodology/data

An extensive literature review was the first activity undertaken by the evaluation. The review was guided by a search for research findings pertinent to the study. This was followed by a survey of the views of key curriculum leaders across the system. At national level, a total of 13 DBE officials were engaged in eight separate interviews, while 16 provincial officials were engaged by means of a questionnaire. At district level, nine interviews were conducted with a total of 23 officials in the four districts targeted.

Interviews were conducted at school level with the principal, Foundation Phase (FP) head of department (HOD), and two Grade 2 teachers in the 12 primary schools, and with the principal, HODs for Further Education and training (FET) Phase Language and Mathematics, and one Grade 10 teacher for each of English First Additional Language (EFAL), Mathematics and Mathematical Literacy in the 12 high schools. Each school was visited by a team of two researchers for two days. This team also observed lessons delivered by the teachers interviewed. Altogether, 35 secondary teachers and 22 primary teachers were interviewed and observed for a total of 96 lessons. Teachers were asked to write a short test in the subject(s) they teach.

Rather than undertake a relatively superficial study of all three grades in the FP, it was decided to look at one grade in more depth; Grade 2 was selected, on the grounds that Grade 3 is commonly studied by research programmes, while in Grade 1, children write relatively less and therefore there is less evidence on which to judge the progress of curriculum implementation.

In primary schools, fieldworkers requested the DBE workbooks of four learners in the EFAL and Mathematics classes taught by the two teachers interviewed. Fieldworkers noted the numbers of pages completed by learners. In addition, the exercise books of two Grade 2 learners in each of the three subjects (Home Language [HL], EFAL and Mathematics) for each of the teachers interviewed were examined. Fieldworkers counted the number of pages written for each of the main topic areas specified in the respective curricula. In secondary schools, the exercise books of two learners from each of the teachers interviewed were analysed. Fieldworkers counted the number of exercises in each content area.

The term plans, assessment records, and assessment tasks of the teachers interviewed were examined. Analysis of the timetables of schools visited were analysed with a view to assessing the time allocated to the subjects in which lessons were observed. Fieldworkers walked around the school during the last period of the first day of the visit and the first period of the second day, noting how many classes were without teachers and the extent to which learners were out of class.

The initial decision regarding the structure of the present report, therefore, was to write eight mini-case studies, grouping the three members of each triplet of schools together and focusing on similarities and differences within the group. However, this approach also proved to be unsatisfactory, since the 24 schools in the sample differ very little from each other with respect to the key indicators, such as time-management, presence and use of books, pedagogy, assessment practices, and the like. Thus, despite their differentiation into 'high-' (H) and 'low- performing' (L), the only systematic differences within the group are that rural schools function significantly less well than urban schools, whatever their performance designation. This provided the second reason not to follow a case study approach in structuring the present report: it would have resulted in eight narratives very similar to one another. This is not to say that there are no theoretically interesting similarities and differences between the schools, but these followed no systematic patterns with respect to the independent variables: Annual National Assessment (ANA) Grade 2 Mathematics score; National Senior Certificate (NSC) pass rate.

