

FUNZA LUSHAKA BURSARY PROGRAMME IMPLEMENTATION EVALUATION

POLICY SUMMARY, EXECUTIVE SUMMARY AND SUMMARY
REPORT

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Glossary of Acronyms and Abbreviations

Abbreviation	Description
B.Ed.	Bachelor of Education
CATI	Computer Assisted Telephonic Interview
CBA	Cost Benefit Analysis
CHE	Council on Higher Education
DAC	Development Assistance Committee
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DPME	Department of Performance Monitoring and Evaluation
DSD	Department of Social Development
ELRC	Education Labour Relations Council
FET	Further Education and Training
FLBP	Funza Lushaka Bursary Programme
FLIMS	Funza Lushaka Information Management System
GITO	Government Information Technology Office
HEMIS	Higher Education Management Information System
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Framework
HESA	Higher Education Statistics Agency
IIAL	Incremental Introduction of African Languages
ISPFTED	Integrated Strategic Planning Framework for Teacher Education and Development
ITE	Initial Teacher Education
ITT	Initial Teacher Training
JET	JET Education Services
MRTEQ	Minimum Requirements of Teaching Qualifications
NEEDU	National Education Evaluation and Development Unit
NPC	National Planning Commission
NSC	National Senior Certificate
NSFAS	National Student Financial Aid Scheme
OECD	Organisation for Economic Co-operation and Development
PED	Provincial Education Department
PERSAL	Personnel Salary System (of government)
PGCE	Postgraduate Certificate in Education
SACE	South African Council for Educators
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Education Quality
SITA	State Information Technology Agency
SOP	Standard Operating Procedures
STATS SA	Statistics South Africa

Policy Summary

This document is a summary of the policy implications of an implementation evaluation of the Funza Lushaka Bursary Programme (FLBP) undertaken by JET Education Services covering the period 2007 to 2012. Reference is made to the full and summary reports where the full set of recommendations are detailed.

The FLBP is an important mechanism to address shortages in teacher supply in South Africa, having supported 15% of students recruited into initial teacher education (ITE) programmes over the first six years of its implementation. Overall, the FLBP is an appropriate tool for meeting the policy goals of an increased supply of high-performing ITE graduates for the education system. The FLBP is part of a range of important policy initiatives which relate to overall teacher education and supply and which together focus on improved access to ITE and success rates in ITE; improved supply of appropriately qualified teachers in identified subjects and geographic areas of need; and improved quality of teacher education. The FLBP is critical, given the need to continue to attract high performing school leavers into the teaching profession and the high cost of university education for which a majority of students require financial support. These are strong arguments for the Programme's retention.

The FLBP must, however, be distinguished from the many linked policy objectives that it cannot directly influence (such as overall supply and demand planning and improvements in the quality of teacher education), so that the Programme itself can be enhanced in the area in which it has direct influence, which is the supply of funding to support ITE students to access and graduate as qualified teachers who can then enter public schools.

In this context, the FLBP would benefit from investigation into the mismatch between qualification specialisation and subjects teachers are actually teaching; why large numbers of FLBP graduates appear to be teaching outside of their areas of specialisation; and more efficient placement mechanisms for newly-qualified teachers. This information would enable more targeted and appropriate selection and placement mechanisms, allowing FLBP graduates to properly fulfil their service obligations in schools where they are most needed and in fields of specialisation which are policy priorities.

In spite of a number of key successes of the FLBP, which include relatively good student success rates¹ and growing numbers of applicants², a number of important improvements are necessary to ensure that the Programme can fully meet its complex goal and objectives. These include: to select appropriate students, to support them financially to graduate in priority areas of specialisation and to ensure that they meet their full teaching obligations to the State while teaching in areas of need. The programme must also be sustainable in its operations, which are currently under strain.

¹ 81% of B Ed and 49% of PGCE graduates completed their studies in the prescribed minimum time, which is significantly higher than the average.

² From 2 801 in 2008 to 44 736 in 2013.

The evaluation provides evidence that the FLBP is broadly effective (and cost-effective) in attracting high-achieving students who complete ITE programmes in good time and take up government-paid positions in public schools. However, substantial data collection and management improvement initiatives are necessary to streamline the efficiency of the FLBP key business processes and provide greater evidence of impact. These improvements include effective student and graduate tracking systems, which do not currently exist.

Selection processes could be improved to identify both relative financial need (broadened beyond the current criteria used by the National Student Financial Aid Scheme (NSFAS)) and passion for teaching. Academic merit and financial need can be addressed in tandem.

Placement can be improved by ensuring more efficient placement processes nationally in collaboration with specific programme changes, including greater flexibility in the FLBP placement policies.

The administrative requirements of the FLBP cannot continue to be met with current staffing and resources. Urgent and effective investment in administrative support, which includes a dedicated unit for the FLBP within or outside of the ITE Directorate in the Department of Basic Education (DBE), resourcing and staffing support for all aspects of the FLBP across a number of stakeholders and a proper set of management information systems, is necessary. These investments will allow for more efficient streamlining of business processes, more effective monitoring and support, reduced workloads due to fewer manual processes and more effective reporting. A part investment from FLBP resources into administration will contribute to a more efficient and sustainable Programme.

There is evidence that the multi-stakeholder working model of the FLBP is a key strength. In conjunction with enhancements to administration, maintaining the strong stakeholder involvement of universities, NSFAS, provincial education departments (PEDs) and the DBE will be important for the continued success of the FLBP.

Executive Summary

Introduction and background

This is an implementation evaluation of the Funza Lushaka Bursary Programme (FLBP), established in 2007 with the goal of attracting greater numbers of students into initial teacher education (ITE) programmes in South African universities. High-achieving students are given generous full-cost bursaries to undertake initial teacher education (ITE) programmes in priority phases and subject areas to address both supply and quality issues in the education system. In return, recipients of the bursary are expected to teach in public schools for a period equal to the number of years they have received funding. The Programme is large-scale: during the period under evaluation (2007-2012) 23,392 students were funded under the Programme, representing on average 15% of the total ITE enrolment over the period.

The FLBP is a complex programme involving a large number of stakeholders who have different roles and responsibilities in relation to the key business processes of the Programme, grouped for the purposes of this evaluation into four processes: recruitment, selection, disbursement and placement. These stakeholders include 22 universities offering ITE programmes, the National Student Financial Aid Scheme (NSFAS), nine provincial education departments (PEDs), and the ITE Directorate in the Department of Basic Education (DBE), which is the administrative hub of the FLBP.

The key evaluation questions to be answered were:

1. What are the measurable results of the FLBP, specifically with regard to supply and placement of FLBP-sponsored teachers? To what extent has the FLBP been effective in achieving its major goals, objectives and intended outcomes? Have recruitment strategies been effective?
2. Is the design of the FLBP appropriate and to what extent is the intervention design consistent with education sector priorities, policies and partnerships with all key stakeholders?
3. To what extent has the FLBP been efficient in its implementation, with specific reference to administration and management arrangements?
4. How sustainable is the FLBP? What key insights, lessons and recommendations are offered, with a view on the possible scaling up of the FLBP?

A programme theory and logframe were clarified with stakeholders at the beginning of the evaluation process and guided the evaluation. A summary of the theory of change which was proposed for the FLBP and agreed to by the evaluation steering committee is presented below:

In Chapter 2 of the main report, amendments are proposed to the programme theory and logframe in light of the evaluation findings.

If you provide a sufficient full-cost bursary as an incentive to recruit students for initial teacher education, **and** you select teacher students based on merit (academic performance) and suitability (passion for teaching, teaching ability and desire to teach in priority subjects, phases and identified areas), **and then** you develop induction and academic support programmes and tracking systems to ensure satisfactory completion of funded students, **and** you link bursaries to service contracts and place FLBP graduates in posts where they will be teaching priority subjects and phases in identified geographical areas of need, **then** you should be able to increase the supply of qualified teachers to meet the need in priority areas (subjects, phases and identified geographical areas of need) so as to address educator scarcity.

A comprehensive literature review has shown that the FLBP is both appropriate (in the South African policy context) and relevant (in terms of the Programme environment). For example:

- The quality of teachers is a matter of concern in South Africa. Teachers “are central to education, and teaching should be a highly valued profession” (NPC, 2011: 265)³. The FLBP recruits high-achieving bursars but the adequacy of the ITE programmes they study is beyond its control.
- The increase in uptake of teacher education, to which the FLBP is making a substantial contribution, is encouraging, and it is predicted that by 2020 ITE enrolment will be sufficient DHET (2014c⁴). However, it is likely that there will still be relative and localised shortages.
- There is currently no robust system for estimating teacher supply and demand (DBE, 2012a)⁵; this gap in the planning system is an important challenge for the FLBP, the success of which hinges on bursars’ choices of subject and phase to meet demand.
- Vacancy rates in schools are high and rising; the dramatic ageing of the teacher population is another critical factor that the FLBP is helping to address.
- The literature review also examined the issue of scarce skills among teachers (DHET, 2014b), showing that the priority areas identified by the FLBP are attuned to national needs.

The evaluation methodology

A variety of methods, quantitative and qualitative, were used to conduct the evaluation, including in-depth interviews and focus groups with 120 FLBP stakeholders and a telephonic survey with a representative sample of 3,200 bursary recipients. Extensive quantitative analysis of various datasets was undertaken. Selected criteria of the Development Assistance Committee (DAC) of the Organisation for Economic Development (OECD) provided the framework for the evaluation.

³ National Planning Commission. 2011. *Our future -make it work: National Development Plan 2030*. Pretoria: NPC.

⁴ Department of Basic Education. 2014c. *Report on Funza Lushaka bursary programme in 2013*. Pretoria: DBE.

⁵ Department of Basic Education. 2012a. *Teacher supply and demand*. PowerPoint presentation for meeting of the Portfolio Committee on Basic Education. 21 August 2012.

Conceptual framework applied to the evaluation areas and questions

DAC Criteria	Evaluation Questions
Relevance & Appropriateness	Is the design of the FLBP appropriate? To what extent is the intervention design consistent with education sector priorities, policies and partnerships with key stakeholders?
Effectiveness	What are the measurable results of the FLBP? To what extent has the FLBP been effective in achieving its major goals, objectives and intended outcomes?
Efficiency	To what extent has the FLBP been efficient in its implementation, with specific reference to administration and management arrangements?
Sustainability	How sustainable is the FLBP? What key insights, lessons and recommendations are offered, with a view on the possible scaling up of the FLBP?

The evaluation was supported by a project management committee and an evaluation steering committee that included representatives of all stakeholders involved in the FLBP.

Key evaluation findings

The evaluation report presents findings on Programme design (covering relevance and appropriateness), effectiveness and results, efficiency and sustainability:

1. The FLBP **design** is relevant in terms of its political, economic and social context. It is also largely appropriate in terms of the complex environment in which it is implemented, characterised by multiple role players and stakeholders. Despite complex challenges, the FLBP responds to the supply and demand requirements of the basic education system. The FLBP has implemented continuous improvements in its strategy, including (in 2012) the introduction of a district-based recruitment system.
2. The evaluation has found ample evidence of Programme **effectiveness**. The Programme has made an important contribution to the very substantial increase in enrolment in ITE over the period under evaluation (FLBP students were on average 15% of the total ITE student intake over the period). It has been successful in attracting quality students to become teachers (however, we note that in the period under review, 'quality' was measured exclusively in terms of academic performance rather than, for example, criteria such as a "passion for teaching"). The majority of students are paying back their bursary obligations by teaching in public schools in government-paid positions, a key legal obligation attached to the bursary (however, large numbers of FLBP graduates are not teaching in the subject of their specialisation). We have noted, however, that in the absence of a tracking mechanism the proportion of FLBP graduates who have fulfilled their service obligation is not known.
3. Programme **efficiency** has been examined in the four key business processes of the FLBP: recruitment and application; selection; disbursement; and placement. Programme monitoring and data management have been discussed as a separate set of cross-cutting support mechanisms to all the business processes; the cost-effectiveness of the FLBP has also been assessed.
 - **Recruitment** is working efficiently, as the Programme is able to select adequate numbers of students who meet the selection criteria. Universities are playing an important and cost-efficient role in marketing the Programme. Means testing of

students does not take place but would be one mechanism to determine relative need of students; marketing to rural and poor students could improve significantly, though this may already be happening through the district-based recruitment strategy. There are important inefficiencies in recruitment: for example, the Funza Lushaka website lists national rather than provincial or district-level priorities; the new district-based recruitment strategy is more labour-intensive and needs to be adequately resourced; and marketing of the FLBP needs more human and financial resources at all levels.

