Document of The World Bank

Report No.: 52888

PROJECT PERFORMANCE ASSESSMENT REPORT

MALAWI

SECONDARY EDUCATION PROJECT (Cr. 3051)

JANUARY 29, 2010

Sector Evaluation Division Independent Evaluation Group

Currency Equivalents (annual averages)

 $Currency\ Unit = Kwacha$

Secondary Education Project

As of October 1997 As of March 16, 2006 US\$1 = Kwacha 17.4 MWK1 = US\$0.01 SDR 1.0 = US\$1.36 (as of December 1997) US\$1.43783 = SDR1

Abbreviations and Acronyms

AfDB African Development Bank
CAS Country Assistance Strategy
CDSS Community Day Secondary School

CIDA Canadian International Development Agency
DANIDA Danish International Development Agency

DCA Development Credit Agreement DPL Development Policy Loan

EDMU Educational Development Management Unit

EFA Education for All

EMIS Educational Management information system

EU European Union

FTI Fast-Track Initiative to achieve Education for All

JCE Junior Certificate Examination GDP Gross domestic product

GTZ Gesellschaft fuer Zusammenarbeit
ICR Implementation Completion Report
IDA International Development Association
IEG Independent Evaluation Group

ISR Implementation Status and Results Report

MOE Ministry of Education

MSCE Malawi School Certificate Examination

NGO Nongovernmental organization

OECD Organization for Economic Cooperation and Development

PAD Project Appraisal Document PCU Project Coordination Unit PIU Project Implementation Unit

PSLCE Primary School Leaving Certificate of Education

PPAR Project Performance Assessment Report
PRSP Poverty Reduction Strategy Paper
PRSC Poverty Reduction Strategy Credit
QAG Quality Assurance Group

SWAP Sector-Wide Approach

UNESCO United Nations Educational, Scientific, and Cultural Organization

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

Fiscal Year

Government: January 1 — December 31

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Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings:* High, Significant, Moderate, Negligible to Low, Not Evaluable.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. The rating has two dimensions: government performance and implementing agency performance. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

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Principal Ratings

	ICR*		PPAR
Secondary Education	Project (Cr. 3051)		
Outcome	Satisfactory	Moderately satisfactory	Moderately unsatisfactory
Institutional Development Impact	Modest	Modest	n/a
Risk to Development Outcome**			Significant
(Sustainability)	Likely	Likely	
Bank Performance	Satisfactory	Satisfactory	Moderately Satisfactory
Borrower Performance	Satisfactory	Unsatisfactory	Unsatisfactory

^{*} The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The ICR Review is an intermediate IEG product that seeks to independently verify the findings of the ICR.

** According to the 2006 harmonization guidelines, sustainability has been replaced with a "risk to development outcome" rating.

Key Staff Responsible

	Task Manager/ Leader	Division Chief/ Sector Director	Country Director
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Preface

This is the Project Performance Assessment Report (PPAR) on an education project in Malawi.

The Secondary Education Project (Cr. 3051) was approved on March 24, 1998 for a credit of US\$48.2 million equivalent. The Credit closed on December 31, 2005 after extensions totaling 30 months, and disbursed fully.

This project was the subject of a PPAR because Malawi was one of a few countries that specifically invested in secondary education in sub-Saharan Africa. Efforts were made to gain insights regarding the results chain in this subsector and the ultimate effects of secondary education projects on labor-market skills.

The document is based on the following sources: Implementation Completion Reports (ICR), Project Appraisal Document (PAD), Development Credit Agreement, and project files, particularly the supervision reports. Also, IEG consulted the research literature, reports on Malawi, and data on schooling trends. An IEG mission visited Malawi in July 2009, to interview officials, donors, and beneficiaries, observe instruction in schools, and collect other pertinent information. Field visits took place in Blantyre, Lilongwe, and various rural areas. The author thanks the government officials who received the mission for their extensive cooperation.

Following standard IEG procedures, copies of the draft PPAR were sent to government officials and agencies for their review and comments. However, no comments were received.

Summary

This document reviews the performance of the Secondary Education Project (Cr. 3051) approved in FY98. The development objective of the project was to increase the number of students from disadvantaged groups who graduate from public and private secondary schools with higher performance in Malawi. More specifically, the project aimed to expand access, improve educational quality, increase systemic efficiency and effectiveness, provide materials to stem the spread of HIV/AIDS, strengthen implementation capacity, and encourage provision of private secondary education.

The project reflected a government commitment to develop secondary education while still in the process of expanding primary education access. The investment was oriented towards the inputs needed to enable an additional 9600 students to attend secondary schools. It included construction of 20 schools in underserved areas, training of administrators, textbook acquisition, administrative support, and materials aimed at stemming the spread of HIV/AIDS. Despite limited implementation capacity and delays, most planned activities were carried out. Most student places were filled, and access to secondary education substantially increased in conventional schools. However, the poorest students may be unable to afford the various fees charged by these schools. Overall, the number of boys and girls who stay in school and transition to higher secondary education has increased. However, the project had a limited effect on enrollments at the national level because it offered no benefits to the majority of the students who attend community day schools.

The project was less successful in providing students with knowledge that would enable them to pass examinations and meet labor market demands. Textbooks were procured and rented to students, but provision could not be sustained. A revolving fund was established to help schools take over future textbook procurement, but funds were insufficient, and bilateral donor aid for the fund was unexpectedly reduced. After project completion, schools had infrastructure priorities and rarely acquired textbooks. Thus, few textbooks remained available in schools by 2009. Most of the classroom time is spent on transcription of textbook contents, first to the blackboard, then to students' notebooks. Given a teacher absenteeism rate of about 20 percent, little time remains for covering the prescribed curriculum, learning the material, and preparing graduates for the labor market. Learning inefficiencies result in relatively low pass rates in the secondary school leaving certificate and continuing high repetition rates. Overall, educational quality seems to have deteriorated rather than improved in the country. The outcome of the Secondary Education Project is rated *moderately unsatisfactory*.

