

# Kingdom of Lesotho

## Education Public Expenditure Review

Report Number: 136894-LS

**March 2019**

GGODR  
Africa Region



### Standard Disclaimer:

This volume is a product of the staff of the International Bank for Reconstruction and Development/ The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

### Copyright Statement:

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development/ The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly. For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, telephone 978-750-8400, fax 978-750-4470, <http://www.copyright.com/>.

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA, fax 202-522-2422, e-mail [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Paul Nomba Um
Senior Global Practice Director:	Deborah L. Wetzel
Practice Manager(s):	Hisham Waly, Halil Dundar
Task Team Leader(s):	Ana Bellver, Harisoa Danielle Rasolonjatovo Andriamihamina

## **Acknowledgements**

This report was prepared by a World Bank team led by Ana Bellver (Senior Public Sector Specialist) and Harisoa Danielle Rasolonjatovo Andriamihamina (Senior Education Specialist). The team was comprised of Servaas van der Berg (Professor, Stellenbosch University), Rachel Ort (Public Sector Specialist), Kirstin Conti (Young Professional) and Elita Banda (Consultant).

The team would like to extend their gratitude to the Government of Lesotho for the close collaboration and contributions, mainly from the following ministries and institutions: the Ministry of Finance, the Ministry of Public Service, the Ministry of Development Planning, the Ministry of Education and Training, and the Bureau of Statistics.

The team benefitted from the overall guidance of Paul Numba Um (Country Director), Janet Entwistle (Country Representative for Lesotho), Ed Olowo-Okere (Governance Director), Hisham Waly (Practice Manager), Halil Dundar (Practice Manager), Sebastien Dessus (Program Leader), and Paolo Belli (Program Leader). The team is also grateful for the invaluable inputs and advice from peer reviewers including: Theo David Thomas (Economic Adviser), Furqan Ahmad Saleem (Lead Public Sector Specialist), and Toby Linden (Lead Education Specialist).

## Table of Contents

<b>Executive Summary</b> .....	1
<b>Chapter I: Expenditure Performance in Education</b> .....	8
<b>I. Administration of the Education Sector</b> .....	9
<b>II. Human Resources in Education</b> .....	11
<b>III. The Education Budget</b> .....	15
<b>Education Spending in Lesotho is High vis-à-vis Country Comparators</b> .....	15
<b>Primary Education is a Top Budget Priority</b> .....	18
<b>Recurrent Costs, Mainly Teacher Salaries, Dominate Education Spending</b> .....	19
<b>Education Budget Overruns have been Uncommon in Recent Years</b> .....	21
<b>IV. Financing Different Education Programs</b> .....	24
<b>Pre-Primary Education/ECCD</b> .....	24
<b>General Primary and Secondary Education</b> .....	25
<b>V. Equity and Performance of the Education System</b> .....	35
<b>VI. Conclusions</b> .....	39
<b>Chapter II: Expanding Secondary Education in Lesotho</b> .....	42
<b>I. Background</b> .....	42
<b>II. School Enrollment Trends</b> .....	42
<b>III. The Cost of Secondary Education to Parents and Students</b> .....	46
<b>IV. The Infrastructure Cost of Providing Secondary School Places</b> .....	47
<b>V. Secondary School Teachers</b> .....	49
<b>VI. Projecting the Cost of Expanding Secondary Education</b> .....	50
<b>VII. Fiscal Implications of the Enrollment Simulations</b> .....	53
<b>VIII. Contrasting the Fiscal Simulations</b> .....	56
<b>IX. Other Fiscal and Policy Considerations</b> .....	58
<b>X. Summary and Conclusions</b> .....	62
<b>Annex 1: Ministry Staff Numbers</b> .....	65
<b>Annex 2: MoET Spending by Sub-program, 2015/16</b> .....	66
<b>Annex 3: MoET Expenditures by Sub-cost Center, 2015/16 (Maloti, millions)</b> .....	67
<b>Annex 4: Information Gathered from Four School Visits in March 2018</b> .....	68
<b>Annex 6. Stakeholder Mapping Method and Data</b> .....	70
<b>Bibliography</b> .....	76

## **Boxes**

Box 1: Stakeholder Mapping: Who has Influence on Expanding Secondary Education in Lesotho?.....	10
Box 2: Stakeholder Mapping: Perceptions of the Ministry of Education and Training.....	10
Box 3: Stakeholder Mapping: Principals and Teachers.....	15

## **Figures**

Figure 1. Enrollment by Age as Compared to United Nations Population Division population estimate, 2016 .....	9
Figure 2. Enrollment by Age, 2013-17 .....	9
Figure 3. Teachers by Year of Birth, 2013–2016 .....	13
Figure 4. The Cross-Country Relationship between GDP per Capita and Spending per Person on Education, 2012 .....	16
Figure 5. Government Spending on Education, 2013 (as a percentage of total government expenditures) .....	17
Figure 6. Government Spending on Education, 2012 (as a percentage of GDP) .....	17
Figure 7: Recurrent Educational Spending in Real Terms (as a percentage of GDP).....	21
Figure 8. School Enrollment by Grade, 2013–2017 .....	25
Figure 9. School Enrollment by Grade and Age, 2016 .....	26
Figure 10 and Figure 11. School Enrollment by Grade and District, 2016 (Actual Numbers and Percentages) .....	27
Figure 12. Percentage of Birth Cohorts that have Completed Various Grades in SACU Countries .....	28
Figure 13: Number of Teachers Employed at the Primary and Secondary Levels, 2016.....	31
Figure 14. Tertiary Education Spending as a Percentage of all Public Education Spending, 2013 .....	34
Figure 15. PSLE Examination Results, 2008–2016 .....	37
Figure 16. Junior Certificate Examination Results, 2011–2016 .....	37
Figure 17. Performance Distribution across Districts in Various Grades on the LGCSE Exams, 2015 .....	38
Figure 18: Cost of Classroom Construction in Lesotho Compared with Some Other Countries, 2015 (in US\$ per square meter).....	48
Figure 19: Cost of Classroom Construction in Lesotho, 2015, US\$.....	49
Figure 20: Distribution of Population in School Phases by Age Group for Three Simulations, 2017 .....	52

## **Tables**

Table 1: Spending and Estimated Unit Costs by Level of Education, 2014 .....	8
Table 2: Primary and Secondary Students, Teachers and Student-Teacher Ratios by District, 2016.....	12
Table 3: Actual MoET Spending by Program, 2010/11 to 2015/16, (millions, Maloti).....	18
Table 4: MoET Expenditure Plus Bursary Loan Expenditure by the NMDS, 2013/14 to 2015/16 (millions, Maloti).....	19
Table 5: Percentage Distribution of Expenditures for Main Education Programs in Lesotho (2013/14) and Namibia (2014/15) .....	19
Table 6: MoET Expenditure by Economic Activity, 2015/16 (in Maloti, millions) .....	20
Table 7: Approved and Revised Budgets and Actual (realized) Expenditures, 2011/12 to 2015/16 (Maloti, millions).....	22
Table 8: Examples of Substantial Deviations between Approved and Revised Budgets and Actual Expenditures, 2014/15 and 2015/16, (Maloti, millions).....	23
Table 9: School Enrollment Numbers by District, 2013–2016 .....	26
Table 10: Percentage of Enrolled Boys and Girls in Secondary Schools by District, 2016 .....	27
Table 11: Primary and Secondary Net Enrollment Rate by Wealth Quintile, 2009 .....	28
Table 12: Regression Models Showing the Effect of Enrollment and District on Numbers of Teachers Employed in Primary and Secondary Schools, 2016 .....	30
Table 13: Secondary School Funds, 2015 (with 328 of 378 schools reporting) .....	32
Table 14: Enrollment in Public and Private Tertiary Education Institutions in Lesotho, 2013/14.....	33
Table 15: PSLE Results, 2008–2016.....	38
Table 16: Junior Certificate Examination Results, 2011–2016.....	38
Table 17: District Shares of Total Enrollment in Selected Grades and Performance on the LGCSE .....	39
Table 18: Enrollment in Primary, Secondary and Vocational Schools, including Net and Gross Enrollment Ratios, 2017 .....	43
Table 19: Day Students, Boarders and Students Living in Rented Accommodations in Secondary Schools by Zone, 2017.....	43
Table 20: Age Distribution in Grade 6 by Zone, 2017 (correct age for Grade 6 is 11 years) .....	45
Table 21: Indicative Costs by School Level Based on Four Schools Visited, 2018 (in Maloti).....	46
Table 22: Funds Received by Secondary Schools, 2017 (excluding net opening balances of Maloti 16.7 million – US\$ equivalent) .....	47
Table 23: Assumed Distribution of Students for Each Age Group over School Phases (%) .....	51

Table 24: Education Participation Rates by Age Group for the Three Simulations to 2030 .....	53
Table 25: Recurrent Costs per Student, 2017 (Maloti) .....	54
Table 26: Assumed Number of Teachers Required if Student-Teacher Ratios Remain Constant in Each School Phase .....	55
Table 27: Costs of Alternative Enrollment Simulations Combined with Constant Cost or Optimistic Cost Scenarios .....	57
Table 28: Subject Choice for the Most Common Subjects in Secondary Schools, 2017 (%) .....	60
Table 29: Fiscal Costs of Alternative Enrollment Simulations by 2030 (Maloti, millions) .....	64

## Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
CAP	Curriculum and Assessment Policy
DTEP	Distance Teacher Education Program
ECCD	Early Childhood Care and Development
ECOL	Examinations Council of Lesotho
EFU	Education Facilities Unit
EMIS	Education Management Information System
FY	Fiscal Year
GDP	Gross Domestic Product
GoL	Government of Lesotho
HIV	Human Immunodeficiency Virus
IDM	Institute of Development Management
IEMS	Institute of Extra-Mural Studies
JC	Junior Certificate
JICA	Japan International Cooperation Agency
LAC	Lesotho Agriculture College
LCE	Lesotho College for Education
LDTC	Lesotho Distance Teaching Center
LGCSE	Lesotho General Certificate of Secondary Education
LSPA	Lesotho School Principals Association
MoDP	Ministry of Development Planning
MoET	Ministry of Education and Training
MoF	Ministry of Finance
NCDC	National Curriculum Development Center
NMDS	National Manpower Development Secretariat
NUL	National University of Lesotho
OVC	Orphans and Vulnerable Children
PFM	Public Financial Management
PIRLS	Progress in International Reading Literacy Study
PSLE	Primary School Leaving Examinations
SACMEQ	Southern and Eastern Africa Consortium for Monitoring of Education Quality
SACU	Southern African Customs Union
SGB	School Governing Boards
SSU	School Supply Unit
TIMSS	Trends in International Mathematics and Science Study
TSC	Teaching Service Commission
TSD	Teaching Service Department
TVET	Technical and Vocational Education and Training
UNAIDS	United Nations Programme on HIV and AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNPD	United Nations Population Division
VMMC	Voluntary Medical Male Circumcision
WDI	World Development Indicators
WFP	World Food Programme

## Executive Summary

1. **This Public Expenditure Review (PER) is the result of a collaboration among the World Bank Group, and Lesotho's Ministries of Education and Finance, and is designed to inform Lesotho's effort in expanding access to quality education services — while operating in a highly fiscally constraint environment.** Although education spending is one of the highest in the world as a percentage of GDP (13.5 percent of GDP) and universal access to primary education enshrined in law, poor educational outcomes persist across the country. Lesotho is also not on track to achieve the two education-related MDGs, with both primary enrollment (82 percent) and primary completion (65 percent) rates lagging far behind the goal of 100 percent by the end 2015.

2. **The report is organized as follows.** The first chapter offers a detailed assessment of the overall sectoral budgeting and expenditure patterns in the education sector over a five-year period, from fiscal years (FY) 2011/12 to 2015/16, using multiple data sources. The second chapter estimates the cost of expanding secondary education to achieve the government's goal of universal compulsory lower basic education by 2020 and makes recommendations on how to better utilize the funding for the sector taking into account the fiscal constraints at macro level.

### *Expenditure Performance in the Education Sector*

3. **High governmental spending in the education sector reflects the Government's priority of providing free primary education.** Lesotho spent about 10 percent of its gross domestic product (GDP) for the education sector in fiscal year (FY) 2015/16 — more than other countries at the same level of income per capita. Indeed, primary education receives the largest share of spending in accordance with the country's provision of free primary education. However, when bursary spending through the Ministry of Development and Planning (MoDP) is included, tertiary spending is also high. By contrast, spending on Early Childhood Care and Development (ECCD) is very low, as is secondary education spending.

4. **Since the introduction of free primary education in the year 2000, the number of teachers has increased by 50 percent, contributing to lower student-teacher ratios notwithstanding the great geographical disparities.** . With almost 15,900 teachers, Lesotho has achieved a student-teacher ratio of 30 for the country as a whole, with a ratio of 33 in primary schools and 25 in secondary schools — although with great variation across districts. However, this is not particularly high in an international context. According to data from the World Development Indicators (WDI), the primary level student-teacher ratio is 55 in Mozambique and 34 in neighboring South Africa, whereas in secondary schools it is 40 in Mozambique, 24 in Namibia, and 25 in South Africa.

5. **The largest share of education spending is for recurrent expenses, with the Ministry of Education and Training spending almost 80 percent of its budget on staff.** High spending in the education sector appears to be driven by high teacher salaries further constraining limited resources, considering the country's economic status as a lower-middle-income country, the high rate of unemployment among potential teachers, and the salaries paid to other public and private sector workers in Lesotho. The average teacher salary in primary schools is 8 times the rate of per capita GDP, whereas in secondary schools it is over 11 times the rate of per capita GDP. This compares with ratios of about 3 and 4 times the rate of per capita GDP, respectively, in other countries at a similar level of development (Lesotho Country Diagnostic Study 2016).

6. **Despite high spending on education and human resources, sector outcomes have been inadequate and inequitable especially in rural remote and mountainous areas of the country.** This can be observed through the slow progression through the school system; poor scores in the international educational evaluation (the Southern and Eastern Africa Consortium for Monitoring of Education Quality

[SACMEQ]); uneven progression across districts to the highest school grades; and poor performance at the highest levels in the school-leaving examinations. Student flows have stabilized, but with high repetition and dropout rates. The result is that only a small proportion of children reach the higher grades of secondary school. Poor children living in the deep rural, mountainous areas are particularly affected by weak learning in the early grades. Pupils who remain in school until the end of primary school often face much greater difficulty in accessing secondary schools, given the high costs of secondary education.

7. **Poor planning and human resource management are the main causes of education sector failures.** The lack of an established/official list of teachers in schools has meant that there is no way to determine the real staffing needs in the field. Unwarranted variations in student-teacher ratios for schools with similar enrollments are also closely linked with the lack of a coherent and consistent policy for appointing additional teachers or reducing teacher numbers in schools when enrollment declines. For too long, the only incentives to become senior teachers have been higher salaries. However, these promotions have not been linked with any changes in teacher roles and responsibilities in schools. In this regard, the Education Management Information System (EMIS) has been under-utilized as an important data source and tool for strategic management of the sector.

8. **Despite the resource constraint, operation and capital budget spending is often underspent due to complexity and lack of usability of the budget management system.** Given the overwhelming dominance of teacher salaries, there is limited discretionary spending within the school budgets. However, despite the tight budget constraints that the Ministry of Finance (MoF) has imposed, the operational and capital budget have often been underspent. There are also many instances of deviation from the budget, and even from the revised budget. One of the reasons for this is the extremely complex and fragmented budget management mechanism. There are a number of cost centers that fund staff and operational costs, as well as the costs of stationery and textbooks at the central and district levels. Also, there appear to be many human management errors due to the lack of a reliable public financial management (PFM) system with adequate capacities.

9. **The bursary scheme for tertiary education is neither effective nor sustainable, and recovery from the schemes is urgent.** The national bursaries/loans accounted for between 2.5 and 4 percent of GDP between FY2011/12 and FY2016/17 (Nehmé 2017: 13). In 2014 they offered 17,300 bursaries to students studying in higher education institutions. Considering the low repayment rate (4 percent), it has become a *de facto* grant scheme. When the bursary scheme spending is included in tertiary education, the state spends much more on a tertiary than on a secondary student (World Bank 2015).

10. **Education spending in Lesotho favors the rich.** For each 100 Lesotho Maloti that the government spends per student in primary education, it spends 165 per student in secondary education and 326 per student in tertiary education. This makes education spending highly regressive and unequal, considering that only a small number of students reach tertiary education. For instance, for every 100 students that complete their primary education, only 36 complete their secondary education and 5 complete their tertiary education. This strongly favors the richest quintiles. According to data from the Lesotho Demographic and Health Survey, amongst the poorest quintile the net attendance ratio of 13-17 year old in secondary education was only 15 percent, whilst this was 72 percent amongst the richest quintile. (Lesotho Ministry of Health 2016: 28, Table 2.14)

#### *Expansion of Secondary Education*

11. **Various factors have made the accelerated growth of secondary enrollment likely; however, expansion of secondary education is expensive due to high unit costs.** There will likely be more pressure on secondary education due to: (i) the abolition of the primary school leaving examination (PSLE) in 2017; (ii) the commitment of the Government of Lesotho (GoL) in 2005 to provide free and compulsory primary

and junior secondary education; (iii) the reduction of individuals impacted by Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) and longer survival with AIDS; and (iv) pressure from the Southern African Customs Union (SACU) zone requiring Basotho youth to be more competitive in situations where some Lesotho workers can obtain jobs in Southern Africa, albeit in limited numbers. However, the unit cost of secondary education is very high due to high teacher salaries, a relatively low student-teacher ratio, and potential high unit costs of school construction (if costs for laboratories, libraries and dormitories are considered). In addition, the burden on families is relatively heavy due to various fees, such as school, boarding and book fees, including book rental fees. In addition, there are computer fees, uniform costs, sport fees, and school educational trips which are not affordable for students from vulnerable and poor families.<sup>1</sup>

12. **Chapter II assesses the cost of expanding secondary education in Lesotho.** To this end, the following three simulations are contrasted (note that figures refer to the cost of all school education from Grade 1 to Form E or Grade 12):

- (i) **Business as Usual (Simulation A)**, with little enrollment growth and no improvement in internal efficiency (flows to higher grades);
- (ii) **Rapid Expansion of Junior Secondary Education (Simulation B)**, whereby improved internal efficiency and longer continuation of school attendance until about age 16 are broadly commensurate with universal primary and universal junior secondary (basic) education by 2030; and
- (iii) **Rapid Expansion of All (Junior and Senior) Secondary Education (Simulation C)**, whereby improved internal efficiency and a strong rise in the demand for education that stimulates longer continuation at school lead to virtually universal primary and secondary education by 2030.

13. **On the cost side, these enrollment simulations are then combined with two cost scenarios:** (i) the “*Constant Case Cost Scenario*”, that is, a base scenario where the teacher cost per student remains constant, and the “*Optimistic Cost Scenario*” where teacher cost per student declines by 1 percent per year. This cost reduction would be attained either through raising average student-teacher ratios or a reduction in average teacher salary, or a combination of the two.

14. The conclusions of the fiscal simulations for the cost of expanding secondary education are as follows:

- a) Although business as usual (Simulation A) is not very fiscally expensive (it would only require an annual real growth of 1.1 percent in spending on all school education, even without any reduction in teacher costs), there would be little progress in education access, or in the performance of the school system.
- b) Rapid expansion of junior secondary education (Simulation B) is more expensive, requiring education spending to grow at a rate of 2.6 percent per year, although this could be reduced to 1.8 percent per year if teacher costs per student were also reduced as in the optimistic cost scenario.

---

<sup>1</sup> Based on information from visits to schools, secondary education cost ranges from between Maloti 7,400 to Maloti 9,100 (US\$522 to US\$642 equivalent) for day scholars, and between Maloti 9,200 to Maloti 12,700 (US\$649 to US\$896 equivalent) for boarders.

- c) The rapid expansion of all school education (junior secondary and senior secondary) in Simulation C would be quite costly. Under the constant costs assumptions, spending on school education would have to grow at a rapid rate of 4.6 percent per year to accommodate the growing enrollment. This simulation also takes into account the fact that senior secondary education is more expensive. In addition, it would require many more teachers, schools and classrooms. If teacher cost per student can be reduced, as in the optimistic cost scenario, a lower growth rate of 3.8 percent in education spending would be required.
- d) In real terms and under the constant case cost scenario, spending on all school education would have to grow from Maloti 2.224 billion (US\$157 million equivalent) in 2017 to Maloti 2.557 billion (US\$181 million equivalent) under Scenario A, and Maloti 3.087 billion (US\$218 million equivalent) under simulation B, and Maloti 3.986 (US\$281.3 million equivalent) in Simulation C.

**Executive Summary Table 1: Costs of All School Education under Alternative Enrollment Simulations Combined with Constant Cost or Optimistic Cost Scenarios**

	Constant Case Cost Scenario: High Teacher Costs per Student		Optimistic Cost Scenario: Lower Teacher Costs per Student	
	Annual cost (Millions of Maloti)	Addition to costs (compared to 2017)	Annual cost (Millions of Maloti)	Addition to costs (compared to 2017)
2017	2,224	0	2,224	0
2030: Simulation A	2,557	+333	2,308	+84
2030: Simulation B	3,087	+863	2,800	+576
2030: Simulation C	3,986	+1,762	3,632	+1,408
<b>Growth rate per year:2017-2030</b>				
Simulation A	1.1%		0.3%	
Simulation B	2.6%		1.8%	
Simulation C	4.6%		3.8%	

Source: Own calculations and assumptions as discussed in text.

Note: All costs are listed in constant 2017 Maloti. The constant cost scenario assumes constant teacher costs per student, the optimistic scenario assumes a 1 percent per year reduction in teacher costs per student. The capital costs used to project costs of constructing classrooms or schools were based on current unit costs. However, as capital costs are a relatively small component of total projected costs, an alternative assumption about the cost of construction would have only a modest effect on total costs.

15. **In sum, the enrollment simulations combined with the two alternative projections of teacher costs per student provide a useful indication of the costs of rapidly expanding secondary education.** Under Simulation B, Lesotho would achieve universal basic education, that is, both primary and junior secondary education, with virtually all children of the target age groups for these education phases enrolled in school<sup>2</sup>. However, some would still lag in terms of being in the primary rather than the junior secondary phase by 2030, as primary school repetition would not be completely eliminated. In Simulation C, Lesotho would achieve universal primary and secondary education, again in the sense that virtually all children of the target age groups for all three school phases would be at school, although some would be in the wrong phase.

<sup>2</sup> Based on experience in other southern Africa countries, it would appear to be difficult to reach a situation where more than 92 percent of any age group would attend school in any given year. Therefore, such a level can be regarded as *de facto* universal access.

*Impediments to the Rapid Expansion of Secondary Enrollment*

16. Impediments to the rapid growth of secondary enrollment, as indicated in Simulations B and C, can be considered from both the education supply and demand sides.
17. **On the supply side, the availability of fiscal resources, schools and teachers is most important.**
- (a) If economic growth lags vis-à-vis the growth of school education spending required, education spending may not be able to expand sufficiently.
  - (b) The availability of places in schools is largely determined by fiscal resources.
  - (c) Although many potential teachers in Lesotho cannot currently find jobs, the kind of teachers that will be required will have to meet specific needs in terms of their training and the subjects they can teach. In addition, many would need to be willing to teach in remote areas. The matter of subject specialization is also intertwined with the introduction of the new secondary school curriculum.
18. **Regarding the demand side, there currently appears to be limited demand for higher levels of school education among many students and parents.** Contributing factors include the prohibitively high cost of education for many poor parents, the difficulty of access to schools for children from remote (particularly mountainous) areas, and high repetition rates that encourage early dropouts. The supply of more school places would enable more children from remote areas to reach their schools, but the cost of education to students and parents may still limit the expansion of secondary school enrollments.

*Recommendations for short- and/or medium-term actions*

19. **In order to improve quality of spending in the education sector, the budget management process and monitoring of “value for money” need to be strengthened.** In light of the low budget execution rate (except for salary payments), the financial management process and capacities of the financial and planning department in the Teaching Service Department (TSD) and other key departments within the Ministry of Education and Training (MoET) need to be strengthened to address the issue of teacher management and proper usage of EMIS. In addition, the following actions are also recommended:
- (a) The education system is performing inadequately and appears to be stagnant, with stabilized student flows, but high repetition and dropout rates. Therefore, monitoring enrollment, progression, and dropout rates is crucial for ensuring the effective management of costs, as well as monitoring how well money is spent to improve education.
  - (b) As the bursary allocations for tertiary studies are poorly targeted in both equity terms as well as the needs of the economy, it should be linked to targeted subjects in line with the priority sectors of the economy. The provision of a bursary for training new teachers should be linked to the relatively low numbers of expected retirements per year (in this case, scarcely 200 per year in the next five years) as well as way to get new teachers to remote areas as part of a recruitment/retention scheme.
  - (c) The discontinuation of the Primary School Leaving Examinations (PSLE) and its replacement with internal assessments within schools will lead to less repetition in Grade 6. This will also affect the pattern of promotions to Grade 7 and perhaps also beyond that, to secondary school. This should be monitored to ensure that the necessary resources are put in place to deal with the increased numbers.
20. **Now that universal and free primary education have been attained, it is important for the government to reiterate its commitment to expanding junior secondary education — and to make it universal over time by 2030.** Expansion under difficult macroeconomic circumstances would require a strong political commitment. Moreover, this expansion will improve education access for the poor.

Therefore, the MoET should give clear priority to expansion of access to junior secondary education. Other obstacles to secondary education for the poor should be investigated. Currently, among poor children, there are far lower progression rates and far greater dropout rates, as well as weak examination performance. This puts them at a disadvantage not only in terms of education, but also when they enter the labor market.

21. **The expansion of the education system will only be successful if it continues to raise the quality of education.** Without quality primary education, quality secondary education will not be possible. This means that primary education graduates should have strong foundational skills — in reading, writing and arithmetic— learned during the junior primary phase. This, in turn, would require investment in ECCD over the short term. In addition, it is imperative that there be an investment in teacher training on the new curriculum and assessment, strong coaching and supervision mechanisms of teachers at the school level, and continuous learning assessment. Attention to quality in primary school emphasizes the need for regular systemic testing of reading and basic mathematics in primary school, thereby providing systematic information about cognitive development. This could potentially be done through sample-based testing, as well as considering participation in other regional and international learning assessments, such as the Trends in International Mathematics and Science Study (TIMSS) Numeracy and the Progress in International Reading Literacy Study (PIRLS) Literacy Assessments. Similarly, the expansion of secondary education needs to contemplate both expansion in enrollment and increases in quality, on the one hand, and relevance for the job market, on the other.

22. **To be viable, the expansion of junior secondary education should combine fiscal austerity and the efficient allocation of resources to address equity concerns.** The following measures are to be considered: (i) instead of building additional schools, junior secondary classes can be added to existing primary schools in mountainous and rural regions so that families do not have to pay for dormitories; (ii) in the host primary schools, the student-teacher ratio could be increased, and the school's facilities could be used in double shifts to diminish capital costs of construction; (iii) the unit cost of school construction could be reduced by opting for science kits instead of laboratories, and an in-classroom library corner instead of school libraries; and (iv) fixed establishments for schools should be set linking positions to responsibilities to address the big teacher salary issues. To ensure that the most vulnerable have access to and stay in school, a school feeding program could be extended at junior secondary schools, starting with those in the most remote locations. Bursaries could also be awarded to deserving poor children in remote locations who have completed primary school before the age of 14 and who live too far from secondary schools. Finally, free or heavily subsidized junior secondary education could be introduced by abolishing school fees and textbook rental fees.

23. **The expansion of the junior secondary school network would also require effective teacher incentives and management, as well as strong reforms for teacher salaries.** Given the limited number of core curriculum teachers, the GoL should consider: (i) limiting tertiary bursaries for education mainly to subject specialists for teachers at the junior secondary level, such as Sesotho, English, Mathematics and Science (including Physics, Chemistry and Biology)<sup>3</sup>; (ii) investing in the training of existing teachers in remote and mountainous areas to teach these subjects; and (iii) preventing secondary schools from offering too many elective subjects which require the provision of additional staff and unaffordable low student-teacher ratios. In addition, there would have to be modest but persistent declines in the teacher salary cost per student, which is determined by the combination of the student-teacher ratio and the average teacher salary. The average salary cost could be decreased by offering lower starting salaries to new teachers, as well as by reducing the proportion of senior teachers over time. The Teaching Services Department (TSD) will have to play a central role to achieve the fiscal savings necessary to ensure the expansion of junior

---

<sup>3</sup> There are also four core courses in the Senior Secondary School, again Sesotho, English and Mathematics. However, the fourth could then be either Physical Science (Physics and Chemistry) or Biology.

secondary education or to keep fiscal spending under control in close cooperation with the Ministry of Finance.