## Annex 3: Revised Logframe

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
<b>Goal</b>	<i>To ensure that children acquire and apply the knowledge and skills specified in the curriculum in ways that are meaningful to their own lives.</i>	% of learners who complete schooling.  % of learners who, at the end of schooling, enter Further Education and Training (FET) or obtain jobs.	DBE data & reports on school completion.  HEMIS data on university enrolment.  Statistics South Africa (StatsSA) data and reports on employment.  Research literature.	The curriculum gives expression to knowledge and skills worth knowing. <i>This assumption was not tested.</i>  The school system is successful in inculcating knowledge and skills.
<b>Objective 1: To provide clear guidance to teachers on the knowledge, skills, and values to be taught in South African schools which will inform good pedagogy</b>				
<b>Long term outcome</b>	LO1 Teachers use CAPS documents regularly to guide daily and weekly planning.	% of lesson plans reviewed which are aligned with CAPS.	School document review.	New teachers will be oriented to CAPS (see Objective 5)  HODs in schools are providing support to teachers on CAPS (see Objective 5).
<b>Inter-mediate outcome</b>	IO1 Educators are clear about what needs to be taught in South African schools.	Teacher performance in assessments which measure curriculum knowledge.  Teacher knowledge of CAPS, as demonstrated in interviews.	Teacher tests.  Teacher interviews.	CAPS documents are accessible and understandable. Teachers can read and understand CAPS. <i>The evaluation found this assumption to hold true.</i>
<b>Outputs</b>	OT1.1 CAPS documents.	Existence of CAPS documents.	Document review.	
	OT1.2. Distribution of CAPS documents to districts and schools.	% of district officials who have ready access to CAPS (their own hard or electronic copies).  % of teachers who have ready access to CAPS.	District subject advisor interview.  Teacher interview.	
<b>Objective 2: To provide appropriate LTSM to teachers and learners which will support quality teaching and learning</b>				
<b>Longer-term outcome</b>	LO2.1. Teachers use LTSM as an integral part of the teaching and learning process to support quality teaching and learning.	Frequency of literacy activities undertaken in class (# activities in the year to date as compared to CAPS guidelines).  Nature of literacy activities undertaken in class (type of literacy activities undertaken as compared to CAPS guidelines).	Learner book analysis.  Learner book analysis. Lesson observations.  Learner book analysis.	LTSM are essential to the teaching and learning process. <i>This assumption was not tested.</i>

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
		Frequency and nature of writing exhibited in learner books as compared to CAPS guidelines.	Learner book analysis.	
<b>Inter-mediate outcomes</b>	IO2.1 Teachers use workbooks and textbooks regularly in their classrooms for teaching and learning purposes.	% of Grade 2 and 10 lessons observed in which textbooks were used.  % of Grade 2 lessons observed in which workbooks were used.  Self-reported used of workbooks and textbooks by teachers in interviews.	Lesson observation  Teacher and HOD interviews.  Document analysis	
<b>Short-term outcome</b>	SO2.1 Teachers and learners have access to more and better quality LTSM.	% of learners having access to the required textbooks and workbooks for the entire school year ( <i>Action Plan to 2019 Towards the Realisation of Schooling 2030</i> indicator).	Cross reference <i>Action Plan to 2019</i> .  School document review.  Classroom observations.  Learner book analysis.	
<b>Outputs</b>	OT2.3 Teachers and learners have access to DBE approved, CAPS-aligned workbooks.	See indicators for A2.5	N/A	
	OT2.4 Teachers and learners have access to DBE approved, CAPS-aligned textbooks.	See indicators for A2.5	N/A	
<b>Objective 3: To ascertain – through school level assessment - whether the knowledge, skills, and values (KSV) specified in CAPS are being acquired and desired outcomes achieved and take remedial action as required.</b>				
<b>Long term outcome</b>	LO3.1 Teaching is more effective as it is tailored to learners' areas of need.	Learner performance in National Senior Certificate (NSC) and international comparative test programmes.	Umalusi and DBE reports.  Longitudinal tracking of results.	NSC, PIRLS, SACMEQ, TIMSS are valid and reliable tests of performance. <i>This assumption was not tested.</i>  NSC, PIRLS, SACMEQ, TIMSS results are comparable horizontally (across the system) and vertically (over time).
<b>Inter-mediate outcome</b>	IO3.3 Gaps and weaknesses in learning are addressed through remedial teaching strategies.	Evidence that gaps and weaknesses in learners are addressed through remedial strategies.	Lesson observation.  Teacher interview.	Weaknesses in terms of pedagogy will be addressed through Continuous Professional