Risk to development outcome is rated *significant*; although there is much demand for secondary education, the maintenance status of the new buildings and sustainability of expenditures are uncertain. Bank performance is rated *moderately satisfactory*, due to a moderately satisfactory quality at entry, a high turnover of task managers, and a limited attention to the educational components of the project. Borrower performance is rated *unsatisfactory*, because of long-term delays, scarcity of counterpart funds, failure to appoint competent staff to manage the project, and governance issues.

This assessment provides a number of lessons for the education sector:

- Civil works have procurement issues that may exceed the supervisory capacity of the implementing units in low-income countries. Private-sector contractors may be able to execute civil works, but a lack of supervision may result in fraud, vandalism, and poor-quality buildings. The complexities of civil-works procurement may become the focus of education projects at the expense of learning issues. Governments should make efforts to employ staff with continuity and expertise that would ensure efficient execution of civil works and allow managers time to focus on learning-related improvements.
- Textbooks or systematically reproduced materials are a prerequisite for knowledge management at all levels of education. Their sustained availability should be a policy priority, particularly in countries where they are expensive. Without textbooks and training of teachers in their use, class time is spent in transcription; knowledge becomes constricted and systemic efficiency is low. Because of their crucial role, decisions on textbook purchases might best not be left to the discretion and financial strength of individual schools. A national strategy of sustainable and affordable secondary education textbooks is needed in low-income countries.
- Often projects provide inputs to educational institutions and expect improved learning outcomes as a result of these. To help students process information and retain it, however, instructionally oriented interventions are needed. Project designs lacking specific elements for improving the learning conditions of schools may not obtain the needed learning and subsequent educational outcomes.
- Large-scale curricular reforms will only have a positive effect if curricula are realistically implementable in classrooms. The Bank should be more proactive in advising governments on realistic curricular structures. Since curricular revisions often necessitate new textbooks, it is important to ensure that there is sufficient rationale for the revisions.

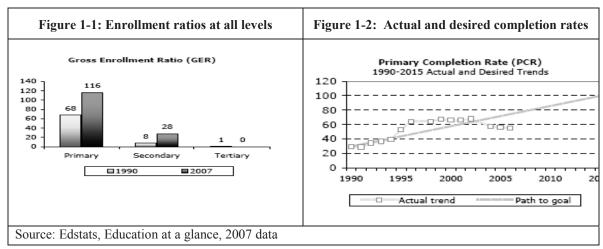
Vinod Thomas
Director-General
Evaluation

1. Background

1.1 Malawi is an agricultural, landlocked, densely populated country of about 14.4 million people with a US\$250 per capita income. The official language is English, but the majority of the population speaks Chichewa, which serves as the medium of instruction for grades 1-3. The literacy rate is about 72 percent for men and 49 percent for women. However, educational attainment is improving. During the last decade, the proportion of men who had never attended school dropped from 21 percent to 12 percent, while that of women dropped from 47 percent to 23 percent.¹

The Education Sector in Malawi

- 1.2 Malawi has an eight-year primary school followed by 4 years of secondary. The primary school grades are called "standard" 1-8, while the secondary grades are "form" 1-4. Entry to secondary school is selective. At the end of Form 2 (grade 10) students take the Junior Certificate examination (JCE), and at the end of Form 4 (grade 12), they take the Malawi School Certificate Examination (MSCE) for graduation (University entrance examinations take place separately.)
- 1.3 Primary schools in Malawi have about 3.6 million students (MOE 2008, p. 51), and secondary schools have about 210,000. Enrollment rates were low until 1994, when primary tuition fees were abolished. The influx of students has severely strained the system, and standards in schools have been declining. Grade 1-2 classes in many areas have over 100 students. About 40 percent of primary school entrants drop out by grade 6, about 60 percent drop out by grade 8, and primary-education completion rates are stationary (Figure 1-2). Nevertheless, the enrollment surge has increased demand for secondary education, which has risen from 31,495 in 1990 to about 233,573 in 2008 (Figure 1-1, MOE 2008 and Education Sector Support Project, PAD p. 26).



1.4 Traditionally, secondary education has been provided through a combination of boarding and day schools. Based on the results of the primary school leaving

¹ Country at a Glance, 2007; World Bank 2009, p. 10. English is used for instruction after grade 4. Chichewa is written in the Latin script with simple spelling and thus is very useful for English reading.

examination, students are assigned to different school types. These are "conventional" secondary schools, 2 Community Day Secondary Schools (CDSS), Open Day Secondary Schools, and private schools. The better students attend conventional schools, and lower scoring students attend community schools (approved and unapproved; MOE 2008, p. 83). The students not selected into public facilities may attend low-cost private schools that have very poor infrastructure and materials or "open" schools that operate in regular schools in the afternoons or evenings. Due to space limitations in public secondary schools most children who pass national examinations at the end of the primary school cycle are unable to continue (Country Status Report 2008).

2

- 1.5 At the time the project was appraised in 1996, only those enrolled in "conventional" public and private schools were considered secondary education students. Other poorer students, (who were 46 percent in 2000³ and by 2008 constituted 67 percent of the student population, according to MOE 2008) attended distance education centers. These had been supported by the third and fifth education projects (Cr. 910 and 1330), and were run by the Malawi College of Distance Education. They used primary school teachers to monitor students, few of whom could handle the secondary-level material on their own. In 2004, most distance education centers were converted into Community Day Secondary Schools. These schools, which are generally in rural areas, have a poorquality infrastructure. Some were constructed by the community, while others used buildings constructed for distance education, or for primary education in the afternoons. Even after their conversion to community day secondary schools, almost half (289 of 630; MOE 2008) remain unapproved.
- 1.6 Distance from school also determines ability to attend. Secondary schools of any type are relatively few, about 769 in 2008, and many students depend on boarding facilities. About 53 of the conventional schools have boarding, though a number of community schools have informal dormitories as well. Until the advent of the secondary education project, boarding schools provided highly-subsidized feeding and accommodation regardless of means.