24. The introduction of an established/official list of teachers in schools is a priority; such a list would help to stop a vicious cycle of oversupply of teachers, a bloated wage bill, and an inadequate operational budget. Until 2016, teachers automatically gained promotions to senior teacher status upon completing a degree course in education. This entitled them to much higher salaries. However, this occurred without any change in their responsibilities or the school at which they taught. The introduction of established positions for teachers in schools —and ending the policy whereby a degree automatically leads to a promotion — would encourage teachers to compete for senior teaching positions with enhanced responsibilities, including schools located in deep rural areas, thereby encouraging a better distribution of teachers across the country. In addition, the student-teacher ratios vary greatly and teachers could be better allocated with established/official teacher lists at the school level without endangering education quality. There may be scope for reducing staff numbers through attrition and elimination of substitute teachers.<sup>4</sup>

---

<sup>4</sup> Attrition of teachers appears to be around 1.5 percent per year for the next five years.

## Chapter I: Expenditure Performance in Education

### I. Background

23. **Due to its limited natural resources, Lesotho is more dependent than most countries on the skills and productivity of its people as the basis for its economic development.** For more than a century, many Basotho have been dependent on job opportunities in the mines and farms of South Africa. With such jobs becoming scarcer, the skills of its population have become increasingly important. Thus, the Government of Lesotho (GoL) places a great value on education as the foundation for the skills required to drive a modern economy. The Ministry of Education and Training (MoET) has set for itself the following mission: *“To develop and implement policies which ensure [the] acquisition of functional literacy among all Basotho and [the] development of a productive, quality human resource base through education and training.”* (MoET 2015b). Moreover, Lesotho introduced free primary education in 2000, and enshrined the right to free and compulsory primary education in the Education Act of 2010. (Lesotho Review 2015)

24. **Lesotho has very high levels of expenditure on education** (Table 1). Teacher salaries, which dominate recurrent spending, amount to almost 10 percent of gross domestic product (GDP). Primary education receives the largest share of spending in accordance with free primary education, but tertiary spending is quite high when bursary spending through the Ministry of Development Planning (MoDP) is also considered. In contrast, spending on Early Childhood Care and Development (ECCD) is very low. Secondary spending is also quite low, not so much in terms of the teacher salary bill as for non-salary expenditures.

**Table 1: Spending and Estimated Unit Costs by Level of Education, 2014**

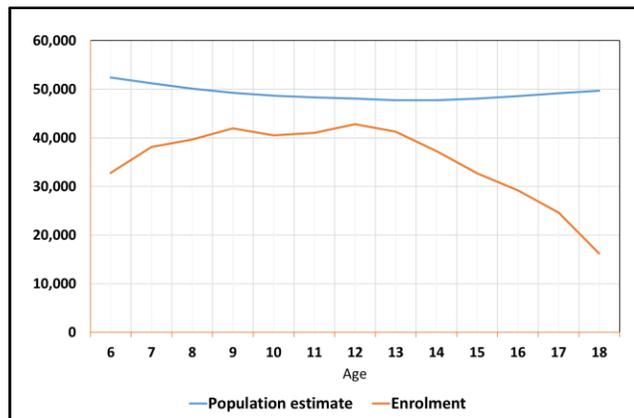
	<b>Aggregate Spending (million Maloti)</b>	<b>Percentage of total</b>	<b>Per student spending (Maloti)</b>
Pre-primary (reception year)	16.7	0.8 %	2,707
Primary	1,211.1	55.3 %	3,360
Secondary	705.3	32.2%	5,565
Junior Secondary	410.3	18.8%	4,516
Senior Secondary	294.9	13.5%	8,220
Technical education	30.0	1.4%	7,106
Higher education	225.4	10.3 %	10,964
Total	2,172.4	100.0%	n/a

Source: Lesotho Country Diagnostic Study 2016, 59.

25. **Despite the high level of governmental resource allocation to education, Lesotho still has a long way to go to educate the majority of its population.** This is not because of limited access or low school attendance, as more than 80 percent of children between the ages of 8 and 14 attend school (see Figure 1). There is a relatively sharp drop in school attendance from about the age of 15, quite similar to the situation in most southern African countries. Apart from this high dropout rate at older ages, the fact that there are so many children who are overaged for their grade reflects the underlying problem of poor learning in the school system. This also leads to large-scale repetition. Figure 2 shows that there has been little change in enrollment numbers at different age groups between 2013 and 2017. In fact, the enrollment data show a decline of 2.7 percent over the same period. However, the United Nations Population Division (UNPD) estimated that the population of the core school age population declined marginally, by 0.8 percent.

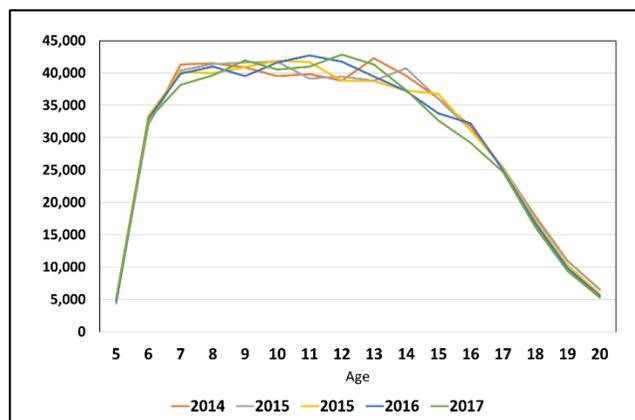
26. **One of the consequences of a weak secondary school system is that only a small number of students reach the tertiary education level;** and they are mainly from the more advantaged segments of the population. This has the consequence that tertiary education spending is not equitable.

**Figure 1. Enrollment by Age as Compared to United Nations Population Division population estimate, 2016**



Sources: United Nations Population Division population estimates; enrolment data from ER42.

**Figure 2. Enrollment by Age, 2013-17**



Source: Education Management Information System (EMIS) data is from ER42.

## II. Administration of the Education Sector

27. **The MoET is responsible for education at all levels.** This starts with Early Childhood Care and Development, even before children enter school. It is followed by the Reception class (grade R, a year before Grade 1), seven years of primary education (Grades 1 to 7), five years of secondary education (Forms A to E, sometimes referred to as Forms 1 to 5), vocational education and training, higher (tertiary) education, as well as adult education. The political head of the ministry is the Minister of Education and Training, assisted by a Deputy Minister. The administrative heads are the Principal Secretaries – one in charge of basic education and one in charge of higher education. The other main management heads consist of the Chief Education Officer, Teaching Services; the Chief Education Officer, Secondary Education; the Chief Education Officer, Primary Education; the Director, Planning; the Director, Education Facilities Unit; the Chief Education Officer, Tertiary Education; the Chief Education Officer, Curriculum and Assessment; the Director, Technical and Vocational Education and Training (TVET); and the Director, Human Resources (see also Box 1 and 2).

---

**Box 1: Stakeholder Mapping: Who has Influence on Expanding Secondary Education in Lesotho?**

Complementing the expenditure analysis, focus group discussions were carried out with the Ministry of Education and Training, four school governing boards (SGBs), teachers' unions, and development partners. Effective management of education systems is a complex task that requires policy coordination between multiple government agencies, tiers of government, and government and non-government actors. The stakeholder mapping exercise set out to explore the relationships, incentives and influence of actors involved in the education sector. Findings are intended to contribute to the dialogue within the MoET, among non-governmental actors, as well as with the World Bank and other development partners engaged in Lesotho.

Focus groups were facilitated using Net Map, a tool developed to guide discussions about how actors are linked, as well as their influence and goals related to a specific proposed change. Facilitators posed the question: *'Who has influence on expanding access to secondary education in Lesotho?'* Focus groups discussed issues such as *Who is involved? How are actors linked?; What are actors' goals? and What are actors' influence?*

Results highlight the importance of communication and coordination to improve education outcomes in Lesotho. Focus groups identified 161 different actors engaged in secondary education. This includes 19 MoET actors; 39 actors from other governmental entities; 19 school actors; 26 community actors; 23 development partner actors; 29 civil society actors; and 24 other actors. For more information, see Annex 5.

---

*Source:* Authors.

28. **The budget management mechanism for the education sector is complex and fragmented.** The MoET budget funds a number of cost centers. Apart from the MoET itself, the ten district offices from which basic (primary) and secondary education are administered also have separate cost centers. These centers fund the staff and operational costs of the district office, the salaries of teachers at district schools, as well as the costs of stationery and textbooks at the central level. In addition, some statutory bodies within the ambit of the MoET — that is, the Council on Higher Education, the National Curriculum Development Center, and the Examinations Council of Lesotho (ECoL) — operate as separate cost centers. Furthermore, funds are transferred from the MoET to a number of higher education institutions that act as separate cost centers, including the Thaba-Tseka Technical Institute, the Lerotholi Polytechnic, the Institute of Development Management (IDM), and the National University of Lesotho (NUL). The MoET's budget also finances transfers to the Lesotho National Commission for the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Lesotho Distance Teaching Center (LDTC), an institution created to provide further education for both youth and adults who have not completed their secondary education, or for teachers wishing to upgrade their qualifications. Transfers to all other cost centers are determined in the budgetary process and not through any particular formula. A large part of spending on tertiary education, namely spending for student loans, does not fall under the responsibility of the MoET. Rather, it is administered by the National Manpower Development Secretariat (NMDS) in the MoDP.

29. **Budget management appears to be a challenge.** The MoET prepares the Budget Framework Paper, which is followed by the preparation of detailed estimates based on the indicative budget ceiling set by the Ministry of Finance (MoF). Given the overwhelming proportion of total spending on teacher salaries in the education sector, there is limited discretionary spending within school budgets. As will be further discussed in section IV, in recent years, the MoET has more often underspent rather than overspent — despite the tight budget constraints that the MoF has imposed. There are many instances of deviation from the budget, and even from the revised budget. However, in the past five budget years, underspending was the net outcome for four of the five years, whereas net overspending occurred in only one year.

---

**Box 2: Stakeholder Mapping: Perceptions of the Ministry of Education and Training**

Actors associated with the MoET comprise a high share of stakeholders identified by focus groups. They were assigned high levels of influence due to their role in setting policy, leading implementation and providing resources.

MoET departments were assigned a high degree of ‘betweenness’—a term used to define the number of times an actor rests between two actors who are themselves unconnected. This reflects a system which puts pressure on MoET to effectively communicate and coordinate policy implementation.

Focus groups expressed an interest in improved communication and consultation with MoET. For example, MoET highlighted the need to consult and communicate reforms with district counterparts and principals to facilitate implementation of new policies. Principals and teachers felt frustrated by a perceived breakdown in communication with MoET. Stakeholders felt that greater consultation from Government could lead to better buy in, and subsequently more cooperation and smoother implementation.

Discussions also reflected the role of resources in generating buy-in for policy reform. A large number of disagreements identified by focus groups were related to resource allocation. In particular, the School Supply Unit, the Education Facilities Unit, and MoET Procurement were ‘hubs’ of disagreement. Disagreements between government and school actors (especially principals and teachers) were related to allocation and management of resources, as well as teacher salary structures. Discussions during school governing board focus groups reflect perceived limited resources as a key source of tension.

---

*Source:* Authors.

### **III. Human Resources in Education**

30. **The development of human resources is of immense importance for developing countries such as Lesotho.** The education sector, which is mainly responsible for the development of such human resources, is itself very human-resource intensive. The development and management of teachers is recognized as a key priority. Human resources within the school education sector are the responsibility of the Teaching Service Department (TSD), which acts as the administrative arm of the Teaching Service Commission (TSC). As such, it “has ultimate legislative powers over all matters pertaining to teacher appointment[s], promotion[s], transfer[s] and discipline” (MoET 2005).

31. **The number of teachers employed in Lesotho schools implies relatively low student-teacher ratios.** The almost 15,900 teachers imply a student-teacher ratio of 30 for the country as a whole, with a ratio of 33 in primary schools and 25 in secondary schools (see Table 2). This is not particularly high in an international context, and only slightly higher than in neighboring South Africa, a much richer country. According to data from the World Development Indicators (WDI), the primary level student-teacher ratio is 55 in Mozambique and 34 in neighboring South Africa, whereas in secondary schools it is 40 in Mozambique, 24 in Namibia, and 25 in South Africa. Across districts in Lesotho, the aggregate ratio varies considerably between 34 in Quachas Neck and 45 in both Thaba-Tseka and Mokhotlong.

32. **The MoET pays significant attention to teacher training, with a strong emphasis on improving teacher qualifications.** The Lesotho College of Education provides both pre-service and in-service programs that lead to a diploma in education, currently the minimum requirement for appointment as a teacher. The Distance Teacher Education Program (DTEP), introduced in 2002, is a four-year diploma for unqualified teachers (defined as not having a teaching degree) who were appointed earlier with even lower qualifications, many of them following the introduction of free primary education. The Faculty of Education at the NUL provides pre-service teacher education degree programs at both the undergraduate and postgraduate levels, including four-year Bachelor of Education and Bachelor of Science in Education degrees. In-service training for teachers is also offered by the Institute of Development Management (IDM). For a time, a serious shortage of qualified teachers existed, worsened by the effect of HIV/AIDS deaths, afflicting also a number of teachers. This shortage was alleviated through the appointment of less qualified teachers, an expansion in training, and by increasing the retirement age of teachers from 55 to 65 years of age, which is 5 years older than for civil servants.

**Table 2: Primary and Secondary Students, Teachers and Student-Teacher Ratios by District, 2016**

District	Enrollment			Teachers			Student-teacher ratio		
	Primary	Secondary	Total	Primary	Secondary	Total	Primary	Secondary	Total
Berea	42,632	16,901	59,533	1,321	683	2,004	32	25	30
Butha-Buthe	22,869	10,112	32,981	719	405	1,124	32	25	29
Leribe	54,506	23,938	78,444	1,683	1,014	2,697	32	24	29
Mafeteng	34,250	14,371	48,621	1,122	582	1,704	31	25	29
Maseru	82,126	34,465	116,591	2,257	1,348	3,605	36	26	32
Mohales Hoek	30,783	7,965	38,748	1,051	338	1,389	29	24	28
Mokhotlong	22,524	5,521	28,045	683	242	925	33	23	30
Qachas Nek	14,397	4,693	19,090	481	216	697	30	22	27
Quthing	21,201	6,197	27,398	572	208	780	37	30	35
Thaba-Tseka	28,901	4,773	33,674	786	179	965	37	27	35
<b>Total</b>	<b>354,189</b>	<b>128,936</b>	<b>483,125</b>	<b>10,675</b>	<b>5,215</b>	<b>15,890</b>	<b>33</b>	<b>25</b>	<b>30</b>

Source: Calculated from EMIS data.

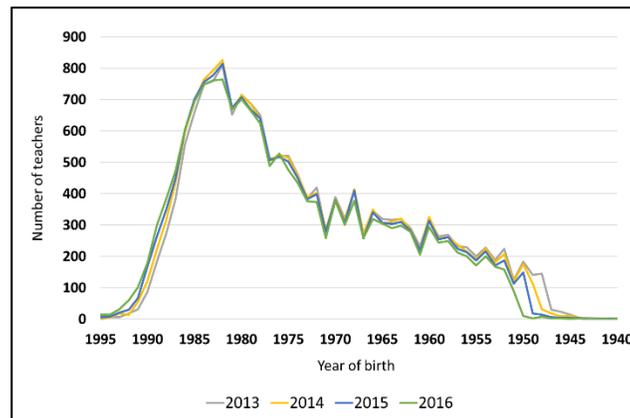
Note: A small number of students and teachers could not be classified by region or school level in the EMIS data.

33. **Currently, there is great stability in the teacher corps.** Figure 3 shows teacher birth years obtained from ER42 (EMIS) forms from all primary and secondary schools for 2013 to 2016. The numbers have barely changed across the four years in all but the youngest birth cohorts, where some new entrants joined the teacher corps in the most recent years. In addition, some teachers were close to the retirement age of 65. Although there is some attrition among teachers for reasons other than retirement, this is not very common given the scarcity of alternative jobs. Indeed, some teachers who leave are replaced by teachers of similar ages, thus explaining the very limited change in the total numbers by birth year.

34. **The rapid increase in teachers to deal with the introduction of free primary education from the year 2000 is the reason for the bulge in teacher numbers born in the 1980s.** To accommodate this, the retirement age for teachers was also raised from 55 to 65 years in 2005. Thus, few teachers retired during the past decade. As a result, there were limited opportunities for new prospective teachers. This explains why only 144 out of almost 16,000 teachers, or less than 1 percent, were 25 years or younger in 2016; and barely 2.5 percent were younger than 30 years of age.<sup>5</sup> Although the average age for teachers is the 30s, there are insignificant percentages in each group above the age of 60. There were 161 teachers who had already exceeded the retirement age of 65, and another 900 aged 60 or above. This implies that about 200 teachers were due to retire every year over the next five years. In a situation of overstaffing in some schools, such retirements offer opportunities both for adjusting student-teacher ratios in some schools, and for replacing older teachers with better qualified ones.

<sup>5</sup> These figures are based on returned ER42 (EMIS) forms, which do not clearly distinguish permanent from substitute teachers. Therefore, it could be the case that not all of these 161 teachers above the retirement age hold a permanent position.

**Figure 3. Teachers by Year of Birth, 2013–2016**



*Source:* Calculated from EMIS data.

35. **School staffing norms are currently largely based on student-teacher ratios; individual deviations from this are based on special requests.** Currently, Lesotho has no established/official lists at its schools, meaning that there are no defined positions at specific rank levels. Rather, schools that apply for additional teachers need to justify requests for additional substitute or permanent teachers to their staff. The TSD should evaluate such requests based on student-teacher ratios. However, overgenerous approval of additional teacher posts seems to occur, leading to considerable variation in the number of teachers allocated to schools of similar size. Once a position has been approved, an advertisement is made through the TSD. However, the decision on whom to appoint largely takes place at the school level (MoET 2015). The TSD currently has little control in the appointment process. It needs to be strengthened to follow proper recruitment procedures to ensure that positions are not filled in a nepotistic fashion at the school level. The so-called ‘owners’ of some of the schools—church organizations who have long been involved in the administration of many of the schools—have had a strong influence on appointments at the school level. Autonomy for schools, influenced by these churches in appointing teachers, means more local discretion. However, this makes rational planning of the distribution of teachers more difficult in the absence of a clear national framework and guidelines. Thus, the TSD is not really involved in matching teacher supply and demand<sup>6</sup>.

36. **Teacher salary levels in Lesotho are high,** considering the country’s economic status as a lower-middle-income country, the high rate of unemployment among potential teachers, as well as the salaries paid to other public and private sector workers in Lesotho. The average teacher salary in primary schools is 8 times per capita GDP, whereas in secondary schools it is just over 11 times per capita GDP. This compares with ratios of about 3 and 4 times, respectively, in other countries at a similar level of development (Lesotho Country Diagnostic Study 2016, p. 122). Nonetheless, salaries are much lower than in South Africa, but very few teachers from Lesotho can realistically regard that as their opportunity cost, as such positions are usually not available to them. Majgaard and Mingat (2012, pp. 28-29) estimated that average primary salaries as a multiple of GDP per capita had fallen from 8.6 to 4.4 between 1975 and 2000 in Sub-Saharan African countries as a group. Thus, Lesotho’s relatively high teacher salaries are a major reason for the high cost of education compared to countries at similar income levels. This as the opportunity cost, given restrictions on the employment of expatriates in South Africa. However, compared to employment opportunities within Lesotho, teacher salaries appear high. Given that there is an over-supply of teachers, allowing salaries to decline in real terms to the extent of 10 to 15 percent would probably not greatly affect teacher supply.

<sup>6</sup> This is the reason why a study on teacher demand and supply has been launched and led by the TSD in 2018.

37. **Teachers were encouraged to improve their qualifications by the very high premium paid for obtaining graduate teacher qualifications, which enabled them to become senior teachers.** For a beginning teacher, having an education degree rather than an education diploma translates into a 30 percent advantage in starting salary, that is, from Maloti 135,276 (US\$9,547) rather than Maloti 89,004 (US\$6,281) per year, according to the salary scales applicable from April 1, 2016. A teacher with a diploma but no degree is initially paid Maloti 89,004 (US\$6,281); after nine years of notch increases, such a teacher would reach the maximum salary of Maloti 115,008 (US\$8,116). However, if such teachers then obtained a degree, they would be appointed as senior teachers and their salaries would jump to Maloti 135,276 (US\$9,547). This is the lowest notch for senior teachers, but still a 17 percent increase over their previous position. After four annual notch increases, the salary would reach Maloti 149,364 (US\$10,541), the maximum for a senior teacher. Teachers with a degree, but not in the field of education, started with a salary of M114,452 (US\$8,077), 12 percent less than teachers with an education degree. However, their salary cannot rise beyond the maximum of Maloti 131,964 (US\$9,313) reached after four years.

38. **Although senior teachers earned much higher salaries, there was no change in their responsibilities and they continued to work in the same position.** This means that some schools may have only senior teachers, whereas similar size schools could have none. The literature shows that teacher qualifications are a poor measure of teacher quality. Nevertheless, it is problematic from an equity perspective that some (mainly urban) schools have many senior teachers, whereas many isolated rural schools may have none. This could also mean that there may be considerable variation in the quality of teaching across Lesotho's schools. In 2005, for instance, 51 percent of primary teachers in mountain areas were unqualified (defined as not having a teaching degree), as were 39 percent in the foothills, 35 percent in the Senqu River Valley, and only 24 percent in the lowlands (MoET 2005).

39. **In 2016, a decision was taken that increased qualifications should no longer automatically lead to a promotion to senior teacher with the commensurate salary increase<sup>7</sup>.** Once an established system has been put in place, positions for senior teachers could be more equally spread across schools throughout the country. Some positions in the mountain areas could become more attractive as promotions for current non-senior teachers are harder to obtain in urban areas due to lower vacancies. It is unclear how such an incentive would affect the willingness of teachers to work in deep rural areas. In Namibia, for example, the introduction of financial incentives for rural teachers, as well as promotions for teachers moving from urban areas to isolated rural areas, led to a moderate shift in qualified teachers to isolated rural schools. (UNICEF 2014).

40. **Since 2011, school principals were appointed on the basis of five-year contracts as part of an attempt to introduce a performance-based approach.** There is no certainty about what should happen at the end of the first period of contract terms. Some of these principals were drawn from outside the teaching corps, or from retired teachers (which also raised another issue as to whether principals should receive pensions while they are still working for the Government). The intention was to only extend such contracts after their performance had been assessed. The goal was apparently to create a performance tool to evaluate whether they had done their jobs well — before reappointment could be considered. However, such a performance assessment tool has yet to be developed, and the TSD needs to evaluate their performance with it. Considering the importance of principals for school functionality, attention to this matter is vital.

41. **In the 2009 plan, the MoET envisaged extending the idea of performance-based career progression to all teachers.** As was stated at the time: “Career progression is based exclusively on experience and qualification and not on competencies. Competencies in this context are demonstrable capabilities and attributes that contribute to the achievement of teaching and educational outcomes. This lack of performance-related progression and reward provides no incentive for performance in teaching and

---

<sup>7</sup> This decision has not been accepted by the teacher unions, as explained later.

school management. The lack of accountability in the Teaching Service arises from simply rewarding people for having studied or having been on the payroll for longer, with no demonstrable ability to deliver at a higher professional level of operation.” (MoET 2009, p. 2) This was clearly overambitious, and the difficulties of performance management in education are well known. Nevertheless, the fact that such performance contracts have been used in appointing school principals presents an opportunity to use such performance contracts for principals more widely.

### **Box 3: Stakeholder Mapping: Principals and Teachers**

Principals were mentioned by all focus groups, except for the teacher formation group, which identified the Lesotho School Principals Association (LSPA). All groups but one assigned neutral goals, suggesting that principals would be generally in favor of expanding access to secondary education but would be frustrated with the challenges presented by reforms. These were thought to include lack of clear communication and direction on implementation of new policies; a reduction in school fees if secondary education were to become free; and limited resources to support expansion. Two focus groups suggested principals would resist reform because they would not want to lose access to discretionary resources such as school fees. Principals were assigned a level influence ranging from moderate to high.

Teachers were identified by all focus groups and assigned a moderate level of influence (3-4). Focus groups suggested teachers would be in favor of expanding access to secondary education. However, they would be concerned with trade-offs related to quality. Specifically, they might resist reform options that leave them feeling ‘overworked, underpaid, and under-resourced.’

Discussions revealed that stakeholders do not share a common understanding of formal systems of accountability. Focus groups had different views about reporting structures for teachers, principals, and school governing boards. For example, groups suggested teachers report to school proprietors, principals, heads of department, the district office, and the TSD and TSC.

Across all focus groups, teachers and principals had very dense networks with links to a large number of actors. In particular, teachers were perceived to disagree with principals, the National Curriculum Development Center (NCDC), the ECoL, the School Supply Unit (SSU), the SGBs, the Central Inspectorate, and the MoET. Reasons given for these disagreements included: workload, pay, curriculum changes, lack of resources, unmet expectations, unreasonable inspections, and reforms that were not well coordinated. Principals were perceived to disagree with development partners over policies that are not well adapted local context (for example, policies pushing girl child education; in Lesotho, it is rather boys who do not attend secondary school because they become herders).

*Source:* Authors.

42. **Most permanent personnel are paid through the centralized payroll system, but this system does not offer a complete picture of personnel spending.** The reason is that substitute teachers are also appointed on occasion to deal with situations of maternity leave, study leave, staff illness, or to temporarily fill vacancies until more permanent appointments are made. Appointing substitute teachers for teachers who are on leave but are still receiving salaries, adds to the salary costs. Moreover, it is difficult to establish a clear picture of how many teachers are paid as permanent employees, as well as how many substitutes who are in the system are still eligible for payment. Further, there does not appear to be clear rules about the length of time that substitute teachers are remunerated.

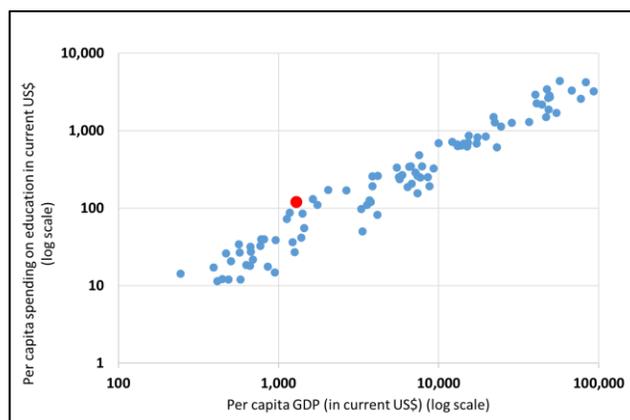
## **IV. The Education Budget**

### **Education Spending in Lesotho is High vis-à-vis Country Comparators**

43. **Lesotho spends more on education than other countries at the same level of income per capita.** Figure 4 shows the positive relationship between the level of economic development of countries as reflected in their GDP per capita and their public spending on education per capita (a logarithmic scale is

used on both axes). Lesotho’s education spending per capita is higher than for countries at similar levels of development, indicating the high priority given to education by the Government. In this context, it is likely more than the level of spending that the country can afford. It is also important that this money is well spent, that is, that there is technical efficiency (obtaining the greatest possible output from a given set of resources). Thus, this chapter also considers educational outputs and outcomes.<sup>8</sup>

**Figure 4. The Cross-Country Relationship between GDP per Capita and Spending per Person on Education, 2012**



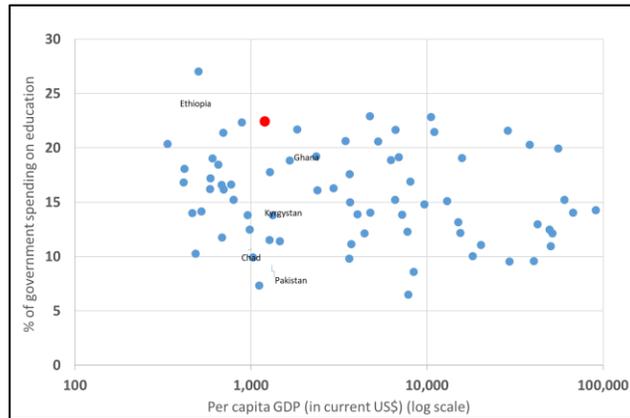
*Source:* Compiled from information in WDI, 2017, and World Bank staff calculations.