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
				Development (CPD). See Objective 5.
<b>Short-term outcomes</b>	SO3.1 Teachers are aware of gaps and weaknesses in learning.	Teachers are able to demonstrate awareness of gaps and weaknesses in learning.	Teacher interview.	
	SO3.2 Teachers, HODs, and subject advisors are aware of possible weaknesses in terms of pedagogy.	Teachers, HODs and subject advisors are able to demonstrate awareness of gaps and weaknesses in terms of pedagogy.	Teacher, HOD and subject advisor interview.	
<b>Outputs</b>	OT3.1 & OT3.3 Formal and informal assessment tasks set and completed.	# of lessons observed which incorporate formal and informal assessment tasks. # of assessment tasks completed in line with CAPS requirements. % of assessments reviewed which are at the right level as outlined in CAPS.	Lesson observation.  Document review (teacher assessment records).  Document review (teacher assessment records).	Teacher assessment records will be made available.
	OT3.2 Formal assessment tasks moderated.	Evidence that HODs have moderated formal assessment tasks.	Document review. HOD and teacher interviews.	
	OT3.4 Formal and informal assessment tasks marked.	Evidence that teachers have marked formal and informal assessment tasks.	Document review. Teacher interviews.	
	OT3.5 Formal and informal assessment tasks analysed.	Evidence that teachers, HODs and subject advisors have analysed formal and informal assessment tasks.	Document review. Subject advisor, HOD and teacher interviews.	
<b>Objective 4: To equip new teachers with the disciplinary knowledge, PCK, and practical competence to teach in line with CAPS</b>				
<b>Long term outcome</b>	LO4.1 More competent newly qualified teachers slowly improve the performance of the education system.	Performance of South African learners in SAQMEC, TIMS and PIRLS.	SAQMEC, TIMS and PIRLS reports.	There are enough newly qualified teachers obtaining jobs to make a difference at the level of the system.
<b>Inter-mediate outcome</b>	IO4.1 Newly qualified teachers meet the MRTEQ requirements on graduating.	of graduates from BEd and PGCE programmes accredited by the CHE.	HEMIS data. DHET and CHE reports.	Minimum Requirements for Teacher Education Qualifications (MRTEQ) provides adequate specifications to convey what is required for effective teaching.

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
				BEd and PGCE programme curricula meet the requirements of the MRTEQ. <i>This assumption was not tested via the evaluation.</i>
<b>Outputs</b>	OT4.1 Student teachers graduate with BEd and PGCE.	# of BEd and PGCE graduates.	HEMIS data. DHET and CHE reports.	
<b>Objective 5: To strengthen teacher competencies (disciplinary knowledge, PCK, and practical classroom knowledge) through CPD</b>				
<b>Long-term outcome</b>	LO1 Teachers have the requisite disciplinary, PCK, and practical classroom knowledge required to implement CAPS.	Competency of teachers in relation to: See objective 6B.	Lesson observations.	
<b>Inter-mediate outcomes</b>	IO5.1 Weaknesses in terms of pedagogy (see Objective 3) are effectively addressed through CPD.	Evidence that weaknesses in pedagogy are being addressed through CPD.	Teacher, HOD and subject advisor interview. Document review.	Schools have CPD plans. HODs have requisite disciplinary and PCK to advise teachers and provide in-school CPD. Subject advisors are competent to support HODs and teachers.
<b>Short-term outcome</b>	SO5.1 Instructional leaders (subject advisors, HODs) are knowledgeable in CAPS.	Subject advisors and HODs knowledge of CAPS, as demonstrated in interviews.	Subject advisor and HOD interviews.	Training was of sufficient quality and duration to equip subject advisors and HODs to support teachers and for teachers to understand CAPS. <i>This assumption was not tested via the evaluation.</i>
<b>Outputs</b>	OT5.1 Teachers, HODs and subject advisors trained in CAPS.	% of subject advisors interviewed trained in CAPS. % of HODs interviewed who were trained in CAPS. % of teachers interviewed who were trained in CAPS. Quality of training.	Subject advisor interview.  HOD interview. Teacher interview. Subject advisor, HOD and teacher interview.	
	OT5.2 Teachers trained in identified areas of need.	% of teachers interviewed who were trained in identified areas of need.	Teacher interview.	
	OT5.3 Teachers supported in identified	Evidence that analysis of formal and informal	HOD and teacher interviews.	