² Conventional schools consist of four government national schools, grant-aided secondary schools, district boarding secondary schools, and day secondary schools. Grant-aided schools are generally considered public because teachers are being funded by the government. Around 2007 there were about 10,258 secondary school teachers in Malawi, of which 8,026 are working in government-funded schools. Community schools have the highest number of teachers (60 percent). Only about 20 percent are female, and they tend to be concentrated in urban and other semi-urban centers. About 60 percent of the teachers are not qualified to teach in secondary schools (81 percent in community schools vs. only 27 percent in conventional schools; Country Status Report 2009).

high pass rates for the junior certificate (88-100 percent), but very low rates for the MCDE (9-11 percent in 1996-1997; Laymanan circa 1998). Given the observations of the IEG mission, it is possible that students

had very limited knowledge of English and low reading rates.

³ ESSUP PAD, p. 28

⁴ The Malawi College of Distance Education offered studies for primary and secondary diplomas; it had

Bank Sector Strategy

- 1.7 The Bank has supported secondary education in Malawi since the first project, approved in 1967 (Table 1-1). Seven of the 10 completed projects supported various aspects of this level of education, mainly through infrastructure; each built a few secondary schools or teacher training centers. The first and second project focused on secondary education at the general and technical levels. The third project established the Malawi Institute of Education and expanded the secondary education training program at Chancellor College. The fourth established 3,960 new secondary student places and further expanded the Chancellor College's secondary teacher training program. The fifth education project (Cr. 1330) supported the Malawi Correspondence College, which at that time provided alternative secondary education to 30 percent of the secondary education students (World Bank 1983).⁵
- 1.8 Other donors have also been involved in secondary education. These include the African Development Bank (ADB), UNICEF, and bilateral donors such as GTZ, DFID, CIDA, and DANIDA. In secondary education donor collaboration has been limited in the past, but donor harmonization procedures have recently been established for subsequent investments.

Table 1-1: World Bank - Education Lending in Malawi

Project name	Project ID	Cr. No.	Approval FY	Final closing date	Credit amount (\$ million)	Cancelled or undisbursed (\$ million)	IEG Ratings Outcome
Completed Projects							
Education I	P001587	102	1967	6/30/1977	6.3	0	Satisfactory*
Education II	P001601	590	1976	6/30/1981	11.6	0.2	Satisfactory*
Education III	P001608	910	1979	12/31/1985	14.5	0.5	Satisfactory*
Education IV	P001610	1123	1981	12/31/1986	41	10.5	Satisfactory*
Education V Education Sector Credit	P001618	1330	1983	9/30/1990	34	0	Satisfactory* Marginally
I Education Sector Credit	P001633	1767	1987	12/15/1994	27	0.3	satisfactory Marginally
II Primary Education	P001649	2083	1990	6/30/1998	36.9	0	satisfactory Unsatisfacto
Project Secondary Education	P042305	2810	1996	12/31/2000	22.5	0	ry Moderately
Project Development Learning	P001670	3051	1998	12/31/2005	54.7	0	satisfactory Canceled,
Center	P083704	3879	2004	11/30/2005	4.0	4.0	n/a
Ongoing Projects Malawi Education							
Sector Support project	P070823	H1590	2005	9/15/2010	32.2		

^{*}Note: the ratings of these older projects have been imputed from project documents.

⁵ The education sector has also benefited from policy and financing inputs from structural adjustment loans and Poverty Reduction Support Credits. The Malawi first and second Poverty Reduction Support Programs (PRSPs; P099313 and P107303), although secondary education was not specifically targeted.

⁶ The acronyms of these organizations are on the second page of this report.

4

2. Project Objectives and Relevance

2.1 Table 2-1 refers to project objectives and components as stated in the PAD. The evaluation follows the PAD objectives, because they refer to performance and to private education.

Table 2-1: Project Objectives and Components

Table 2-1: Project Objectives and Components	
Malawi: Secondary Education Project	
Objectives	Components
The project development objective is increasing the number of students from disadvantaged groups who graduate from public and private secondary schools with higher performance (p. 14). The main objective of the operation is to support the Government's plan to expand	⇒ Expanding access to secondary education (US\$26.8m appraisal, US\$39.8m actual) to finance civil works for building and equipping 15 day schools in rural areas and five schools in urban areas with a total capacity of 9,600 students.
and improve secondary education (p.2). Specific objectives are to: ⁷	⇒ Provision of Instructional Materials (US\$7.7m appraisal, US\$10.8m actual) to enhance the quality of secondary education through provision of instructional
(a) expand access, by constructing 20 new day secondary schools and related physical facilities;	materials; the 20 new schools would receive textbooks for all grades in core subjects, reference books for school libraries, basic school supplies and consumables for
(b) improve educational quality, through provision of teaching and learning materials in all Government and grant-aided general ("conventional") secondary schools;	science. The government and grant-aided secondary schools would receive textbooks, school supplies and consumables for science.
(c) improve efficiency and effectiveness of the secondary education system by strengthening school-based management through training of methods advisors, deputy heads and heads of department in all schools, and	⇒ Training on School Level Management and Teacher Support (US\$1.2m appraisal, US\$1.7m actual) for a managers' training course aimed at enhancing teaching effectiveness (for 100 school deputies, 450 heads of department, 40 methods advisors, 10 new heads of schools).
new heads of schools; (d) stem the spread of HIV/AIDS among teachers and students, through provision of training materials;	⇒ HIV/AIDS Materials Reproduction and Adoption (US\$1.3m appraisal, US\$1.7 m actual) to rapidly adapt materials from Zimbabwe for use in all secondary schools and in all grades to help sensitize and train youth on reproductive health issues.
(e) strengthen project implementation capacity, through technical assistance in procurement and financial management; and	⇒ Support to Administrative Unit, Monitoring and Evaluation, and Studies (US\$1.0m appraisal, US\$1.5m actual) to support the project implementation team, a financial reporting system, and communications
(f) support the Ministry of Education's (MOE) policy to encourage provision of private secondary education by supporting short-term consultancy services on private education.	equipment.