*Note:* Lesotho's ratio is indicated by the larger, red-colored dot.

44. **Although Lesotho’s ratio of public spending to GDP has declined somewhat since 2010, the country still spends an extraordinary proportion of its public resources on education.** Figure 5 and Figure 6 allow for a comparison of Lesotho’s public education spending with those of countries such as Cambodia, Cameroon, Chad and Pakistan, which are at similar levels of economic development, as well as with others that are at much higher and lower levels of GDP spending per capita. Both these figures suggest that government spending on education in Lesotho is extremely high by international standards, even when the country is compared to all other countries. Lesotho had the highest public education expenditure-to-GDP spending ratio among the almost 100 countries depicted here. Further, it had one of the highest shares of education spending in terms of total expenditures. These ratios are close to — or may even exceed — what a lower-middle-income country such as Lesotho can sustain. The very high repetition rates and poor cognitive outcomes are evidence of weak technical efficiency. However, this does not necessarily imply that less should be spent, rather that there should be greater attention paid to improving outcomes.

<sup>8</sup> Burger and others (2015, p. 150) define outputs as “deliverables that are usually easy to observe, count and verify, and are usually intermediary aims that are necessary but not sufficient conditions for meeting the ultimate goal of a programme.” School enrollment is an output. Outcomes, on the other hand, are “deliverables that are more difficult to observe, count and verify, but are linked to the ultimate goal of a programme” — for example, how much the enrolled children have actually learned.

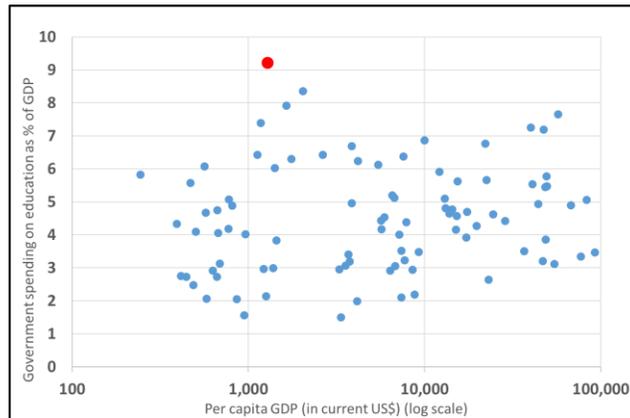
**Figure 5. Government Spending on Education, 2013 (as a percentage of total government expenditures)**



*Source:* Compiled from information in WDI, 2017.

*Note:* Lesotho's ratio is shown by the larger, red-coloured dot.

**Figure 6. Government Spending on Education, 2012 (as a percentage of GDP)**



*Source:* Compiled from information in WDI, 2017.

*Note:* Lesotho's ratio is shown by the larger, red-colored dot.

## Primary Education is a Top Budget Priority

45. Spending reflects the Government's policy priority of providing free primary education.

46. Table 3 shows that 55 percent of spending within the MoET is for the program on Basic Education Management (where basic is understood to refer to primary education), 30 percent on Secondary Education Management, and 6 percent on Tertiary Education Management. Together, these three programs constitute 91 percent of total spending by the MoET. This is the same proportion as in 2011/12, with virtually no shift between programs during this period.

**Table 3: Actual MoET Spending by Program, 2010/11 to 2015/16, (millions, Maloti)**

Ministry of Education and Training: Actual Expenditure by programme	2010-11	2011-12	2015-16	2012-13	2013-14	2014-15	2015-16	2015-16
	Actual expenditure							
0300	1 730 534 447	-175 793	0%	46 314	26 664	51 391	-12 530	0%
0301 Administration	19 751	23 747 624	1%	21 136 935	35 323 262	32 661 174	31 417 551	1%
0302 Early Childhood Care and Development		5 076 834	0%	5 289 850	4 087 557	3 831 541	7 930 846	0%
0303 Primary Education Management		949 334 328	54%	966 420 498	1 102 045 786	1 121 600 632	1 205 722 903	55%
0304 Secondary Education Management	-34 225	518 736 324	30%	581 791 281	559 843 599	612 823 581	658 362 451	30%
0305 Technical and Vocational Education and Training Management	226 671	41 431 590	2%	41 921 017	44 475 312	40 803 143	39 178 091	2%
0306 Teaching Service Management		40 281 941	2%	39 739 688	45 164 274	38 302 808	41 273 078	2%
0307 Tertiary Education Management		118 301 219	7%	139 506 262	134 546 236	121 027 009	121 629 346	6%
0308 Curriculum and Assessment Management		7 368 297	0%	14 218 676	12 437 061	24 689 346	26 151 068	1%
0309 Education Policy Development, Planning, Monitoring and Evaluation		14 022 350	1%	9 511 516	21 447 716	97 143 226	8 619 929	0%
0310 Special Education		8 927 108	1%	10 593 602	9 639 053	11 857 294	13 268 851	1%
0311 Decentralized Educational Management		15 230 362	1%	17 600 750	20 766 407	21 427 662	22 457 558	1%
Total	1 730 746 643	1 742 282 183	100%	1 847 776 388	1 989 802 926	2 126 218 806	2 175 999 142	100%

Source: Lesotho BOOST.

47. **Once bursary loans for tertiary students are also considered, tertiary education's share of total education spending rises.** These tertiary bursary loans fall under the NMDS in the MoDP. However, these loans should be added to spending by the MoET to attain a fuller picture of educational spending. These bursaries amounted to Maloti 705.7 million (US\$49.8 million) in 2013/14, and dropped somewhat to Maloti 678.5 million (US\$47.9 million), and then to Maloti 661.6 million (US\$46.7 million) in the following two fiscal years. Taking these figures into consideration leads to a different distribution of spending over the main expenditure programs, as is evident from Table 4. The breakdown between the three largest spending components then becomes 42 percent for primary education, 28 percent for tertiary education, and 23 percent for secondary education. By contrast, as Table 5 shows, in Namibia — a country with similar educational backlogs as Lesotho, but more fiscal resources — there is a much stronger emphasis on primary education (the expenditure share is 49 percent as compared to Lesotho's 42 percent). The same proportion (23 percent) is spent on secondary education, with tertiary education receiving a much smaller proportion (16 percent), even when including both countries' bursary schemes. In Lesotho, TVET receives only 1 percent of all spending on education as compared to almost 4 percent in Namibia. Also, ECCD receives not even half of 1 percent as compared to a similarly low rate of 1 percent in Namibia.

**Table 4: MoET Expenditure Plus Bursary Loan Expenditure by the NMDS, 2013/14 to 2015/16 (millions, Maloti)**

Sub-program	2013/14		2014/15		2015/16	
	Actual Expenditure	%	Actual Expenditure	%	Actual Expenditure	%
0300	26,664	0	51,391	0	-12 530	0
0301 Administration	35,323,262	1	32,661,174	1	31,417,551	1
0302 Early Childhood Care and Development	4,087,55	0	3,831,541	0	7,930,846	0
0303 Primary Education Management	1,102,045,786	41	1,121,600,632	40	1,205,722,903	42
0304 Secondary Education Management	559,843,599	21	612,823,581	22	658,362,451	23
0305 Technical and Vocational Education and Training Management	44,475,312	2	40,803,143	1	39,178,091	1
0306 Teaching Service Management	45,164,274	2	38,302,808	1	41,273,078	1
<b>All tertiary</b>	<b>840,225,093</b>	<b>31</b>	<b>799,487,149</b>	<b>29</b>	<b>783,191,554</b>	<b>28</b>
<i>0307 Tertiary Education Management</i>	13,454,236	5	121,027,009	4	121,629,346	4
<i>NMDS loan bursaries (not part of MoET spending)</i>	705,678,857	26	678,460,140	24	661,562,208	23
0308 Curriculum and Assessment Management	12,437,061	0	24,689,346	1	26,151,068	1
0309 Education Policy Development, Planning, Monitoring and Evaluation	21,447,716	1	97,143,226	3	8,619,929	0
0310 Special Education	9,639,053	0	11,857,294	0	13,268,851	0
0311 Decentralized Educational Management	20,766,407	1	21,427,662	1	22,457,558	1
<b>Total</b>	<b>2,695,481,783</b>	<b>100</b>	<b>2,804,678,946</b>	<b>100</b>	<b>2,837,561,350</b>	<b>100</b>

Source: Lesotho BOOST.

**Table 5: Percentage Distribution of Expenditures for Main Education Programs in Lesotho (2013/14) and Namibia (2014/15)**

Education Program	Lesotho (%)	Namibia (%)
Administration	1	1
Primary education	42	49
Secondary education	23	23
Higher education (including scholarships)	28	16
Vocational and technical training	1	4
Pre-primary education	0.3	1.3
Other	5	6
<b>Total</b>	<b>100</b>	<b>100</b>

Sources: Calculated from Lesotho BOOST, and Namibia, Office of the Auditor General, 2016.

### Recurrent Costs, Mainly Teacher Salaries, Dominate Education Spending

48. **Personnel spending often crowds out other important educational expenditures** (Glewwe 2014; Pritchett and Filmer 1999; and Verspoor 2006). The dominant sub-programs (teachers' supply) relate to primary and secondary teachers of Maloti 961 million and Maloti 632 million (US\$67.8 million

equivalent and US\$44.6 million equivalent), respectively, with the largest other major spending sub-program being free primary education (Maloti 224 million, or US\$15.8 million equivalent).

49. Annex 2 shows MoET spending, including details about sub-programs for 2015/16. Teacher supply largely relates to the remuneration of teachers and the structures to provide such support. Free primary education refers to funds set aside to replace school fees for primary schools, as well as to the Government's share of Maloti 195 million (US\$13.8 million) for the school feeding program. The most important cost captured under free primary education relates to the cost of textbooks and stationery. Another important part of the efforts to provide universal primary education (introduced in 2000) is the provision of food at schools. This measure has been instrumental in many poor countries, making it more attractive for parents to send children to school. It has also contributed, in some cases of severe undernutrition, to improving children's ability to concentrate and learn. Given the extent of poverty in Lesotho, this program probably had similar impacts in parts of the community. Almost one-third of the school feeding program for 90 percent of primary school children is funded by the Government, two-thirds by the World Food Programme (WFP), and the rest by parents and smaller nongovernmental organizations.

50. **In many developing countries, educational outcomes are hampered by excessive spending on teacher salaries — but too little spending on textbooks and other instructional materials** (Pritchett and Filmer 1999, p. 224; and Pradhan 1996, p. 76). Some of the reasons for this spending pattern are that teachers have become a strong lobby, working to ensure that their salaries receive high priority. The result is often a crowding out of the scope for spending on textbooks. The education budget remains dominated by recurrent expenditures, as development (capital) expenditures of Maloti 23.7 million (US\$ 1.7 million) in 2015/16 constituted only 1.1 percent of all MoET spending. Among recurrent expenditures, spending on personnel dominates. According to Table 6, 77 percent of expenditures were for compensation of employees. However, part of the 18 percent allocated to transfers also funds personnel spending, for example, transfers to the NUL. Thus, the compensation element is even larger overall education spending. The Education Sector Plan reports that salaries of teachers and non-teaching staff constitute 80 percent of primary recurrent spending and 98 percent of that on secondary education recurrent spending. However, only about 2 percent of each consists of 'pedagogical goods and services'. The difference in spending structure between primary and secondary schools is caused by free school feeding, that contributes much to the overall cost of free primary education (MoET 2016, p. 64). By contrast, in secondary education, far more out-of-pocket expenditures are required by parents for items such as books and examination fees. In examining data regarding the MoET expenditures by sub-cost center (annex 10), it is evident how large some of the amounts spent outside of the main MoET budget are, such as spending for the NUL (Maloti 106 million – US\$7.5 million equivalent) and the ten district offices (Maloti 22.5 million – US\$1.6 million equivalent).

**Table 6: MoET Expenditure by Economic Activity, 2015/16 (in Maloti, millions)**

	<b>Expenditure</b>	<b>%</b>
41 Compensation of Employees	1,677,380,988	77
43 Operating Costs	50,523,868	2
42 Travel and Transport	42,441,718	2
47 Transfers	396,914,077	18
53 Acquisition of Non-financial assets (mainly school buildings)	19,787,166	1
14 Other Revenues	(11,048,675)	-1
<b>Total</b>	<b>2,175,999,142</b>	<b>100</b>

Source: Lesotho BOOST.

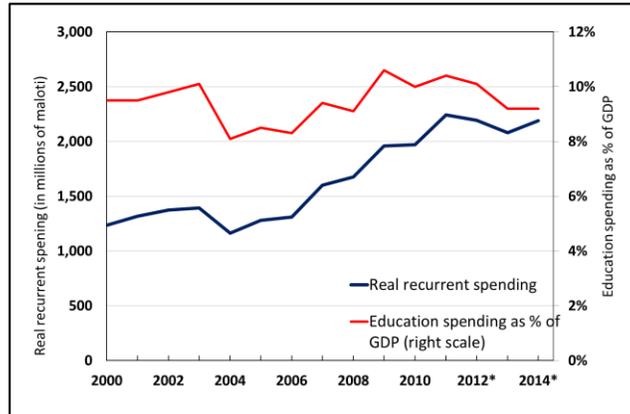
## **Education Budget Overruns have been Uncommon in Recent Years**

51. **Real recurrent spending on education has been rising over time, despite resource constraints; however, recurrent education spending has consistently maintained a rate of about 10 percent of GDP.** This can be seen in Figure 7, based on data from the Education Sector Plan for 2016–2025. It provides clear evidence of the value that Lesotho places on the provision of education. Despite this, Lesotho seems to have avoided the risk of spending overruns on the education wage bill. In 2011/12 and 2012/13, the MoET’s actual spending amounted to respectively 14 percent and then 11 percent lower, respectively, than the approved budget for compensation. The only overrun on the staff wage bill, by 2 percent, occurred in 2013/14 (

52. Table 7). Spending more than the amounts allocated in the budget or failing to spend the budgeted amount could be an indication of other problems, such as limited capacity at the planning or implementation levels or inadequate monitoring of spending units. In Lesotho, the infrequent occurrence of overspending on the MoET budget may also reflect the fact that the education budget is already quite large by international standards. In addition, the uncertainty around the wage expenditure required for substitute teachers raises concerns for budgetary planning.

53. Table 8 includes examples of spending that were much lower than originally approved or than the revised budget. However, there are also a few examples in the other direction, that is, where actual spending considerably exceeded budgeted spending for both FY2014/15 and FY2015/16. It is notable that in the former year the actual expenditure deviated more in both directions, with total expenditures being closer to the initially approved budget in the earlier year.

**Figure 7: Recurrent Educational Spending in Real Terms (as a percentage of GDP)**



Source: Based on data from the Education Sector Plan, 2016–2025.

**Table 7: Approved and Revised Budgets and Actual (realized) Expenditures, 2011/12 to 2015/16 (Maloti, millions)**

	<b>Employee Compensation</b>	<b>Travel and Transport</b>	<b>Operating Costs</b>	<b>Transfers</b>	<b>Acquisition of Non-financial Assets</b>	<b>Total</b>
Approved budget	1,408.40	16.3	50.1	400	97.8	1,970.60
Revised budget	1,408.40	18.4	53.2	398.1	98	1,980.40
Actual expenditures	1,211.00	16.6	39	438	40.8	1,742.20
Outturn (%)	85.98%	90.22%	73.31%	110.02%	41.63%	87.97%
<b>FY2012/13</b>						
Approved budget	1,470.40	25.8	62.3	466.2	76.7	2,098.30
Revised budget	1,400.50	22.6	62.1	476.8	85.9	2,048.00
Actual expenditures	1,306.00	20.2	33.8	464.1	28.2	1,847.80
Outturn (%)	93.25%	89.38%	54.43%	97.34%	32.83%	90.22%
<b>FY2013/14</b>						
Approved budget	1,446.30	32.4	96.3	403.3	82.4	2,053.00
Revised budget	1,485.30	35.3	98.5	403.6	106.2	2,128.70
Actual expenditures	1,474.50	28.2	41.3	403.0	51.4	1,989.80
Outturn (%)	99.27%	79.89%	41.93%	99.85%	48.40%	93.47%
<b>FY2014/15</b>						
Approved budget	1,552.40	55	162	410.2	84.5	2,255.70
Revised budget	1,562.50	54	174.9	401.7	107.4	2,300.50
Actual expenditures	1,546.40	43.3	83.8	398.8	64.7	2,126.20
Outturn (%)	98.97%	80.19%	47.91%	99.28%	60.24%	92.42%
<b>FY2015/16</b>						
Approved budget	1,741.70	47.8	67.2	403.3	75.9	2,323.30
Revised budget	1,757.60	46.3	71.9	397	76.3	2,349.00
Actual expenditures	1,677.40	42.4	50.5	397	19.8	2,176.00
Average of outturn (%)	95.44%	91.58%	70.24%	100.00%	25.95%	92.64%

Source: Lesotho BOOST.

Note: Overspending is (Actual spending – Approved budget) / Approved budget. The subcomponents do not always add up to the total, as taxes, and other revenues and expenditures are not shown (these are very small components). Transfers refer to money transferred to institutions outside of the MoET to a cost center, such as the university, regional offices, and so on. ‘Acquisition of nonfinancial assets’ largely relates to school buildings.

**Table 8: Examples of Substantial Deviations between Approved and Revised Budgets and Actual Expenditures, 2014/15 and 2015/16, (Maloti, millions)**

		<b>Approved Budget</b>	<b>Revised Budget</b>	<b>Actual Spending</b>
<b>MoET 2015/16</b>	<b>Total</b>	<b>2,323,261,430</b>	<b>2,348,976,559</b>	<b>2,175,999,142</b>
Administration and management	Salaries (established posts)	21,474,741	20,045,233	12,148,658
Basic education	Wages - new posts	0	3,523,700	3,523,700
Basic education	Training costs	3,240,000	3,240,000	738,142
Secondary education	Non-residential buildings	42,000,000	42,000,000	11,701,843
Secondary education	Non-office equipment	10,000,000	10,000,000	0
Teacher development, supply and management	Salaries - established posts	1,631,054,333	1,647,170,538	1,592,447,891
Tertiary education	Books and publications	9,007,500	14,807,500	0
Education policy development, planning, monitoring and evaluation	Salaries - established posts	6,783,777	7,171,322	3,835,170
Education policy development, planning, monitoring and evaluation	Wages - new posts	3,951,276	427,576	427,563
Education policy development, planning, monitoring and evaluation	Travel and transport	3,281,513	2,871,824	2,572,850
Education policy development, planning, monitoring and evaluation	Operating costs	5,585,179	4,352,379	3,985,607
<b>MoET 2014/15</b>	<b>Total</b>	<b>2 052,985,037</b>	<b>2,128,710,760</b>	<b>1,989,802,926</b>
Early childhood care and development	Subsidies to non-financial public corps	4,500,000	3,500,000	2,908,853
Basic education	Operating costs	20,608,180	21,608,180	15,910,720
Basic education	Subsidies to non-financial public corps	4,500,000	2,750,000	3,021,221
Basic education	Non-residential buildings	15,000,000	15,000,000	9,167,069
Secondary education	Operating costs	11,497,721	11,047,721	1,340,029
Technical and vocational education and training	Non-residential buildings	0	7,500,000	7,500,000
Teacher development, supply and management	Salaries	1,340,393,405	1,392,186,080	1,392,066,098
Tertiary education	Salaries	423,890	334,393	334,393
Education policy development, planning, monitoring and evaluation	Travel and transport	8,598,272	9,517,340	4,024,236
Education policy development, planning, monitoring and evaluation	Operating costs	51,069,667	50,419,667	9,463,597
Education policy development, planning, monitoring and evaluation	School feeding program	3,000,000	3,000,000	366,274
Education policy development, planning, monitoring and evaluation	Non-residential buildings	31,350,000	31,350,000	7,331,648
Education policy development, planning, monitoring and evaluation	Machinery and equipment	18,600,000	18,450,000	928,161

Source: Lesotho BOOST.

## V. Financing Different Education Programs

### Pre-Primary Education/ECCD

54. **The Education Development Sector Plan recognized the importance of ECCD, but implementation has been a challenge.** The 2005–2015 Education Sector Development Plan stipulated that all children from 0 to 6 years of age should have access to early childhood education by 2015. However, Lesotho did not reach anywhere near that target.

55. ECCD currently takes place through a variety of delivery mechanisms that offer uneven access. These include the following:

- (a) Reception classes for children age 5 are attached to public primary schools. According to the new Education Sector Plan (MoET 2016), 245 classes accommodated around 6,178 children in 2014. To put this into perspective, the five-year-old age-cohort totals around 50,000, and the more than 1,200 primary schools do not have such reception year classes. Of those that do, around 40 percent accommodate such classes in staff rooms or store rooms due to lack of sufficient physical facilities.
- (b) Center-based preschools for children ages 3 to 5 (sometimes called ECCD Centers) are largely private facilities developed by communities, nongovernmental organizations, and churches. They are partly supported by the MoET through school feeding, some short-term training, and very limited supervision. Although these preschools are characterized by high fees in the Lesotho context, they reach about a third of children in the targeted age group, with 2,063 such preschools enrolling approximately 53,530 children in 2014.
- (c) Home-based services for orphans and vulnerable children ages 3 to 5 are supported by communities and offer free services in 57 centers. The Government provides teaching and learning materials, in-service training, and feeding with the assistance of the WFP.
- (d) In addition to the facilities noted above, a large number of day care centers offer childcare services that are typically located around urban centers and factories, mainly for toddlers and infants ages 0 to 2. However, the services offered at these facilities are often of poor quality (Lesotho Country Diagnostic Study 2016).

56. **Major problems exist, with the greatly varying quality of ECCD services, and little systematic quality assurance.** Access is also uneven, particularly for children from disadvantaged families. Around 100 caregivers at center-based preschools receive annual, in-service training offered by MoET and the United Nations Children's Fund. Around 30 persons per year graduate with the Lesotho College of Education's Certificate in Early Childhood Education.

57. **The current funding for preschool education is low and would have to increase considerably to meet the Government's ECCD target.** The current funding for preschool education by the MoET is just Maloti 7.9 million (US\$0.6 million) (already a doubling from the previous year), which amounts to only over Maloti 50 (US\$3.5 million) per child in the core ECCD group aged 3–5. Although some other departmental spending should be added to this to obtain a fuller picture of public funds devoted to ECCD, it is clear that even if the MoET confines itself to only the reception year program, expenditures would have to increase considerably to perform even a modest service in this field. According to the Education Diagnostic Review (2016), in 2014, 91 teachers in reception classes were paid an average of Maloti 77,000

(US\$5 434) by the TSC, whereas 149 who were paid as ‘volunteers’ from the Government’s recurrent budget received only Maloti 14,000 (US\$988) per year. It is unlikely that salaries will remain as low as this in the long run. However, it may still be possible to contain such salaries to below those paid to primary teachers. Even if the cost per student in the reception year is as low as half of that in primary schools — and if around half of the 6-year-old age cohort was accommodated in reception year classes — the MoET recurrent budget for ECCD would still have to increase almost fivefold, to around Maloti 34 million (US\$2.4 million). Yet, in the context of the overall education budget, this would still not constitute a major demand on resources. Providing more classrooms for the reception year is already a priority, however, and expanding enrollment while also expanding provision to more schools would place further demands on the system. Spending on pre-primary education was only 0.28 percent of the total education budget in 2014/15, as compared to 1.3 percent in Namibia, which is still far below the Namibian government’s target.

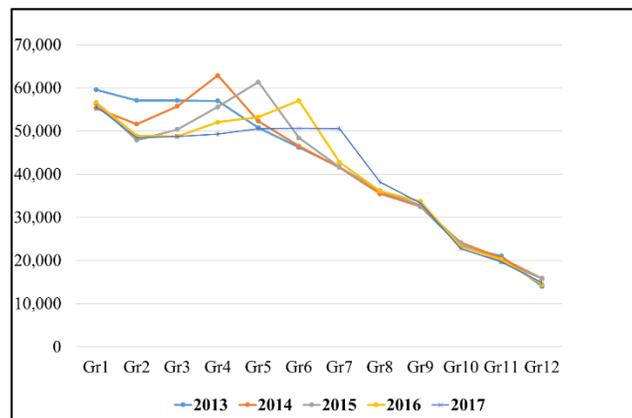
### General Primary and Secondary Education

58. **The wage bill for general primary and secondary education is of central importance, as is the case throughout the world.** Basic (primary) and secondary education constitute 85 percent of the MoET’s budget, or 65 percent of the budget when the MoET spending plus spending on loan bursaries is considered. High salaries and an increasing number of teachers have raised the MoET’s share of all civil servants to 33.5 percent, and its share of the total public wage bill to 37.2 percent. When considering spending for the school education system, it is therefore necessary to focus attention on the level of teacher salaries, enrollments, and the student-teacher ratio as the major cost drivers. This section will first consider enrollment and the student-teacher ratio (the level of teacher salaries was discussed in section II), before moving on to some other important matters that have a bearing on resources in school education.

#### *School Enrollment*

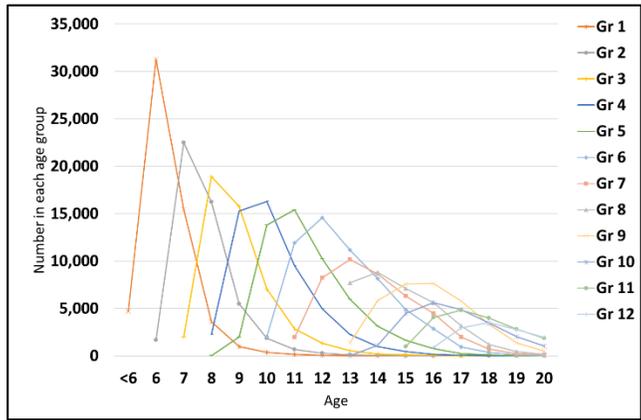
59. **The broad stability of enrollment patterns over the secondary school grades reflects the sharp dropout rate from school in the higher grades from 2013 to 2016** (Figure 8). Figure 1 illustrated the relatively high school participation rates between the ages of 8 and 15. The seeming discrepancy between enrollment by age and enrollment by grade is explained by very high repetition rates in primary school which, along with late school entry by some children, leads to a situation in which many children of secondary school age are still in primary school. Figure 9 shows how the age range of children in each grade widens in the higher grades. In Grade 1, for example, 31,271 children were aged 6, whereas in Grade 7 (6 years advanced), only 8,221 children were 12 years old, the appropriate age for that grade. Clearly, there is a lot of grade repetition and/or dropouts in the school system.

**Figure 8. School Enrollment by Grade, 2013–2017**



Source: Calculated from EMIS data.

**Figure 9. School Enrollment by Grade and Age, 2016**



Source: Calculated from EMIS data.

60. **District and gender factors also play a role in enrollment, repetition, and dropout rates.** Table 9 shows enrollment numbers by district from 2013-2016. It is evident that the school enrollment is not currently growing, although the school-age population is still moderately growing.

61. Table 10 shows the proportion of all enrollments for boys and girls in secondary schools for all districts. This figure is much higher for girls (29 percent) than for boys (23 percent), and there are also major differences across districts. The low proportion of boys (only 10 percent) in Thaba-Tseka that have reached secondary schools contrasts sharply with the 34 percent rate of girls in secondary school in Leribe, as well as the 32 percent in four other districts. Even among girls, progression to secondary school is low in Leribe, whereas it peaks at 26 percent among boys in Maseru and Leribe. District patterns can also be depicted graphically as in Figure 10 and Figure 11. Although Berea, Maseru, and Leribe constitute 48 percent of all Grade 3 students, their share rises to 60 percent by Form 5 — largely because most other districts experience relatively more dropouts in these higher grades.

**Table 9: School Enrollment Numbers by District, 2013–2016**

<b>District</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Thaba-Tseka	36,119	35,869	34,968	34,756
Butha-Buthe	31,772	31,766	31,862	32,192
Leribe	81,422	80,301	79,985	79,553
Berea	62,712	62,162	61,666	61,013
Maseru	116,424	116,391	115,700	115,962
Mafeteng	51,122	50,989	50,426	49,631
Mohales Hoek	40,676	40,651	40,207	39,348
Quthing	28,491	28,239	28,067	27,637
Qachas Nek	20,050	19,905	19,449	19,144
Mokhotlong	27 802	28,248	28,320	28,243
<b>Total</b>	<b>496,590</b>	<b>494,782</b>	<b>490,650</b>	<b>487,479</b>

Source: EMIS data.