- The **selection** process is generally efficient and thorough. Importantly, it appears that most selected students are motivated to teach and to pay back their service obligations. However, the lack of human resource capacity in the ITE Directorate of the DBE, which is involved in each university selection process and is responsible for final decisions about awards, is a major factor affecting efficiency in the selection process. No financial support is allocated for administrative work on the Programme, so the FLBP is dependent on PEDs, universities and other institutions for allocating adequate staff and resources to the Programme.
- The **disbursement** of funds is efficiently governed by the FLBP steering committee. Funding is sufficient to meet student needs; the amount of the FLBP bursary represents an important Programme efficiency. However, the timing of disbursement is problematic because the government fiscal year differs from the academic year; consequent delays in payments to students impact on their basic needs and also on the cash flow of universities that provide support to students to bridge the gap.
- **Placement** of FLBP graduates has serious inefficiencies that are largely not within the control of the Programme: although 83.5% of FLBP graduates are potentially fulfilling their service obligation in public schools, only 50.6% of graduates surveyed reported that they are in schools in the three poorest quintiles; there do not seem to be mechanisms to detect when students have changed their specialisation in the course of their studies, so it is difficult to check whether their subjects match priority needs; students sometimes choose priority areas in which there is an oversupply of teachers (resulting from weak demand and supply projection); monitoring of placement is difficult as information is held in the Personnel Salary System (PERSAL) rather than the ITE system; there is currently no system in place to track defaulting graduates; almost a quarter of all FLBP graduates surveyed were placed in their teaching position directly by schools, although this option is not in line with FLBP policy; and, finally, approximately 30% of FLBP graduates were not placed within the required 60-day period and are therefore not required to fulfil their service obligation.
- Programme **monitoring, tracking and data management** is weak and under-resourced; for example, the ITE Directorate has only one key staff member responsible for managing the FLBP database and also data on the entire teacher education system. The system is primarily manual and there are multiple points at which data are manipulated, which opens the system up to possible errors at each point and raises confidentiality and security issues. Very importantly, the information system does not allow the monitoring or tracking of students across the various business processes of the FLBP.
- Although it was not possible to do a full cost-benefit analysis of the Programme, it has been possible to do a limited assessment of the **cost-effectiveness** of the FLBP during the period 2007 to 2012. Overall, the Programme is relatively cost-effective. For

example, the proportion of FLBP graduates working as teachers in public schools is high and there appears to be a significant saving with students who complete their studies in the minimum time, as most FLBP bursars do.

4. The FLBP will continue to be dependent on other functions of the DBE, DHET and other stakeholders such as the universities and NSFAS for its **sustainability**. This is particularly the case in two areas – the ongoing discussions about the quality of ITE and the various systems for the placement of new teachers in public school teaching posts. The FLBP does not have direct control of either of these areas of work, but both are critical for its success and perceptions of its success. The extent to which broader changes in these areas can be influenced by the FLBP is a necessary ongoing discussion. Wherever possible, partnerships and collaboration should be strengthened to improve in these critical areas. Implementation of the recommendations of this evaluation is also critical for Programme sustainability, in particular, adequate resourcing and major improvements in the management of information.

Recommendations for implementation, policy and further research

Key recommendations related to Programme **design** are presented below.

1. *Practical ways of using the refined definition of merit in the recruitment and selection processes (as per the programme theory documented in Annexure B) are needed.*
2. *The Programme needs a planning and contracting system that helps to attract increased numbers of FLBP graduates to poor and rural schools in “geographical areas of need”.*

Recommendations related to Programme **effectiveness** are presented below.

3. *The DBE, in collaboration with universities, should develop an effective academic monitoring and tracking system (this will also assist with efficiency in selection).*
4. *The DBE, in collaboration with PEDs, should examine different approaches to placement, such as allowing students to apply directly to schools and extending the current 60-day period in which graduates must be placed or they are released from their service obligation (this will also assist with efficiency in placement).*
5. *The DBE, in collaboration with PEDs and universities, should conduct rigorous research to improve the match between FLBP graduates’ studies and schools’ needs.*
6. *The DBE should plan to respond effectively to the Incremental Introduction of African Languages (IIAL) policy.*
7. *The DBE should ensure that selection and disbursement processes are streamlined to support the academic cycles.*

Recommendations related to **efficiency in recruitment** are presented below:

8. *The DBE should ensure that effective recruitment strategies are shared among key role players.*
9. *The DBE should consider whether administration of the FLBP can be enhanced by issuing a single contract for the duration of the qualification.*
10. *The DBE should consider requesting universities to waive their application fees for needy FLBP applicants.*

Recommendations related to **efficiency in selection** are presented below:

11. *The DBE should draw up guidelines that set out possible mitigating factors in students' applications, such as illness.*
12. *The DBE, in conjunction with other Programme stakeholders, should consider ways to improve efficiency in responses to applications.*
13. *Since universities are national not provincial institutions, studying in another province should not affect a candidate's chance of selection; however, the DBE and PEDs should collaborate to attune the priority areas to local circumstances and consider district-level priority areas. Working in a particular district should be part of a district-based FLBP student's service obligation.*
14. *The DBE, in collaboration with universities, should develop an effective system to monitor the priority areas that students have enrolled for; priority subject areas should be fixed in the period between application and selection; (this will also assist with efficiency in placement).*

Recommendations related to **efficiency in disbursement** are presented below:

15. *The DBE should consider introducing a mechanism for determining relative financial need of FLBP applicants to better target needy students (this also relates to Programme design and assists with sustainability).*
16. *The DBE should develop guidelines for universities to ensure that all students receive similar levels and types of support to fill the gap between the beginning of the academic year and receipt of the bursary.*
17. *The DBE should review the FLBP refund policy, noting that students should not receive the benefit of downward adjustments of university course fees.*
18. *The DBE should ensure that important discussions lead to policy decisions and action; for example, the discussion among stakeholders about how payments to institutions might be made earlier should lead to decisive action.*
19. *Given the scale of the Programme and the large amounts of funds available, the DBE and other role players should allocate adequate resources to reduce disbursement delays.*
20. *To avoid possibly costly legal challenges the DBE should examine the feasibility of mechanisms such as admission of debt when students convert their bursaries into loans.*

Recommendations related to **efficiency in placement** are presented below:

21. *The DBE should ensure that placement data are captured and stored in an effective management information system.*
22. *The DBE should develop a strategy and tools for projecting supply and demand to inform the determination of priority areas; this initiative should link to broader education sector planning.*
23. *The DBE, in collaboration with PEDs, should develop an effective tracking system to provide feedback to universities on placement to help shape their strategy on teacher supply and ensure that FLBP graduates meet their full service obligations beyond their placement and (this will also assist with efficiency in disbursement).*
24. *The DBE should encourage strengthened data management and province-level research into teacher supply and demand.*
25. *Given that in practice many FLBP graduates apply directly to schools, the DBE should accept this but introduce safeguards to ensure that graduates take up posts in areas of need.*

26. *The DBE, in collaboration with PEDs, should ensure that PED responsibilities in terms of placement are clear and develop protocols to ensure that universities receive feedback from provinces on placement.*
27. *The DBE, in collaboration with PEDs, needs to identify methods of effective placement, considering all possibilities, such as national placement for FLBP graduates who agree to be placed in any province when they accept the bursary.*

Recommendations related to **efficiency in monitoring, tracking and data management** are presented below:

28. *The DBE should allocate adequate staff and resources to manage Programme data for effective planning and monitoring.*
29. *The DBE and the State Information Technology Agency (SITA) should develop a new application service specification setting out the software and hardware requirements for a management information system that can support all FLBP business processes for effective planning and decision making.*

A recommendation related to the **cost-effectiveness** of the FLBP is presented below:

30. *The DBE should ensure that appropriate data on net benefits and net costs are available in the future to support a cost-benefit analysis.*

Recommendations related to the **sustainability** of the FLBP are presented below:

31. *The Programme is effective and should be sustained by government, with the improvements recommended in this report.*
32. *The DBE, with the support of other Programme stakeholders, should develop an effective FLBP planning system, which must be linked to and aligned with the overall planning of government in areas such as teacher supply and demand and teacher employment. Effective planning is also necessary to ensure alignment between government funding and planning cycles and those of relevant stakeholders, including universities and NSFAS; the DBE should ensure that measures already in place to bridge the gap between the academic year and the government financial year (such as universities' support for needy students) are encouraged.*
33. *The DBE should develop measures to ensure that marketing is effective and that responses to applications are as speedy as possible.*
34. *Given the scale of the Programme and the large amounts of funds available, the DBE should allocate adequate resources to administer the Programme. The DBE should consider the establishment of a dedicated unit within or outside of the ITE Directorate to manage the FLBP.*

A recommendation for **future evaluation work** is presented below:

35. *The FLBP should commence planning and lay the groundwork now to evaluate the FLBP again in future, including cost-benefit analyses and impact evaluations of the Programme.*

Summary Report

1

Background and Introduction

1.1 About the Programme

The Funza Lushaka Bursary Programme (FLBP) was established in 2007 with the goal of attracting greater numbers of students into initial teacher education (ITE) programmes in South African universities. The FLBP provides generous full-cost bursaries to high-performing students to study in priority phases and subject areas in ITE programmes. In return, recipients of the bursary are expected to teach in public schools for a period equal to the number of years of funding received.

The FLBP falls within the mandate of Department of Basic Education (DBE) as a key deliverable as indicated in the Strategic Plan 2011-2014 and the Action Plan to 2014 (DBE, 2011a)⁶. The Programme articulates with Goal 14 of the Action Plan to 2014 and is designed to achieve the following goals (DBE, 2013d)⁷:

- Attract quality students and ensure that students are trained in identified priority areas;
- Contribute substantially to the supply of adequately trained teachers with a focus on rural and poor schools.

The priority areas follow:

- **Foundation Phase** (Grades R-3): Foundation Phase specialisation: specialisation in an African Language.
- **Intermediate and Senior Phase** (Grades 4-6 and 7-9 respectively): With a teaching major in one of the following: African Languages; English; Mathematics; Natural Sciences; or Technology.
- **Further Education and Training (FET) phase** (Grades 10-12): With a teaching major in one of the following: Accounting; African Languages; Economics; English; Geography; Mathematics; Mathematical Literacy; Agricultural Sciences; Life Sciences; Physical Sciences; Agricultural Technology; Civil Technology; Electrical Technology; Mechanical Technology; Information Technology; Computer Applications Technology; or Engineering Graphics and Design.

⁶ Department of Basic Education. 2011a. *Action plan to 2014: Towards the realisation of schooling 2025*. Pretoria: DBE.

⁷ Department of Basic Education. 2013d. *Funza Lushaka: Brochure*. Pretoria: DBE

The FLBP is seen as one of the mechanisms to be used to enhance access for high-achieving students to qualify as teachers, addressing both supply and quality issues in the education system (DBE, 2011b)⁸. Several objectives were identified for the Programme (DBE, 2011b):

- Employ efficient and effective recruitment mechanisms to attract quality students (aged 30 and below) to become teachers in identified priority areas;
- Increase the number of first-time enrolments in teacher education programmes by 10% each year;
- Provide financial assistance to South African youth with academic potential to enter and complete tertiary studies in teacher education programmes;
- Ensure a satisfactory completion rate of funded students; and
- Ensure that Funza Lushaka graduates are placed appropriately in schools.

The Programme is large-scale: during the period under evaluation (2007-2012) 23,392 students were funded, representing a total average of 15% of the total ITE enrolment over the period.

The FLBP is a complex programme involving a large number of stakeholders who have different roles and responsibilities in relation to the key business processes of the Programme, grouped for the purposes of this evaluation into four processes: recruitment, selection, disbursement and placement. These stakeholders include 22 universities offering ITE programmes, the National Student Financial Aid Scheme (NSFAS), nine provincial education departments (PEDs), and the ITE Directorate at the DBE, which is the administrative hub of the FLBP.

During the **recruitment** phase, universities, PEDs and education districts inform prospective students about and participate in information sessions for district-based applicants; recruitment campaigns are carried out at national, provincial and district level; and applicants apply through two mechanisms – the national process on the DBE website, and the district process through districts and PEDs, often with the assistance of universities.

Selection is carried out at different levels: districts and provinces for the district-based students, who then receive promissory letters; and national selection which takes place at universities, in collaboration with faculty staff, PEDs and national DBE staff. In the latter process, universities engage with successful and unsuccessful students.

During the **disbursement** phase, students engage with the National Student Financial Aid Scheme (NSFAS) through the financial aid offices of their universities and are required to sign contracts with NSFAS. Payments are made from the DBE to NSFAS, which then pays out in batches to universities based on the agreed selection profiles for that year.

At the time of graduation, during the **placement** phase, universities assist students to provide the necessary information through placement request forms, the DBE captures and processes placement request information and the PEDs are responsible for placing FLBP graduates in appropriate teaching posts. FLBP graduates are expected to work back one full year of teaching for each year of study funding received.