⁷ The objective is stated differently in p. 2 and 14 of the Project Appraisal Document but there is complementarity. The Development Credit Agreement objective has small differences in wording with the PAD objective of p. 2, but the meaning is substantially similar. It stated: The objectives of the Project are to support the Borrower's plan to expand and improve secondary education through: (i) expanding access by constructing new secondary schools; (ii) improving the quality of education by providing teaching and learning materials; (iii) improving the efficiency and effectiveness of the secondary education system by strengthening school-based management through the provision of training; and (iv) stemming the spread of HIV/AIDS among teachers and students through the provision of materials and training. This document follows the PAD objectives, because they refer to performance and to private education.

5

Relevance

- 2.2 Objectives were highly relevant; the project development objectives have been consistent with the Government's Secondary Education Strategy and long-term objectives as defined in the 1996 Country Assistance Strategy (CAS; no. 15494). The strategy was focused on economic growth and support for human resources development. The objectives remained relevant with the Poverty Reduction Strategy Plan (PRSP) and 2007 CAS (Report No. 25906-MAI), which seeks to improve among other things, delivery of education services, textbooks and materials, girls' education and HIV/AIDS education. The objectives were also in harmony with the government's sectoral plans. 8
- 2.3 Overall, the design was modestly relevant to project objectives. There was a need to invest in secondary education because this level of knowledge is necessary for the preparation of primary teachers and workers of other professions. According to the PAD (p. 7), the project was narrowly conceived in order to target some of the immediate problems in secondary education as quickly as possible. The project focused on the relatively few "conventional" secondary schools, expecting to create "centers of excellence". At the time of the appraisal, community schools were still considered distance education centers. (They were converted in 2004, when the project was about to end.) The project did not take *equity* considerations into account. It did not attempt to serve the schools that at that time contained almost half of the secondary education student population. No plans were made to give them textbooks, other than AIDS information, or to train their administrators. The project made the implicit assumption that providing inputs to conventional schools would improve learning outcomes, but the design did not contain specific elements to ensure that the inputs would be used for student learning and quality improvement. Furthermore the project promoted a policy of closing dormitories because of costs (MOE 1996)⁹, without due consideration to the transportation realities of many students, particularly for girls. After facing many problems, the government has revived the use of dormitories, though subsidies have been reduced or removed.

3. Project Implementation

3.1 During appraisal, efforts were made to speed up implementation early on through a Project Preparation Facility (PPF for US\$1.5m) to finance the preparation of initial procurement packages and some studies. However, implementation proved unusually challenging. The problems included constant delays in counterpart funding, lack of procurement experience, difficulty finding suitable staff or consultants, high staff turnover, governance issues, poor financial accounting. By mid-term review in 2001,

⁸ "Policy and investment framework for education in Malawi" 1995-2005 and 2000-2012

⁹ This MOE 1996 policy document specified that to convert to secondary schools, communities would be required to construct four teacher houses, for which the government would provide roofing materials. Once boarding services were phased out, tuition fees would be raised in line with cost sharing mechanisms designed for secondary education.

only 13 percent of the funds had been disbursed, and the delays ultimately necessitated extensions totaling 30 months. The complications related to execution of civil works and procurement detracted the implementers' attention from the educational goals of the project.

3.2 The section below discusses the implementation of the most important activities of this project. For a complete list of inputs, outputs, and outcomes see Annex Table A-1.

Expanding Access to Secondary Education

3.3 The project was to build 20 secondary schools, 15 of them in rural areas. The installations would include teacher housing, laboratories, libraries, and assembly halls. The new schools had no dormitories, and students were expected to commute from an approximate distance of 10 km. Construction proved unexpectedly difficult because building costs had been underestimated, and local contractors had little experience with large buildings. The educational development management unit (EDMU) had little supervisory capacity, and the architectural firm that was hired similarly failed to supervise the construction adequately. As a result, several schools were built with various problems, including the use of lower-quality materials. Project files contain several documents expressing concerns regarding contractor performance. After lengthy delays, however, the 20 secondary schools were built and furnished, creating 9,600 additional places for secondary education.

Figure 3-1: A newly built school



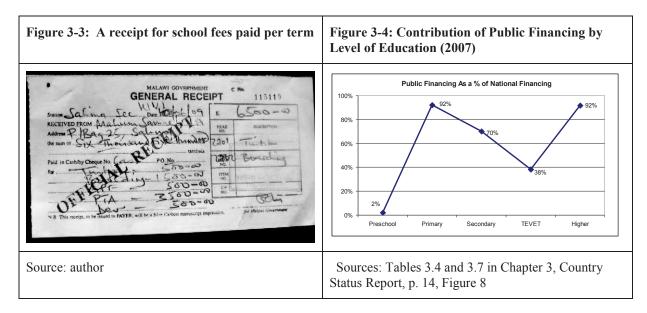
Figure 3-2: Laboratories in a project school



3.4 The IEG mission visited three of the schools built by the project (Figure 3-1: and Figure 3-2:). The buildings were visually appealing, particularly in comparison to community day schools. However, these large structures have substantial recurrent

¹⁰ The IEG mission visited 12 schools: Secondary schools of Bangwe, Salima, Namikasi, and Nachitewe; Community Day Secondary Schools of Ngumbe, Mdeka, Haluka, Msalura; and the Mangissa private secondary school. Also, the mission visited the Msaruwa, Mdeka, Chichiri, and Magankula primary schools (for grades 1-8). The sample is based on convenience and used for illustration rather than rating projects.

expenditures, such as watchmen, grounds maintenance, librarians, and lab assistants. The government cannot afford the expenses, so parents' committees that exist in all schools of Malawi, must determine how funds are to be found. Since communities typically are poor, their fundraising potential is limited; so the expenditures are apportioned to students as fees. Tuition is nominally low (500 kwacha per term), but other fees are much higher. These include a school development fund, general purpose fund, parent-teacher association fee. Each of these fee categories amounts to 500-3500 kwacha per term (about US\$30), so schooling may cost about US\$100 per year (aside from boarding which may cost another US\$50; Figure 3-3:).