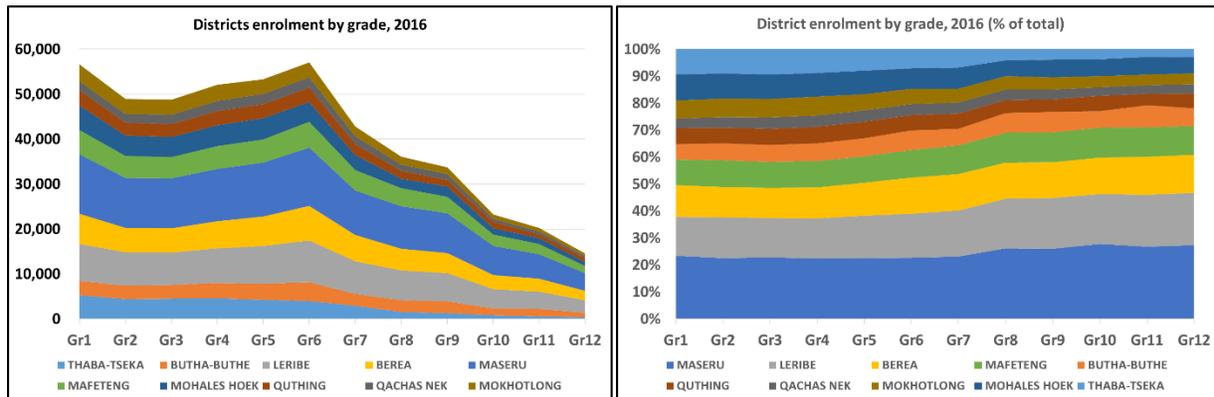
**Table 10: Percentage of Enrolled Boys and Girls in Secondary Schools by District, 2016**

District	Boys (%)	Girls (%)
Thaba-Tseka	10	16
Butha-Buthe	25	32
Leribe	26	34
Berea	25	32
Maseru	26	32
Mafeteng	25	32
Mohales Hoek	17	23
Quthing	20	26
Qachas Nek	19	28
Mokhotlong	14	24
<b>Total all districts</b>	<b>23</b>	<b>29</b>

Source: Calculated from EMIS data.

62. **Enrollment and progression through the school system strongly favor the richest quintile and are higher among girls than among boys.** The primary net enrollment rate (the number of children of the primary age group who are enrolled in and attend the primary grades) “has remained almost stagnant at 83 percent since 2000” (World Bank 2015).<sup>9</sup> Both the primary and the secondary net enrollment rates greatly differ by socioeconomic status (Table 11). The primary rate ranges from 90.5 percent in the poorest quintile to 97.4 percent in the richest for both genders combined. However, the aggregate rate is almost 4 percentage points higher among girls. At the secondary level, the inequality in access is much higher, with the average net enrollment rate ranging from 61 percent in the richest quintile to less than 11 percent in the poorest, with a 10-percentage point differential between boys and girls. This results from a much poorer progression rate in the primary grades among poorer children and boys.

**Figure 10 and Figure 11. School Enrollment by Grade and District, 2016 (Actual Numbers and Percentages)**



Source: Calculated from EMIS data

63. **Indeed, many poor children do not reach high school or do so late — or even drop out of school altogether.** This gradient in secondary net enrollment is very steep and consistent across all quintiles. It reflects inadequate teaching and learning in many schools, but also the high cost of secondary

<sup>9</sup> The net primary enrollment rate derived from the mixture of enrollment data from the EMIS and the United Nations Population Division estimates is also 83 percent, much higher than the 2009 estimate of 34 percent derived from the Demographic and Health Survey.

education for children from poor households. This is exacerbated by the lack of schools offering secondary education (with only 344 compared to 3,031 offering primary education), thereby making access to secondary schools much more difficult. The World Bank (2015) noted that the low secondary enrollment “... stems from: poor rates of completion and learning in primary schools, the secondary-level fee policies that restrict demand for education, the still-widespread lack of supply of secondary education, especially in rural areas, and the scale of absolute poverty... The non-participation reflects the level of poverty, the distance to schools, and the condition of schools. Boys tend to drop out to engage in herding. Comparatively few children receive scholarships—22 percent at [the] lower secondary [level] and 40 percent at [the] upper secondary [level], compared with 60 percent in higher education.”

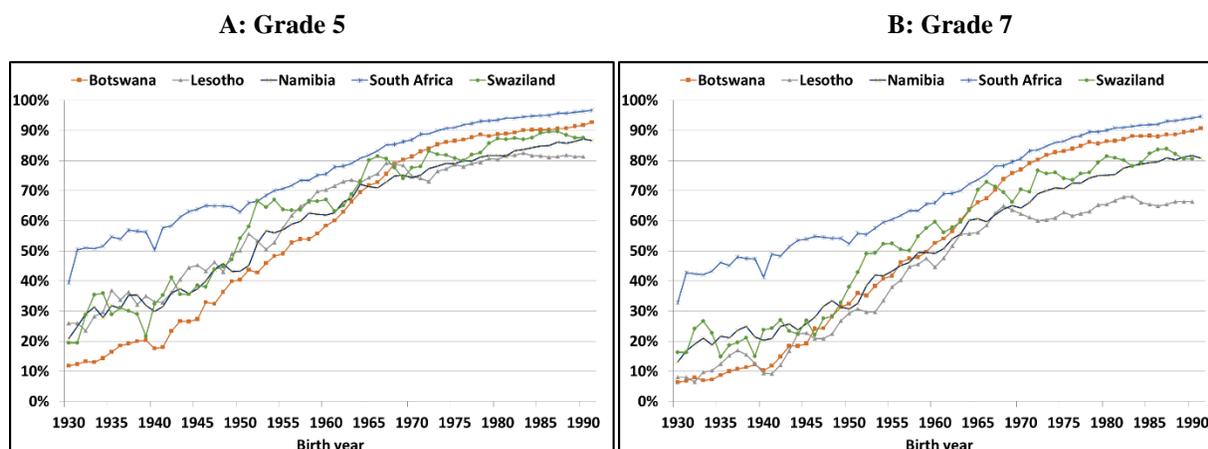
**Table 11: Primary and Secondary Net Enrollment Rate by Wealth Quintile, 2009**

	Primary Net Enrollment Rate (%)			Secondary Net Enrollment Rate (%)		
	Male	Female	Total	Male	Female	Total
Quintile 1	87.0	94.3	90.5	6.7	14.8	10.7
Quintile 2	90.4	97.2	93.8	15.3	27.1	21.0
Quintile 3	94.2	96.7	95.4	24.9	38.1	33.2
Quintile 4	94.5	98.0	96.2	37.0	51.6	44.4
Quintile 5	97.8	97.0	97.4	59.9	61.8	61.0
<b>Total</b>	<b>92.8</b>	<b>96.6</b>	<b>94.7</b>	<b>28.8</b>	<b>38.7</b>	<b>34.1</b>

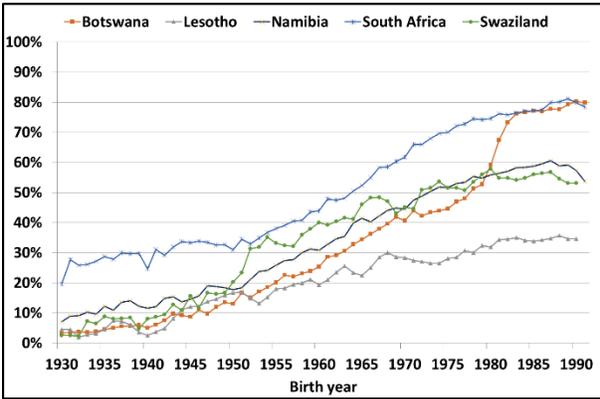
Source: World Bank 2015, using figures from the Lesotho Demographic and Health Survey (2009).

64. **Lesotho lags other southern African countries in secondary education completion rates.** The four panels of Figure 12 show that the higher the grade, the further behind Lesotho has fallen compared to other Southern African Customs Union (SACU) countries. Whereas only about 20 percent of children born around 1990 in Lesotho completed Grade 12, that proportion is above 30 percent in Swaziland and Namibia, above 40 percent in Botswana, and around 50 percent in South Africa. Compared to international and regional standards, Lesotho needs to significantly expand its secondary education system. This would necessarily put upward pressure on education spending. Fortunately, the growth of the school-age population has fallen to about 0.8 percent per year for 2015–2030 (based on United Nations Population Division estimates). Yet, high levels of repetition and more students continuing to higher grades would require that student numbers grow by around 1.5 percent per year over this period (Van der Berg and Knoesen 2015).

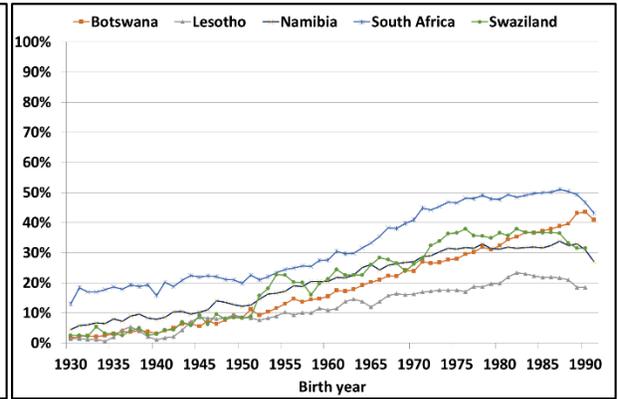
**Figure 12. Percentage of Birth Cohorts that have Completed Various Grades in SACU Countries**



**C: Grade 10**



**D: Grade 12**



Source: Van der Berg and Knoesen 2015.

*Student-Teacher Ratios*

65. **Student-teacher ratios are quite low in Lesotho.** According to the Southern and Eastern Africa Consortium for Monitoring of Education Quality (SACMEQ) III (that is, the third representative survey of schools by the SACMEQ), the student-teacher ratio in Grade 6 schools in Lesotho was 42 in 2011 compared to the SACU average of 50. In part, this is the result of having many small schools, mainly in rural areas, where it is difficult to cover the curriculum without a certain minimum number of teachers. The regression models in

66. Table 12 show a strong and almost linear relationship between enrollment and teacher numbers in both primary and secondary schools, with some variation across districts. This model does not contain a dummy variable to indicate whether a school is urban or rural because of the absence of such a variable in the data. A similar modelling in the Education Sector Study of Lesotho (2016) also finds the rural effect on the student-teacher ratio to be small and slightly negative.

**Table 12: Regression Models Showing the Effect of Enrollment and District on Numbers of Teachers Employed in Primary and Secondary Schools, 2016**

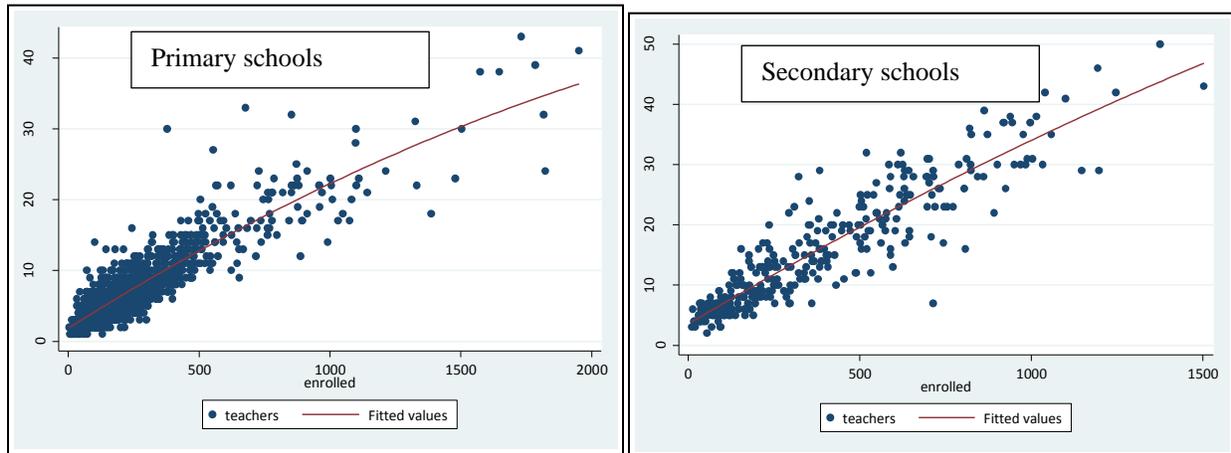
	<b>Primary Schools</b>	<b>Secondary Schools</b>
Per 100 students	2.25*** (0.06)	3.29*** (0.23)
Per 100 students (squared)	-0.03*** (0.00)	-0.03 (0.02)
Thaba-Tseka	(Reference district)	(Reference district)
Butha-Buthe	1.65*** (0.30)	2.49* (1.26)
Leribe	1.62*** (0.24)	2.47*** (1.02)
Berea	1.67*** (0.26)	1.36 (1.09)
Maseru	1.39*** (0.23)	2.41** (1.03)
Mafeteng	1.39*** (0.25)	2.08* (1.10)
Mohale's Hoek	1.19*** (0.25)	1.50 (1.20)
Quthing	0.82*** (0.27)	0.62 (1.34)
Qacha's Nek	0.76*** (0.28)	1.57 (1.26)
Mokhotlong	-0.14 (0.28)	0.68 (1.34)
Constant	0.91*** (0.21)	1.90* (0.97)
Adjusted R-squared =	0.81	0.85
Number of schools	1,472	340

*Source:* Calculated from EMIS data.

*Note:* Standard errors in parentheses. Significant at the 1 percent level \*\*\*, significant at the 5 percent level \*\*, and significant at the 10 percent level \*.

67. **There are adequate numbers of teachers at the primary school level, whereas at the secondary school level, there is a significant excess of teachers considering the current level of enrollment.** Table 13 illustrates the teacher levels for primary and secondary schools. Not all schools of similar size are equally endowed with teachers. Of the 119 primary schools with an enrollment between 200 and 220, for instance, two had only two teachers, and three had three teachers; on the other end of the scale, one such school had 13 teachers and another school 11. If all schools with enrollments above 175 had a student-teacher ratio of at least 35, the current number of teachers in primary schools appears to be adequate for their needs because the excess number of teachers in some schools could balance the shortages in some others. In secondary schools, however, this would lead to a reduction of almost 1,300 teachers. In secondary education, other considerations than simply the student-teacher ratio apply, including the need to have teachers for specialist subjects. Moreover, although there are potential savings to be had from reducing the number of teachers in secondary schools, the inevitable expansion of secondary enrollment in the next decade would again imply a need for additional teachers at this level.

**Figure 13: Number of Teachers Employed at the Primary and Secondary Levels, 2016**



Source: Calculated from EMIS data.

Note: Fitted values are a quadratic regression.

68. **Given the lack of an established/official list at the school level and the underutilization of the EMIS, the TSD depends solely on reporting and applications from schools for the management of teachers.** The TSD assesses the application based on the current staffing and enrollment figures, largely based on relevant numbers obtained from the schools concerned. EMIS data appears to be under-used and is not regularly updated and/or verified. Further, it is not even managed by the Planning Department, but by an external service provider. This is partly because of a lack of capacity to analyze such data within the MoET. As a result, a reduction in enrollment rates does not lead to a reduction in staffing at a school. Instead, the TSD depends on the reporting from school principals for the management of the number of teachers. Therefore, it is important to strengthen the capacities within the Ministry for the effective use of the EMIS.

#### *Factors affecting Secondary School Dropout Rates*

69. **Difficulty in accessing secondary schools and attendant high costs lead to relatively low transition rates to secondary school, as well as a high dropout rate.** As the number of secondary schools is ten times less than the number of primary schools, many children who wish to continue to secondary school need to travel long distances. This implies significant costs and is often not feasible because of limited transportation opportunities. Alternatively, they would have to pay the cost of accommodation in boarding schools or in rented accommodations. Travel, boarding, renting accommodations, school uniforms and textbooks all contribute to the high cost of secondary school (further discussed in Chapter II.). Compared to primary school, then, secondary school is prohibitively expensive and less accessible for most children from poor households. Reducing the costs for children from poorer households requires greater financial outlays for books and learning support materials, and perhaps also subsidization of boarding schools. However, once the cost of secondary education declines, there is likely to be an expansion of education demand at the secondary level. This would in turn require more teachers at this level over the medium-to-long term, despite the current low student-teacher ratio.

70. **Funding of secondary education requires a significant commitment from parents and children** (Table 13). Revenue from school fees does not accrue to the MoET, but to the individual schools and their governing bodies. According to the ER42 forms of 2016, for example, 60 of the 378 secondary schools did not report financial statements. From the available data, the average financing (excluding the opening balance) was Maloti 1,317 (US\$92.9 million) per student. This implies the collection of an average of more than Maloti 100 (US\$7.1) per student per month through fees or donations, which can be a large

amount for poor rural families and communities. Table 13 shows that parents contributed about Maloti 150 million (US\$10.6 million) to secondary school funds in the schools that responded. According to the 2010/11 household survey (World Bank 2015, p. 56), “secondary education costs parents between Maloti 2,600 and Maloti 4,200, roughly comparable to four months’ family income.” Presumably, these amounts include the cost of school uniforms and hostels. The same report also points out that few school children receive scholarships. The ER42 for 2016 contains some information provided by teachers regarding the reasons for school dropouts. One-third of the more than 6,000 secondary school children who dropped out during 2016 stated the lack of funds as the main reason. Among girls, pregnancy or marriage together also contributed to one-third of dropouts. The next most common reason for dropouts for both girls and boys was having failed. Fifteen percent of secondary school boys who dropped out did so because they did not like school.

**Table 13: Secondary School Funds, 2015 (with 328 of 378 schools reporting)**

<b>Funding Source</b>	<b>Amount (in Maloti, millions)</b>	<b>%</b>
Opening balance	11, 849,309	5
Parents/guardians	150,123,285	65
Donors/funders	11,879,364	5
Government	25,782,033	11
Other sources	31,573,744	14
<b>Total</b>	<b>231,207,736</b>	<b>100</b>

*Source:* Calculated from EMIS data (form ER42 for secondary schools).

### *School Facilities*

71. **With its mountainous terrain and dispersed population, the provision of school facilities in Lesotho is expensive and challenging.** Due to the limited budget for construction and maintenance, school facilities are generally in poor condition. Approximately 295,000 of 360,000 students are accommodated in conventional classrooms. Among the remaining 65,000, many study in community halls or church facilities. A total of 15,000 attending school do so in the open air, and more than 1,100 children attend class in what are described by teachers as poultry houses. Only 9,500 latrines are available to children in primary schools, that is, around one per 50 children, of which only about 2 percent are described as flush toilets. The most common forms are so-called VIP toilets, so-called because they are regarded as better than toilets and pit latrines. Water provision to schools is also a major issue. Not all schools, especially those in the mountain areas, have access to clean running water.

### *Textbooks*

72. **The MoET provides textbooks to all children, but distribution logistics remain a major challenge.** Part of the policy of free education is to provide free textbooks in primary schools. The provision of stationery and textbooks to children in all grades throughout the country is generally well-organized by the MoET. The distribution of textbooks is, however, a major challenge. In fact, army helicopters are occasionally used to transport books and stationery to students in remote areas. Textbooks are usually reused the next year by the next cohort of children, thus reducing the need to supply new textbooks every year for every grade level. However, timely replenishment is necessary to replace damaged books and/or to provide for increased enrollments.

73. **At the secondary level, most of the costs for stationery and textbooks are charged to parents or guardians.** Parents are often responsible for the purchase of stationery and textbooks in regional centers, which are often located at long distances from their homes. In other cases, they rent books from the MoET through the schools. These costs, along with the costs of school fees and school uniforms, present a substantial hurdle to continue schooling for many children from poorer households. There are some modest

bursaries available for secondary school children, mainly orphans, but they reach only a limited segment of the population. Keeping the costs of textbooks low remains important for improving secondary school access.

### Tertiary education

74. **Nine public and five private institutions provide post-secondary education in Lesotho, with enrollments of 20,554 and 3,519, respectively, as of 2014** (Lesotho Country Diagnostic Study 2016, p. 95). Tertiary enrollment numbers have steadily declined from 26,580 in 2010/11, mainly because of the declining availability of bursaries. Almost 60 percent of enrollment is female. Somewhat more than half of the students are enrolled in diploma rather than degree courses. Table 14 provides a more detailed picture of tertiary enrollment. One-third of the students are studying education, with the goal of becoming teachers. This number is large considering that only about 200 teachers will retire per year over the next five years. The incentives for most of the students appear to be the very high premium paid to teachers who have an education degree.

**Table 14: Enrollment in Public and Private Tertiary Education Institutions in Lesotho, 2013/14**

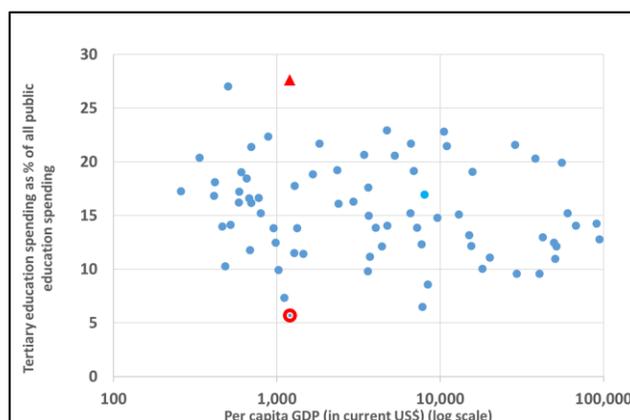
Educational Institution	Acronym	Female	Male	Total
Center for Accounting Studies	CAS	921	712	1,633
Institute of Development Management	IDM	315	171	486
Lesotho Agricultural College	LAC	227	219	446
Lesotho College of Education	LCE	2,862	1,268	4,130
Lesotho Boston Health Alliance	LeBoHa	1	—	1
Lesotho Institute of Public Administration and Management	LIPAM	258	79	337
Lerotholi Polytechnic	LP	913	1,884	2,797
Limkokwing University of Creative Technology <sup>a</sup>	LUCT	1,563	1,515	3,078
Maluti Adventist College <sup>a</sup>	MAC	142	42	184
National Health Training Center	NHTC	355	149	504
National University of Lesotho	NUL	5,918	3,636	9,554
Paray School of Nursing <sup>a</sup>	PSN	97	31	128
Roma School of Nursing <sup>a</sup>	RSN	93	25	118
Scott Hospital School of Nursing <sup>a</sup>	SSN	119	30	149
<b>Total</b>		<b>13,784</b>	<b>9,761</b>	<b>23,545</b>

Source: Lesotho Bureau of Statistics, 2015.

Note: a. Indicates a private institution.

75. **Spending on tertiary education by Lesotho's Government consists of two parts: a budget for the MoET and loan bursaries; the bursary scheme represents a significant amount of governmental spending.** The first part of the budget for tertiary education is managed by the MoET. The majority of the Maloti 121.5 million (US\$8.6 million) in 2015/16 was transferred to the NUL. The rest is spent on administrative costs for the MoET. The second part consists of loan bursaries provided by the NMDS in the MoDP and amounts to Maloti 661.6 million (US\$46.7 million). Although the budget for tertiary education is relatively small, the loan bursary scheme should be considered as a critical part of tertiary education spending. In Figure 14, the lower large dot represents Lesotho's share of spending on tertiary education if only the MoET budget is considered. However, the country becomes the highest spender on tertiary education when the loan bursaries are added. As only a small portion of these loans are recovered, it makes sense to regard the loan bursaries as part of current spending.

**Figure 14. Tertiary Education Spending as a Percentage of all Public Education Spending, 2013**



*Source:* Compiled from information from the WDI, 2017 and World Bank staff calculations and estimates. Dots represent all countries for which comparable data are available.

*Note:* Lesotho's ratios are shown by the two larger, red-colored markers. The lower large dot shows only expenditures by the MoET, and the higher large triangle includes loan bursary scheme expenditures by the NMDS as a part of tertiary education spending.

76. **When bursary scheme spending is included in tertiary education expenditure, the state spends much more on a tertiary than on a secondary student** (World Bank 2015). About three-quarters of tertiary students receive bursaries that fund both tuition and accommodations, and about 85 percent of tertiary students are from households in the upper two wealth quintiles. Moreover, due to limited employment opportunities in Lesotho, many students seek jobs in South Africa after graduation. Some students who receive larger bursaries also go to South Africa for their studies.

77. **The bursary scheme offers around 17,300 bursaries to students studying in higher education institutions, but only 4 percent of the funds is recovered.** Around 400 of these bursaries go to students studying in South Africa, ranging in value between Maloti 40,000 and Maloti 60,000 (US\$2,823 to US\$4,234) per student per year, whereas in Lesotho far smaller bursaries are paid, ranging between Maloti 7,000 and Maloti 60,000 (US\$494 and US\$4,234). Graduates are supposed to repay the interest-free loans on a sliding scale, depending on whether they are employed by the Government (50 percent) or in a private sector job in Lesotho (65 percent). Those employed in South Africa are supposed to repay 100 percent of the bursary that they would have received if they had studied in Lesotho rather than in South Africa. Actual repayments represent only about 4 percent of the annual outlays, not counting administrative costs.

78. **When tertiary institutions are pressed for funds, they often increase fees and obtain the funds from students; bursary values then increase to cover these costs.** Bursary levels are usually set to cover the cost of study and basic living expenses. In the case of Lesotho, the bursary scheme is often seen as an alternative way of funding the university and other institutions. In neighboring South Africa, qualifying (poor) students receive similar bursary funding from the National Student Financial Aid Schemes. However, the amount is fixed and not explicitly linked to short-term changes in student fees, which are usually already set in the previous year. A comparable scheme also operates in Namibia along similar lines as that of South Africa.

79. **According to a recent report, the bursary scheme in place today is neither effective nor sustainable** (Nehmé 2017, p. 6). The reasons include: (i) the fragmented governance and organizational structure; (ii) the lack of autonomous and transparent mechanisms to identify who should receive bursaries;

(iii) the absence of effective repayment and recovery mechanisms; (iv) the lack of transparency, knowledge and information about the program; (v) the absence of a proper accountability system; (vi) the lack of audit mechanisms at all levels (including at higher educational institutions); (vii) insufficient labor market analysis to inform the development of strategies and policies; and (viii) the lack of an integrated data system. The analysis concludes that the bursary scheme has a very low repayment rate of about 4 percent. In addition, the selection criteria are designed to support academic merit. However, the selection criteria do not provide for financial need. This tends to favor wealthier beneficiaries more than financially needy students. The report concludes that: “If the Government wants to increase the opportunity for poor students to attend higher education [institutions], the objective of the bursary scheme needs to be revised.” (Nehmé 2017, p. 6). The lack of labor market analysis also leads to a situation in which the choice of study programs to support is not in line with labor market needs. This is evidenced by the 8,000 student teachers in the higher education system, whereas there are only 15,000 teachers in the entire school system.

## **TVET and Adult (non-formal) Education**

80. **Technical education and training in Lesotho are still in their early stages of development; this type of education is still expensive, inefficient, and not well tailored to meet the needs of the economy.** Only 1 percent of the MoET’s spending is allocated to TVET. According to the Lesotho Country Diagnostic of 2015, TVET “costs six times more than a general secondary education, and only a third of its graduates pass skills tests. In 2007, only 166 TVET students qualified for graduation.” Two of the eight TVET training institutions, the Lerotholi Polytechnic and the Thaba-Tseka Technical Institute, are completely government-funded. The Government funds the salaries of the other six training institutions, which are all church-owned (Lesotho Review 2015). Due to the lack of comprehensive labor market analysis, it is not clear whether the courses offered meet the real needs of employers. There are also church and private providers offering non-formal training and traditional apprenticeships. Government support for non-formal education (for example, literacy and adult basic education) is mainly channeled through the Lesotho Distance Teaching Center (LDTC), which offers various secondary-level courses (Lesotho Review 2015). The Institute of Extra-Mural Studies (IEMS) in the NUL also provides a range of courses. (Lesotho Review 2015).

81. **The MOET is currently considering a three-stream system at secondary schools, which would include vocational and technical training parallel to the traditional academic routes.** The plan is that artisanal training would be provided in junior secondary schools and technical and vocational training at the senior secondary level. The feasibility of introducing this at scale is doubtful, considering the many small schools, and the need for new curricula and trained teachers. Building and expanding the few technical schools that exist so that they can perform better appears a more viable option.