⁸ Department of Basic Education. 2011b. *Funza Lushaka Bursary Scheme policies and processes 2012*. Pretoria: DBE

1.2 About the evaluation

This is an implementation evaluation of the FLBP covering the period 2007-2012. The main purpose of the evaluation was to assess the effectiveness of the Programme, measure the Programme against its key objectives and intended outcomes, identify strengths and weaknesses of the Programme and make recommendations to improve the functioning of the Programme. This included examining the appropriateness of the current design; assessing Programme results; a detailed assessment of FLBP management and administrative systems, processes and procedures; and assessing sustainability of the Programme. The terms of reference also requested the service provider to look at recommendations for Programme improvement, including advising on the future measurable impact assessment of the FLBP.

According to the terms of reference, the results of the Programme are to be assessed against its main intended outcomes:

- An increased number of students recruited and funded in ITE programmes;
- A satisfactory completion rate of FLBP bursars;
- The placement of qualified bursars in rural and poor schools; and
- Increased supply of qualified teachers in the identified priority areas and phase specialisations.

The **key evaluation questions** to be answered in this evaluation were:

1. What are the **measurable results** of the FLBP, specifically with regard to supply and placement of FLBP-sponsored teachers? To what extent has the FLBP been effective in achieving its major goals, objectives and intended outcomes? Have recruitment strategies been effective?
2. Is the **design** of the FLBP appropriate, and to what extent is the intervention design consistent with education sector priorities, policies and partnerships with all key stakeholders?
3. To what extent has the FLBP been **efficient** in its implementation, with specific reference to administration and management arrangements?
4. How **sustainable** is the FLBP? What key insights, lessons and recommendations are offered, with a view on the possible scaling up of the FLBP?

2.1 Background and Introduction

This section presents an overview of the programme theory⁹ and logframe¹⁰ which were developed for the FLBP and which provided a guiding framework for this evaluation.

2.2 Overview of the programme theory and logframe

A summary of the programme theory which was proposed for the FLBP and agreed to by the evaluation steering committee is outlined below. The full programme theory and logframe document can be found in Annexure B, which is a separate document which accompanies the full report. Annexure B also includes recommendations from the evaluation team for proposed changes to the programme theory in light of the evaluation findings.

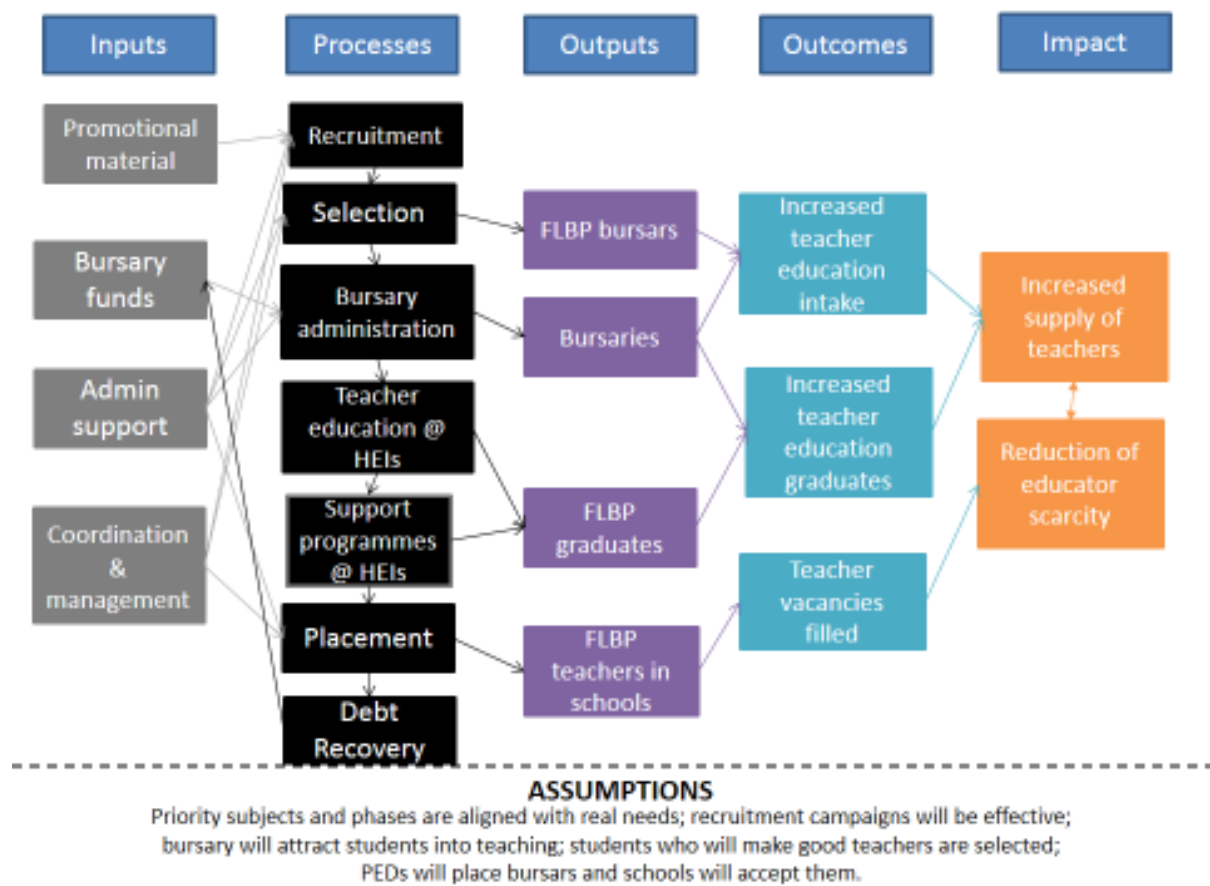
If you provide a sufficient full-cost bursary as an incentive to recruit students for initial teacher education, **and** you select teacher students based on merit (academic performance) and suitability (passion for teaching, teaching ability and desire to teach in priority subjects, phases and identified areas), **and then** you develop induction and academic support programmes and tracking systems to ensure satisfactory completion of funded students, and you link bursaries to service contracts and place FL graduates in posts where they will be teaching priority subjects and phases in identified geographical areas of need, **then** you should be able to increase the supply of qualified teachers to meet the need in priority areas (subjects, phases and identified geographical areas of need) so as to address educator scarcity.

The diagram below presents the programme theory in graphic form:

⁹ “programme theory” refers to a plausible, sensible model of how a programme is believed to work and how it brings about positive change (Bickman, L, 1987, The functions of program theory. *New Directions for Program Evaluation*, 1987(33), pp.5–18. “Programme theory” is often used interchangeably with the term “theory of change”. However, a distinction can be made between process theory (how a programme operates) and impact theory (how change occurs) (Rossi, P.H., Lipsey, M.W. & Freeman, H.E., 2004. *Evaluation: a systematic approach*. 7th edition. Thousand Oaks, CA: Sage); both process and impact theory were developed for the FLBP and are thus referred to by us as “programme theory”.

¹⁰ Also referred to as a “logical framework” a logframe is a management tool which provides a summary of a programme, usually including inputs, activities, outputs, outcomes and impact, assumptions or risks which underpin or may affect a programme, the relationship between programme components and indicators (which can be identified at various levels) to measure progress (DAC, 2002, *Glossary of key terms in evaluation and results-based management*. Paris, France: OECD).

Figure 1: FLBP programme theory



Initial Teacher Education in South Africa: A Literature Review

3.1 Introduction

A key component of the evaluation was a thorough literature review, the salient features of which are summarised below.

3.2 Teacher quality

Of the 425,090 educators employed in schools, the majority (92%) are employed in public schools. The current average national learner:educator ratio in public schools is 31 (DBE, 2014a)¹¹. However, this average hides a wide range of differences across districts and geographical locations.

Table 1: Numbers of teachers employed in South African schools

Province	2011	2012	2013	2014
Eastern Cape	68 499	67 936	66 007	64 258
Free State	24 057	24 828	24 475	24 552
Gauteng	71 532	73 960	74 823	77 265
KwaZulu Natal	93 266	94 932	96 057	95 560
Limpopo	58 016	57 670	57 108	57 256
Mpumalanga	34 623	34 664	34 936	35 000
Northern Cape	8 899	8 864	8 972	9 182
North West	25 897	25 924	26 194	26 086
Western Cape	35 819	36 389	36 451	35 931
South Africa	420 608	425 167	425 023	425 090

Source: DBE 2014a, School realities 2014

Despite this arguably favourable average learner:teacher ratio, learning outcomes are poor, especially in historically black schools – an indication of persisting historical inequalities (Spaull and Kotze, 2015)¹². A strong association between learner performance and teacher quality is clear from the 2007 Southern and East African Consortium for Monitoring Educational Quality (SACMEQ) data, which show, for example, that the subject knowledge base of the majority of South African Grade 6 Mathematics teachers is inadequate. A similar finding has been made in relation to language teachers, whose performance in the SACMEQ tests dropped when they were confronted with questions requiring higher cognitive processing skills (Taylor and Taylor, 2012)¹³.

¹¹ Department of Basic Education. 2014a. *School realities 2014*. Pretoria: DBE

¹² Spaull, N. & Kotze, J. 2015. Starting behind and staying behind in South Africa: The case of insurmountable learning deficits in mathematics. *International Journal of Educational Development*, 41, 13–24.

¹³ Taylor, N. and Taylor, S. 2012. Teacher knowledge and professional habitus. In Taylor, N., van der Berg, S. & Mabogoane, T., (Eds.), *Creating effective schools: Report of the National School Effectiveness Study*. Cape Town: Pearson.

The quality of teachers is clearly a matter of concern for the FLBP. The Programme strives to recruit high-achieving bursars but the adequacy of the ITE programmes they study is beyond its control. The Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE) has noted that a student's undergraduate academic majors in relevant subjects are no guarantee of sufficient disciplinary knowledge as a basis for building pedagogical knowledge (CHE, 2010)¹⁴.

Teachers “are central to education, and teaching should be a highly valued profession” (NPC, 2011: 265)¹⁵. For this reason, policy has focused on the quality of teacher education programmes: the revised Minimum Requirements of Teaching Qualifications (MRTEQ), aligned with the Higher Education Qualifications Sub-Framework (HEQSF) (SAQA, 2013)¹⁶, set out the minimum competences required of a newly qualified teacher. The Integrated Strategic Planning Framework for Teacher Education and Development in South Africa (ISPFTED) 2011–2025 outlines the vision for an integrated national plan for teacher development aimed at improving the quality of teacher education in order to improve the quality of teachers, teaching and learning (DBE and DHET, 2011)¹⁷. An important output of the ISPFTED is that increased numbers of high-achieving school-leavers must be attracted into teaching. This aspect of the literature review highlights the importance of the FLBP, which is a key mechanism to attract higher quality teachers into the profession.

3.3 Uptake of teacher education

The increase in uptake of teacher education is encouraging. According to the Department of Higher Education and Training (DHET) (2014c)¹⁸, there was a 167% increase in headcount enrolments for initial teacher education between 2008 and 2012. This upward trend is expected to continue, as the figure below indicates.

¹⁴ Council on Higher Education. 2010. *Report on the national review of academic and professional programmes in education*. Pretoria: CHE.

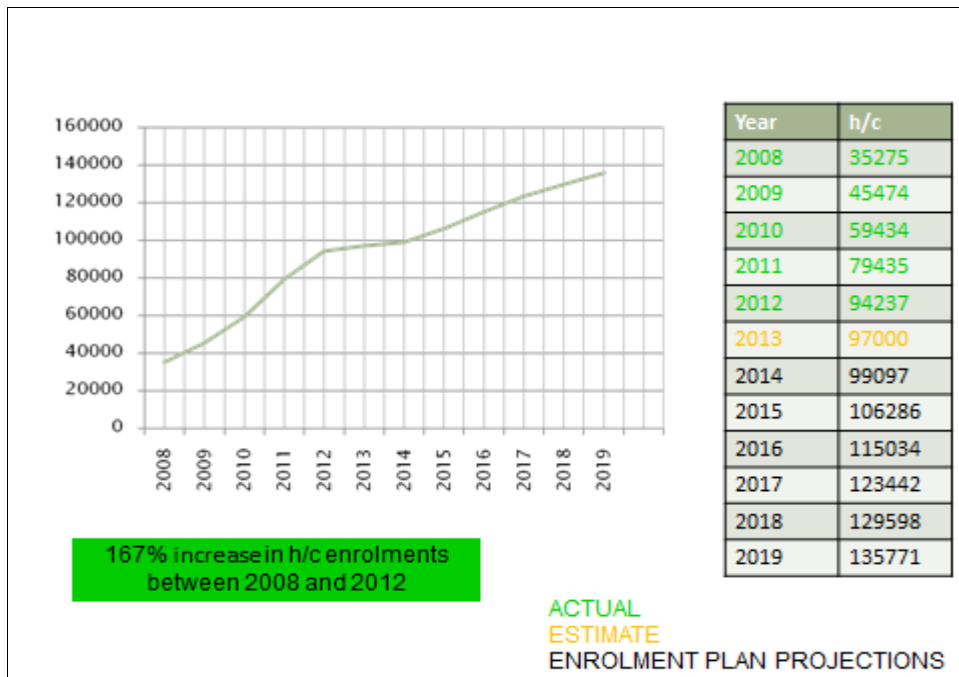
¹⁵ National Planning Commission. 2011. *Our future -make it work: National Development Plan 20130*. Pretoria: NPC.