Provision of Instructional Materials

- 3.5 The project was to provide textbooks, school supplies, and consumables for sciences to the project-financed schools as well as to the other 93 public conventional schools. (Only the 20 schools got reference books.) By mid-term review in 2001, many essential textbooks had been procured. Following procurement, the curricula in some subjects were changed, and some of the delivered textbooks were not in conformity with the new curricula. Furthermore, governance issues arose with textbook procurement, because a company that won a bid had incorrect documents and proved incapable of delivering the textbooks. After lengthy delays and distribution failures, all textbooks and instructional materials were delivered to schools in 2005.
- 3.6 In 2000, the project set up a book rental scheme for which students would pay a flat fee of 250 kwacha per year (about US\$1.50). Rental fees were set nationally, but individual secondary schools were responsible for collection and deposit in school bank accounts and for secure maintenance of the accumulated fees. It was expected that schools would have a choice of textbooks written on the same subject by different authors. Publishers were to develop manuscripts on the basis of the syllabi and submit them for approval to the Malawi Institute of Education. The top three choices were to be available for purchase by the headmasters and displayed in book fairs. Other potential textbooks were made available as reference books. The MOE was to consolidate the purchases in order to "obtain some degree of discount" (PAD p. 20). It was expected that

after five years of matching fund support, schools would have accumulated sufficient funding to order replacements.

8

- 3.7 The scheme was designed in close association with local publishing and bookselling associations, and it had a stimulating effect on both parts of the local book trade. The mid-term review aide memoire (March 12, 2001) stated that the Planning Directorate would monitor the effective use of textbooks. A 2002 baseline study (ICR p. 10) showed that textbooks provided by the project to conventional schools were facilitating instruction, since teachers did not have to transcribe lessons on the blackboard. Ultimately, however, the book scheme faced unforeseen obstacles; DANIDA initially provided a matching fund and paid publishers whose books were chosen, but for political issues, DANIDA ended its operations in the country and stopped the subsidy.
- With the book rental fees of 250 kwacha per year, the schools cannot afford to buy the books they need. Each costs US\$10-15 (1000-1800 kwacha), so it takes the rental income of six students to buy one book that will last about three years. About 85 percent of the students pay the fees, but many schools divert part of the textbook rental fees for other purposes, and almost 50 percent of the collected rental fees cannot be accounted for (Verspoor, 2008, p. 158). Textbook choice has proved impractical by complicating procedures. (Many headmasters of remote schools could not attend the few book fairs that have been held.) So, as student numbers rose and textbook stocks were not replaced, textbook use proved unsustainable. The few books that exist are kept in the school library, and students may check them out (Figure 3-5: and Figure 3-6:).

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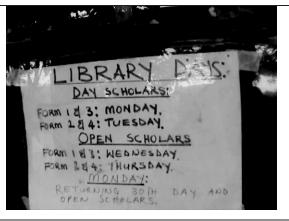
¹¹ Primary school reading practice impacts secondary education. In primary schools, textbooks should be available for each student, but in reality there are 2-3 students per textbook; in particular, textbooks in grades 1-2 are kept in school, have low usage rates, and students are kept illiterate (Calcon 2007). Students usually cannot spend much time practicing reading or learning much English. Scarcity and poor time use may account for delayed reading of primary students. These factors may also account for the statistical finding that textbook availability in Malawi (aside from Chichewa books) has little impact on learning achievement. The books might be available at schools but not in students' hands, thus having no effect on learning (Country Status Report 2009).

Figure 3-5: Library in a community school



Community day secondary schools can only afford to buy a few copies of each textbook

Figure 3-6: Library notices in a community school



Notification: "If you return the books over this date, you will pay K20 as the late return penalty"

3.9 Curricular reform. The project documents mentioned that curricula would be revised, but there were no specifics as to inadequacies of existing curricula and rationale for the revisions, given the effort and expense of obtaining suitable textbooks. Persons interviewed during the mission mentioned the need for periodic curricular revisions regardless of any textbook issues that might arise. For example, in 2008, it was decided that outcome-based curricula should be adopted in Malawi, as have been in other countries (e.g. Burkina Faso), with little attention to the feasibility of doing so. Revising curricula independently of textbooks (particularly in a country where price and scarcity are paramount issues), risks undermining the amount of information students receive in class. Little attention seems to be paid to this issue.

TRAINING ON SCHOOL-LEVEL MANAGEMENT AND TEACHER SUPPORT

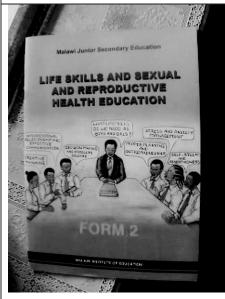
- 3.10 There was a need to train school administrators on issues such as leadership, vision, organization, staffing, rules, discipline, gender sensitivity, HIVAIDS, financial management, and community relations. The project financed the development of training modules on school-based management and provided three-week training courses for all school administrators and advisors. The Malawi Institute of Education was partly responsible for this activity.
- 3.11 Eight trainers were recruited in a pilot group of Educational Methods Advisors of MOE and they developed eight modules: school improvement, classroom organization, training of trainers, gender awareness, financial management, guidance and counseling, effective and efficient use of instructional materials. The first workshop was held in December 2000. Eventually all administrators of conventional schools received training (Annex Table A-1).

HIV/AIDS MATERIALS REPRODUCTION AND ADOPTION

3.12 This component was to finance a rapid adaptation of high-quality, behavior-change instructional materials from UNICEF-Zimbabwe, and the reprinting of some of materials. These were to be produced in 180,000 copies. By the 2001 mid-term review,

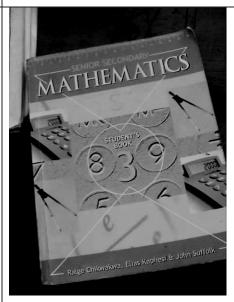
an AIDS expert had not been hired, local consultants had not yet adapted them, permission to reprint had not been received from Zimbabwe, and other materials available in Malawi seemed more effective. Consultants produced four draft sets of materials that were to be finalized through a needs assessment workshop (Kadzamira et al. 2001). Also, information regarding HIV/AIDS has been incorporated into life skills textbooks (Figure 3-7:). Eventually booklets were produced, but the IEG mission received conflicting information on whether 180,000 were distributed to schools.