## **VI. Equity and Performance of the Education System**

### *Education and Labor Market Outcomes*

82. **Returns to education in the labor market are estimated to be relatively high, indicating the value of education in terms of higher future earnings.** It has been estimated that each year of primary education raises the earnings of workers by about 8.0 percent, compared to 8.5 percent for junior secondary schooling, and 9.2 percent for senior secondary schooling. “The benefit-to-cost ratio, defined as the ratio of the contribution to total social outcome of each year of schooling to per student cost per year of schooling is 69:1 for basic education, 35:1 for junior secondary, and 16:1 for senior secondary education, reflecting the much higher costs of secondary education.” (IDA 2016, p. 101). These are high rates, indicating that there is much to be gained by improving one’s educational attainment. However, high unemployment and the inadequate quality of education, often combined with much repetition, reduce the attractiveness of

education to many individuals. Improving educational quality is therefore an imperative. Inadequate education is, in itself, a major factor reducing the likelihood of finding employment. The proximity of the South African labor market offers some opportunities for workers to sell their labor in that market, although there are obstacles to doing so freely. However, the much higher returns to professionals, such as doctors or accountants, makes it difficult for Lesotho to retain such workers, especially as there are fewer restrictions on employment of such personnel in South Africa. Also, remittances from people working in South Africa are an important source of income for many households in Lesotho.

#### *Weak Grade Progression and Test Performance*

83. **The need to reduce the burden of the high costs of secondary education for the poor, as well as to improve progression to higher grades, is likely to place upward pressure on education expenditures.** The low rate of progression to secondary school and the even lower completion rates of secondary education are symptomatic of inadequate learning in schools and the high costs of secondary school to parents and children. As noted, it also “reflects the level of poverty, the distance to schools, and the condition of schools.” (World Bank 2015). One key sign of the inadequacies of the school system is the low rate of progression to higher grades.

84. **Lesotho children generally perform poorly on cognitive tests.** Lesotho takes part in SACMEQ, but students performs poorly in both the reading and the mathematics tests that form part of this international educational evaluation. Lesotho scored 468 on the SACMEQ III reading tests in 2011 compared to the average of 513 for the 15 participating countries. That means 45 points or 0.45 of a standard deviation below the average for the countries of southern and eastern Africa. In mathematics, Lesotho scored 477 as compared to the SACMEQ average of 512, a deficit of 0.35 of a standard deviation.<sup>10</sup> As in all countries, the scores varied between children from richer and poorer households. However, it is interesting that the gap between the wealthiest and the poorest quintiles of students in Lesotho was only around 30 points for both reading and mathematics, and there was almost no gender gap. Altogether 21 percent of the Grade 6 learners performed at such a low level that they could be regarded as functionally illiterate; another 42 percent can be classified as functionally innumerate (Spaull 2012). Combining the household survey and SACMEQ data, Taylor and Spaull (2015) estimate that only 61 percent of the age cohort is functionally literate, and a further 9 percent have acquired higher order reading skills. Regarding numeracy, the situation is even bleaker: 50 percent are functionally innumerate and only 2 percent have acquired higher order numeracy skills. This weak performance is even more worrying, as it occurred despite Lesotho having more educational resources than the SACMEQ average. Apart from the lower student-teacher ratio mentioned earlier, 56 percent of Lesotho students had their own reading and mathematics textbooks. However, the numbers for SACMEQ were much lower by about a quarter. As far back as 2011, almost all (96 percent) students reported receiving a free meal at school compared to an average of only 29 percent across participating countries. (Spaull 2012).

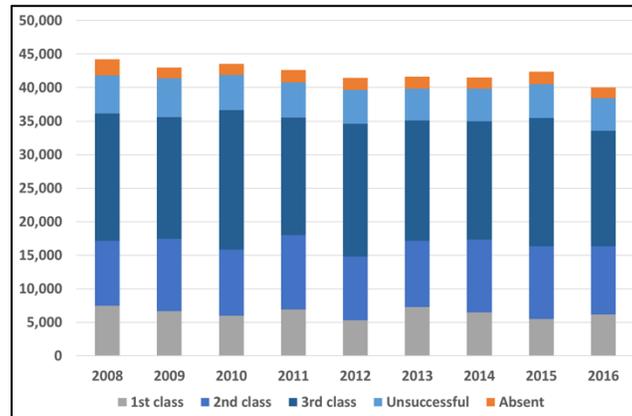
85. **Internal examinations also indicate weak performance on external tests.** The Primary School Leaving Examinations written in Grade 7 have been the measure by which many parents judged school performance over the years. As such, its demise (it was phased out in 2017) may leave an information gap that may in turn reduce accountability in the primary schools. Continuous assessments at the school level will offer an alternative source of information, albeit perhaps more susceptible to differential assessments in the various schools. The data for the past nine years, presented in Figure 15 and

---

<sup>10</sup> At SACMEQ IV, Lesotho’s performance in English and Mathematics has slightly improved. However, its scores are still low compared with the regional average.

86. Table 15, show that there has been no progress in primary school performance. Assuming that the difficulty level of the examination has remained broadly constant, there has been a decline in the numbers of students writing and passing the exams. This indicates that neither learning nor progression through primary school have improved. An analysis of the results of the Junior Certificate (JC) examination in Grade 10 in Figure 16 shows very similar conclusions as that for the PSLE. There does not appear to be progress in the movement to Grade 10, nor in the results achieved there. Altogether, the education system seems stagnant and not geared to enhancing performance.

**Figure 15. PSLE Examination Results, 2008–2016**



Sources: ECoL 2015c, 2016b.

**Figure 16. Junior Certificate Examination Results, 2011–2016**



Sources: ECoL 2015c, 2016b.

**Table 15: PSLE Results, 2008–2016**

CLASS	2008	2009	2010	2011	2012	2013	2014	2015	2016
1st class	7,461	6,664	5,954	6,920	5,286	7,275	6,506	5,519	6,182
2nd class	9,663	10,762	9,877	11,107	9,489	9,863	10,844	10,843	10,162
3rd class	19,008	18,156	20,803	17,528	19,810	17,951	17,619	19,117	17,234
<b>Total passes</b>	<b>36,132</b>	<b>35,582</b>	<b>36,634</b>	<b>35,555</b>	<b>34,585</b>	<b>35,089</b>	<b>34,969</b>	<b>35,020</b>	<b>33,578</b>
Unsuccessful	5,705	5,815	5,235	5,197	5,076	4,738	4,848	5,043	4,874
<b>Total who wrote</b>	<b>41,837</b>	<b>41,397</b>	<b>41,869</b>	<b>40,752</b>	<b>39,661</b>	<b>39,827</b>	<b>39,817</b>	<b>40,063</b>	<b>38,452</b>
Absent	2,357	1,611	1,675	1,883	1,799	1,827	1,690	1,864	1,591
<b>Total registration</b>	<b>44,194</b>	<b>43,008</b>	<b>43,544</b>	<b>42,435</b>	<b>41,460</b>	<b>41,654</b>	<b>41,507</b>	<b>41,927</b>	<b>40,043</b>

Sources: ECOL 2015c, 2016b.

**Table 16: Junior Certificate Examination Results, 2011–2016**

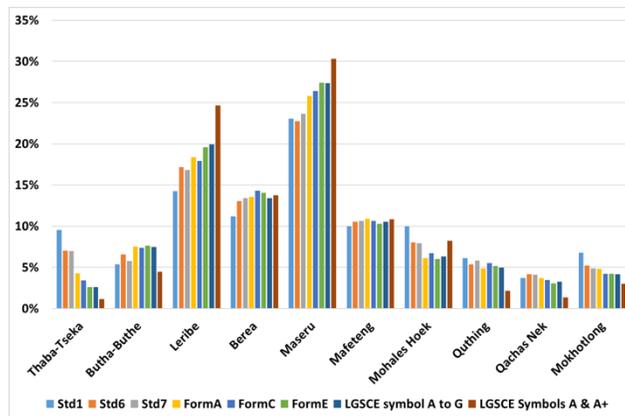
CLASS	2011	2012	2013	2014	2015	2016
1st class with merit	352	369	379	306	418	288
1st class	1,582	1,706	1,567	1,412	1,384	1,388
2nd class	10,679	10,285	10,596	10,490	10,425	10,641
3rd class	1,943	2,279	2,320	2,648	2,603	2,377
<b>Total passes</b>	<b>14,556</b>	<b>14,639</b>	<b>14,862</b>	<b>14,856</b>	<b>14,830</b>	<b>14,694</b>
Ungraded/fail	6,454	6,775	6,032	6,832	6,848	6,620
<b>Total who wrote</b>	<b>21,010</b>	<b>21,414</b>	<b>20,894</b>	<b>21,688</b>	<b>21,678</b>	<b>21,314</b>

Sources: ECoL 2015b, 2016a.

87. The Lesotho General Certificate of Secondary Education (LGCSE) was offered for the first time in 2015, thereby replacing the Cambridge O-level examinations. As such, it is not possible to analyze performance trends. However, they do allow for analysis of district performance in terms of the distribution of enrollment in various grades from primary to secondary school, as well as of passes and first class (A or A plus) performances across districts. Figure 17 shows that the higher the grade or the performance level measured, the more the urban districts of Maseru, Leribe, and to some extent Berea, outperform other districts. Thus, the bars for these districts rise from left to right, and a strong declining percentage share is observed for Thaba-Tseka..

88. Table 17 accompanying the graph is useful in analyzing this phenomenon in more detail.

**Figure 17. Performance Distribution across Districts in Various Grades on the LGCSE Exams, 2015**



Sources: Derived from EMIS data (ER42 forms) and ECoL 2015a.

**Table 17: District Shares of Total Enrollment in Selected Grades and Performance on the LGCSE**

District	Enrollment						LGCSE performance	
	Grade 1 (%)	Grade 6 (%)	Grade 7 (%)	Form 1 (%)	Form 3 (%)	Form 5 (%)	A to G (Pass)	1 <sup>st</sup> class (A and A+) (%)
Thaba-Tseka	10	7	7	4	3	3	3	1
Butha-Buthe	5	7	6	8	7	8	7	4
Leribe	14	17	17	18	18	20	20	25
Berea	11	13	13	14	14	14	13	14
Maseru	23	23	24	26	26	27	27	30
Mafeteng	10	11	11	11	11	10	11	11
Mohales Hoek	10	8	8	6	7	6	6	8
Quthing	6	5	6	5	6	5	5	2
Qachas Nek	4	4	4	4	3	3	3	1
Mokhotlong	7	5	5	5	4	4	4	3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Sources: Derived from EMIS data (ER42 forms) and ECOL 2015a.

## VII. Conclusions and recommendations

89. **This chapter investigated the broad fiscal situation of Lesotho’s educational system** and some of the structural issues related to it. From the analysis, it is apparent that the under-development of the secondary school system — particularly issues of access and equity — constrains the system in its quest to provide the human capital that Lesotho needs to further socioeconomic development. The next chapter will look at the possibility of expanding secondary enrollments, including the fiscal costs associated with doing so. To conclude this chapter, a summary of some main findings and suggestions for short- to medium-term actions are presented.

90. **The education system is performing inadequately and appears to be stagnant, with stabilized student flows, but high-grade repetition and dropout rates.** The result is that only a small proportion of children reach the higher grades of secondary school. This is also reflected in examination results. The high repetition rates imply very high numbers of students still in primary school, although some children never enter school, and many drop out early. For instance, the projected total number of children of primary school age (ages 6 to 12) was only 343,068 for 2016 (based on the United Nations Population Division’s 2012 projections of single age groups), whereas the actual numbers in primary school were 29 percent higher at 443,078. The most extreme example is in Grade 6, where the number of children was more than 50 percent greater than the number of 11-year-olds, the age group that should be in Grade 6.

91. **The system is inequitable in terms of educational outcomes.** Poor children in deep rural areas (mountainous areas) are particularly affected by inadequate learning in the early grades. Those who do manage to remain in school until the end of primary school often face much greater difficulty in accessing secondary schools, both because of distance and due to the high costs of secondary education.

92. **Poor planning and resource management are the main causes of inadequate educational outcomes:**

- The lack of an established/official list of teachers in schools (this is closely linked with the next two points);

- Unwarranted variations in student-teacher ratios for schools with similar enrollments. This is closely related to the lack of a coherent and consistent policy for appointing additional teachers or reducing teacher numbers in schools when enrollment declines;
- Incentives for teachers to increase their qualifications to become senior teachers, while remaining in their previous position with no additional responsibilities — but with a considerably higher salary;
- Excessive numbers of student teachers in the NUL and the Lesotho College of Education, given the limited attrition of the current teaching corps;
- Lack of proper usage of the EMIS as an important data source and education management tool.

93. **Recommendations for Short- and/or Medium-term Actions:**

- Create an established/official list of teachers for every school based on enrollment and factors, such as subject choice. This should distinguish between teachers and senior teachers, with additional responsibilities for senior teachers. Teachers should compete for the position of senior teachers in schools throughout the country. This will mean that teachers who wish to hold such positions may, in many cases, be required to move to more isolated, rural communities. If qualifications were a requirement for competing for higher remunerated positions (that were limited in number and part of the establishment of schools), then such seniority would be linked to taking on greater responsibilities. Create a salary scale for current senior teachers who do not obtain the new senior teacher positions, whereby their salary advantage over ordinary teachers will be reduced over time.
- Lesotho's student-teacher ratios are relatively favorable and could be increased somewhat when setting the established/official teacher lists at the school level, but without endangering education quality. There may be scope for reducing staff numbers through attrition and elimination of substitute teachers.
- Use attrition to reduce teacher numbers in schools where there currently is overstaffing. Attrition of teachers appears to be around 1.5 percent per year for the next five years.
- Manage the salary bill by limiting salary increases. Given the over-supply of teachers, allowing salary scales for new teachers to decline in real terms would probably not affect teacher supply greatly.
- Bursary allocations for tertiary studies are poorly targeted in both equity terms (most beneficiaries are from better-off households), as well as the needs of the economy (as evidenced by the large numbers enrolled in education studies compared to the supply of such positions). Setting fees and bursary values and numbers has largely become a strategic game played between the NMDS and tertiary institutions that contributes little to greater efficiency of spending.
- The discontinuation of the PSLE and its replacement with internal assessments within schools are likely to lead to less repetition in the preceding grade, Grade 6. It will affect promotions to Grade 7 and, perhaps also beyond that, to secondary school. This should be monitored to ensure that the necessary resources are put in place to deal with the increased numbers.

- The discontinuation of the PSLE creates a need for regular external assessment of learning in primary schools to provide systematic and regular information about cognitive development. It can also help to evaluate alternative ways of improving learning. The ministry, through ECoL, is already doing regular national learning assessments for G4 and G6. It would be helpful to make this kind of national assessment more systematic and use the results to make changes at classroom level. At the same time, it is important to develop effective continuous assessments at the school level. Testing reading in the early grades is of particular importance, as poor performance has spillover effects at higher grades and contributes to higher repetition and dropout rates. Strengthening early learning can benefit from more graded readers and more reading material in the Sesotho language, especially considering that few households have any reading material that can assist in the quest for literacy.

## Chapter II: Expanding Secondary Education in Lesotho

### I. Background

25. **Lesotho has made large gains in primary education enrollment, in part due to the introduction of free primary education.** However, the country lags behind other southern African countries in secondary education. Enrollment data suggest very slow progression through schools and high dropout rates, particularly in the mountain areas. Compared to primary schools, secondary schools are expensive and less accessible.

26. **Education has the biggest budget share, but performs poorly and even with this large share, the proportion of children who access secondary education is still low.** Public spending on education accounts for 9 percent of GDP and 14 percent of the total budget in 2015/16. However, it delivers poor services. Nearly 96.2 percent of spending is for recurrent expenditures, whereas only 3.8 percent is for capital investment. Among those who complete basic education, many lack basic literacy and numeracy skills. Student flows have stabilized, but with high repetition and high dropout rates. Only a small proportion of children reach the higher grades of secondary school. Poor children in deep rural areas (the Mountain zone) are particularly affected by poor learning in the early grades and face much greater difficulty in accessing secondary schools. Secondary education is a privilege largely for the rich, which constrains employment for the poor, hindering poverty reduction.

27. **This chapter assesses the cost of expanding secondary education in line with the government's goal of universal compulsory lower basic education by 2020** (MoET 2016). The chapter includes an assessment of overall sectoral budgeting and the structure of budget allocation across sub-sectors, as well as within secondary education. As such, recommendations can be made to the government regarding how to better utilize the funding for the sector, taking into account the budget constraints at the macro level.

28. **The analysis will place a particular focus on drawing the poor into higher levels of education.** The problem of access will be illustrated by data on student flows through the education system drawn from the Education Management Information System (EMIS) and gathered in the Annual School Census. This topic will also be covered in the enrollment trends section.

### II. School Enrollment Trends

29. **Difficult access and high costs lead to low progression rates to secondary school, as well as high dropout rates.** This is evident from Table 18, which shows enrollments, including also the net and gross enrollment ratios in the different school phases. The net enrollment ratio (the proportion of the appropriate age group that is actually in the correct phase) is 80 percent for primary education, 34 percent for junior secondary education, and 14 percent for senior secondary education, based on United Nations Population Division numbers.<sup>11</sup> As there are more than four times as many primary as secondary schools, many children who wish to continue to secondary school have to travel long distances at significant cost, which is seldom possible because of limited transport opportunities. In addition, many students and their families cannot afford to pay for staying in boarding schools or rented accommodations. Only three-quarters of secondary students are day students, 8 percent are boarders in school hostels, and 16 percent stay in rented accommodations (Table 19). Travel, boarding, and renting accommodations all contribute to the high costs of attending secondary school. There are also other costs to be considered, such as school fees, examination fees for the two major examinations (in Forms III (grade 10) and Form V (grade 12)), school uniforms, renting or buying textbooks, buying stationery, and so on. Compared to primary school, where

---

<sup>11</sup> Lower census-based population estimates imply slightly higher enrollment ratios.

most costs are borne by the state, secondary school can be prohibitively expensive for most children from poor households, as well as less accessible. This leads to a sharp drop in participation in the secondary age groups (see Figure 1). However, once the cost of secondary education declines, there is likely to be an expansion of education demand at this level. This would in turn require more teachers over the medium to long run, despite the current low student-teacher ratio.

**Table 18: Enrollment in Primary, Secondary and Vocational Schools, including Net and Gross Enrollment Ratios, 2017**

	Primary	Secondary			Vocational education
		Junior secondary	Senior secondary	Total secondary	
<b>Total enrollment</b>	354,189	94,268	34,668	128,936	4,651
<b>Enrollment of the appropriate age group</b>	274,676	47,008	12,847	59,855	-
<b>Population of appropriate age: UNPD estimate</b>	348,170	143,654	97,796	241,450	-
<b>Census-based estimate</b>	306,669	127,109	83,946	211,055	-
<b>Net enrollment ratio (UNPD)</b>	79%	33%	13%	38%	-
<b>Net enrollment ratio (Census)</b>	90%	37%	15%	44%	-
<b>Gross enrollment ratio (UNPD)</b>	102%	66%	35%	53%	-
<b>Gross enrollment ratio (Census)</b>	115%	74%	41%	61%	-

*Source:* Enrollment data are derived from the EMIS, and the United Nations Population Division single-year estimates based on UNPD 2017. Census estimates are based on data from the 2016 Census (Lesotho Bureau of Statistics 2017), and smoothed and unadjusted for undercounting. Census-based estimates for 2017 were assumed to be the same as for 2016, as population growth in the affected age cohorts is close to zero (see UNPD projections). Note that the net enrollment rate expresses those students in a particular school phase that are *of the correct age group relative to the population estimate for that age group*. This explains why the net enrollment ratio of secondary education as a whole is much higher than that for junior and senior secondary education separately. Many junior secondary students are too old for the Junior Secondary phase, but not too old for secondary schools as a whole.

**Table 19: Day Students, Boarders and Students Living in Rented Accommodations in Secondary Schools by Zone, 2017**

	Day students (%)	Boarders (%)	In rented accommodations (%)	Total (%)
<b>Lowlands</b>	79	6	15	100%
<b>Foothills</b>	78	11	12	100%
<b>Senqu River Valley</b>	63	20	17	100%
<b>Mountains</b>	59	11	30	100%

*Source:* Calculated from EMIS data.

30. A variety of factors make growth of secondary enrollment likely in the near future.

(a) The Primary School Leaving Examination that had acted as a barrier to progress to secondary schools was abolished in 2017. Around 13 percent of students failed this examination annually and could not continue on to grade 8. Furthermore, many primary schools held back weaker students likely to fail the PSLE to prevent them from reaching grade 7. This was done so that the school could maintain a good performance rating in the PSLE. This incentive for high repetition has now disappeared. Thus, the progression rates through primary school and the transition rates from grade 7 to grade 8 are expected to both improve.

(b) The 2017 grade 7 cohort is 15 percent larger than that of 2016, which resulted from greater “crowding” in grade 4 in 2014 than is customary (that is, more students failed grade 4 the previous year and fewer failed grade 3). Although this appears to be a one-time phenomenon, it is likely to boost the numbers transitioning to secondary school.

(c) The Government of Lesotho had already committed itself to free and compulsory primary and junior secondary education in 2005. It set out to “Ensure that all children have access to and complete 10 years of quality basic education” and to “Improve all aspects of the quality of [the] basic education sector now that completion of primary education is reaching high levels” (Lesotho Education Sector Plan 2005-2015, p. 43). This could become an even more prominent goal in future education planning. Improved primary education, if achieved, would accelerate flows through the primary school system, thereby encouraging more children to continue to higher levels of education. The free or reduced cost of junior secondary education would have a similar effect.

(d) The reduction of Acquired Immune Deficiency Syndrome (AIDS)-related deaths from a peak of 15,000 in 2005 to 4,900 in 2017 (UNAIDS 2017) led to fewer orphans. There are also now fewer children living with Human Immunodeficiency Virus (HIV). According to the United Nations Programme on HIV and AIDS (UNAIDS), around 16,000 children below the age of 14 are living with HIV. The reduction in disease rates will improve the home circumstances and the health of many children, thereby encouraging more children to remain in school. Between 2013 and 2017, the number of orphans identified by primary or secondary schools in the ER42 declined by almost 40,000, or one-quarter. This may be because the extent of the pandemic has declined, or because it has been socially better accommodated in terms of living arrangements and the care of children.

(e) Lesotho is currently far behind other countries of the South African Customs Union in terms of student progression to secondary school and beyond. This is likely to spur the government to reduce this gap. Moreover, as SACU countries largely compete for many jobs in the same labor market, the need for better educated workers to compete in this market will grow. It will also probably further stimulate the demand for higher education in Lesotho.

31. **The broad stability of the enrollment pattern for the secondary school grades from 2013 to 2017, as shown in Figure 8, reflects the continued sharp dropout rates from schools in the higher grades.** School participation rates are relatively high between the ages of 8 and 14. The seeming discrepancy between enrollment by age and enrollment by grade is explained by high repetition rates in primary school. This, along with some instances of late school entry, leads to a situation where many children of secondary school age are still in primary school.

**District and gender factors also play a contributory role in enrollment, repetition, and dropout rates.** Table 9 showed that the school population is not currently growing, even though the school-age population is still exhibiting moderate growth.

32. Table 10 shows the proportion of all enrollments for both boys and girls in secondary schools for all districts. This figure is much higher for girls (29 percent) than for boys (23 percent), and there are also major differences across districts. The low proportion of enrolled boys that have reached secondary schools in Thaba-Tseka (only 10 percent) contrasts sharply with the 34 percent of girls enrolled in secondary school in Leribe, and the 32 percent in four other districts. Even among girls, progression to secondary school is low in Leribe, whereas it peaks at 26 percent among boys in Maseru and Leribe. While Maseru, Leribe, and Berea districts constitute 48 percent of all Grade 3 students, their share rises to 60 percent by Form V, largely because most other districts experience relatively more dropouts in these higher grades.

33. **Apart from schools located in the Lowlands, the over-age problem is severe toward the latter part of primary school.**

34. Table 20 shows that 33 percent of grade 6 students are aged 11 or younger in the Lowlands, as compared to only 16 percent in schools in the Mountain zone; and 62 percent are overaged by just one year or less in the Lowlands compared to 40 percent in schools located in the Mountain zone. In the latter zone, 37 percent of students in grade 6 were already at least 3 years overaged. The overage problem results from a combination of late enrollment and repetition. The situation in schools located in the Foothills zone or the Senqu River Valley is somewhere between these two extremes. Given high repetition rates in grade 6, by grade 7, about 51 percent of students still in the school system are at least two years overaged.

**Table 20: Age Distribution in Grade 6 by Zone, 2017 (correct age for Grade 6 is 11 years)**

	Lowlands (\$)	Foothills (%)	Senqu River Valley (%)	Mountain (%)	Total (%)
Correct age or less	33	25	21	16	27
One year overaged	29	27	25	24	27
Two years overaged	19	22	23	24	21
3 years over-aged	10	13	15	17	12
4 or more years overaged	9	13	16	20	12
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

*Source:* EMIS data.

35. **High rates of repetition in primary schools are a precursor to dropout toward the end of primary school.** Even among those who do continue on to junior secondary school, repetition in earlier grades makes it more likely that students will drop out of junior secondary school. Mingat and others (2016, pp. 92-3) find that students who have had to repeat a grade several times in primary school are less likely to succeed in junior secondary school than students who had performed similarly on the PSLE.

36. **Enrollment and progression through the school system strongly favor the richer families and are lower among boys than among girls.** The primary net enrollment rates (the number of children of the primary age group who are enrolled and in the primary grades) differ greatly by socioeconomic status (Table 11). Data from the Demographic and Health Survey of 2009 show that the primary net enrollment rate ranged from 90.5 percent in the poorest quintile to 97.4 percent in the richest quintile for both genders combined. However, the aggregate rate was almost 4 percentage points higher among girls. At the secondary level, the inequality in access by socioeconomic status was much higher, with the average net enrollment rate ranging from 61 percent in the richest quintile to less than 11 percent in the poorest — including a 10-percentage point differential between boys and girls. Poorer children and boys show less progression through the primary grades, with many poor children dropping out of school altogether before reaching high school. This very steep gradient in secondary net enrollment reflects inadequate teaching and

learning in many schools, as well as the high cost of secondary education for children from poor households. This is exacerbated by the lack of schools offering secondary education, making access to secondary schools very difficult. The World Bank Report (2015) noted that the low secondary enrollment “... stems from: poor rates of completion and learning in primary schools, the secondary-level fee policies that restrict demand for education, the still-widespread lack of supply of secondary education, especially in rural areas, and the scale of absolute poverty...The non-participation reflects the level of poverty, the distance to schools, and the condition of schools. Boys tend to drop out to engage in herding.”

### III. The Cost of Secondary Education to Parents and Students

37. **The cost of secondary education still largely rests on parents and communities.** An indication of the costs that typically arise for children in secondary education can be gleaned from Table 21, which is based on World Bank team interviews during visits to four schools spanning all four ecological zones (including the Mountain, the Senque River Valley, the Foothills and the Lowlands zones). For a day scholar, the annual costs range between about Maloti 7,400 and Maloti 9,100 (US\$522 to US\$642 equivalent), and around Maloti 9,200 to Maloti 12,700 (US\$649 to US\$896 equivalent) for a boarder. There are also added examination fees for children writing the Form III (grade 10) and the Form V (grade 12) examinations in the amounts of Maloti 905 and Maloti 1,600 respectively (US\$64 to US\$113 equivalent). For a boarding student, this cost is approximately the same amount as the per capita GDP of Lesotho, making it virtually impossible for most children from poor households to access secondary education without bursaries. The cost to parents of enrolling children in schools is a little lower if schools are within walking distance of a student’s home. However, this cost could still be prohibitive for many children from rural backgrounds.

**Table 21: Indicative Costs by School Level Based on Four Schools Visited, 2018 (in Maloti)**

Cost Item	Lowest	Highest	Average
School Fees	1,200	3,315	2,053
Boarding Fees	1,750	3,600	2,698
Book Fees (rental)	220	220	220
Book Fees (paid by student)	1,000	3,000	2,000
Stationery (paid by student)	500	500	500
Computer Fee	0	400	100
Uniform cost	300	1,000	581
Sports Fee	100	100	100
School Educational Trips	200	200	200
<b>Total excluding exam fees:</b>			
• Day scholars	7,435	9,120	8,451
• Boarders	9,185	12,720	11,149

*Source:* Information obtained from World Bank team visits to four schools.

*Note:* Grade 10 students also pay an exam fee of Maloti 905 (US\$64 equivalent) and grade 12 students an exam fee of Maloti 1,600 (US\$ 113 equivalent).