¹⁶ South African Qualifications Authority (SAQA), 2013. *Higher Education Qualifications Sub-Framework*, Pretoria: SAQA.

¹⁷ Department of Basic Education & Department of Higher Education and Training. 2011. *Integrated strategic planning framework for teacher education and development in South Africa, 2011–2025: Technical report*. Pretoria: DBE & DHET.

¹⁸ Department of Higher Education and Training. 2014c. *Briefing on initial teacher education to joint sitting of the BE & HET PC*, 4 November 2014. Pretoria: DHET.

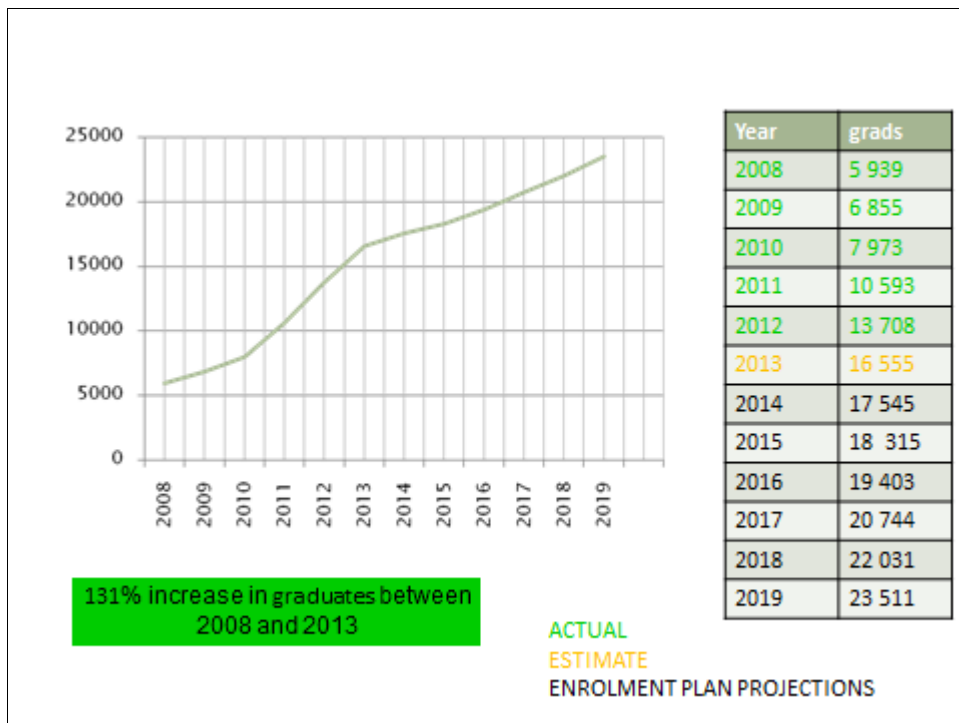
Figure 2: Actual and estimated trends in headcount enrolments in ITE, 2008 - 2019



Source: DHET, 2014c

The increase in graduates is expected to continue, as reflected in the figure below.

Figure 3: Actual and estimated trends in graduations in ITE, 2008 - 2019



Source: DHET, 2014c, Briefing at joint sitting of the BE & HET Portfolio Committee

Based on these enrolment and graduation trends, the DHET predicts that by 2020 ITE enrolment will be sufficient. However, it is likely that there will still be relative and localised shortages. To reduce

these shortages, the focus should be on the shape (not only the size) of ITE: to produce sufficient teachers per phase, to address subject specialisation mismatches, and to address the training of specialised teachers (DHET, 2014c). The FLBP has a key role to play in pursuing these goals.

3.4 Teacher supply and demand

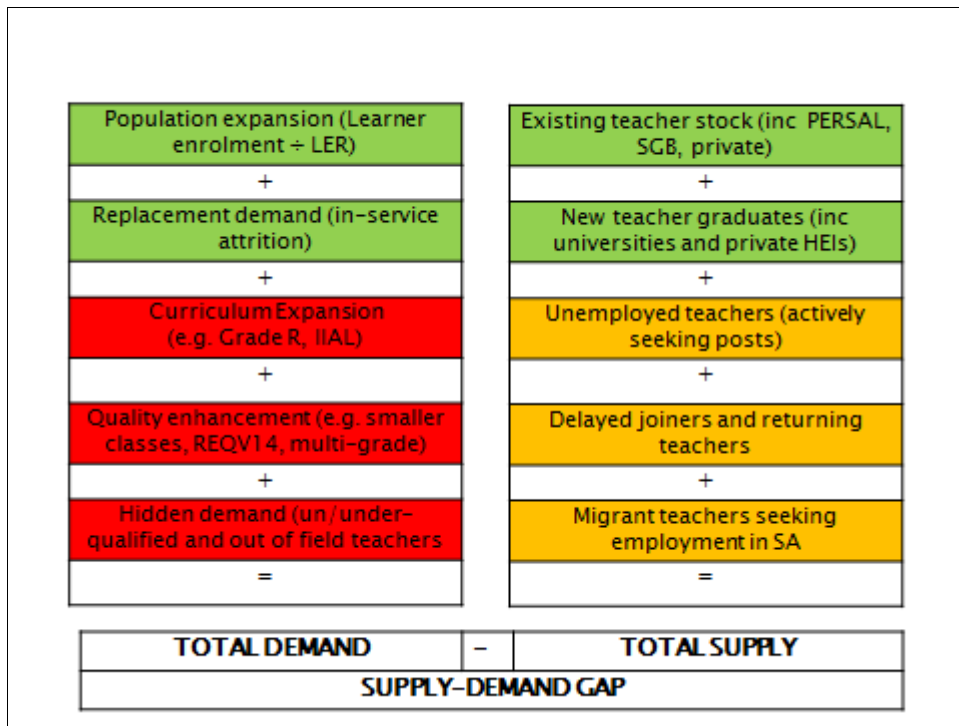
Teacher supply and demand are crucial aspects of the education system for the FLBP but involve a degree of risk because of the complexity involved in generating useful estimates. The literature review notes that there is no robust system for estimating teacher supply and demand; critical information, including subject specialisation and levels of qualification of teachers within the system, is not timeously available to be used for planning at district, provincial and national level (DBE, 2012a)¹⁹. This gap in the planning system is an important challenge for the FLBP, the success of which hinges on bursars' choices of subjects and phases to meet demand. To support more accurate projections of teacher supply and demand, the DHET is exploring a multivariate model which can:

- Analyse multiple independent variables on demand and supply, for example population expansion, curriculum expansion, quality enhancement, and hidden demand;
- Disaggregate supply and demand data by province, subject specialisation, language of learning etc.; and
- Account for current and future supply, including accounting for all teachers who are seeking employment.

The proposed model is presented in the figure below.

¹⁹ Department of Basic Education. 2012a. *Teacher supply and demand*. PowerPoint presentation for meeting of the Portfolio Committee on Basic Education. 21 August 2012.

Figure 4: Multivariate model for projecting/predicting teacher supply and demand



Source: DHET, 2014c, Briefing at joint sitting of the BE & HET Portfolio Committee

While there has been an increase in the number of students taking up teaching at university level and graduating, not all graduates are being absorbed into the system. The DHET has analysed the employment of ITE graduates of 2009, 2010 and 2011 in the public schooling system, and has reported that only about 60% of graduates are being placed in government-paid positions in public schools; others may be employed by public school governing bodies or independent schools. As we shall see in Chapter 5, FLBP graduates are placed in public schools in higher than average proportions.

Teacher attrition is another important phenomenon in the context of the FLBP. DBE data (DBE, 2013b)²⁰ show that the annual attrition rate over five years from 2008 to 2012 was between 3% and 4%, constituting an average loss of 13,300 teachers annually (DBE, 2014b)²¹. However, the Centre for Development Enterprise (CDE, 2015)²² provides an analysis of attrition in 2012 and 2013 and cautions that analysis of attrition is compromised by inaccuracies and incompleteness of databases; this caution illustrates a complexity that impacts on FLBP planning.

²⁰ Department of Basic Education. 2013b. *Briefing by the DBE on progress reports in respect to the teacher vacancies*. PowerPoint presentation to the Portfolio Committee. 28 May 2013.

²¹ Department of Basic Education. 2014b. *Education human resource planning report 2012/2013*. Pretoria: DBE.

²² Centre for Development and Enterprise (CDE), 2015, *Teachers in South Africa: Supply and Demand 2013-2025*, Johannesburg, CDE.

One study reviewed (Hall et al, 2005)²³ has shown that many teachers are tempted to leave the profession because of, for example, poor remuneration (40%) and heavy workloads (24%). Stop-gap measures to deal with teacher attrition include the appointment of temporary teachers, many of whom are under-qualified (DBE, 2013b). In 2012, vacancy rates rose in most of the provinces between January and March, with the national average rising by almost 5% (DBE, 2012a); in three provinces, as the table below shows, the rate is over 10%. The fact that the vacancy rate is higher than the attrition rate (3.5%) shows that the training of new teachers is an issue that needs to be urgently addressed, including, importantly, to maintain adequate learner:teacher ratios (DBE, 2014b). The FLBP is playing an important role in this regard.

Table 2: Provincial vacancy rates January – March 2012

Province	Date	Total Vacancies	PPN ²⁴ 2012	Vacancy Rate
Eastern Cape	12-Jan	1 460	47 826	3.05%
	12-Mar	5 107	47 826	10.68%
Free State	12-Jan	344	16 389	2.10%
	12-Mar	736	16 389	4.49%
Gauteng	12-Jan	2 697	39 192	6.88%
	12-Mar	2 335	39 192	5.96%
KwaZulu Natal	12-Jan	1 415	64 672	2.19%
	12-Mar	2 936	64 672	4.54%
Limpopo	12-Jan	190	43 177	0.44%
	12-Mar	3 197	43 177	7.40%
Mpumalanga	12-Jan	857	25 812*	3.32%
	12-Mar	3 738	25 812*	14.48%
Northern Cape	12-Jan	654	19 458*	3.36%
	12-Mar	628	19 458*	3.23%
North West	12-Jan	1 161	16 371	7.09%
	12-Mar	1 076	16 371	6.57%
Western Cape	12-Jan	2 068	18 772	11.02%
	12-Mar	2 298	18 772	12.24%

Source: DBE, 2012a, Teacher Demand and Supply²⁵

The ageing of the teacher population is another factor that must be considered in FLBP planning. In 2009, less than 5% of teachers were under the age of 30; by contrast, in 1994 54% of teachers were younger than 35 years of age (DoE 2009: 37, cited in DBE & DHET, 2011). In 2004, 29% of teachers were aged 45 and older (ELRC 2005: xiv, cited in DBE & DHET, 2011) and many are now (if still in the system) close to retirement.

An analysis of the inflow of new teachers into the public schooling system (Gustafsson, 2015)²⁶ shows that the number of entrants under the age of 30 has remained at half to two-thirds of new entrants between 2007 and 2014; clearly, not enough young teachers are joining the workforce. The demand for young, qualified teachers is evident; attracting high-achieving school leavers into the teaching profession, a central FLBP objective, is therefore crucial.

²³ Hall, E. H., Altman, M., Nkomo, N., Peltzer, K. & Zuma, K. 2005. *Potential attrition in education: The impact of job satisfaction, morale, workload and HIV/Aids*. HSRC Press, Cape Town.

²⁴ PPN stands for post provisioning norms.

²⁵ Note: The source document does not explain what asterisks represent.

²⁶ Gustafsson, M, 2015, *Inflow of new teachers into the public system*, unpublished report.

Research by the CDE (2015) shows the magnitude of the teacher supply challenge. Using population analysis, projected enrolment levels and teacher:learner ratios, and based on the number of teachers in 2013 (425,989), the CDE projected that 30,633 more teachers will be needed by 2025.