Figure 3-7: Paperback life skills books



For schools with a textbook revolving fund each book costs 1950 kwacha (US\$11.5 for about 100 pages).

Figure 3-8: Paperback math textbooks



For schools with a textbook revolving fund each book costs 1600 kwacha (US\$9.5 for about 200 pages).

SUPPORT TO ADMINISTRATIVE UNIT, MONITORING AND EVALUATION, AND STUDIES

- 3.13 The project supported the educational development management unit (EDMU) that had functioned as a project implementation unit in earlier and subsequent projects. The objectives were to establish a monitoring system and a computerized financial management system (Annex Table A-1). Several procurement seminars took place. Much work was carried out towards establishing financial management capability. Also, the unit acquired the capability to communicate by email. However, this component suffered a lot from staff turnover, as experienced employees left for other lucrative positions. Audit and financial management reports were often submitted late and contained errors or irregularities.
- 3.14 Overall management of the project rested with the Planning Department of MOE (operations unit). However, this unit had little capacity to supervise the EDMU.

4. Achievement of the Project Objectives

4.1 The project (Table 4-1) had an overarching development objective with specific objectives, whose fulfillment is outlined below. To provide continuity to present conditions, the pertinent activities of the follow-on project ESSUP are briefly presented in Annex B.

Table 4-1: Indicator Target Values at Appraisal and Values Achieved at Project End

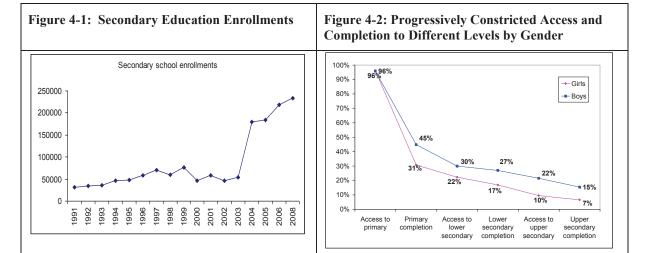
Numerical Outcome	1997/1998 Baseline	Target at Project	Achievement
Indicators ((PAD p. 14-16)		End	
9,600 new places created	0	9,600	9,600 (6615 occupied)
Share of student cohort	13%	26%	18% - not met
finishing secondary education	28,886 graduates in	40,586 graduates in	40.5% increase in
to increase (initial baseline	1997	2004	graduations
estimated as 15%)			
Girls completing secondary	29%	40%	43% achieved by
education to increase			project end in 2005
Enrollment rate in secondary	15%	26%	Gross enrollment ratio
education to increase			remained at about
			16%, but population
			changed after
			appraisal
Share of conventional school	58%	60%	Unknown; pass rate of
students attaining MSCE			all students increased
increases			from 23% to 50%
100% trained managers	0	100	Target achieved,
			impact unknown

Note: initial targets were to be fulfilled by 2003, but the project was extended by 30 months

Objective (a): expand access, by constructing 20 new day secondary schools and related physical facilities (substantial)

- 4.2 The project succeeded in its objective to construct schools for 9,600 new student places. Enrolment in the schools has increased over time, although some are still operating below capacity. The physical target was achieved, and if only the conventional schools were counted as secondary education, the 9,600 places would increase access by a substantial 16.1 percent over the 1998 enrollment figures (Figure 4-1: and Annex Table C-1). However, community day secondary schools entered the formal education system, and their enrollments increased rapidly. By the end of the project in 2005, 183,854 students were enrolled in secondary education, but project objectives and targets were not updated when the status of the community day schools changed. The achievement of the access objective is rated substantial considering the objective as defined during appraisal. By all counts, however, access to education increased substantially during the project.
- 4.3 The following paragraphs discuss how access has changed in secondary education as a whole during the project period. Because of the change in the secondary education population, some changes are not directly attributable to the project. Disaggregated data are not always available, but the changes reflect country dialogue during the project and government policies that were enacted, partly as a result of this dialogue.

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Note: in 2004, distance education centers became community day secondary schools, and their enrollments were included in the secondary education population

Source: Calculation according to MICS 2006 database (Country Status Report figure 5.1)

- 4.4 The ratio of students completing secondary education as a percentage of 17-year olds did not increase to 26 percent in 2003, as expected (Table 4-1:), but the target was set on the basis of conventional schools only. Since 2002 the gross enrollment ratio has remained stable at 16 percent (Country Status Report 2007). Data are not available to estimate whether various groups of disadvantaged students have higher graduation rates as a result of the project. Secondary education enrollments have increased about 3.6 percent annually since 2000 (5.3 since 2004; Country Status Report 2009), but many dropped out. However pass rates show an upward trend (Figure 4.3), so students are now more likely to complete their education.
- 4.5 Secondary education has a poverty alleviation potential in Malawi. The relevance of education for the labor market is indicated by increasing average annual incomes gains for each additional level of education. Rates of return to education, calculated on the basis of the 2004 household survey, are extremely high. The additional average income of people working in 2004 compared to lower educational levels was 14 percent for lower primary, 60 percent for upper primary, 92 percent for lower secondary, 155 percent for upper secondary, and 177 percent for technical-vocational education. The income gain for higher education as compared to TEVET is 440 percent, which demonstrates a severe shortage of academically trained Malawians. The annual average income in 2004 of an employed person with a higher education background amounted to almost 45 times the GDP/per capita, way above the ratio observed in selected other African countries (Annex Tables C-10 and C11; Country Status Report 2009). These rates reflect the low overall access to education in Malawi.
- 4.6 The large demand for secondary education has been filled through enrollments in schools that have very poor infrastructure and teachers who may only have primary-school credentials. As a result, student-teacher ratios have remained stable throughout the life of the project rather than increase (Table 4-2:). The average secondary student-teacher ratio in Malawi in 2007 was 20, whereas the sub-Saharan Africa average was 28 (Table 4-2:, Annex Table C-2).