38. **Parents and communities also make other contributions to school funds** that may not be fully captured in the costs noted above. Revenue from school fees does not accrue to the MoET, but to individual schools and their governing bodies. From the available data in the ER42 forms of 2017, the average financing (excluding the opening balance) was Maloti 1,451 (US\$102 equivalent) per student. This implies the collection of on average more than Maloti 120 (US\$8.50 equivalent) per student per month through fees or donations, which can be a large amount for poor rural communities and families. Table 22 shows that parents contributed about Maloti 180 million (US\$12.7 million equivalent) to secondary school funds. According to the 2010/11 household survey (World Bank 2015, p. 56), “secondary education costs parents between Maloti 2,600 and Maloti 4,200 (US\$545), roughly comparable to four months’ family income.”

Presumably, these amounts include school uniforms and hostel costs, although household surveys often have difficulty in accurately capturing such costs. The ER42 for the years 2013 to 2017 contains some information provided by teachers about why certain children left schools. Among boys in secondary school, the main reasons mentioned were that they did not like schooling, that they had to attend initiation school, or that they had to do herding. For girls, the major reason was marriage or pregnancy, followed by dislike of schooling. The next most common reason mentioned for both boys and girls who dropped out of school was lack of funds, a factor that is mentioned increasingly often (in 10 percent of cases in 2013 and in 15 percent of cases in 2017), especially among girls. However, this trend is not observed in primary education, which is free.

**Table 22: Funds Received by Secondary Schools, 2017 (excluding net opening balances of Maloti 16.7 million – US\$ equivalent)**

Source	Amount (in million Maloti)
Opening balance	16.7
Donors/Funding	13.4
Parents/Guardian	180.4
Government	25.8
Other Sources	36.0
<b>Total</b>	<b>255.5</b>

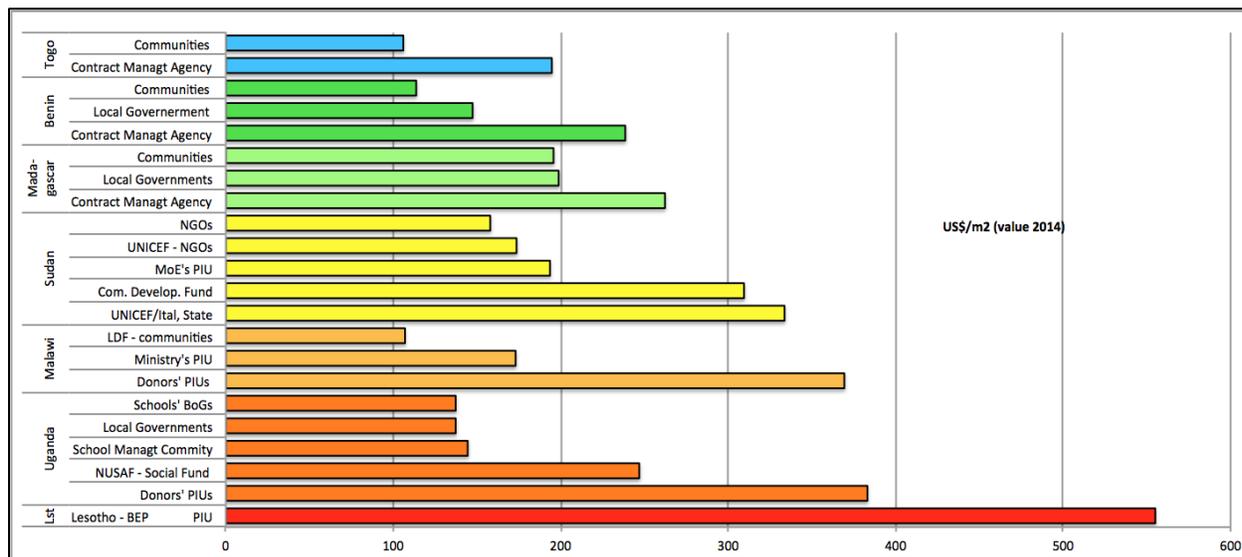
*Source:* Calculated from EMIS data (form ER42 for secondary schools).

39. According to information provided by schools in the ER42 forms, altogether 2,382 secondary students received bursaries or support in 2017. Almost 90 percent of these were provided by three main sources with similar numbers of bursaries: The Ministry of Education and Training (739 bursaries), the National Manpower Development Secretariat in the Ministry of Development Planning (674), and the Ministry of Social Development (671). This is far fewer than the 22 percent of junior and 40 percent of senior secondary students that are said to receive bursaries (World Bank 2015). In addition, the value of the secondary bursaries largely covers the cost of school fees but is much less than the tertiary bursaries paid by the National Manpower Development Secretariat to 60 percent of tertiary students.

#### **IV. The Infrastructure Cost of Providing Secondary School Places**

40. **The average unit cost of school construction is higher in Lesotho than in most comparable countries.** Figure 18 shows the cost of school construction for a sample of countries using different modalities of construction. The Lesotho average is 50 percent more expensive than the most expensive other example, something Theunynck (2015a, pages 111, 112) ascribes to low intensity of competition in construction in Lesotho, among other factors. Yet, MoET officials mention the large number of tenders received for recent school building projects. They ascribe the high costs largely to topography and accessibility issues of building terrains.

**Figure 18: Cost of Classroom Construction in Lesotho Compared with Some Other Countries, 2015 (in US\$ per square meter)**



Source: Theunynck 2015a, 2015b.

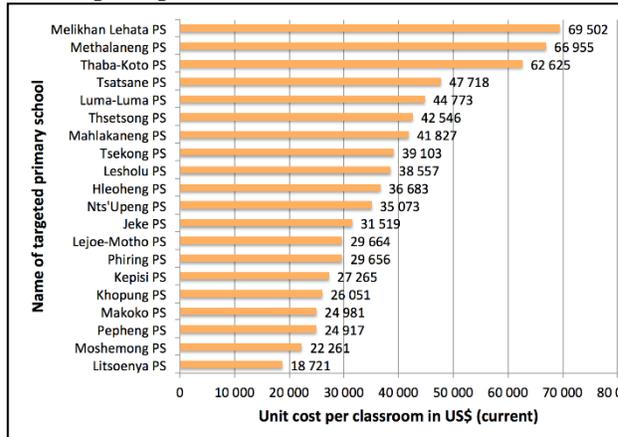
Note: BEP=Basic Education Project; BoG=Board of Governors; LDF= Local Development Fund; m2= square meter; MoE= Ministry of Education; NGO= non-governmental organization; NUSAF= Northern Uganda Social Action Fund; PIU= Project Implementation Unit; UNICEF=United Nations International Children's Emergency Fund.

41. **Not only are unit costs high in Lesotho, but they also vary greatly between different contracts** (Figure 19). Factors such as site accessibility, topography (sloping of the site), hard and soft rock, and distance can influence construction costs and help to explain these differences. Different construction modalities can also explain variances in construction costs<sup>12</sup>. This is not something unique to Lesotho. Indeed, costs for constructing classrooms in Senegal using a similar architectural design and technology ranged over a factor of 7 to 1 between the least and the most expensive (that is, from US\$6,700 to US\$48,000) (Theunynck 2009, p. 32).

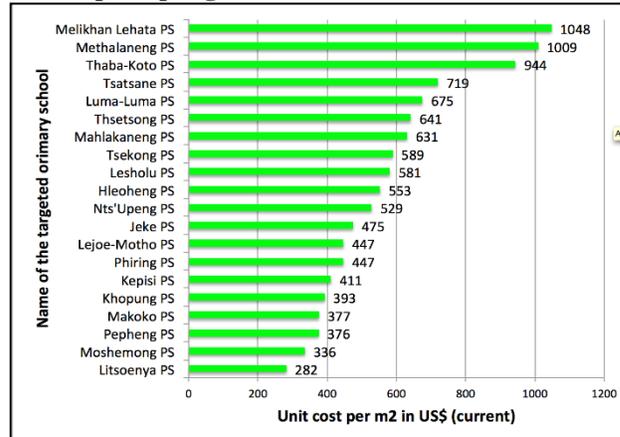
<sup>12</sup> In a book that addresses the cost of construction of primary schools in Africa for the Education for All initiative, Theunynck (2009, p.141) specifically contrasts construction costs using conventional construction modalities with community-driven construction initiatives. The total costs of US\$15,230 for the former contrast with the US\$11,665 for the latter. An even lower figure than either of these is used by Lewin in calculating the costs of secondary school expansion in Africa. He considers it appropriate to use an amount of \$10,000 per classroom (Lewin 2007b).

Figure 19: Cost of Classroom Construction in Lesotho, 2015, US\$

A. Unit price per classroom



B. Unit price per gross m<sup>2</sup> of classroom



Source: Theunynck 2015a, p. 8.

Note: m2= square meter; PS=primary school.

42. **Construction costs in Lesotho vary significantly.** In four Japan International Cooperation Agency (JICA)-financed construction projects of lower secondary schools in Lesotho, the average construction cost of schools consisting of ten classrooms — one block combining a science laboratory and administration offices, a staff house, and latrines for boys and girls — was almost Maloti 4.5 million (US\$318,000 equivalent) in 2011 (Theunynck 2015a, p. 11). After allowing for inflation, this might be considered an appropriate cost for building new schools using conventional modalities, although the cost in remote areas may be as much as a third higher, around Maloti 8.7 million (US\$614,000 equivalent) in current costs, a value that will be used in the cost projections. The costs would amount to around Maloti 435,000 (US\$30,700 equivalent) per classroom in current values, if the cost of the science and administration block were excluded. Even higher cost estimates were obtained from the MoET’s Education Facilities Unit, whose indicative quotes for the construction of a block of 3 classrooms amounts to around Maloti 593,000 (US\$41,800 equivalent) per classroom, similar to the cost per classroom of the Tsatsane Primary School, fourth from the top in the list of 20 projects in Figure 19. Two other estimates that the Education Facilities Unit (EFU) provided, however, were lower priced: around Maloti 400, 000 (US\$28,200 equivalent) per classroom for blocks of 1one or two classrooms. In addition, they noted that factors such as site accessibility, topography and distance can affect construction costs.

V. Secondary School Teachers

43. **As discussed in Chapter I, the student-teacher ratio of 30 for the country as a whole is low in the context of developing countries.** There is little attrition among teachers and few retirements. Around 200 teachers are due to retire annually in the next five years, far fewer than the number of prospective new student teachers undergoing training.

44. **School staffing norms are largely based on student-teacher ratios.** In the absence of an established/official teacher list at schools, schools that apply for additional teachers need to justify requests for additional substitute or permanent teachers on their staff.

45. **Teacher salary levels in Lesotho are high** compared both to those in other lower-middle-income countries, as well as to salaries earned by other individuals with similar qualifications in Lesotho — despite high levels of unemployment among potential teachers. The average secondary teacher salary is 11 times

the GDP per capita. This compares with a ratio of about 4 times GDP per capita in other countries at similar levels of development (Lesotho Country Diagnostic Study 2016, p. 122).

## **VI. Projecting the Cost of Expanding Secondary Education**

46. **To evaluate the feasibility of expanding secondary education, this section investigates the implications of alternative scenarios regarding student numbers.** One way in which the expansion can occur is through students already in secondary school remaining in school longer (that is, reducing secondary school dropouts). Other possibilities include improving flows from primary education through reduced primary school repetition, and a rise in the transition rate from primary to secondary school. Considering that the primary school exit examination has now been abolished, acceleration in junior secondary enrollment can be expected. However, it may be curtailed by problems of access to secondary schools. The expansion of senior secondary enrollment will probably be slower, as access and direct and opportunity costs are more likely to limit senior secondary enrollment.

47. Projecting the fiscal costs of future enrollment involves simulating future enrollment numbers in the different school phases, and then applying certain cost scenarios to these enrollment simulations. These two aspects will be looked at sequentially.

### *Projecting Future Enrollment*

48. Three future enrollment simulations are contrasted as follows:

- (iv) **Business as Usual (Simulation A)**, with little enrollment growth and no improvement in internal efficiency (that is, flows to higher grades);
- (v) **Rapid Expansion of Junior Secondary Education (Simulation B)**, where improved internal efficiency and longer continuation at school until about age 16 are broadly commensurate with universal primary and universal junior secondary (basic) education; and
- (vi) **Rapid Expansion of All Secondary Education (Simulation C)**, where improved internal efficiency and a strong rise in the demand for education that stimulates longer continuation at school leads to an outcome commensurate with universal primary and secondary education.

The population by age group in 2017 and 2030 is taken from projections of the United Nations Population Division.<sup>13</sup> In addition, assumptions then need to be made regarding: (i) how many students in each of the main age groups would be enrolled by 2030 (school participation rates, as shown in

---

<sup>13</sup> The Lesotho Population Census shows somewhat lower population numbers, probably due to under-counting, something that is common in all censuses. The census population has not yet been adjusted for under-counting, which would probably bring it more in line with the UNPD population estimates. Moreover, currently there is no other available source of population projections by age than those provided by the UNPD.

49. Table 23), and (ii) how each age group is distributed across the school phases (the age-phase distribution) (Table 24). The age groupings analyzed are those who are under-age for school (age 5), the main primary school age group (ages 6-12), the junior secondary age group (ages 13-15), the senior secondary age group (ages 16-17), and the over-aged group (ages 18-25). The different combinations of repetition, dropout and transition rates between school phases can generate different scenario outcomes. The table in Annex 7 should simply be regarded as indicative routes for reaching the three simulated outcomes.

**Table 23: Assumed Distribution of Students for Each Age Group over School Phases (%)**

	<b>Primary</b>	<b>Junior Secondary</b>	<b>Senior Secondary</b>	<b>Total</b>
<b>Actual 2017 and assumed for Simulation A:</b>				
<b>Age 5</b>	100	0	0	<b>100</b>
<b>Ages 6-12</b>	99	1	0	<b>100</b>
<b>Ages 13-15</b>	57	42	1	<b>100</b>
<b>Ages 16-17</b>	18	58	24	<b>100</b>
<b>Age 18-25</b>	4	38	58	<b>100</b>
<b>Assumptions for simulations B and C:</b>				
<b>Age 5</b>	100	0	0	<b>100</b>
<b>Ages 6-12</b>	100	0	0	<b>100</b>
<b>Ages 13-15</b>	40	60	0	<b>100</b>
<b>Ages 16-17</b>	10	55	35	<b>100</b>
<b>Age 18-25</b>	0	30	70	<b>100</b>

*Source: Assumptions as discussed in text.*

*Simulation A: Business as Usual*

50. In Simulation A, school participation rates are assumed to remain unchanged in each age group, as shown in Table 24. Also, the distribution of children of different age groups across the phases is assumed to remain unchanged from that in 2017 (see

51. Table 6). If current trends are simply left to continue in this manner, aggregate enrollment rates would rise quite slowly, driven by the modest population growth of the school age population. The average primary repetition and dropout rates would remain close to their current levels at about 15 and 2 percent, respectively, with the transition rate from primary to secondary school remaining at a relatively high rate of around 70 percent.<sup>14</sup> At the secondary level, too, there would be no real change in this simulation.

*Simulation B: Rapid Expansion of Junior Secondary Education*

52. Table 24 also applies to this scenario. In this simulation, the most rapid enrollment growth of 2.9 percent per year will be in junior secondary education. However, senior secondary is also set to grow quite rapidly at 2.3 percent a year, whereas aggregate enrollment growth in school education will be 1.9 percent per year under these assumptions. As can be seen from the table in Annex 7, for this situation to eventuate, virtually all children would have to complete primary education. In addition, dropout levels at the junior secondary level would have to be low.

*Simulation C: Rapid Expansion of All (Junior and Senior) Secondary Education*

53. Simulation C assumes that all secondary education expands as rapidly as appears possible in the 13 years from 2017. This would require that children remain at school longer, and that many more make the transition to secondary, and especially senior secondary, education (see Table 24). Such an expansion assumes a strong rise in the demand for education that would draw most children of school-going age — and even some older individuals who have not completed their schooling — into school. The participation rates for children aged 6-12, 13-15 and 16-17 would all reach what appears to be approximately the upper limit in southern Africa, that is 92 percent. Longer continuation periods in school will also lead to a rise in school participation among those aged 18-25, which is assumed to reach 25 percent, that is, much higher than its 2017 value of 9 percent. As this simulation also assumes improved flows (greater internal efficiency) through school, a similar distribution of children in each age group across school phases is assumed as in Simulation B (see

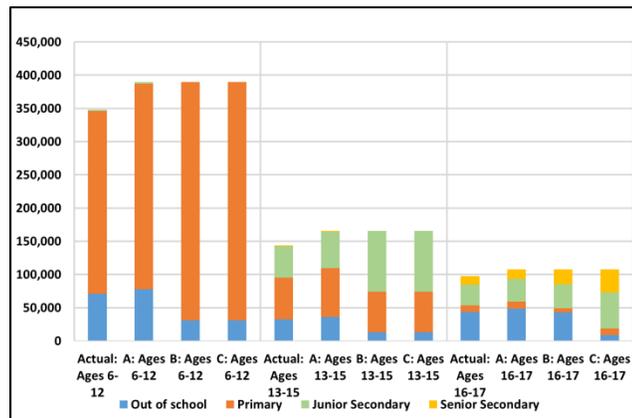
---

<sup>14</sup> Mingat (2016) notes that the transition can be higher, but it depends on the definition that is used. In his case, he considered “*chances of an individual to get to the last grade of a cycle of study to eventually (after one, but possibly two or three tries) get access to the first grade of the next cycle of study.*”

54. Table 6). Some repetition and the effect of the Form III (Grade 10) examination on promotion to higher grades would prevent an even greater change in the pattern of school phases in each age group. In this simulation, aggregate school enrollment rates would need to grow at an annual rate of 3.0 percent, with the most rapid growth (8.6 percent per year) observed in senior secondary, followed by 4.8 percent in junior secondary and only 1.6 percent in primary schools.

55. Figure 20 shows the distribution of the population in the core school ages 6-12, 13-15 and 16-17. The implied enrollment growth rates of the three simulations in both secondary education phases combined are 0.7 percent, 2.8 percent and 6.0 percent, respectively, per year. The almost stagnant enrollment in Simulation A is similar to the low enrollment growth experience of the recent past, despite the introduction of free primary education. The net effect of these simulations is captured in Table 24.

**Figure 20: Distribution of Population in School Phases by Age Group for Three Simulations, 2017**



*Source: Calculation and assumptions as discussed in text.*

56. Mingat, Ledoux and Rakotomalala (2010, p. 70) projected the growth of combined secondary enrollment to be between 2.0 and 3.9 percent per year. The lower estimate assumed no improvement in the transition rate from primary to junior secondary schools, and the upper estimate assumed this transition rate to rise to 100 percent. An alternative projection regarding the growth of the demand for education in the five countries of the South African Customs Union, based on assumptions on long-term convergence to high education demand (Van der Berg and Knoesen 2015), projected Lesotho’s secondary enrollment to grow at 4.3 percent per year.

57. Considering these alternative projections, it appears as if Simulation B is the most likely. Simulation A would mean falling further behind other countries in southern Africa, and Simulation C is quite optimistic. An alternative way of looking at the possible demand for secondary education is to consider only the population of secondary school age (that is, ages 13-17 are the appropriate ages for grades 8 to 12, if children enter school at the age of 6 years). Currently, an estimated 76,000 children from this age group have left school or have never attended<sup>15</sup>. By 2030, the number of children out of school may decline drastically to 22,000 if Simulation C applies, or to a still high 56,000 under Simulation B. The current secondary enrollment is almost 129 000, which includes around 36,000 who are older than 17, a number which is set to grow to 67,000 under Simulation C.

<sup>15</sup> This applies if the UNPD’s population estimate is accepted. It is only 47,000 if the lower census numbers are used.

**Table 24: Education Participation Rates by Age Group for the Three Simulations to 2030**

	Current situation (as of 2017)	Projections for 2030		
		Simulation A: Business as Usual	Simulation B: Rapid Expansion of Junior Secondary Education	Simulation C: Rapid Expansion of all Secondary Education
<b>School participation by age group (%)</b>				
Age 5 <sup>16</sup>	9	9	9	9
Ages 6-12	80	80	92	92
Ages 13-15	78	78	92	92
Ages 16-17	55	55	60	92
Age 18-25	9	9	9	25
<b>Number of Students enrolled by school phase</b>				
Primary	354,189	399,537	430,848	434,291
Junior Secondary	94,268	104,571	137,161	174,465
Senior Secondary	34,668	35,292	46,701	101,608
<b>Total</b>	<b>483,125</b>	<b>539,400</b>	<b>614,710</b>	<b>710,363</b>
<b>Annual growth rate of enrollment by school phase (%)</b>				
Primary		0.9	1.5	1.6
Junior Secondary		0.8	2.9	4.8
Senior Secondary		0.1	2.3	8.6
<b>Total</b>		<b>0.9</b>	<b>1.9</b>	<b>3.0</b>

Source: Assumptions as discussed in text.

## VII. Fiscal Implications of the Enrollment Simulations

58. The increased enrollment will generate increased capital costs to provide additional school places. It will also require additional teachers, increasing the salary bill. In addition, it will increase other recurrent costs (mainly for learning materials). Given the dominance of teacher costs, two alternative projections — a constant cost estimate and an optimistic or low-cost estimate — will be applied to test how sensitive the cost projections are to changing the assumption about teacher costs.

### *Capital Costs*

59. Greater enrollment would necessitate establishing more school places, requiring more classrooms and schools. Capital costs are relatively similar for primary and secondary classrooms. It should be noted, though, that the costs of providing laboratories, libraries and dormitories, where these are included (mainly in donor-funded schools), are larger in secondary schools. However, from a cost perspective, it is important to avoid such non-essential items, as they raise the cost of school infrastructure and therefore limit the pace at which the school network can be expanded.<sup>17</sup> It is assumed that the costs of such school places (including

<sup>16</sup> School enrollment here applies only to enrollment from Grade 1. The expansion of ECCD might even dampen the participation of 5 year olds in Grade 1 or beyond.

<sup>17</sup> One possibility for cost reduction is to choose more cost-effective strategies of construction. Theunynck (2015) contrasted the high cost of school construction in Lesotho with more cost-effective options, and noted the following three respects in which the two options would differ:

the associated infrastructure, such as water and sanitation as well as school furniture, blackboards, and so on — but *excluding* laboratories and libraries) is either high, that is, Maloti 870,000 (US\$ equivalent) per classroom or half that, Maloti 435,000 (US\$ equivalent), and that a new classroom is built for every additional 40 children. Across all school phases, this would imply a need for an additional 1,407 classrooms in Simulation A; 3,290 in Simulation B; and 5,681 in Simulation C. If total capital costs are divided equally over the 13-year projection period, then 108, 252 and 437 classrooms, respectively, would need to be built annually for these three enrollment simulations. As capital costs are a relatively small component of total projected costs, an alternative assumption about the cost of construction would have only a modest effect on total costs, as will be discussed later.

### *Teacher Salaries*

60. Table 25 shows the recurrent costs per student across the different school phases. These are split into that part of recurrent costs constituted by teacher salaries and other recurrent costs. These costs are used in the projections of teacher salary costs, as well as other recurrent costs that are discussed in the next sub-section. Altogether, 87 percent of recurrent costs in primary schools and 74 percent in secondary schools are teacher salaries.

**Table 25: Recurrent Costs per Student, 2017 (Maloti)**

	<b>Primary</b>	<b>Junior secondary</b>	<b>Senior secondary</b>
Teacher cost per student	3,420	3,910	7,117
Non-teacher recurrent cost per student	511	1,374	2,500
<b>Total recurrent costs per student</b>	<b>3,931</b>	<b>5,284</b>	<b>9,617</b>

*Source:* Lesotho Country Diagnostic 2016, p. 63, as adjusted for inflation.

61. In the constant cost projection, recurrent teacher costs per student are assumed to remain the same, with an unchanged student-teacher ratio in each school phase and unchanged real teacher salaries. *This implies that the number of teachers should grow at the same rate as enrollment in each school phase.* This would require the overall number of teachers to increase by 11, 29 and 57 percent, respectively, in each of the three simulations (see). By themselves, these are not large increases. Furthermore, considering the large number of potential teachers who currently cannot find jobs as teachers, it should not be difficult to attain these numbers, as well as to replace the almost 3,000 teachers who would be retiring. The 22 percent of primary school teachers due to retire in the next 13 years is much larger than the 12 percent in each of the

- 
- Regarding laboratories: These are expensive to build and typically cost around US\$63,000, or the cost of ten classrooms. They are expensive to replenish and maintain, and because of their expense, few schools have them. In contrast, science kits offer almost the same options for teaching, and they can be rolled out quickly to all schools at a much more affordable cost. The experience with them in countries such as Uganda and Zimbabwe has been very positive.
  - Regarding school libraries: Dedicated libraries are expensive to build, costing around US\$32,000, or the equivalent of the cost of constructing three classrooms. They also usually require a dedicated librarian to ensure that stocks are well maintained. Library corners are more efficient and can be quickly scaled up at an affordable cost.
  - Regarding boarding schools: Boarding facilities are often provided because of the long distances for many students to travel to secondary schools. In 2011, around 40 percent of secondary schools offered such facilities, though more recently preference has been for housing students in rental housing. Boarding facilities are expensive to build and to administer. In this regard, studies in both developed countries (for example, the United Kingdom) and developing countries (for example, Mali, Nigeria and Zimbabwe) show a considerable risk of abuse of children in such facilities.

Lesotho has already reduced the building of libraries, school libraries and boarding schools. However, these are still included in some planning, as well as in much of the school construction funded by development partners.

two secondary phases, where more specialists are required. As Table 26 shows, to meet the requirements for maintaining a stable student-teacher ratio of 33 in primary school, 25 in junior secondary school, and 19 in senior secondary school — and to replace retirees — 4,771 teachers would need to join the teaching work force over the period in Simulation A; 7,609 in Simulation B; and 12,146 in Simulation C. Although these are not very large numbers in terms of annual needs, it may be more difficult to sustain the required growth in teacher numbers and replacement of retirees in subjects for which there is currently a scarcity of teachers (namely, mathematics, physical science/biology and English). Some current teachers may need to go through intensive teacher training to present these subjects.

**Table 26: Assumed Number of Teachers Required if Student-Teacher Ratios Remain Constant in Each School Phase**

School Level	2017	Simulation A	Simulation B	Simulation C	Retirements 2017-2029
Primary	10,624	11,984	12,923	13,027	2,317
Junior Secondary	3,709	4,115	5,397	6,865	435
Senior Secondary	1,873	1,906	2,523	5,489	220
<b>Total</b>	<b>16,206</b>	<b>18,005</b>	<b>20,843</b>	<b>25,380</b>	<b>2,972</b>
<i>Increase on 2017</i>		<i>11%</i>	<i>29%</i>	<i>57%</i>	-
<b>New teachers required to keep the student-teacher ratio constant, and to replace retirees:</b>					
Primary		3,677	4,616	4,720	
Junior Secondary		841	2,123	3,591	
Senior Secondary		253	870	3,836	
<b>Total</b>		<b>4,771</b>	<b>7,609</b>	<b>12,146</b>	

*Source:* Retirement data is drawn from the EMIS.

*Note:* The Table assumes that the student-teacher ratio would be 33 in primary school, 25 in junior secondary school, and 19 in senior secondary school. In 2017, secondary teachers are assumed to be distributed over the two secondary phases in the same proportions as the salary bill.

62. **High teacher salaries are combined with relatively low student-teacher ratios in Lesotho.** This leads to extraordinarily high recurrent costs in providing education at both the primary and the secondary levels. Average teacher salary levels in Lesotho are 8.0 times and 11.3 times the per capita GDP for primary and secondary school teachers, respectively (and 10.5 and 12.5 times in junior and senior secondary schools, respectively). These are much higher than in countries at similar levels of economic development, where they are typically only 3.0 and 4.0 times per capita GDP in primary and secondary schools, respectively (Lesotho Country Diagnostic 2016, p. 122). Current attempts to contain high teacher salaries have given rise to protests among teachers and teacher unions. It is not yet clear how this will play out. However, even if average salary levels are not reduced, it should be possible to reduce recurrent spending needs per student by raising the student-teacher ratio in secondary schools to closer to the norm for countries at similar levels of development. This can be achieved without endangering education quality. It would however require a better alignment between the core subjects and the number of teachers qualified to teach these subjects, a topic discussed again later.

63. **An optimistic cost scenario might be that the teacher salary component of both primary and secondary recurrent costs declines by 1.0 percent per year.** In the costing, this is assumed to affect all school levels similarly.