Table 3: Projected educator requirements

Schooling level	2013 ²⁷	2016	2019	2022	2025
Lower primary	132 872	137 610	135 112	131 514	129 081
Higher primary	118 621	131 069	139 026	136 263	134 426
Secondary	174 497	168 749	174 320	189 642	192 216
Total	425 989	437 428	448 458	457 419	455 723

Source: CDE report, 2015

A final demand-side issue is that while participation of 7-15 year olds in schooling was almost universal at 98.8% in 2012 (12,655,436 learners), there are concerns about the percentage of youth aged 16-18 who were out of school in the same year. A higher proportion of out-of-school youth in this age group were girls (15.4%), as highlighted in the table below (DBE, 2013a)²⁸.

Table 4: Percentage of youth aged 16 – 18 out of school, 2002 – 2012

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Male	14.3	14.6	14.1	14.8	15.7	13.4	15.5	15.9	15.2	14.3	12.8
Female	20.9	19.8	20.5	20.9	19.5	16.3	16.9	17.5	19.0	16.0	15.4
Total	17.6	17.2	17.3	17.8	17.5	14.8	16.2	16.7	17.1	15.1	14.1

Source: DBE, 2013a, Education for All Country Progress Report

The DHET is tasked with providing alternative skills programmes for these youth (DBE, 2013a). However, qualified teachers will be needed to provide these skills. In this regard, the demand for teachers will grow if government's commitment to bring out-of-school children into the formal schooling system is to be fulfilled. This has important implications for the FLBP.

3.5 Scarce skills

The literature review also examined the issue of scarce skills among teachers. The DHET's draft list of top 100 occupations in high demand in the country is drawn from all the available research and identifies the following three areas of scarce skills in the school sector (DHET, 2014b):

- Foundation Phase teachers (especially teachers who speak an African language – of the 1,275 teachers graduating with a Foundation Phase qualification in 2009, only 168 (13%) spoke an African language);
- Natural Science teachers in Grades 10-12; and
- Mathematics teachers at primary school level.

²⁷ The 2013 data are based on actual data, not estimates.

²⁸ Department of Basic Education. 2013a. *Education for all (EFA) 2013 country progress report: South Africa*. Pretoria: DBE.

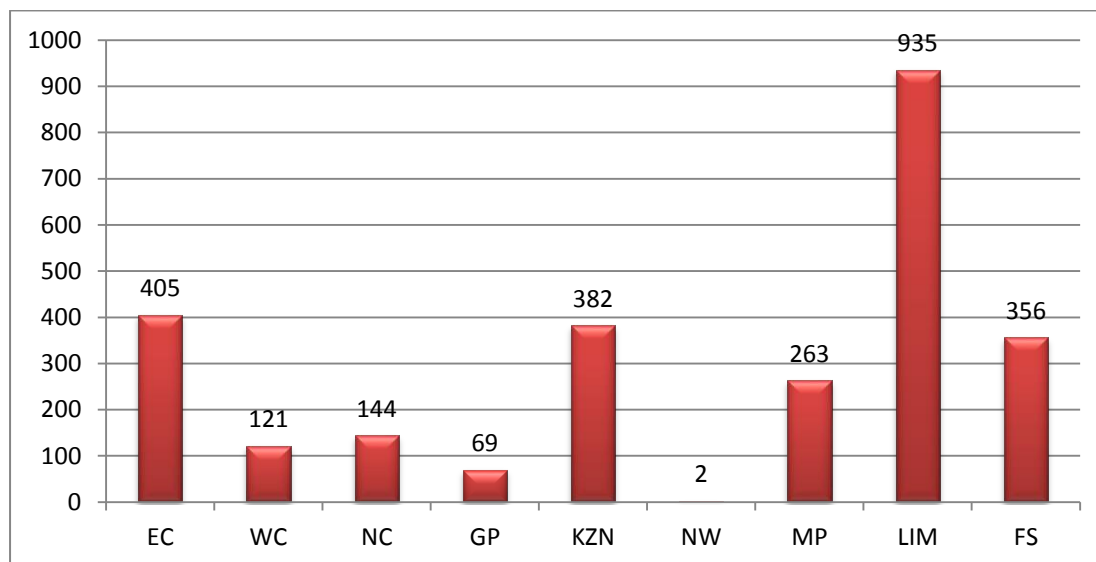
The challenges in terms of African languages are important to note because of the introduction of the Incremental Introduction of African Languages (IIAL) policy (DBE, 2013c)²⁹: more teachers who speak an African language are needed in the Foundation Phase, to teach African languages as school subjects and to use African languages as the language of learning and teaching in other subjects. The FLBP is addressing this challenge through its priority areas.

The CDE’s 2015 study notes that information on teacher utilisation (for example, what grade or learning area the current teachers are teaching) is difficult to access, which limits the ability of decision makers to compare the number of teachers teaching subjects or learning areas with the number of teachers required for each subject or learning area. Because knowledge management limitations compromise the validity of supply projections, it is difficult to determine shortages of teachers by subject or learning area. This is a key planning challenge for the FLBP.

3.6 Major sources of financial aid for ITE

NSFAS, the pro-poor student financial aid scheme, is one of the key mechanisms to increase access to higher education. In the first decade of operation, the NSFAS funded 659,000 students in South African universities, distributing more than R12 billion in financial aid (DHET, 2010a)³⁰. However, the share of NSFAS funding going to education students has been small (dropping from 11% in 1996 to 3.3% in 2001). In this context, FLBP funds, which are channelled through NSFAS, are an important contribution to expansion in ITE. The FLBP is not the only provider of bursaries for ITE, the second largest source of aid being PEDs, which in 2012 invested over R130 million to fund 2,673 students towards their initial teacher education qualification. The figure below presents bursary allocations per province, showing that Limpopo gave the highest number of bursaries.

Figure 5: Provincial bursary allocation for ITE in 2012



²⁹ Department of Basic Education. 2013c. *The incremental introduction of African languages in South African schools: draft policy*. Pretoria: DBE.

³⁰ Department of Higher Education and Training. 2010a. *The supply and development of teachers by public higher education institutions in South Africa*. Pretoria: DHET.

4.1 Introduction

The evaluation approach was utilisation-focused. This participatory, flexible approach incorporates stakeholders' values. A utilisation-focused approach can contribute to improved and strengthened Programme capacities leading to increased sustainability, and provide solid, empirical data on which to base conclusions and recommendations.

The following methods were used to conduct the evaluation:

- A desktop review of the FLBP, DBE and related documents on Programme design and implementation;
- A clarificatory process to document the programme theory and develop a logframe for the FLBP; this drew on the desktop review entailed consultation with key stakeholders, through interviews and a workshop at the start of the evaluation; recommended changes to the programme theory were proposed at the end of the evaluation;
- A literature review of the South African initial teacher education context;
- A desktop-based review and benchmarking of comparative bursary programmes;
- Stakeholder interviews with key individuals as identified, covering all FLBP stakeholder groupings (a total of 73 interviews involving 112 individuals);
- A telephonic survey of a representative sample (3,200) of bursary recipients during the period 2007 to 2012;
- Focus groups with selected bursary recipients (9 focus groups were conducted with 47 senior students); and
- Quantitative data analysis to find patterns in Programme results (Higher Education Management Information System (HEMIS), NSFAS, FLBP, Personnel Salary System (PERSAL) and other data).

Selected criteria of the Development Assistance Committee (DAC) of the Organisation for Economic Development (OECD) provided the framework within which the evaluation areas and questions were analysed and understood.

³¹ Department of Basic Education. 2012b. *Report on Funza Lushaka bursary programme in 2012*. Pretoria: DBE.

Table 5: Conceptual framework applied to the evaluation areas and questions

DAC Criteria	Evaluation Questions
Relevance & Appropriateness	Is the design of the FLBP appropriate? To what extent is the intervention design consistent with education sector priorities, policies and partnerships with key stakeholders?
Effectiveness	What are the measurable results of the FLBP? To what extent has the FLBP been effective in achieving its major goals, objectives and intended outcomes?
Efficiency	To what extent has the FLBP been efficient in its implementation, with specific reference to administration and management arrangements?
Sustainability	How sustainable is the FLBP? What key insights, lessons and recommendations are offered, with a view on the possible scaling up of the FLBP?

4.2 Evaluation questions and methods applied

The overarching evaluation questions set out in the introduction were broken down into 55 evaluation questions in 23 broad areas of focus. A table linking the evaluation questions to the methods and data collection instruments applied in the study can be found in Annexure E.

4.3 Management and governance of the evaluation

This evaluation was supported by a management committee which met regularly in the early stages of the evaluation and an evaluation steering committee that met twice during the research planning stage. The management team met regularly in the first few months of the evaluation while planning was under way and feedback meetings were scheduled after each deliverable. The steering committee included representatives of the stakeholders involved in the FLBP. Steering committee members were also consulted via email on a number of decisions relating to research design and planning. Research instruments were shared with and signed off by the steering committee.

5.1 Introduction

This chapter summarises the major findings of the evaluation, linking these to recommendations for the improvement of Programme design and delivery and the achievement of Programme objectives and desired outcomes. The chapter examines the Programme design, effectiveness and efficiency and also addresses Programme sustainability and the future measurement of Programme impact and cost-efficiency.

5.2 Programme design

Findings related to Programme design

The FLBP design is relevant in terms of its political, economic and social context. It is also largely appropriate in terms of the complex environment in which it is implemented, characterised by multiple role players and stakeholders:

- The full-cost bursary mechanism adopted by the FLBP funds successful applicants subject to key conditions to which applicants are legally bound, notably, being placed in public schools for a period equivalent to the duration of their bursaries as repayment for the investment by government. Despite complex challenges, the FLBP responds to the demand-side requirements of the basic education system and has addressed (as we shall see in subsequent sections) the complexities of supply-side needs.
- The FLBP has adopted a policy of adaptive programming, implementing continuous improvements in its strategy, such as greater involvement of PEDs in selection processes, recruiting based on priority needs identified in consultation with provinces and the introduction of the district-based recruitment system.
- An important Programme design issue is the definition of ‘merit’, which is currently only measured by academic performance rather than, for example, a “passion for teaching”, as highlighted as an important consideration by Programme stakeholders and incorporated into the programme theory developed for this evaluation.

Recommendations related to Programme design

Key recommendations related to Programme design are presented below.

1. *Practical ways of using the refined definition of merit in the recruitment and selection processes (as per the programme theory documented in Annexure B) should be designed by the DBE in collaboration with PEDs, piloted and taken to scale.*
2. *A planning and contracting system that helps to attract increased numbers of FLBP graduates to poor and rural schools in “identified geographical areas of need”, as per the programme theory, should be designed by the DBE in collaboration with PEDs.*

5.3 Programme effectiveness and results

Findings related to Programme effectiveness

The evaluation has found ample evidence of Programme effectiveness (the extent to which the FLBP achieved its objectives in the evaluation period):

- As the table below shows, there has been a very substantial increase in enrolment in ITE over the period under evaluation, from 29,000 in 2007 to over 86,000 in 2012. While this increase cannot be attributed to the FLBP, it is likely that the Programme has made an important contribution (FLBP students were 15% of the total ITE student intake over the period, peaking at 22.5% in 2009).

Table 6: Enrolment in selected education courses* and FLBP recipients in universities, 2005 to 2012³²

Year	TOTAL Enrolled in ITE*	% change on previous year	FLBP-funded students	% change on previous year	FLBP-funded students as a % of total enrolled
2005	26 582	-	-	-	-
2006	28 118	5.8	-	-	-
2007	29 002	3.1	3 669	-	12.7
2008	33 139	14.3	5 189	41.4	15.7
2009	40 754	23.0	9 188	77.1	22.5
2010	51 299	25.9	10 073	9.6	19.6
2011	73 201	42.7	8 677	-13.9	11.9
2012	86 245	17.8	11 621	33.9	13.5

*Education courses included are undergraduate Bachelors Degree, Postgraduate Diploma and Diploma/Certificate (the HEMIS qualifications categories)

- The Programme has been successful in attracting quality students to become teachers. However, in the period under review 'quality' was measured exclusively in terms of National Senior Certificate (NSC) results (for first-time applicants) and academic performance in their studies at higher education institutions. More candidates who are competent in African languages are needed.
- As the table below shows, the majority of students are paying back their bursary obligations by teaching in public schools – 86.2% of FLBP graduates surveyed reported that they are meeting this obligation in government-paid positions. This is supported by PERSAL data, which show a similar percentage of FLBP graduates (83.5%) are working in public schools in government-paid positions. Focus group discussions with students revealed positive attitudes to their service obligation. These are important indications of the success of the FLBP and its sustainability. We note, however, that in the absence of a tracking mechanism the proportion of FLBP graduates who have fulfilled their service obligation is not known.