13

Table 4-2: Secondary Schools, Evolution of Pupil Teacher Ratio (Public and Private)

					` `		
	2000	2001	2002	2003	2004	2005	2006
Students	164,459	176,252	116,493	131,100	180,157	183,854	218,310
Teachers	5,905	7,593	10,805	7,076	9,044	8,975	10,386
PTR	28	23	11	19	20	20	21

Source: Mulkeen 2007

EQUITY CONCERNS

4.7 In principle, secondary schools have become available in many rural areas during the life of the project, either as a result of project-financed construction or as a result of community day school expansion. Due to a need for school fees, however, they may be unaffordable to some poor students, particularly if they live some distance from the schools (see Chapter 3). In particular, the poorest may be unable to afford the more expensive secondary schools developed by the project. As a result, a number of students either fail to enroll or drop out for financial reasons. Failure constitutes an extra penalty by creating wastage in the households that can least afford fees of these well-appointed schools. In some respects, attending the schools built by the project may penalize the poorest.

- 4.8 Some students can only afford the community day schools that are cheaper, but these have lower graduation rates than conventional schools. Also, the poorest may have attended low-quality primary schools, and when they fall behind in secondary school they cannot afford private tutoring. The result is financing inequity on multiple issues. Those who can afford the fees get the benefits of higher-quality subsidized education, while those who can only attend the self-financing community schools get little benefit from government and donor funding.
- 4.9 Overall, secondary education receives much lower public subsidy than primary or higher education (Figure 3-4:), ¹³ and the fees have given rise to schooling arrangements that in some respects resemble private nonprofit schools, where trustees (community committees) set the prices rather than private owners. This issue has raised concerns about de facto privatization of schools (Rose 2005). The government has instituted a

¹² One example was the rural Nachitewe secondary school, which was financed by AfDB. According to the headmaster, about 20 percent of students are forced to drop out because of inability to pay fees of 6250 kwacha per year (about US\$37). These include per term 500 for tuition, 500 for school development, 500 for general purpose fund, and 500 for PTA (watchman), as well as 250 kwacha for the first term only for books. Students unable to pay during the grace period are not allowed to take examinations. As a result, some students fail not because of poor preparation but because they lack financial assistance. For example, at the end of the first term in 2009, the number of students enrolled in that school was reduced from 400 to 320.

¹³ Nevertheless, Malawi's recurrent allocations to secondary education (adjusted to a 7-year cycle duration for comparative perspective) are above average, 40.4% against a Sub-Saharan Africa average of 34.4%. The public annual unit cost per student is estimated to be MK 30,300 (83% GDP per capita versus 30% for the sub-Saharan Africa average) and it is 4 times higher (in terms of GDP per capita) than it was in 2000. However this average unit cost hides the disparities between the conventional and the Community Day Secondary Schools, at the detriment of the latter (Country Status Report 2007).

program of scholarships. But their numbers have been inadequate, ¹⁴ and means tests to determine who gets them have not been effective, according to staff interviewed by the IEG mission.

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4.10 The policy to eliminate dormitories without ensuring whether students have adequate means of transport (and expecting them to come from a radius of 10 kms away) has also had some adverse effects on the poor. The transportation system of Malawi is limited and, many students who live 5-10 kms from the schools cannot attend. For all these reasons, only about 6.615 places had been filled in project schools (43 percent by girls) at the time the project ended. Since 2005, enrollments to project schools have increased, although many still operate below capacity. Some are trying to add girls' dormitories.

GIRLS' ENROLLMENTS

- 4.11 Girls' enrollments have traditionally been low at all levels, but the government has made strong efforts to improve them. Gender parity in secondary education was to be achieved in 2005 (EFA-GMR 2003-04), but girls score lower than boys and have lower secondary school completion (Figure 4-2:).
- 4.12 Differences in girls' access to lower secondary education can first be explained by the primary completion rates but also by some government policies, particularly on availability of space in boarding schools for boys and girls. In the teenage years there are also issues of pregnancy, early marriage, and inability to pay tuition (Country Status Report 2008). Generally all government co-education boarding schools in Malawi have an access ratio of two boys to every one girl. This difference contributes to the lower access girls have to secondary education, although secondary day schools have a ratio of 1:1 when they select students.
- 4.13 The government has made efforts to promote girls' enrolments. It developed a policy to reserve 50 percent of the spaces for girls, and it has reversed its policy to eliminate dormitories in order to attract girls to school. As a result of government policies during the time period of the project, Malawi gender parity index in secondary education increased from 0.46 in 1990 to 0.69 in 1998 and to 0.76 in 2001. The pass rate for girls who sat for the examination increased from 17 percent in 1997 to 43 percent in 2004. The ratio of girls to total students passing rose from 25 to 34 percent between 1997 and 2004, showing that the gender gap in achievement is narrowing (ICR p. 6). A 2000 survey in Malawi found almost equal completion rates for boys and girls able to attend school (Country Status Report 2008, p. 18).

¹⁴ The appraisal specified that a survey would establish parental willingness to pay for education, and a broader sector analysis was to feed into the policy dialogue by mid-term review. A study on fees was indeed conducted (Annex Table A-1), but its impact on setting school fees was uncertain. The project's implementation problems diverted the attention needed for problems.

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Objective (b): Improve educational quality, through provision of teaching and learning materials in all Government and grant-aided general ("conventional") secondary schools (Modest)

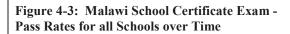
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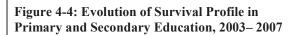
- 4.14 Quality of education is difficult to measure, but it should result in improved learning outcomes. At the secondary level, learning improvements over time are not easy to measure because achievement tests are rarely standardized. The PAD of the project used pass rates as proxy indicators of quality. However, public examinations are not equated from year to year, and they may be easier in some years than others. Also, pass criteria may change as a result of political decisions to graduate more or fewer students. Thus, pass rates may not be comparable across time, and they do not necessarily reflect changes in the quality of education.
- 4.15 In Malawi, data could not help establish whether the project led to improvements in learning outcomes and whether performance has become higher over time. The PAD used as target a marginal improvement in conventional school pass rates, from 58 percent in 1996 to 60 percent in 2004. In 2006, the pass rate for *conventional* schools was lower, 53.5 percent (Table 4-4: ¹⁵ Therefore, performance seems to have deteriorated. As mentioned above, these test scores are not standardized, and large fluctuations are possible from year to year. Also, increased access may have allowed lower-scoring students to enter, who then lowered pass rates, even if criteria remained constant over time (Figure 4-3:). Nevertheless, evidence regarding deterioration of performance is found in multiple sources¹⁶ and affects secondary education performance. The performance is due to a series of issues, discussed below.