*Recurrent Non-Teacher Costs*

64. **It is assumed for both cost projections that non-teacher recurrent costs<sup>18</sup> for each school phase would remain unchanged at their 2017 levels**, as shown in Table 25. This implies that the availability of learning materials would remain at roughly similar levels to those currently in effect. An improvement in education quality at both the primary and secondary levels may require greater availability of learning materials than is currently the case. Special attention needs to be given to the cost and the functioning of the book rental scheme, which creates problems for parents and students. If government is to provide universal basic education, as it has set out to do, it would be expected that it should also provide free books. Currently the rental scheme means that secondary students pay Maloti 220 (US\$15.50 equivalent) per year for renting books. Given current enrollment rates in junior secondary school, this would require Maloti 20.7 million (US\$1.5 million), an amount that would rise to only Maloti 38.5 million (US\$2.7 million) in 2030 — even under the optimistic scenario C. This again illustrates that textbooks are a relatively small part in the education budget compared to personnel expenditures. However, these amounts could still be difficult for many poor parents to afford.

### VIII. Contrasting the Fiscal Simulations

65. As detailed in the foregoing sections, the assumptions for the enrollment simulations are relatively simple. They involve a combination of improved flows of children to higher grades, and longer continuation at school, which in turn implies growth in the demand for education. On the cost side, these enrollment simulations are then combined with two cost scenarios, a base scenario where the teacher cost per student remains constant, and a more optimistic cost scenario where teacher cost per student declines by 1 percent per year. This could be attained either through raising average student-teacher ratios or by a reduction in average teacher salaries, or a combination of these two, as discussed later.

66. From these assumptions, the constant costs scenario is depicted in the first column of Table 27, and the more cost-optimistic scenario appears in the second column.

67. Simulation A is not fiscally expensive and would only require an annual real growth rate of 1.1 percent in spending on school education, even without any reduction in teacher costs. In this simulation, there is little progress in education access and school system performance.

68. Simulation B is more costly, requiring education spending to grow at a rate of 2.6 percent per year. However, this can be decreased to 1.8 percent per year if teacher costs per student can also be reduced, as in the optimistic cost scenario.

69. Rapid expansion of all school education as in Simulation C would be quite costly. Under the constant cost assumptions, spending on school education would have to grow at a rapid 4.6 percent per year to accommodate the growing enrollment, as well as the more expensive senior secondary education. In addition, it would require many more teachers, schools and classrooms. If the teacher cost per student can be reduced, as in the optimistic cost scenario, a lower growth rate of 3.8 percent in education spending would be required.

70. In real terms and under the constant case cost scenario, spending would have to grow from Maloti 2.224 billion (US\$157.0 million equivalent) in 2017 to Maloti 2.557 billion (US\$180.5 million equivalent) under Scenario A, Maloti 3.087 billion (US\$217.9 million equivalent) under simulation B, and Maloti 3.986 billion (US\$281.3 million equivalent) in Simulation C.

---

<sup>18</sup> As non-teaching staff comprise a small proportion of overall spending, their costs are lumped together with non-teacher recurrent costs in the cost projections.

71. **The capital costs used to project costs of constructing classrooms or schools were quite high.** Some MoET officials believe that the likelihood of reducing capital costs substantially is low because of the high costs associated with the topography, as well as the difficulty of creating road access to new schools. In some cases, roads have to be constructed through difficult terrain to reach building sites, and sometimes construction cannot be completed when contractors under-estimated the costs and ran into financial difficulties. Yet, Theunynck (2015) provides strong evidence that capital costs can be reduced by using more appropriate construction methods — and also by avoiding expensive libraries, laboratories and dormitories. Reducing the assumed construction costs of Maloti 870,000 (US\$61,400 equivalent) per classroom by half would save Maloti 47 million (US\$3.3 million equivalent) per year for Simulation A; Maloti 109 million (US\$7.7 million equivalent) per year for Simulation B; and Maloti 190 million (US\$13.4 million equivalent) per year for Simulation C. Spending growth would then be 0.2 percent lower per year in Simulation A; 0.3 percent lower in Simulation B; and 0.4 percent lower in Simulation C.

**Table 27: Costs of Alternative Enrollment Simulations Combined with Constant Cost or Optimistic Cost Scenarios**

	Constant case cost scenario: High teacher costs per student		Optimistic cost scenario: Lower teacher costs per student	
	Annual cost (Million Maloti)	Addition to costs (compared to 2017)	Annual cost (Million Maloti)	Addition to costs (compared to 2017)
2017 Baseline	2,224	0	2,224	0
2030: Simulation A	2,557	+333	2,308	+84
2030: Simulation B	3,087	+863	2,800	+576
2030: Simulation C	3,986	+1,762	3,632	+1,408
<b>Growth rate (%) per year, 2017-2030</b>				
Simulation A	1.1%		0.3%	
Simulation B	2.6%		1.8%	
Simulation C	4.6%		3.8%	

Source: Calculations based on assumptions discussed in text.

Note: All costs are in constant 2017 Maloti. The enrollment projections are as described in the text. The constant cost scenario assumes constant teacher costs per student, and the optimistic scenario assumes a 1 percent per year reduction in teacher cost per student.

72. **The enrollment simulations combined with the two alternative projections of teacher cost per student provide a useful indication of the costs of rapidly expanding secondary education.** Under Simulation B, Lesotho would achieve *universal basic education*, that is, both primary and junior secondary education, in the sense that virtually all children of the target age groups for these education phases would be enrolled in school.<sup>19</sup> However, some would still lag in terms of being in the primary rather than the junior secondary phase by 2030, as primary school repetition would not be completely eliminated. In Simulation C, Lesotho would achieve *universal primary and secondary education*, again in the sense that virtually all children of the target age groups for all three school phases would be at school, although again some would be in the wrong phase.

73. Impediments to the rapid growth of secondary enrollment, as in Simulations B and C, can be considered from both an education supply and demand side.

<sup>19</sup> Based on experience in other southern Africa countries, it would appear to be difficult to reach a situation where more than 92 percent of any age group would attend school in any given year. Therefore, such a level can be regarded as *de facto* universal access.

### *Supply Side Impediments*

#### 74. **On the supply side, the availability of fiscal resources, schools and teachers is most important.**

- (f) If economic growth lags behind the growth of school education spending required, education spending may not be able to expand sufficiently. Otherwise, it would rise to an even greater proportion of GDP (unless there is some compensating reduction in tertiary education spending).
- (g) Availability of places in schools is largely determined by fiscal resources.
- (h) For teachers, the situation is a little more complex. Although a large number of potential teachers in Lesotho currently cannot find jobs, the increased number of teachers required will have to meet specific needs in terms of their training and the subjects that they can teach. In addition, many would need to be willing to teach in remote areas. The matter of subject specialization is also intertwined with the introduction of the new secondary schools and will be discussed in more detail later.

### *Demand Side Impediments*

75. There currently appears to be a limited demand for higher levels of school education among many students and parents. Factors that contribute to this include the prohibitively high cost of education for many poor parents, the difficulty of access to schools for children from remote (particularly mountainous) areas, and the high repetition rates that encourage early dropout. The supply of more school places would enable more children from remote areas to access schools, but the cost of education to students and parents may still limit enrollment expansion at secondary schools. For this reason, this issue again receives attention in the recommendations.

## **IX. Other Fiscal and Policy Considerations**

### *Capital Costs*

76. It may be possible to reduce the high construction costs assumed in the projections, but this would require careful management and planning in the process of expanding the school system.

77. In the poor Mountain regions, it is often more practical to simply add junior secondary classes to existing primary schools (to create combined schools) than to build new schools. In this way students need not leave their home to attend schools located far from their home village. Majgaard and Mingat (2012, p. 26) note that “(m)any sub-Saharan African governments now consider lower secondary education as part of basic education, consistent with trends elsewhere in the world.” This means that some of the costs of building a new school can be avoided, and a greater proportion of capital spending can be devoted to classroom construction in existing primary schools. In 12 of the 15 constituencies that fall wholly or mainly<sup>20</sup> in the Mountain zone, there are at least 100 fewer students enrolled in grade 8 than in grade 7. The 3,274 students in grade 8 imply a transition rate from primary to secondary education in the Mountain zone of only 43 percent. This compares to the national rate of 76 percent, a difference of 4,268 students.<sup>21</sup>

---

<sup>20</sup> Judged by primary school enrolment.

<sup>21</sup> This may slightly underestimate the actual transition rate from primary to secondary school in these constituencies, as some students who attend grade 7 in a school in the Mountain Zone do continue to grade 8 in another constituency. Sometimes, they become boarders or live in rented accommodations near schools in other constituencies. Yet, it is clear that there is an unmet, latent demand for secondary education in many of these constituencies.

78. In combined schools, a stop-gap measure to postpone the need for constructing new school facilities could be to use some school facilities according to a double shift, that is, with the afternoon hours offered for junior secondary grades.

#### *Teacher Costs and Availability*

79. **The expansion of secondary education is expensive and can only be tackled with sufficient resources.** In Lesotho's case, the most viable way of expanding junior secondary education is to do so while containing, and indeed reducing, costs and ensuring that quality is not compromised. In this regard, teacher salary cost per student is particularly important. This combines the effect of the student-teacher ratio and the real average salaries of teachers. Under a fairly favorable cost scenario, it may be possible to reduce this cost by 1 percent per year for the forecasting period, which has a quite significant impact on costs, as was shown in the fiscal projections.

80. **One way of reducing teacher costs per child would be through increasing student-teacher ratios.** For example, this could be achieved by reducing the number of specialist teachers in junior secondary education, or not appointing an additional principal where junior secondary classes are attached to an existing primary school to create a combined school.

81. **An alternative is reducing average teacher salaries.** This could potentially occur through changing the mix of senior and other teachers, offering lower starting salaries to new teachers, or below inflation salary adjustments. However, this last option is likely to run into stronger teacher opposition and may therefore be a less viable alternative.

82. **Reducing teacher costs per student needs to be combined with efforts to increase the quality of secondary education,** which may put some upward pressure on costs of learning materials, among other things. The implications of the introduction of the new curriculum will be discussed in the next sub-section.

83. **Teacher availability at the secondary level requires further analysis.** Data from the the EMIS ER42 form on student subject choices, summarized in Table 28, offers some indication of the most popular subjects in secondary school. At the top of the list are three compulsory or almost universal subjects, English, Sesotho and mathematics, with 15, 12 and 13 percent, respectively, of children in junior secondary school taking these subjects. Equally ubiquitous is science (13 percent; at the junior secondary level, it incorporates physics, chemistry and biology). Another popular subject at the junior secondary level is business education/commerce, taken by 11 percent of junior secondary students (but only 5 percent of senior secondary students, 11 percent of whom take accounting, a subject not offered at the junior secondary level).

**Table 28: Subject Choice for the Most Common Subjects in Secondary Schools, 2017 (%)**

	Grade 8	Grade 9	Grade 10	All Junior Secondary	Grade 11	Grade 12	All Senior Secondary
English	15	14	15	15	16	16	16
Mathematics	13	13	13	13	14	13	13
Sesotho	12	12	12	12	13	14	13
Business Education	11	11	11	11	5	5	5
Accounting	0	0	0	0	11	11	11
Science	13	13	13	13	9	9	9
Biology	0	0	0	0	9	9	9
Agriculture	7	7	6	7	5	5	5
Religious Education	6	6	7	6	5	5	5
Geography	5	5	5	5	3	3	3
Development Studies	5	5	5	5	4	4	4
History	4	4	4	4	1	1	1
Computer Studies	4	4	4	4	1	1	1
<b>Total for subjects shown</b>	<b>94</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>95</b>

*Source:* Calculated from the EMIS data.

*Note:* The subject choice is expressed as a percentage of all subjects chosen. Commerce and economics are included with business education. Biology, physics and chemistry are combined under science in the Junior Secondary grades.

84. In 2017, of the 338 secondary schools for which data are available, 1,059 teachers were teaching mathematics. Of these, 77 percent (816) had majored in mathematics, and another 99 who had also majored in mathematics were not teaching that subject. Surprisingly, although there were more than 2,200 teachers who could teach English, fewer than 1,600 of them actually did, whereas more than 2,000 who did not major in English were teaching this subject at the secondary level.

85. **The introduction of the new curriculum should be considered in expanding secondary education.** In 2009, the Ministry of Education and Training published a Curriculum and Assessment Policy (CAP) that provided the principles and guidelines for the reform and assessment of the national curriculum. A new curriculum was introduced in primary schools after the PSLE was abolished in 2016. The new curriculum is currently being piloted in Grade 9. It is intended to increase the quality of secondary education, as well as to strengthen technical and vocational education. A major planned feature is the introduction of a three-stream system, with academic, technical and vocational (artisanal) groups in the junior, and particularly the senior secondary schools, to offer more skills tailored to the labor market. Although the ambition is to introduce all three streams in all schools, this clearly cannot be done without having many teachers trained in the new subjects. In addition, new classrooms and learning materials would need to be provided. This will require training new teachers and retraining existing teachers to offer new subjects. Teams of trainers will need to support teachers to provide continual training on pedagogy and assessment skills. Currently, the universities and colleges do not offer training in the subject content required for the three-stream policy. In the academic stream, the intention is to introduce physics, chemistry and biology as stand-alone subjects, rather than the current catch-all physical science curriculum that incorporates all three subject areas. The core subjects at the junior secondary level are currently Sesotho, English, mathematics and science (including physics, chemistry and biology). There are also four core courses in the senior secondary schools, again Sesotho, English and mathematics; the fourth could either be physical science (physics and chemistry) or biology. However, the launching of the new curriculum has slowed due to a shortage of fiscal and staff resources.

86. **The full transition to the new three-stream curriculum in conjunction with the rapid expansion of secondary enrollment would be difficult.** For new secondary schools or classrooms in remote areas in particular, where the number of children in each grade may be limited, implementing three streams may be impractical. Thus, the real question may become which of the three streams to offer in which schools, once the new curriculum is in full operation.

87. In terms of the availability of teachers in scarce subjects, the three-stream system, once implemented, would somewhat reduce the demand for teachers specializing in currently scarce fields (for example, mathematics and physical science). However, it would create a greater need for teachers able to teach subjects that are currently seldom taught that form part of the technical and the vocational streams.

88. **It may be necessary to improve incentives for teachers to teach in remote areas.** Given the large number of teachers that are currently unemployed, this may not require large incentives. However, it may be more difficult to attract those teachers with more experience who teach scarce subjects to relocate to such schools.

*Measures that could Stimulate the Effective Demand for Education*

89. **The significant expansion of secondary education may not be possible without some additional funds that could both stimulate the demand for education and improve equity of access.** Issues to consider include the following:

(i) **Introducing a school feeding program in junior secondary schools**, starting with those in the most remote locations: Such feeding schemes have been very popular in poor countries and have contributed to school retention, mainly in primary schools (though in neighboring South Africa, a school feeding scheme operates at both the primary and secondary levels). Many vulnerable children would benefit from such a scheme. Currently, the cost to the government of providing a free meal in primary schools is Maloti 195 million (US\$13.8 billion equivalent) per year for the 30 percent of primary school children who benefit from this government provision. (The biggest provider is the World Food Programme.) This implies a cost of Maloti 2,200 (US\$155 equivalent) per student, which in Simulation 3 would require Maloti 302 million (US\$21.3 million equivalent) to cover all those in junior secondary schools. The government could also open discussions with development partners about the possibility of support for such a program.

(j) **Introducing free or heavily subsidized junior secondary education.** Based on simulations in Uganda, Essama-Nassah and others (2008) expected that the abolition of school fees in secondary schools in that country would cause a surge in enrollment among poorer segments of the population. Their conclusions are also relevant for Lesotho: “...those who would have wanted to continue on to secondary school after completing primary school but could not on account of cost, would seize the opportunity once secondary schooling became affordable, other things being equal. Obviously, the feasibility of these potential outcomes hinges critically, among other things, on the ability of the school system to invest in space and other important inputs at levels commensurate with the expected influx of students.” (Essama-Nassah and others 2008, p. 34). The issue in Lesotho, however, is complicated by the high fiscal costs required to substantially reduce costs to parents. Funding textbooks and stationery and largely abolishing school and examination fees would increase the recurrent costs of secondary schools to the government by more than half (Maloti 5,000 [US\$353 equivalent] per child per year). This may not be fiscally possible in the foreseeable future, given current fiscal constraints. However, should this be implemented for junior secondary education only, that is, to make basic education universal, the cost to the government would be considerable less

(k) **Awarding bursaries to deserving poor children in remote locations** who have completed primary school before the age of 14 and who live far from secondary schools. If bursaries (additional to those currently available) were extended to 40 percent of junior secondary students in

Simulation 3, and if these bursaries were valued at Maloti 3,000 (US\$212 equivalent) per student per year, this would cost Maloti 165 million (US\$ equivalent) in 2017 money terms, a large but not massive amount. A bursary of this amount would cover the cost of school fees in low fee schools, plus rental of school books, and the purchase of additional school books and stationery. This would bring junior secondary education within the grasp of many children currently excluded, although it would still leave a large part of the cost to the parents.

## X. Conclusions and recommendations

90. **The education system is performing inadequately and appears to be stagnant.** Student flows have stabilized with high repetition and dropout rates, and with many students over the appropriate age for their grade. The system is inequitable in terms of educational outcomes, with poor children in deep rural areas (Mountainous areas) particularly affected by inadequate learning in the early grades. Those who do remain until the end of primary school often face large impediments to transitioning to secondary education due to issues of access, as well as to the high costs of secondary education. Due to a combination of high salaries and low student-teacher ratios, the salary bill is extraordinarily large for a country at Lesotho's level of socioeconomic development.

91. **There are some crucial measures for ensuring that secondary expansion can be combined with fiscal austerity,** including: (i) reducing the recurrent costs of teachers per student, including by reducing the proportion of senior teachers on the payroll, among other measures; (ii) ensuring that student-teacher ratios rise where this is practical; and (iii) maintaining or reducing the cost of construction of new schools through a variety of measures by opting for science kits instead of laboratories, and an in-classroom library corner instead of school libraries. These measures may in turn free some resources for supporting poor children.

### Recommendations for Short- and/or Medium-term Actions:

92. **Now that universal and free primary education has largely been attained, it is important for the Government to reiterate its commitment to expanding junior secondary education — and to make it universal over time by 2030.** This time, however, it should adopt a more realistic time frame and commit enough resources to this goal to make it feasible. Moreover, this expansion can be undertaken in a way that expands access for the poor. Undertaking such an expansion under difficult macroeconomic circumstances is not going to be easy, and it will take political commitment. However, the enrollment projections in this document have shown that attaining universal junior secondary education is within reach by 2030.

93. **The MoET should give clear priority to expansion of access to junior secondary education, combined with attention to educational quality at the primary level.** This would ensure accelerated flows through primary school so that more children can enter junior secondary education with a solid knowledge base. There is a broad and complex literature on the best methods of accomplishing such improvements in educational quality. Yet, two matters are clear from this literature: (i) Limited resources need not be a major constraint in improving quality; and (ii) Improving quality at the higher levels of the education system requires a good foundation at the lower levels. To achieve quality secondary education, it is imperative to achieve such quality in primary schools, particularly the foundational skills of reading, writing and arithmetic. This will require greater attention to training teachers about how to teach these foundational skills. Improving teaching quality also requires more attention to the motivation and training of teachers, particularly given important curriculum changes that have taken place. In order to attract teachers to the more remote areas, incentives may have to be increased. One way of doing so could be to offer more senior positions in such schools. Attention to quality in primary school — despite the abolition of the PSLE, which had served as a quality measure — emphasizes the need for regular systemic testing of reading and basic mathematics in primary school, thereby providing systematic information about cognitive

development. This could potentially be done through sample-based testing, as well as considering participation in international assessments aimed at developing countries, such as the Trends in International Mathematics and Science Study (TIMSS) Numeracy and the Progress in International Reading Literacy Study (PIRLS) Literacy Assessments.

94. **Similarly, the expansion of secondary education needs to contemplate both expansion in enrollment and increases in quality, on the one hand, and relevance for the job market, on the other.** The benefits of investing in a strong human capital base for improved labor market productivity are well known. Thus, progress to the higher levels, as well as the quality and nature of such education, are all important. The government of Lesotho has therefore committed itself to the development of its human resources. The new curriculum with the three-stream policy is an acknowledgement that the economy requires not only good academic education, but also technical and vocational skills. Reallocating funds from tertiary education or from other sectors should be considered.

95. **To make junior secondary schools more accessible to the poor and enhance the equity of the educational system, expansion of the junior secondary school network should be a priority.** This should include, where appropriate, attaching junior secondary classes to primary schools so that families do not have to pay for dormitories instead of building additional schools. Where lags in the provision of classrooms occur, it may be necessary to consider introducing double shifts for a short period (using the same classrooms for two groups of students, though with different teachers).

96. **In addition, increasing equity of access to the junior secondary level requires that the financial cost of attending such schools be reduced as much as is feasible.** Measures to consider to this end could include:

- Introducing a school feeding program in all junior secondary schools
- Initiating heavily subsidized junior secondary education by abolishing school fees and textbook rental fees
- Awarding more bursaries to deserving poor children in remote locations to attend junior secondary schools, including boarding costs where appropriate. This would be cheaper for the Government than free junior secondary education for all (including those who can afford such education), It could be targeted to poor and deserving children (for example, children in remote areas who had successfully progressed through primary school with little interruption).

97. Table 29 sets out the costs to government of expanding the secondary school system, as well as bearing some of the costs currently borne by parents for junior secondary education only. This table incorporates the optimistic scenario for teacher costs. Even so, the costs rise quite sharply across the three simulations. It would take a real commitment to implement a program of expansion of junior secondary school as expressed in Simulation B, while also making such schools more accessible to poor parents through a feeding program, subsidizing some of the direct costs, and instituting a substantial bursary system. Yet, the figures also show that this is not an impossible objective.

**Table 29: Fiscal Costs of Alternative Enrollment Simulations by 2030 (Maloti, millions)**

Scenarios	<u>2017 Actual</u>	<u>2030: Simulation A</u> (Business as Usual)	<u>2030: Simulation B</u> (Rapid expansion of junior secondary education)	<u>2030: Simulation C</u> (Rapid expansion of all secondary education)
Optimistic cost scenario: Lower teacher costs per student	2,224	2,308	2,800	3,632
School feeding for junior secondary children		879	948	955
Heavily subsidizing junior secondary education		523	686	872
Awarding bursaries to poor and deserving secondary students		42	56	122
<b>Total fiscal cost</b>	<b>2,224</b>	<b>3,752</b>	<b>4,490</b>	<b>5,582</b>

Source: Assumptions discussed in text

Note: All costs are in constant 2017 Maloti. The enrollment projections are as described in the text. The optimistic cost scenario assumes a 1 percent per year reduction in teacher costs per student. The fiscal costs are combined with a slightly optimistic cost scenario, plus other expenditures that may be required for the rapid expansion of secondary education.

98. **The expansion of the junior secondary school network would increase the need for teachers who can teach scarce subjects.** The Government should consider limiting tertiary bursaries for education mainly to those wishing to major in one of the three most important specialist subjects at the junior secondary level, namely mathematics, science (including biology) and English. In some cases, the expansion of junior secondary education will require subject specialists who may not be available in remote regions. Other teachers should be encouraged to improve their skills to teach such subjects, perhaps by the provision of a modest incentive that will only apply for a transition period. Junior secondary and senior secondary schools should be prevented from offering too many elective subjects which require additional staff, leading to unaffordable low student-teacher ratios.

99. **For the MoET to afford a significant expansion of junior secondary education, it would help if modest but persistent declines in the teacher salary cost per student could be achieved.** This is determined by the combination of the student-teacher ratio and the average teacher salary. Some of this cost reduction can be obtained by decreasing the staff established/official lists at schools that are better staffed than average, using the opportunities offered by retirements. It is also important that the expansion of the system should maintain more fiscally realistic student-teacher ratios from the beginning. There is limited scope for reducing salaries for current teachers, but average salary cost could perhaps be managed downward. This could include offering lower starting salaries to newly-appointed teachers (given that there is no shortage of demand for such teachers), changing the mix of senior teachers to other teachers, and/or gradually reducing the salary differential between senior and other teachers.

100. **The Teaching Services Department will have to play a central role to achieve the fiscal savings necessary to ensure the expansion of junior secondary education or to keep fiscal spending under control.** It is essential that the director of the TSD be aware of the fiscal implications of human resource decisions. In addition, the director should play this role in close cooperation with the Permanent Secretary, the Minister and the Ministry of Finance.

### Annex 1: Ministry Staff Numbers

Ministry	Establishment		Costing Files (LA - Lw)	Vacancy (15/16)
	2015/16 Approved	2016/17 Approved	Actual (15/16)	
MINISTRY OF AGRICULTURE AND FOOD SECURITY	3097	3299	1860	39.94%
MINISTRY OF HEALTH	3903	3911	2698	30.87%
MINISTRY OF EDUCATION	875	879	15193	N/A
MINISTRY OF FINANCE	964	964	738	23.44%
MINISTRY OF TRADE	209	221	173	17.22%
MINISTRY OF Development Planning	630	629	528	16.19%
MINISTRY OF JUSTICE AND	1639	1640	1606	2.01%
MINISTRY OF HOME AFFAIRS	693	693	465	32.90%
OFFICE OF THE PRIME MINISTER	987	991	635	35.66%
MINISTRY OF COMMUNICATIONS,	897	896	855	4.68%
MINISTRY OF LAW, CONSTITUTIONAL	445	443	342	23.15%
MINISTRY OF FOREIGN AFFAIRS	283	284	187	33.92%
MINISTRY OF PUBLIC WORKS	2845	2845	1060	62.74%
MINISTRY OF FORESTRY, RANGE AND	800	900	483	39.63%
MINISTRY OF ENERGY	202	218	179	11.39%
MINISTRY OF LABOUR AND	285	286	189	33.68%
MINISTRY OF TOURISM, ENVIRONMENT	279	274	234	16.13%
AUDITOR GENERAL'S OFFICE	166	167	142	14.46%
HIS MAJESTY'S OFFICE	87	88	59	32.18%
PUBLIC SERVICE COMMISSION	53	52	37	30.19%
PENSIONS			7620	
STATUTORY			5	
MINISTRY OF DEFENCE	325	325	4384	N/A
NATIONAL ASSEMBLY	208	222	253	-21.63%
SENATE	100	100	81	19.00%
OFFICE OF OMBUDSMAN	38	38	28	26.32%
ELECTORAL OFFICE	257	257	183	28.79%
MINISTRY OF LOCAL GOVERNMENT	1600	1601	4153	N/A
MINISTRY OF GENDER, YOUTH,	305	298	236	22.62%
MINISTRY OF THE PUBLIC SERVICE	266	269	143	46.24%
JUDICIARY	1194	1177	1030	13.74%
MINISTRY OF SOCIAL DEVELOPMENT	283	283	271	4.24%
DIRECTORATE ON CORRUPTION	63	67	59	6.35%
MINISTRY OF MINING	160	176	101	36.88%
MINISTRY OF POLICE	707	704	4890	N/A
MINISTRY OF SMALL BUSINESS	262	262	242	7.63%
MINISTRY OF WATER	476	471	325	31.72%
Unknown			710	
<b>Grand Total</b>	<b>25583</b>	<b>25930</b>	<b>52377</b>	<b>23.30%</b>

## Annex 2: MoET Spending by Sub-program, 2015/16

<b>0301 Administration</b>	<b>31 417 551</b>	<b>1.4%</b>
030101 Administration	19 797 953	0.9%
030102 Human Resources Management	2 243 424	0.1%
030105 Financial Management	2 760 733	0.1%
030106 HIV & AIDS Management	1 113 208	0.1%
030107 Information, Communication and Public Affairs	818 669	0.0%
030108 Procurement and Asset Management	846 159	0.0%
030109 Legal Services	280 963	0.0%
030110 Infrastructure Development	3 556 441	0.2%
<b>0302 Early Childhood Care and Development</b>	<b>7 930 846</b>	<b>0.4%</b>
030202 Early Childhood Care and Development	7 930 846	0.4%
<b>0303 Primary Education Management</b>	<b>1 205 722 903</b>	<b>55.4%</b>
030302 Primary Education Management	16 876 210	0.8%
030303 School Health and Nutrition Management	564 546	0.0%
030304 Free Primary Education	223 503 292	10.3%
030307 Teaching and Learning Materials	3 023 427	0.1%
030308 Teachers' Supply	961 381 892	44.2%
030309 Primary Field Inspectorate	373 537	0.0%
<b>0304 Secondary Education Management</b>	<b>658 362 451</b>	<b>30.3%</b>
030401 Secondary Education Management	19 715 569	0.9%
030408 Teachers' Supply	631 759 234	29.0%
030409 Central Inspectorate	6 887 647	0.3%
<b>0305 Technical and Vocational Education and Training Management</b>	<b>39 178 091</b>	<b>1.8%</b>
030501 Technical and Vocational Education and Training Management	4 671 980	0.2%
030502 Basic Technical Skills Development and Training	6 505 546	0.3%
030503 Advanced Technical Skills Development and Training	28 000 000	1.3%
030504 Teacher and Instructors Supply	565	0.0%
<b>0306 Teaching Service Management</b>	<b>41 273 078</b>	<b>1.9%</b>
030601 Teaching Service Management	1 213 077	0.1%
030602 Teachers Recruitment and Deployment Management	3 600 045	0.2%
030603 Government School Supervision	655 867	0.0%
030604 Teacher Education and Training	32 049 000	1.5%
030606 Teachers Administration and Management	3 755 090	0.2%
<b>0307 Tertiary Education Management</b>	<b>121 629 346</b>	<b>5.6%</b>
030701 Tertiary Education Management	649 792	0.0%
030702 Public Service Development and Training	5 979 554	0.3%
030703 University Education and Training	106 000 000	4.9%
030704 Tertiary Education Supervision	9 000 000	0.4%
<b>0308 Curriculum and Assessment Management</b>	<b>26 151 068</b>	<b>1.2%</b>
030801 Curriculum and Assessment Management	4 408 720	0.2%
030802 Curriculum Development and Assessment	14 642 348	0.7%
030803 Examinations Management	7 100 000	0.3%
<b>0309 Education Policy Development, Planning, Monitoring and Evaluation</b>	<b>8 619 929</b>	<b>0.4%</b>
030901 Education Policy Development, Planning, Monitoring and Evaluation	5 079 012	0.2%
030905 Information Technology Services	1 643 977	0.1%
030906 Statistics and Research	1 896 940	0.1%
<b>0310 Special Education</b>	<b>13 268 851</b>	<b>0.6%</b>
031001 Special Education	1 314 874	0.1%
031003 Open and Distance Learning	10 417 658	0.5%
031004 UNESCO Initiatives	1 536 318	0.1%
<b>0311 Decentralized Educational Management</b>	<b>22 457 558</b>	<b>1.0%</b>
031101 Decentralized Educational Management	22 457 558	1.0%
<b>Grand Total</b>	<b>2 175 999 142</b>	<b>100.0%</b>

Source: Lesotho BOOST.