³² http://www.dhet.gov.za/SitePages/Org_Universities.aspx?RootFolder=%2FHEMIS%2FEnrolment%2FEnrolment%20%2D%20Table%202%2E7&FolderCTID=0x012000B8085885C40BA64199A3A1AAD74A1D74&View=%7B5591CDEB%2D164C%2D4A0C%2D9435%2D366E45ADD819%7D downloaded 18 December 2014.

Table 7: How FLBP recipients are repaying their bursaries

Method of fulfilling obligation	No.	%
Paid/Paying back in service (i.e. you are working at a school to pay back the bursary)	9 673	86.2%
Paid/Paying back financially (i.e. the bursary has been converted to a loan, paying money in monthly instalments)	50	0.4%
I am not paying it back (i.e. I have been declared in breach of contract)	272	2.4%
I am still awaiting placement	851	7.6%
I have been released from my service obligation	226	2.0%
Other	153	1.4%
Total	11 225	100.0%

- Among survey respondents who were teaching, 86.2% were doing so in a priority subject. However, large numbers of FLBP graduates are not teaching in the subject of their specialisation – for example, among survey respondents teaching in the Senior Phase, in only two priority subjects were more than 50% of the survey respondents teaching in the subject they had specialised in. This is an indication of ineffective supply and demand projections.
- More generally, Programme planning appears to be weakly embedded in the work of the DBE ITE directorate and across stakeholders. Overall, planning appears to be ad hoc and reactive. More effective planning is also necessary to ensure alignment between government funding and planning cycles and those of relevant stakeholders, including universities and NSFAS.
- A much higher percentage of FLBP students graduate in the minimum timeframe than is typically the case in the South African university system, an important indication of Programme efficiency and cost-effectiveness. Very small numbers of FLBP students drop out of their programmes (1-3% across qualification types) and the majority graduate (55-74% across qualification types). These figures are in stark contrast to the general picture presented in a DHET study (DHET, 2016), which shows that the national B.Ed throughput rate in minimum time was 46.7% and 41.7% for the 2000 and 2005 cohorts respectively; the same study reports that 16.2% of the cohort commencing their B.Ed studies in 2005 dropped out after their first year of study and 31.1% by year 10.
- Stakeholder relationships are mostly well established and there is evidence of substantial collaboration and commitment across stakeholders to make the Programme work. The DBE, as the central hub of the Programme, plays an important role in maintaining relationships across stakeholders and there appear to be solid mechanisms in place to allow for effective communication between the DBE and stakeholders and across stakeholder groups. However, growing workloads, mainly as a result of the introduction of the district-based recruitment and selection process in 2012, are a challenge.

Recommendations related to Programme effectiveness

Recommendations related to Programme effectiveness are presented below.

3. *The DBE, in collaboration with universities, should develop an effective academic monitoring and tracking system which shows NSC results (for first-time applicants) and academic performance of FLBP bursars at universities during their studies (this will also assist with efficiency in selection).*
4. *The DBE, in collaboration with PEDs, should examine different approaches to placement, such as allowing students to apply directly to schools and extending the current 60-day period in which graduates must be placed (and after which they are released from their service obligation (this will also assist with efficiency in placement)).*
5. *The DBE, in collaboration with PEDs and universities, should conduct rigorous research to improve the match between FLBP graduates' studies and schools' needs.*
6. *The DBE should plan to respond effectively to the IIAL policy.*
7. *The DBE should ensure that selection and disbursement processes are streamlined to support the academic cycles.*

5.4 Programme efficiency

Findings related to Programme efficiency

Efficiency has been examined in the four key business processes of the FLBP: recruitment and application; selection; disbursement; and placement. Programme monitoring and data management have been discussed as a separate set of cross-cutting support mechanisms to all the business processes; the cost-effectiveness of the FLBP has also been assessed.

Findings related to recruitment

Recruitment of FLBP students anchors all other business processes. Recruitment is working well, as the Programme is able to select adequate numbers of students who meet the selection criteria: the number of applications grew, from 2,801 for the academic year 2008 to 44,736 for 2013. More specific efficiency-related findings follow:

- Stakeholders interviewed by the evaluation team indicated that their roles and responsibilities in recruitment, as set out in the 2007 and 2014 protocol documents, were clear.
- Universities are playing an important role in marketing the Programme to potential bursary recipients; the role played by universities is cost-efficient, as students have to interact with the institutions anyway for admission purposes.
- It is difficult to determine the extent to which the Programme is targeting students from rural areas. The data suggest that marketing to rural and poor students could improve significantly, though this may already be happening through the district-based recruitment strategy, introduced in 2012.
- The vast majority of student respondents judged the FLBP application process to be straightforward but 53% reported that they did not receive a response before the start of the academic year.

There are, however, inefficiencies in recruitment:

- Students have typically chosen their priority subjects from the FLBP website but the subjects listed are national rather than provincial or district-level priorities. This may affect their

chances of being awarded a bursary – depending on the province they apply to study in – and/or their subsequent chances of being placed.

- Renewed applications (for second and subsequent years of study) are treated as new applications and lead to new contracts which many interviewed felt was unnecessary.
- The separate application processes (for funding and a place to study) are not always well understood by students and closing dates for each application are not synchronized.
- Some students fail to apply because they cannot afford the university application fees.
- We have noted that while the new district-based recruitment strategy may help to recruit students from rural and poor backgrounds, it is more complicated and labour-intensive and is resulting in a substantial increase in applications. Although its timing means that it falls outside the scope of this evaluation, the implications of this strategy for the management and administration of the FLBP are considerable.
- Marketing of the FLBP needs more human and financial resources at national, provincial and university levels, and needs improvement in rural areas; 42.3% of Bachelor of Education (B.Ed.) students and 36.6% of Post Graduate Certificate in Education (PGCE) students surveyed did not apply in a particular year or years because they did not know about the bursary.
- An important Programme inefficiency is that among students surveyed who applied but did not receive the FLBP bursary in a given year or years, almost half (47.4%) reported that they did not know why they were unsuccessful.

Recommendations related to recruitment

8. *The DBE should ensure that effective recruitment strategies are shared among key role players.*
9. *The DBE should consider whether administration of the FLBP can be enhanced by issuing a single contract for the duration of the qualification.*
10. *The DBE should consider requesting universities to waive their application fees for needy FLBP applicants.*

Findings related to selection

The selection process is generally efficient and thorough. Prior to the introduction of district-based selection in 2012, universities were responsible for setting up selection panels with representatives of PEDs. Over the period under review, these panels took into account students' academic records (performance of returning students and the NSC results of new applicants) and the quota distribution model for areas of specialisation. Selection processes were sufficiently flexible to take into account individual student information. Human factors such as illness were also often taken into account – a strength of the selection process. The selection process allows for support for students who may need an additional year to fund their studies; this is helpful to get students to completion. By and large it appears that selected students are motivated to teach and to pay back their service obligations. This is an extremely positive finding, as the selection process does not include a mechanism for measuring motivation to teach.

The selection process is faster for returning students than for first-time applicants because of the timing of the release of the relevant academic records (returning students are guaranteed a

renewed bursary if they have performed satisfactorily). However, an effective system to monitor academic performance would increase efficiency in the selection of these re-applicants.

However, certain inefficiencies in the selection process have been noted:

- There is misalignment between the commencement of the academic year and the FLBP selection cycles. The delays in selection affect the registration of students in need of financial assistance and cause anxiety in the early part of the academic year when students are not aware of the result of their applications.
- The lack of human resource capacity in the ITE Directorate of the DBE, which is involved in each university selection process and is responsible for final decisions about awards, is a major factor affecting efficiency in the selection process. No financial support is allocated for administrative work on the Programme, so the FLBP is dependent on PEDs, universities and other institutions for allocating adequate staff and resources to the Programme.
- Applicants may select priority areas in their province but then enroll in a university in a different province with different priority areas. These students are then not selected because of the lack of alignment in terms of their priority areas – even though they may intend to return to their home province after completing their studies. This is a complex inefficiency to manage, and would become more complex if district-level priority areas are determined, which above and beyond any administrative difficulties for the FLBP, seems to be an attractive policy option.

Recommendations related to selection

11. *The DBE should draw up guidelines that set out possible mitigating factors in students' applications, such as illness.*
12. *The DBE, in conjunction with other Programme stakeholders, should consider ways to improve efficiency in responses to applications and give reasons for unsuccessful applications.*
13. *Since universities are national not provincial institutions, studying in another province should not affect a candidate's chance of selection; however, the DBE and PEDs should collaborate to attune the priority areas to local circumstances and consider district-level priority areas. Working in a particular district should be part of a district-based FLBP student's service obligation.*
14. *The DBE, in collaboration with universities, should develop an effective system to monitor the priority areas that students have enrolled for; priority subject areas should be fixed in the period between application and selection.*

Findings related to disbursement

In this section we assess both disbursement and the management of bursary funds. Our analysis shows that disbursement processes have been fairly consistent from 2010, since when the FLBP policies and procedures manual has been updated annually. Efficiencies in the disbursement policy follow:

- Funding is sufficient to meet student needs and students are mostly using their funds to support their direct academic and support needs. Overall, the amount of the FLBP bursary represents a Programme efficiency.
- Disbursement appears to be efficiently governed by the FLBP steering committee, which meets quarterly and includes key stakeholders such as NSFAS, the DBE, the DHET and some of the education deans; an annual FLBP meeting to review Programme performance is hosted by the DBE. Stakeholders rate their relationships as overall very positive.
- Although the bursary amounts differ by institution (but are intended to cover all the major costs to allow a student to study full-time), there is a maximum capped amount for all institutions.
- Institutions may not spread the funds allocated amongst a greater number of students; and they may not retain FLBP funds for administration of the bursary scheme. (This latter efficiency relates to the FLBP, not to universities, which necessarily do incur administration costs.) There were no concerns about the FLBP allocations among education faculties.

However, the evaluation has found certain inefficiencies in disbursement:

- Disbursements are effected to NSFAS in April of each year (because the government fiscal year differs from the academic year), by which time the academic year is in full swing (and the delay in payments by NSFAS to universities is up to 30 days). Consequent delays in payments to students (and uncertainty regarding when payments will be made) are a concern among all stakeholders. The effect of late payments on students can be significant, for example, in terms of basic needs. The delays in payment also impact on the cash flow of universities that provide support to students to bridge the gap.
- To cover delays in FLBP approval, students sometimes also apply for NSFAS funding, which compensates for the inefficiencies mentioned above. However, this option means that other needy NSFAS applicants will be denied loans, which represents an inefficiency for NSFAS although not for the FLBP.
- The 'refund policy' of the FLBP may need review. Downward adjustments of university course fees should be taken into account, refunds as a result of decreased fees should not be paid to students and rather paid back to NSFAS and into the FLBP fund.
- Finally, it is important to note that to improve FLBP efficiency, a tracking system is needed to ensure that FLBP graduates meet their full service obligations beyond their placement. There is currently no tracking and monitoring and very little if any control over how students fulfil their contractual obligations.

Recommendations related to disbursement

15. *The DBE should consider introducing a mechanism for determining relative financial need of FLBP applicants to better target needy students and support the additional FLBP selection criteria introduced in 2014³³. Financial need should be defined more broadly than it currently*

³³ "Everything else being equal, selection should favour candidates from rural areas, candidates who wish to teach in rural areas and candidates whose financial position would otherwise exclude them from enrolment for a teaching qualification" (Department of Basic Education, 2014f. *Implementation Protocol on the Funza Lushaka Bursary Programme*. Pretoria: DBE.

is by NSFAS, to include those whose family income sits above the maximum required to qualify for NSFAS, yet who still cannot afford higher education and struggle to obtain commercial bank loans (this also relates to Programme design and assists with sustainability).

16. The DBE should develop guidelines for universities to ensure that all students receive similar levels and types of support to fill the gap between the beginning of the academic year and receipt of the bursary. National guidance may also be necessary regarding the timing of the disbursement of funds to students once the funds have been received from NSFAS.
17. The DBE should review the FLBP refund policy, noting that students should not receive the benefit of downward adjustments of university course fees and that such funds should be returned to NSFAS; an administrative mechanism to address student fee accounts would improve Programme efficiency in this regard.
18. The DBE should ensure that important discussions lead to policy decisions and action; for example, discussions among stakeholders about how payments to institutions might be made earlier and how accumulated funds may be used to close the gap between the beginning of the academic and financial years should lead to decisive action and a satisfactory resolution of this problem.
19. Given the scale of the Programme and the large amounts of funds available, the DBE and other role players should allocate adequate staff and resources to reduce disbursement delays.
20. To avoid possibly costly legal challenges the DBE should examine the feasibility of mechanisms such as admission of debt when students convert their bursaries into loans.