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
	areas of need (e.g. mentoring, professional learning communities (PLCs), and assessment).	assessment tasks has informed in-school CPD.  Evidence of support provided by HODs	Document review.  HOD and teacher interview.	
	OT5.4 HODs supported to support teachers.	Evidence of support provided by subject advisors	Subject advisor and HOD interview.	
<b>Objective 6a: To provide adequate support from district and school level, to teachers to support effective teaching and learning</b>				
<b>Long-term outcome</b>	LO6a1. Subject advisors and HODs provide ongoing/sustained quality instructional leadership.	HODs reporting that they receive ongoing, quality support from subject advisors.  Teachers reporting that they receive ongoing, quality support from HODs.	HOD interviews.  Teacher interviews.	
Inter-mediate outcome	IO6a1. Subject advisors and HODs provide quality instructional leadership.	Quality (usefulness) of support provided by subject advisors, as reported by HODs.  HODs' monitoring and support role is clearly defined (in their job descriptions).  Quality (usefulness) of support provided by HODs, as reported by teachers.  Reported gaps in terms of additional monitoring and support required.	HOD interviews.  School records  Teacher interviews.  HOD and teacher interviews.	Subject advisors are suitably qualified and knowledgeable.  The ratio of subject advisors: teachers allows adequate support; subject advisors have transport.  HODs are suitably qualified and knowledgeable in the subjects in which they are supporting teachers.  The ratio of instructional leaders: teachers allows for adequate support.  Quality is measured in terms of 4 dimensions defined by Hoadley and Galant (2015).
Outputs	OT6a1. Monitoring and support provided to schools and teachers.	Frequency of subject advisor monitoring and support visits.  Frequency of subject advisor monitoring and support activities by type (e.g. school visits, workshops, documents).	School and district records.  Subject advisor, HOD, and teacher interviews.	Records are available and are provided.

	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
	OT6a2. Monitoring and support provided to teachers.	Frequency of support provided by HODs.  Frequency of HOD monitoring and support activities by type (e.g. lesson observation, moderation of assessment, CPD provision).	HOD and teacher interviews.  School and teacher records.  School and teacher records.	Records are available and are provided.
<b>Objective 6b: To strengthen teaching practices and enhance learning</b>				
<b>Long term Outcome</b>	LO6b1. Improvement in learning outcomes.	The gap between expected (targets) and achieved learning outcomes.  Longitudinal trends in learner performance over time (NSC, SACMEQ, TIMSS, PIRLS).	DBE and Umalusi.  Umalusi, SACMEQ, TIMSS, and PIRLS.	NSC and ANA scores are comparable horizontally (across the system) and vertically (in time). <i>This assumption was not tested via the evaluation</i>
<b>Inter-mediate outcome</b>	IO6b1. Learners acquire the KSV specified in CAPS.	Learner performance in informal and formal school-based assessment.  Learner performance in external tests (ANA, NSC).	School records.  DBE and Umalusi.	School-based assessments are valid.  NSC and ANA are reliable indicators of learning specified in CAPS. <i>This assumption was not tested via the evaluation.</i>
<b>Short-term outcome</b>	SO6b1. Teachers provide quality instruction.	Extent to which teachers: <ul style="list-style-type: none"> <li>• Use effective questioning techniques;</li> <li>• Respond to learner questions appropriately;</li> <li>• Use written assessment formatively;</li> <li>• Provide model responses to learners;</li> <li>• Give adequate time for practice;</li> <li>• Progressively introduce new learning;</li> <li>• Make efficient use of lesson time;</li> <li>• Coordinate classroom resources and space;</li> </ul>	Lesson observation          Analysis of class assessment tasks.	Coe et al.'s criteria for 'great teaching' are valid.



	Logical hierarchy	Objectively verifiable indicators (OVI)	Means of verification; source of verification information	Assumptions
		<ul style="list-style-type: none"> <li>• Manage learner behaviour constructively.</li> <li>• Assessment task are appropriate for subject and grade.</li> </ul>		
<b>Outputs</b>	OT6b1. Work plans and lesson plans	% of teachers interviewed who report using CAPS to plan lessons.  % of work plans reviewed which are in line with CAPS.  % of lesson plans reviewed which are aligned with CAPS.	Teacher interview.  Document review.  Document review.	Work plans and lesson plans will be available.
	OT6b2. Lessons	% of coverage of work specified in CAPS.  % of learners who cover everything in the curriculum for their current year on the basis of sample based evaluations of records kept by teachers and evidence of practical exercises done by learners. Link to <i>Action Plan to 2019</i> .	Learner book analysis	



## planning, monitoring and evaluation

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