Note: AIDS= Acquired Immune Deficiency Syndrome; HIV= Human Immunodeficiency Virus; and UNESCO= United Nations Educational, Scientific and Cultural Organization.

### Annex 3: MoET Expenditures by Sub-cost Center, 2015/16 (Maloti, millions)

0301 Administration and Management	27,861,109
0302 Integrated Early Childhood Care and Development	7,930,846
0303 Basic Education	244,341,012
0304 Secondary Education	26,603,216
0305 Technical and Vocational Education and Training	39,177,526
030501 Technical and Vocational Department	4,671,980
<b>030502 Thaba-Tseka Technical Institute</b>	<b>6,505,546</b>
<b>030503 Lerotholi Polytechnic</b>	<b>28,000,000</b>
0306 Teacher Development, Supply, and Management	1,634,416,811
0307 Tertiary Education	121,627,346
030701 Tertiary Section	647,792
<b>030702 Institute of Development Management (IDM)</b>	<b>5,979,554</b>
<b>030703 National University of Lesotho (NUL)</b>	<b>106,000,000</b>
<b>030704 Council on Higher Education</b>	<b>9,000,000</b>
0308 Curriculum Development and Assessment	26,151,068
030801 Curriculum and Assessment	4,408,720
<b>030802 National Curriculum Development Center</b>	<b>14,642,348</b>
<b>030803 Examinations Council of Lesotho (ECOL)</b>	<b>7,100,000</b>
0309 Education Policy Development, Planning, Monitoring and Evaluation	12,176,371
<b>0310 Special Programs</b>	<b>13,256,279</b>
031001 Special Education Unit	1,314,874
<b>031002 United Nations Educational, Scientific and Cultural Organization (UNESCO)</b>	<b>1,536,318</b>
<b>031003 Lesotho Distance Teaching Center</b>	<b>10,405,086</b>
0311 District Management	22,457,558
<b>031101 Botha-Bothe</b>	<b>2,454,855</b>
<b>031102 Leribe</b>	<b>2,673,589</b>
<b>031103 Berea</b>	<b>2,401,292</b>
<b>031104 Maseru</b>	<b>1,940,993</b>
<b>031105 Mafeteng</b>	<b>2,539,840</b>
<b>031106 Mohale's Hoek</b>	<b>2,147,474</b>
<b>031107 Quthing</b>	<b>2,159,362</b>
<b>031108 Qacha's Nek</b>	<b>1,944,371</b>
<b>031109 Mokhotlong</b>	<b>2,048,115</b>
<b>031110 Thaba-Tseka</b>	<b>2,147,667</b>
Total	2,175,999,142

Source: Lesotho BOOST.

Note: Figures in bold refer to funds transferred to cost centers rather than to the MoET.

#### **Annex 4: Information Gathered from Four School Visits in March 2018**

The World Bank Education Mission visited Lesotho from March 26 – 30, 2018. The mission visited four schools to explore some issues regarding secondary education. The issues included the costs of expanding secondary education to government and parents. These costs included school building and furnishing, building additional classrooms, books and learning materials, specialist teachers, support staff and boarding facilities (that is, Government costs), as well as school fees, books (rented or bought), stationary, examination fees (Form C and Form E), uniforms, boarding and other contributions (that is, parent costs).

The four schools visited were St. Barbanus High School, Moshoeshoe II High School, St. Rodriquez High School and St. Catherine High School. These schools represented different classifications in different ecological zones of Lesotho, that is, mountain regions, foothills and lowlands, as well as rural and urban areas. The schools outlined their costs, including the shares of government and parent costs. Such costs varied among schools. Major costs included school and exam fees for Forms C and E. The costs of boarding fees vary, due to differing costs in utilities between rural and urban schools (for instance, rural schools do not usually have a utility bill to pay for water).

Other factors mentioned which affect children's participation in secondary education, especially among poorer families, included: distance to be travelled to school; dropouts due to lack of family income, forcing children to look for employment; early marriage for girls; initiation school and herding for the boys; and the question of orphans and vulnerable children (OVCs). The scarcity of classrooms for secondary schools also limits how many students can be accommodated in secondary education. This requires new construction of additional classrooms, as well as the hiring of more teachers and other non-academic staff for secondary education.

### Annex 5: Detailed Annual Enrollment Projections by Phase for the Three Enrollment Simulations

Year	Simulation A				Simulation B				Simulation C			
	Primary	Junior Secondary	Senior Secondary	Total	Primary	Junior Secondary	Senior Secondary	Total	Primary	Junior Secondary	Senior Secondary	Total
2017	354,189	94,268	34,668	<b>483,125</b>	354,189	94,268	34,668	<b>483,125</b>	354,89	94,268	34,668	<b>483,125</b>
2018	357,487	95,061	34,716	<b>487,263</b>	359,567	97,027	35,472	<b>492,066</b>	359,788	98,839	37,658	<b>496,284</b>
2019	360,815	95,853	34,763	<b>491,431</b>	365,028	99,867	36,294	<b>501,188</b>	365,475	103,632	40,905	<b>510,012</b>
2020	364,174	96,646	34,811	<b>495,631</b>	370,571	102,790	37,136	<b>510,496</b>	371,252	108,657	44,432	<b>524,341</b>
2021	367,565	97,438	34,859	<b>499,862</b>	376,198	105,798	37,996	<b>519,992</b>	377,120	113,926	48,264	<b>539,310</b>
2022	370,987	98,231	34,907	<b>504,125</b>	381,910	108,894	38,877	<b>529,682</b>	383,081	119,451	52,426	<b>554,958</b>
2023	374,441	99,023	34,955	<b>508,419</b>	387,710	112,082	39,779	<b>539,570</b>	389,137	125,243	56,946	<b>571,326</b>
2024	377,927	99,816	35,003	<b>512,746</b>	393,597	115,362	40,701	<b>549,660</b>	395,288	131,316	61,857	<b>588,461</b>
2025	381,446	100,608	35,051	<b>517,105</b>	399,574	118,738	41,644	<b>559,957</b>	401,536	137,684	67,191	<b>606,411</b>
2026	384,997	101,401	35,099	<b>521,497</b>	405,642	122,213	42,610	<b>570,465</b>	407,883	144,360	72,985	<b>625,229</b>
2027	388,582	102,193	35,147	<b>525,922</b>	411,801	125,790	43,598	<b>581,190</b>	414,330	151,361	79,279	<b>644,970</b>
2028	392,200	102,986	35,196	<b>530,381</b>	418,055	129,472	44,609	<b>592,135</b>	420,880	158,700	86,115	<b>665,696</b>
2029	395,851	103,778	35,244	<b>534,874</b>	424,403	133,261	45,643	<b>603,307</b>	427,533	166,396	93,541	<b>687,470</b>
2030	399,537	104,571	35,292	<b>539,400</b>	430,848	137,161	46,701	<b>614,710</b>	434,291	174,465	101,608	<b>710,363</b>

Source: Calculated by growth interpolations from the 2017 enrollment and 2030 enrollment simulation scenarios.

## Annex 6. Stakeholder Mapping Method and Data

To complement the expenditure analysis reflected in this report, focus group discussions were organized to explore the relationships, incentives, and influence of actors involved in expanding access to secondary education in Lesotho. Discussions were organized with the Ministry of Education and Training (MoET), four school governing boards (SGBs), teachers' unions, and development partners between April 17-24, 2018 in Marakabeis, Maseru, Masianokeng, Mohale, and Nazareth. Table A1 reflects the organizations represented in these discussions. The school governing board focus groups were conducted in Sesotho.

Focus groups were facilitated using Net Map, a tool developed to guide discussions about how actors are linked, as well as their influence and goals related to a specific proposed change. Facilitators posed the question *'Who has influence on expanding access to secondary education in Lesotho?'* Focus groups mapped the following:

- *Who is involved?* Write the names of actors with a role in expanding access on post-it-notes and place them on a large sheet of flip chart paper. Actors were categorized into six groups: government, school, community, civil society, development partner, and other.
- *How are actors linked?* Draw arrows between actors to reflect reporting, persuasion, and disagreements.
- *What are actors' goals?* Actors in favor of or perceiving benefits from the reform options for expanding secondary education were assigned a 'positive' goal. Actors perceiving risks or a 'headache' from the reform options were assigned a 'negative' goal. Actors perceiving risks and benefits or no impact from proposed reforms were assigned a 'neutral' goal.
- *What are actors' influence?* Stack wooden disks to reflect actors' degree of influence over the proposed change. Zero disks represented no influence and six disks represented the highest influence.

To anchor the discussion, the following reform options were presented to each group:

- Government may need to make spending more efficient (for example, by employing multi-subject teachers, using school facilities for double shifts, and improving teacher allocation) or shift resources from other areas of the budget (for example, from the tertiary bursary scheme).
- Teachers could be recruited, retrained, and/or asked to teach multiple subjects.
- Schools or classrooms could be built, and existing primary school facilities could be used for double shifts.

Participants mainly discussed the goals of actors relative to ongoing reforms in Lesotho, including the launching of the new curriculum; the phasing out of the primary school leaving exam; and the creation of an academic, vocational and artisanal track for post-primary education. SGBs focused on the impact on teacher and principal workloads, the availability of resources, and the ability to navigate relationships with external actors, such as influential community members and regulatory actors in the education system.

The stakeholder maps produced during the focus groups reflect perceptions rather than as 'hard facts' or immutable truths. Perceptions are likely to change with time, depending on who sits at the table. Many of the groups mapped actors as being generally in favor of increasing access to secondary education, when these same groups may or may not have been in favor of a specific policy proposal. The maps produced

during these sessions reflect perceptions of the focus group participants, which can be used to form and test a hypothesis about the way in which formal and informal systems operate within Lesotho's education system. Along with the maps drawn by stakeholders, notes were taken during each session about why specific stakeholders were placed on the maps (or left off), why links were drawn (or not drawn), and the reasoning behind their being assigned positive, negative or neutral goals — or a certain level of influence.

A summary of the level of influence and perceived goals, as well as reporting, convincing and persuading links assigned to several key actors are highlighted in the tables below.

**Table A.1. Organizations Represented at Secondary Education Focus Groups**

<b>MoET, Maseru (April 17, 2018)</b>	<b>St. John the Baptist School Governing Board, Marakabeis (April 18, 2018)</b>
Budget Department Examinations Council of Lesotho Ministry of Education and Training Inspectorate National Curriculum Development Commission Technical Vocational Department Lesotho Distance Teaching Center Ministry of Education and Training Planning Special Education Unit Teaching Service Department	Parents' Representative Teacher Acting School Principal Proprietor Community Councillor
<b>Teachers Formations, Maseru (April 24, 2018)</b>	<b>Mohale High School Governing Board, Mohale (April 19, 2018)</b>
Progressive Association of Lesotho Teachers (PALT) Lesotho Association of Teachers (LAT) Lesotho Teachers Trade Union (LTTU)	Parents' Representative Teacher Chief Proprietor School Principal Parents Representative
<b>Development Partners, Maseru (April 24, 2018)**</b>	<b>St. John Mount High School Governing Board, Nazareth (April 20, 2018)</b>
Lesotho Council of Non-Governmental Organizations (LCN) World Vision World Food Programme (WFP) United Nations Educational, Scientific, and Cultural Organization (UNESCO)	School Principal Parents Representative Teacher Parents Representative Community councillor Proprietor
<b>Masianokeng High School Governing Board, Masianokeng (April 23, 2018)</b>	
Proprietor Chief Representative School Principal Parent Representative Proprietor Teacher Community Councillor	

\*\* Development partners from the Lesotho Council of Non-Governmental Organizations (LCN), World Vision, the World Food Programme (WFP), the United Nations Educational, Scientific, and Cultural Organization (UNESCO), and the United Nations' Childrens' Emergency Fund (UNICEF) were invited to the focus group. Not all organizations were able to attend.

**Table A.2: Influence, Perceived Goals, and Links Assigned to Key Actors**

Focus Group	Influence	Goals	Number of reporting links	Number of convincing links	Number of disagreement links
<b>Perceptions about the Teaching Service Department (TSD)</b>					
MoET	0	(+ -)	1	0	8
Development Partner (DP)	2	(+ -)	1	2	0
Teachers Formation	5	+	2	0	0
Mohale	3	+	3	0	3
Nazareth	5	+	1	0	0
Masianokeng	4	+	2	0	1
Marakabeis	not mentioned				
<b>Perceptions about the Examinations Council of Lesotho (ECOL)</b>					
Ministry of Education and Training (MOET)	3	+	2	0	0
DP	4	+	1	1	0
Teachers Formation	2	(+ -)	1	0	0
Mohale	2	+	1	1	1
Nazareth	not mentioned				
Masianokeng	6	+	4	0	1
Marakabeis	5	+	1	0	3
<b>Perceptions about Education Facilities Unit (EFU)</b>					
MoET	0	+	1	0	2
DP	1	(+ -)	1	0	0
Teachers Formation	3	+	0	0	0
Mohale	2	(+ -)	1	0	0
Nazareth	not mentioned				
Masianokeng	5	+	1	0	0
Marakabei	not mentioned				
<b>Perceptions about School Supply Unit (SSU)</b>					
MoET	0	+	1	1	4
DP	not mentioned				
Teachers Formation	3	+	1	0	0
Mohale	2	+	1	0	0
Nazareth	not mentioned				
Masianokeng	6	+	1	0	0
Marakabeis	5	+	1	0	2

(Table A.2 continued)

Focus Group	Influence	Goals	Number of reporting links	Number of convincing links	Number of disagreement links
<b>Perceptions about Parents</b>					
MoET	2	(+ -)	0	1	0
Teachers Formation	1	(+ -)	0	6	1
DP	0	+	0	0	2
Mohale	4	(+ -)	1	3	1
Nazareth	3	+	2	2	2
Masianokeng	1	(+ -)	2	4	1
Marakabeis	3	+	1	2	0
<b>Perceptions about Principals</b>					
MoET	3	(+ -)	2	1	6
DP	4	(+ -)	2	2	2
Teachers Formation			not mentioned		
Mohale	5	(+ -)	3	2	3
Nazareth	4	(+ -)	3	1	11
Marakabeis	6	+	2	0	2
Masianokeng			not mentioned		
<b>Perceptions about School Governing Boards (SGBs)</b>					
MoET	1	-	5	2	1
DP	2	+	2	1	0
Teachers Formation	4	-	2	0	0
Mohale	4	(+ -)	3	2	2
Nazareth	5	+	3	4	3
Masianokeng	5	+	1	1	1
Marakabeis	5	+	2	1	1
<b>Perceptions about Teachers</b>					
MoET	3	-	1	1	1
Teachers Formation	4	(+ -)	8	5	2
DP	4	+	2	1	0
Mohale	6	(+ -)	6	1	6
Nazareth	4	+	3	0	2
Masianokeng	3	(+ -)	5	2	10
Marakabeis	4	(+ -)	2	3	5

(Table A.2 continued)

	Focus Group	Influence	Goals	Number of reporting links	Number of convincing links	Number of disagreement links
<b>Perceptions about Unions</b>						
<i>Teacher Union Focus Group</i>	Lesotho Association of Teachers	2	(+ -)	2	0	1
	Lesotho School Principals Association	2	(+ -)	0	0	1
	Lesotho Teachers Trade Union	2	(+ -)	2	0	1
	Progressive Association of Lesotho Teachers	2	(+ -)	2	0	3
	Teacher Formations	3	(+ -)	6	4	2
<i>MoET Focus Group</i>	Trade Union	3	-	0	0	3
	Teacher Formation	2	-	0	0	0
<i>Other focus groups: 'Teacher Formation'</i>	DP	3	(+ -)	0	1	1
	Mohale	not mentioned				
	Nazareth	3	(+ -)	0	0	3
	Masianokeng	2	+	1	0	1
	Marakabeis	4	(+ -)	0	1	2

Source: Maps are drawn by focus groups discussions.

Note:

\*Influence is on a scale from 0 (no influence) to 6 (highest influence).

\*\*Goals: (+) represent positive goals or perceived benefits from expanding access to secondary education; (+) represents neutral goals or perceived benefits and risks; (-) represents negative goals or perceived risks.

\*\*\*Number reporting links reflects the number of in and out reporting links drawn by each focus group; number convincing links reflects the number of in and out convincing links drawn by each focus group; and the number disagreement links reflects the number of in and out disagreement links drawn by each focus group.

**Annex 7. Repetition, Dropout and Transition Rates for Three Simulations (%)**

	<b><u>Simulation A:</u> Business as usual</b>	<b><u>Simulation B:</u> Rapid Expansion of Junior Secondary Education</b>	<b><u>Simulation 3:</u> Rapid expansion of all secondary education</b>
<b>Repetition rates</b>			
Primary	11	0	0
Junior Secondary	15	11	10
Senior Secondary	15	15	10
<b>Dropout rates</b>			
Primary	2	0	0
Junior Secondary	5	5	2
Senior Secondary	10	10	0
<b>Transition rates</b>			
Primary to Junior Secondary	70	70	85
Junior to Senior Secondary	54	60	85

*Source: Assumptions as discussed in text.*

## Bibliography

- Bruns, Barbara, Alain Mingat, and Ramahatra Rakotomalala. 2003. *Achieving Universal Primary Education by 2015: A Chance for Every Child*. World Bank: Washington, DC
- Bureau of Statistics. 2015. *Education Statistics Report*. Lesotho Bureau of Statistics, Maseru.
- Burger, R., A. Smith, N. Spaul, and S. Van der Berg. 2015. "Poverty, Fiscal Incidence and Service Delivery in South Africa." In *Public Economics*, edited by P. Black, E. Calitz, T. Steenekamp, K. and Siebrits, 138–168, Oxford University Press: Cape Town. .
- Caillods, Françoise. 2001. "Financing Secondary Education in Selected Francophone Countries of Africa: Issues and Perspectives." In *Financing Secondary Education in Developing Countries: Strategies for Sustainable Growth*, edited by Keith Lewin and Françoise Caillods, International Institute for Educational Planning/UNESCO: Paris.
- Cunha, F. and J. Heckman. 2007. "The Technology of Skill Formation." *AEA Papers and Proceedings*, 97(2): 31–47.
- ECOL (Examinations Council of Lesotho). 2015a. "LGCSC Examinations Results." <http://www.education.org.ls/index.php/downloads/lgcsc-exam-results>
- . 2015b. "Junior Certificate Passlist." <http://www.education.org.ls/index.php/downloads/jc-results>
- . 2015c. "PSLE Passlist." <http://www.education.org.ls/index.php/downloads/psle-exam-results>
- . 2016a. "Junior Certificate Passlist." <http://www.education.org.ls/index.php/downloads/jc-results>
- . 2016b. "PSLE Passlist." <http://www.education.org.ls/index.php/downloads/psle-exam-results>
- . 2016c. *Lesotho Localized Curriculum and Assessment in Senior Secondary Education. Collaboration Between the Examinations Council of Lesotho and Cambridge International Examinations*. <http://www.education.org.ls/index.php/downloads/2015-09-09-10-09-44/curriculum-policy>
- Essama-Nssah, B., Philippe G. Leite, and Kenneth R. Simler. 2008. *Achieving Universal Primary and Secondary Education in Uganda: Access and Equity Considerations*. Poverty Reduction and Social Protection Groups. World Bank: Washington, D.C.
- Grosh, Grosh, Carlo del Ninno, Emil Tesliuc, and Azedine Ouerghi. 2008. "For Protection and Promotion: The Design and Implementation of Effective Safety Nets." World Bank, Washington, DC.
- IDA (International Development Association). 2016. *Project Appraisal Document on A Proposed Credit to the Kingdom of Lesotho for An Education Quality for Equality Project*. Unpublished: Washington, DC.
- Lesotho Bureau of Statistics. 2015. *Education Statistics Report*. Lesotho Bureau of Statistics, Maseru.
- . 2017. 2016 Census Summary: Summary and Key Findings. Bureau of Statistics: Maseru. Available: <http://www.bos.gov.ls/>. Accessed: 21 May 2018.
- Lesotho Country Diagnostic Study. 2016. *Education Sector Study of Lesotho: A System at a Crossroads*. A national study with the support of UNESCO, UNICEF, and World Bank with funding from the Global Partnership for Education: Washington, DC.
- Lesotho, Ministry of Health. 2016. *Lesotho Demographic and Health Survey 2014*. Maseru.

- Lesotho Review. 2015. *Chapter: Education and Training*. Wade Publishers, <http://www.lesothoreview.com/education-training-2015.php>
- Lewin, Keith M. 2001. "Secondary Schooling in Malawi: The Challenge of Financing Enrollment Growth". In: Lewin, Keith and Françoise Caillods. 2001. *Financing Secondary Education in Developing Countries: Strategies for Sustainable Growth*, pp.95-126. International Institute for Educational Planning/UNESCO.: Paris
- . 2007a. *Improving Access, Equity and Transitions in Education: Creating a Research Agenda*. CREATE Pathways to Access Research Monograph No 1.
- . 2007b. "Financing Education in Developing Countries. *Commonwealth Education Partnerships 2007*: 141-7. Available: [www.cedol.org/wp-content/uploads/2012/02/141-147-2007.pdf](http://www.cedol.org/wp-content/uploads/2012/02/141-147-2007.pdf). Accessed: 23 May 2018.
- Lewin, Keith and Françoise Caillods. 2001. *Financing Secondary Education in Developing Countries: Strategies for Sustainable Growth*. International Institute for Educational Planning/UNESCO: Paris.
- Majgaard, Kirsten and Alain Mingat. 2012. *Education in Sub-Saharan Africa: A Comparative Analysis*. World Bank: Washington, DC. Manduvi-Moyo, J. and Keith M. Lewin. 2001. "Financing Secondary Education in Zimbabwe: Access, Equity and Efficiency Revisited". In *Financing Secondary Education in Developing Countries: Strategies for Sustainable Growth*, edited by Keith Lewin and Françoise Caillods, pp.61-94. International Institute for Educational Planning/UNESCO: Paris.
- Mingat, Alain, Blandine Ledoux, and Ramahatra Rakotomalala. 2010. *Developing Post-Primary Education in Sub-Saharan Africa: Assessing the Financial Sustainability of Alternative Pathways*. Africa Human Development Series. World Bank: Washington, DC.
- MoET (Ministry of Education and Training). 2005. *Policy, Planning and Management of Primary Teachers in Lesotho*. [http://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/publication/wcms\\_161961.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_161961.pdf)
- . 2009. *Proposed Career Structure for the Teaching Service in Lesotho*. Government of Lesotho: Maseru
- . 2014. *The Evaluation of the Distance Education Programme (DTEP) offered by Lesotho College of Education: Final Report*. (Chair: Maximus Monaheng Sefotho). ([http://www.education.org.ls/images/PDFs/DTEP\\_final.pdf](http://www.education.org.ls/images/PDFs/DTEP_final.pdf))
- . 2015a. MoET website. <http://www.education.org.ls/index.php/2015-08-09-20-48-29/ministry-of-education-management>
- . 2015b. MoET website. [http://www.gov.ls/gov\\_webportal/ministries/education%20and%20training/edu.html](http://www.gov.ls/gov_webportal/ministries/education%20and%20training/edu.html).
- . 2015c. MoET website. <http://www.education.org.ls/index.php/2015-08-09-20-48-29/teacher-development>
- . 2016. *Education Sector Plan 2016—2025*. Draft # 1. Government of Lesotho: Maseru. June.
- . 2005. *Lesotho Education Sector Strategic Plan: 2005-2015*. MoET: Maseru.
- Ministry of the Public Service. 2016. *Circular Notice No. 2 of 2016*. Government of Lesotho. March 7. Maseru.
- Namibia, Office of the Auditor General. 2016. *Summary Report of the Auditor General on the Accounts of the Ministry of Education, Arts and Culture (2015/16)*. Windhoek. <http://www.oag.gov.na/report/1CGOV-Fin-Min-reportPage9.html>
- Nehmé, Micheline. 2017. *Lesotho Student Bursary Scheme Portfolio Improvement Strategy – Analysis and Recommendations*. Report for the World Bank. Unpublished.
- Spaull, N. 2012. "Lesotho At A Glance: SACMEQ Series." Stellenbosch Economic Working Papers. <http://resep.sun.ac.za/index.php/projects/>

- Taylor, S., and N. Spaul. 2015. "Measuring Access to Learning Over A Period of Increased Access to schooling: The Case of Southern and Eastern Africa since 2000." *International Journal of Educational Development* 41: 47–59.
- Theunynck, Serge. 2009. *School Construction Strategies for Universal Primary Education in Africa: Should Communities be Empowered to Build Their Schools?* Africa Human Development Series. World Bank: Washington, DC.
- . 2015a. *School Construction Component Lessons Learned and Unit Cost Analysis. Lesotho – Basic Education Project (BEP), Implementation Completion Report (ICR).* October 15. World Bank: Washington, DC.
- . 2015b. *Reading the Education System through the School Construction Lens: Lessons Learned from BEP and Other Projects.* Lesotho Ministry of Education and Sports – World Bank. Learning Project Preparation Event. Washington, October 2015.
- United Nations Population Division, 2015. *Population Prospects 2015 Revision.* United Nations: New York.
- UNICEF (United Nations Children's Fund). 2014. *The Impact of Incentives for the Recruitment and Retention of Qualified Teachers in Namibia's Remote Schools.* Windhoek: UNICEF. September. Available: [https://www.unicef.org/namibia/na.Impact\\_of\\_incentives\\_Qualified\\_teachers\\_in\\_Namibia\\_FinalReport\\_10\\_Sept2014.pdf](https://www.unicef.org/namibia/na.Impact_of_incentives_Qualified_teachers_in_Namibia_FinalReport_10_Sept2014.pdf)
- Van der Berg, S. and M. Knoesen. 2015. *Implications of Demographic Projections for Education in the Five SACU Countries.* Report for the World Bank: Stellenbosch.
- . 2016. *Demand for Education in the Five Countries of the South African Customs Union – Projections and Implications.* Report to the World Bank. Stellenbosch.
- Verspoor, A. 2006. *At the Crossroads: Choices for Secondary Education in Sub-Saharan Africa.* World Bank: Washington, DC.
- World Bank. 2015. *Lesotho - Systematic Country Diagnostic.* Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/371421468188678379/Lesotho-Systematic-country-diagnostic>
- . 2016. "Project Appraisal Document for a Social Assistance Project." World Bank, Washington, DC.