Findings related to placement

Placement of FLBP graduates is not within the control of the Programme, so most inefficiencies reported in this section are not Programme inefficiencies. However, it is clear that placement processes have serious deficiencies:

- As the table below shows, urban schools appear to be benefiting from FLBP graduates more than rural schools. However, a number of schools could not be identified in the Education Management Information System (EMIS) database, so the figures may in reality be quite different. It should also be noted that during the programme theory process the objective of placing teachers in rural schools was changed to talk to placing teachers in areas of geographical need, which are not always rural schools. Although some stakeholders interviewed believed that FLBP graduates are reluctant to be placed in rural schools, the survey data indicate that this is the attitude of a minority of students. However, in the programme theory developed for this evaluation, the reference to “rural areas” has been replaced by “areas of need”.

Table 8: Geographical location of schools that those employed as teachers are teaching at (based on survey data)

Geographical location	No.	%
Rural	3 092	29,4%
Urban	4 353	41,4%
To be updated*	1 393	13,3%
Unidentified schools **	1 665	15,9%
Total	10 503	100,0%

* 'To be updated' is a category in the EMIS data.

** 'Unidentified schools' were those for which an EMIS number could not be found.

- In terms of quintiles, there are many FLBP graduates teaching in quintile 4 and 5 schools; the Programme is supposed to target the poorest (quintile 1-3) schools. This may be because only 29% of FLBP graduates teaching in public schools reported being placed by the district or province and 24% had applied directly to and been employed by schools.

Table 9: Quintile allocation of schools where FLBP graduates employed as teachers are teaching (based on survey data)

School quintile	No.	%
1	1 838	17,5%
2	1 626	15,5%
3	1 849	17,6%
4	1 461	13,9%
5	1 756	16,7%
Not applicable	95	0,9%
To be updated (by EMIS)	253	2,4%
Unidentified schools	1 625	15,5%
Total	10 503	100,0%

- Although the evaluation findings are positive in terms of the numbers of teachers working in public schools, there is room for improvement. Ultimately an improved placement system will ensure the proper fulfillment of the teaching obligation for all students. As the table below shows, a much higher percentage of FLBP graduates (82.8%) reported being placed in public schools than the national average (60%) reported by the DHET (DHET, 2014c); 91% of these FLBP graduates were employed in government-paid positions. A similarly high percentage (83.5%) was found by linking data on FLBP recipients found in the PERSAL data to the full list of recipients of the bursary between 2007 and 2012.

Table 10: Sector of employment for survey respondents employed as teachers

Sector	No.	%
Independent schools	185	1,8%
Public schools	8 693	82,8%
Unidentified schools	1 625	15,5%
Total	10 503	100,0%

- In the absence of sound data, we have noted a number of efficiency concerns from stakeholder interviews and our survey findings: students may change priority areas in the course of their degree, which impedes placement when their subjects do not match the priority needs of the province (there do not seem to be mechanisms to detect when students have changed their specialisation); students may apply for the priority areas of the province in which they study but cannot be placed in the province they select for placement because the priority areas are different (despite the fact that universities are not only training teachers for the provinces in which they are located); students sometimes choose priority areas in which there is an oversupply of teachers, making placement impossible (the lack of demand and supply projection often leads to an oversupply of teachers in certain subject areas which were initially indicated as priority subjects); and, finally, graduates' reports of delays in placement (which must happen within 60 days of receipt of students' results, or they will be released from their service obligation) vary across provinces, affecting between 0% and 24% of graduates.
- Monitoring of placement is difficult, as information is held in PERSAL rather than the ITE system because of confidentiality issues. The ITE Directorate manually captures information about whether students have defaulted, been placed or not been placed. There is currently no system in place to track defaulting graduates and ensure that bursaries are paid back – over 88% of graduates surveyed reported that there had been no follow-up in this regard and there do not seem to have been any consequences for students who default.
- Because of the lack of monitoring, there is no feedback to universities on placement to help shape their strategy on supply (for example, information on which specialist areas are most likely to be taken up). University and DBE stakeholders reported that an inefficiency arises from unclear roles and responsibilities in some PEDs in relation to placement – university respondents, for example, reported that they do not receive feedback from provinces on students placed.
- Linking selection of FLBP recipients to placement, a key efficiency issue, is easier in the case of the PGCE, which is only one year, than in the longer programmes, which would require longer-term supply and demand modelling than exists currently. Balancing the national supply system with provincial demand is a key Programme challenge; we have noted that while placement of graduates is an important objective, it is not within the direct control of the Programme.
- Almost a quarter (24.4%) of all graduates surveyed were placed in their teaching position in the school directly by the school; this option is not in line with FLBP policy, but at least one PED finds this option preferable as a graduate may be placed by the PED but later move to another preferred school anyway.
- Almost 98% of FLBP graduates surveyed who were teaching were placed in schools after graduation but 30.4% of these were not placed within the required 60-day period (which releases them from their service obligation). This suggests that the stipulated period may not be adequate – possibly a Programme inefficiency.

Recommendations related to placement

21. *The DBE should ensure that placement data are captured and stored in an effective management information system.*

22. *The DBE should develop a strategy and tools for projecting supply and demand to inform the determination of priority areas; this initiative should link to broader education sector planning.*
23. *The DBE, in collaboration with PEDs, should develop an effective tracking system to follow up on graduates' service obligations and provide feedback to universities on placement to help shape their strategy on teacher supply (for example, information on which specialist areas are most likely to be taken up).*
24. *The DBE should encourage strengthened data management and province-level research into teacher supply and demand.*
25. *Given that in practice many FLBP graduates apply directly to schools, the DBE should accept this but introduce safeguards to ensure that graduates take up posts in areas of need.*
26. *The DBE, in collaboration with PEDs, should ensure that responsibilities are clear with regard to PED roles and responsibilities regarding placement and develop protocols to ensure that universities receive feedback from provinces on placement.*
27. *The DBE, in collaboration with PEDs, needs to identify methods of effective placement, considering all possibilities, such as national placement for FLBP graduates who agree to be placed in any province when they accept the bursary.*

Findings related to monitoring, tracking and data management

The administrative hub of the FLBP, the ITE Directorate in the DBE, is the manager of the Funza Lushaka Information Management System (FLIMS) which supports all the major business processes throughout the annual cycle of operations and requires a very labour-intensive process (for example, in 2014, within one month, 41,000 bursary applications had been received). The Directorate, which generates information for FLBP reports to both Treasury and Parliament, is supported by the State Information Technology Agency (SITA) and the Government Information Technology Office (GITO). SITA's responsibility is to ensure that the data are secure, that the IT infrastructure is adequate and up to date and that technical queries are resolved timeously; the role of GITO is to ensure that the IT needs of the DBE are adequately supported and to liaise between the DBE and SITA. There are no SITA or GITO personnel assigned full time to the FLBP, but the ITE Directorate has one key staff member responsible for managing the FLBP database and also data on the entire teacher education system.

There are various key efficiency challenges with respect to FLIMS:

- The system is primarily manual (the only online portion of the FLBP business processes is the annual application process).
- There are multiple points at which data are manipulated, which opens the system up to possible errors at each point and raises confidentiality and security issues.
- The online system has limitations as it is merely an input-output database (at the design stage in 2006, all that was required was an electronic portal for the capturing of application information).
- The information system does not allow the monitoring or tracking of students across the various business processes of the FLBP, including, for example, subjects or phases studied by FLBP recipients and placement. It is not possible to calculate failure, dropout and throughput rates.

Recommendations related to monitoring, tracking and data management

28. *The DBE should allocate adequate staff and resources to manage Programme data for effective planning and monitoring.*
29. *The DBE and SITA should develop a new application service specification setting out the software and hardware requirements for a management information system that can support all FLBP business processes for effective planning and decision making, make administrative systems less onerous and enhance Programme sustainability. A critical aspect will be inter-operability with other systems, particularly PERSAL.*

Findings related to the cost-effectiveness of the FLBP

Using survey data, it has been possible to do a limited assessment of the cost-effectiveness of the FLBP during the period 2007 to 2012. Data limitations, however, have prevented a full analysis being conducted. We have identified the direct and indirect costs associated with the FLBP bursary; indirect costs include opportunity costs in administration of the bursaries for the DBE and the universities. We have noted certain difficulties, such as the cost of late disbursement (which is not possible to quantify) and the cost of staff time (which can be estimated). Benefits, including individual and societal benefits, are very difficult to estimate, so a cost-effectiveness analysis was undertaken rather than a cost benefit analysis, using two primary units of measurement: the number of successfully placed graduates and the completion rate of graduates in the minimum time.

An amount of just over one year's bursary (R73,620) was spent for every PGCE holder in the period 2007 to 2012. Nearly twice that amount was spent for every B.Ed. degree holder. This higher cost, however, brings a proportionally greater service obligation for students because of the longer duration of the B.Ed.

The minimum time to graduation for the PGCE is one academic year; the minimum duration for the B.Ed. programme is four academic years. There appears to be a significant saving with PGCE students who complete their studies in minimum time, as the expenditure for students who finish the programme in more than one year is nearly double that of those finishing in one year. There is also a saving (but on a smaller scale) with students who finish the B.Ed. in the minimum time. As noted above, FLBP students completing in the minimum time are doing so at a much higher rate than the average in the higher education and training system. This would suggest that the Programme is relatively cost-effective and efficient.

The proportion of FLBP graduates working as teachers in public schools (thereby fulfilling their service obligation) is high and is another indication that the FLBP is cost-effective, although the absence of an effective monitoring system that determines the extent of student pay-back in relation to the number of years worked for the number of years funded means that this is at best a tentative assessment.

Recommendation related to the cost-effectiveness of the FLBP

30. *The DBE should ensure that appropriate data on net benefits and net costs are available in the future to support a cost-benefit analysis.*

5.5 Programme sustainability

Findings related to the sustainability of the FLBP

The recommendations set out above cover a wide range of suggested improvements in the FLBP, many of which are critical for Programme sustainability. These include adequate funding and personnel to effectively implement the Programme across the range of stakeholders. Significant improvements to the Programme, in particular the streamlining and alignment of different business processes to enhance efficiency, will require greater and more stable numbers of personnel, and may require targeted funding appropriate for the level of human input required. The FLBP in its current form is labour-intensive, and methods will need to be identified to ensure adequate staffing and adequate information management and thereby reduce the labour-intensive nature of the Programme.

A critical element of a sustainable FLBP is addressing the major challenges of data exchange and management, information systems infrastructure and staffing and the serious lack of effective tracking and monitoring systems. Without significant changes in this area, Programme accountability will continue to be compromised, capacity challenges will continue to grow and future evaluation work will be very difficult to conduct.

The FLBP will continue to be dependent on other functions of the DBE, DHET and other stakeholders such as the universities and NSFAS for its sustainability. This is particularly the case in two areas – the ongoing discussions about the quality of ITE and the various systems for the placement of new teachers in public school teaching posts. The FLBP does not have direct control of either of these areas of work but both are critical for its success and perceptions of its success. The extent to which broader changes in these areas can be influenced by the FLBP is a necessary ongoing discussion. Wherever possible, partnerships and collaboration should be strengthened to improve in these critical areas.

Recommendations related to the sustainability of the FLBP

31. The FLBP is largely effective in achieving its objectives *and should be sustained by government, with the improvements recommended in this report.*
32. Programme planning is only weakly embedded in the work of the ITE directorate and across stakeholders. *The DBE, with the support of other programme stakeholders, should develop an effective FLBP planning system, which must be linked to and aligned with the overall planning of government in areas such as teacher supply and demand and teacher employment. Effective planning is also necessary to ensure alignment between government funding and planning cycles and those of relevant stakeholders, including universities and NSFAS; the DBE should ensure that measures already in place to bridge the gap between the academic year and the government financial year (such as universities' support for needy students) are encouraged.*
33. *The DBE should develop measures to ensure that marketing is effective and that responses to applications are as speedy as possible.*
34. *Given the scale of the programme and the large amounts of funds available, the DBE should allocate adequate staff and resources to administer the programme. The DBE should*

consider the establishment of a dedicated unit within or outside of the ITE Directorate to manage the FLBP.

5.6 Considerations for future evaluation work

Impact evaluation

An impact evaluation usually seeks to measure the intervention effect and establish whether this can be attributed to a specific intervention. The benefits of evaluating the impact of the FLBP would include understanding whether the Programme is being successful in contributing to enhanced teacher supply (in specific areas) and whether receiving the FLBP bursary means that a student is more likely to: commence teacher education studies, study priority subjects, complete teacher education studies, complete teacher education studies in the prescribed period of time, be placed and teach in a poor/rural school and remain in the education system. If changes are proposed to the FLBP design then an impact evaluation could be used to measure the effect of different variations of the Programme (for example, varying the bursary amount or selection criteria).

Cost-benefit analysis

As a cost-benefit analysis was not possible for this study, some thoughts have been included below about future considerations for cost-related analyses of the FLBP. Cost-benefit analysis compares the Rand values of the costs of an intervention against the Rand values of the intervention benefits. The difference between the total benefits and total costs of an intervention are called net benefits or net costs, i.e. if the difference is positive or negative respectively. An intervention is considered to be worthwhile if the benefits exceed the costs or at least if the intervention breaks even.

For cost-benefit analysis (CBA) to be implemented for the FLBP, costs and benefits need to be measured and expressed in monetary terms. They are then adjusted for the time value of money so that all flows of benefits and project costs are expressed on a common basis in terms of their net present value. The earlier section on cost effectiveness showed that the evaluation could not do a CBA due to lack of adequate information. For the future, it will be necessary for the FLBP to keep a detailed record of all monetary costs and benefits (be they tangible or intangible) incurred throughout the life of the project. A detailed management information system that includes financial data will assist in the future calculation of the cost-benefit ratios. There is also a need for the FLBP to quantify targets per year and these targets need to be applied consistently. This will help to compare actual results versus the targeted results.

Recommendation for future evaluation work

- 35. The FLBP should commence planning and lay the groundwork now to evaluate the FLBP again in future, including CBA's and impact evaluations of the programme; future evaluation work should be based on improved and much more comprehensive programme data.*

5.7 Overall conclusions

Relevance and appropriateness of the Programme design

The FLBP is relevant and appropriate in terms of national priorities and policy in the context of South African education, as well qualified and competent teachers are key to the improvement of learning outcomes. The quality of teacher education is a government policy priority – young, well trained and academically talented teachers are needed in priority phases and subjects, particularly in under-resourced schools in the poorer quintiles. The FLBP was designed to attract candidates of this calibre to ITE programmes (targeting scarce skills in specific subjects, phases and geographical – or, perhaps more appropriately, geopolitical – areas of need) and raise the profile of teaching as an attractive profession. In a context of limited funding for higher education, the Programme has addressed a difficult phase in the post-apartheid transition, in which fees for ITE programmes rose and the number of Black students dropped, despite growing challenges in terms of the supply of teachers.

Programme effectiveness and results

The FLBP has been largely effective. There has been a very substantial increase in enrolment in ITE over the period under evaluation. While this increase cannot be attributed to the FLBP, it is likely that the Programme has made an important contribution; most students (78.9%) would have chosen teaching as a profession without the bursary, which is an indication that by and large the Programme is attracting appropriate candidates and has achieved its goal of attracting quality students to become teachers. We note, however, that ‘quality’ was measured exclusively in terms of NSC results (for first-time applicants) and academic performance in their studies at universities, and that other characteristics of ideal candidates (such as having a passion for teaching and the ability and desire to teach as per the programme theory documented for this evaluation) had not been taken into account in the selection process in the period under review. FLBP students graduate more quickly than is typically the case and very few drop out of their programmes. Relatively high numbers of FLBP students are teaching in public schools, thus potentially fulfilling their service obligation, and most are teaching in schools in the three poorest quintiles; however, large numbers of FLBP graduates are not teaching in the subject of their specialisation.

Programme efficiency

There are important inefficiencies in all four key business processes of the FLBP: recruitment and application; selection; disbursement; and placement. A very important inefficiency is that the FLIMS is an information system but not a management information system – for example, the system does not allow the monitoring or tracking of students across the various business processes of the FLBP, including, for example, subjects or phases studied by FLBP recipients and placement. It is not possible to calculate failure, dropout and throughput rates. Another important inefficiency is the lack of human and financial resources for efficient administration of the Programme. A further inefficiency, beyond the control of the Programme, resides in the misalignment between the commencement of the academic year and the FLBP selection cycles; disbursement, although slow, is efficiently governed by the FLBP steering committee. Currently, an important inefficiency is that many FLBP graduates are not teaching the subjects in which they specialised during their studies; appropriate placement of graduates in areas of need is likely to improve with the district-based recruitment strategy, introduced in 2012. Despite key data limitations, the FLBP has been assessed as cost-effective.

Programme sustainability

The Programme is largely effective in contributing to the challenges of teacher supply and demand and should be maintained, noting that over the coming years it is likely that the number of new teachers needed will not grow at the same rate as in recent years. Programme sustainability is dependent on the recommendations of this evaluation related to Programme design, effectiveness and efficiency being implemented. In particular:

- Adequate human and financial resources are needed to strengthen the management and administration of the FLBP.
- An effective management information system is needed to support all business processes and eliminate the potential for error at multiple points in the data capturing process.
- An effective planning system is needed, for example in the areas of teacher supply and demand and teacher employment.
- Alignment is needed between government funding cycles and those of relevant stakeholders, including universities and NSFAS – the financial year of government differs from the academic year, and consideration needs to be given to how the resulting funding gap can be addressed.

Funding for the FLBP is secured in the medium term, as outlined in the Medium Term Strategic Framework, and is likely to be sustained, as FLBP is a key means for the DBE to achieve its strategic goal of improved quality of teaching and learning through development, supply and effective utilisation of teachers (DBE, 2011a). However, if the programme is to continue receiving political and fiscal support going forward, it must respond to the current socio-political and economic context in higher education. The national student protests of 2015, connected to a diverse movement called #feesmustfall, have put the financing of university education firmly on the national agenda³⁴. In this context, any significant government investment in higher education should take financial need (defined broadly) into consideration. This underscores the importance of considering a mechanism for determining relative financial need and targeting needy students. It is highly likely that government-funded initiatives will be under significant scrutiny in the future for their relevance in addressing issues of access to higher education for those in need. At the time of the next FLBP evaluation questions are likely to be asked about whether funds have been used optimally in times of constraint, related to considerations of cost-effectiveness and value for money.

³⁴ At the time when the evaluation was conducted the feesmustfall movement was not active and it was therefore not included in the literature review or considered in carrying out the evaluation. At the time of finalising the report however, the context has changed and it is necessary to bring in some consideration of the changed political environment. #feesmustfall has had a significant effect on the national higher education environment and has received international exposure, as an internet search will show- see e.g. <https://en.wikipedia.org/wiki/FeesMustFall>.

References and Bibliography

Bickman, L, 1987, The functions of program theory. *New Directions for Program Evaluation*, 1987(33), pp.5–18.

Centre for Development and Enterprise, 2015, *Teachers in South Africa: Supply and Demand 2013-2025*, Johannesburg: CDE.

Council on Higher Education. 2010. *Report on the national review of academic and professional programmes in education*. Pretoria: CHE.

Development Assistance Committee, 2002, *Glossary of key terms in evaluation and results-based management*. Paris, France: OECD.

Department of Basic Education Website. Educator recruitment database: <http://www.education.gov.za/Educators/EducatorRecruitmentDatabase/tabid/844/Default.aspx>

Department of Basic Education. 2009. *Teacher supply patterns in the payroll data*. Pretoria: DBE.

Department of Basic Education. 2011a. *Action plan to 2014: Towards the realisation of schooling 2025*. Pretoria: DBE.

Department of Basic Education. 2011b. *Funza Lushaka Bursary Scheme policies and processes 2012*. Pretoria: DBE

Department of Basic Education. 2012a. *Teacher supply and demand*. PowerPoint presentation for meeting of the Portfolio Committee on Basic Education. 21 August 2012.

Department of Basic Education. 2012b. *Report on Funza Lushaka bursary programme in 2012*. Pretoria: DBE.

Department of Basic Education. 2013a. *Education for all (EFA) 2013 country progress report: South Africa*. Pretoria: DBE.

Department of Basic Education. 2013b. *Briefing by the DBE on progress reports in respect to the teacher vacancies*. PowerPoint presentation to the Portfolio Committee. 28 May 2013.

Department of Basic Education. 2013c. *The incremental introduction of African languages in South African schools: draft policy*. Pretoria: DBE.

Department of Basic Education. 2013d. *Funza Lushaka: Brochure*. Pretoria: DBE.

Department of Basic Education, 2013e, *Placement process for Funza Lushaka graduates*. Pretoria: DBE.

Department of Basic Education. 2014a. *School realities 2014*. Pretoria: DBE.

Department of Basic Education. 2014b. *Education human resource planning report 2012/2013*. Pretoria: DBE.

Department of Basic Education. 2014c. *Report on Funza Lushaka bursary programme in 2013*. Pretoria: DBE.

Department of Basic Education. 2014d. *Flow diagram of business process*. Pretoria: DBE.

Department of Basic Education. 2014e. *Funza Lushaka bursary programme business process*. Pretoria: DBE.

Department of Basic Education. 2014f. *Implementation protocol on the Funza Lushaka Bursary Programme*. Pretoria: DBE.

Department of Basic Education. 2014g. *Standard operating procedure (SOP) Draft*, Pretoria: DBE.

Department of Basic Education & Department of Higher Education and Training. 2011. *Integrated strategic planning framework for teacher education and development in South Africa, 2011–2025: Technical report*. Pretoria: DBE & DHET.

Department of Education. 2007. *The National Policy Framework for Teacher Education and Development*. Pretoria: DBE.

Department of Education. 2009. *Educator profile report: 2004 – 2008*. Pretoria: DoE.

Department of Higher Education and Training. 2010a. *The supply and development of teachers by public higher education institutions in South Africa*. Pretoria: DHET.

Department of Higher Education and Training. 2010b. *Report of the Ministerial Committee on the review of the National Student Financial Aid Scheme*. Pretoria: DHET.

Department of Higher Education and Training. 2011. *Policy on minimum requirements for teacher education qualifications selected from the HEQF*. Pretoria: DHET.

Department of Higher Education and Training. 2013. *Trends in teacher education 2012: Teacher education enrolment and graduation patterns at public universities in South Africa*. Pretoria: DHET.

Department of Higher Education and Training. 2014a. *Teacher graduate employment 2014: Employment of initial teacher education graduates in 2012*. Pretoria: DHET.

Department of Higher Education and Training. 2014b. *Top 100 occupations in high demand list: Draft discussion document for advisory group*. Pretoria: DHET.

Department of Higher Education and Training. 2014c. *Briefing on initial teacher education to joint sitting of the BE & HET PC, 4 November 2014*. Pretoria: DHET.

Department of Higher Education and Training, 2016. *2000 TO 2008 First Time Entering Undergraduate Cohort Studies for Public Higher Education Institutions*. Pretoria: DHET.

Department of Performance Monitoring and Evaluation. 2014. *Guideline 2.2.12 on Implementation Evaluation*. Pretoria: DPME.

Education Labour Relations Council. 2009. *Resource documents: Teacher development*. Pretoria: ELRC

Government Communication and Information Service. 17 February 2012. Early retirement on the cards for teachers. South African Government News Agency. Available at: <http://oldsanews.gcis.gov.za/news/12/12021713251003>

Gustafsson, M, 2015, *Inflow of new teachers into the public system*, unpublished report.

Hall, E. H., Altman, M., Nkomo, N., Peltzer, K. & Zuma, K. 2005. *Potential attrition in education: The impact of job satisfaction, morale, workload and HIV/Aids*. HSRC Press, Cape Town.

Higher Education South Africa. 2008. *Tuition fees: Higher Education Institutions in South Africa*. Pretoria: HESA.

JET Education Services. 2014. *Initial Teacher Education Research Project, Progress Report August 2014*. Johannesburg: JET.

National Education Evaluation and Development Unit. 2012. *National report: Summary*. Pretoria: NEEDU.

National Education Evaluation and Development Unit. 2013. *National report 2013: Teaching and learning in rural primary schools*, Summary report. Pretoria: NEEDU.

National Planning Commission. 2011. *Our future -make it work: National Development Plan 2030*. Pretoria: NPC.

Parliamentary Monitoring Group. 2008. *Early childhood development*: Department of Education presentation to the Portfolio Committee on Education. June 2008.

Rossi, P.H., Lipsey, M.W. & Freeman, H.E., 2004. *Evaluation: a systematic approach*. 7th edition. Thousand Oaks, CA: Sage.

South African Qualifications Authority, 2013. *Higher Education Qualifications Sub-Framework*, Pretoria: SAQA.

Spaull, N. & Kotze, J. 2015. Starting behind and staying behind in South Africa: The case of insurmountable learning deficits in mathematics. *International Journal of Educational Development* 41, 13–24.

Taylor, N. and Taylor, S. 2012. Teacher knowledge and professional habitus. In Taylor, N., van der Berg, S. & Mabogoane, T., (Eds.), *Creating effective schools: Report of the National School Effectiveness Study*. Cape Town: Pearson.