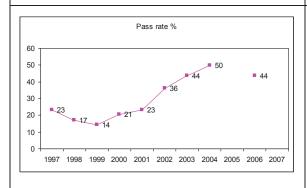
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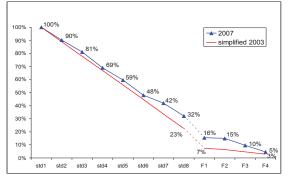
¹⁵ Test scores are unavailable for years after 2006. Statistics circa 2005 are often cited because the project ended at that time.

¹⁶ Evidence of decline is documented by the Southern African Consortium for Monitoring Educational Quality (SACMEQ) scores and national examination pass rates. The number of 6th graders who reach a minimum level of mastery in English reading was cut in half in the period from 1998–2004, and in 2004 was barely nine percent. In mathematics, only 2 percent of the students possessed skills beyond basic numeracy and none of them had skills beyond competent numeracy. Compared to other countries, Malawi is at the bottom of all the SACMEQ countries in English reading and next to last in mathematics (selectivity may differ across countries; Annex Table C-3, C-4). In the UNESCO-financed MLA tests given in 1992-2002, Malawian 8th graders scored low, 43 percent average (41.3% female, 46% male; Edstats, World Bank 2009).









Source: Secondary Education Project ICR and MOE 2008

Source: Calculation from EMIS database and IHS-2 repetition structure for primary education; Country Status Report 2009, Figure 2.5

Overall, secondary education completion rates in the country show substantial improvements over time, but they mainly reflect the formalization of community schools and would not be directly attributable to the project. The pass rate in all schools for pupils (both boys and girls) who took the examination increased from 23.3 percent in 1997 to 50 percent in 2004, and it dropped again to 44 percent in 2006. Scores at the JCE at the end of form 2 (grade 10) tend to be higher, with a total average of 62 percent in 2006 (Table 4-3:).

Table 4-3: JCE and MSCE Examination Results for all Schools (2006)

	Junior Certificate Examination			Malawi Sch	ool Certificate E	xamination
	Entered Sat Passed			Entered	Sat	Total
Total	61,205	58,565	36,219	44,442	42,414	18,576
% who passed		95.7	61.8		95.4	43.8

Source: EMIS, 2007

Note: JCE sat rate= nb of students in Form 2 who sit the exam/nb of student in Form 2(entered); JCE Pass rate= nb of students in Form 2 who pass the exam/nb of student in Form 2 who sit the exam Country Status report table. 4.8.

Table 4-4: JCE and MSCE Examinations Pass Rates by School Type in % (2006)

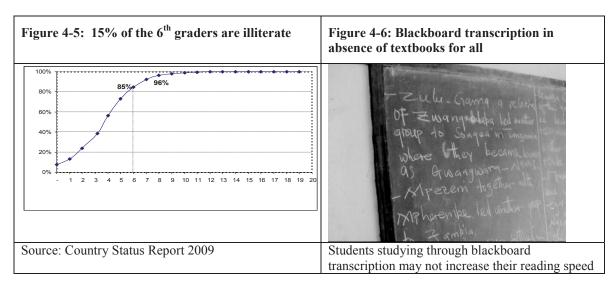
	Conventional Schools	Community Secondary schools	Other Day Secondary Schools	Total Public Schools	Private Schools	Average
JCE	79.6	54.2	47.4	61.2	64.8	61.8
MSCE	53.5	33.0	43.2	41.5	50.4	43.8

Source: EMIS, 2007; Country Status Report Table 4.9; about 95 percent of the enrolled students take the JCE and MSCE examinations

Prior knowledge is necessary for retaining the information provided to secondaryeducation students. Only 22 percent of Grade 6 students demonstrated minimum literacy in 2002, and about 15 percent graduate illiterate (Figure 4-5:; Ellis 2003). ¹⁷ Some of the

 17 A longitudinal study that used curriculum-based achievement tests to assess performance in English, Chichewa, and mathematics of a sample of standards 2, 3, 4, and 5 pupils, found that a majority of children entered subsequent grades without mastering the prerequisite literacy and numeracy skills that would enable them to cope with the work in the higher standard. Over 50 percent of the pupils in standard 3 could

students assessed attended secondary education during the project period. To assess the issues better, the IEG mission visited three rural primary schools. A convenience sample of 12 students in grades 1-8 were asked to read in Chichewa and English and to explain what they had read. The students who were interviewed could barely read in Chichewa in grade 3 and could read fluently in grades 4-6, but they had limited English vocabulary in grades 6-8 and could not express themselves. Thus they were unlikely to understand much of the English-language texts they read in secondary schools.



4.18 *Textbooks unavailable to students*. The IEG mission verified that due to high cost and dependence on purchase decisions at the individual school level, the schools had fewer textbooks than students. Students' access to textbooks in 2009 was limited to library copies. The mission asked every schoolmaster about the expense priorities of the school and invariably heard concerns about infrastructure and equipment (e.g. burned computer power supplies and kitchen equipment). None of the interviewed headmasters mentioned textbook acquisition as a priority. When asked, however, all mentioned that textbooks were simply too expensive to acquire them for all students. Their revolving fund was too small, and though schools have been allowed to use 30 percent of tuition for textbooks, they rarely bought textbooks. Textbooks have been optional, while building maintenance and construction of teacher housing are considered necessary. Many teachers themselves went to school without textbooks, and many members of management committees that make spending decisions are illiterate. Thus, holding classes without textbooks may be seen as normal.

4.19 As a result of textbook scarcity, the most frequent task in all classrooms visited was transcription. Teachers spent most classroom time copying on the blackboard the textbook contents for students to recopy. Without systematic reading, students' reading

not read the Chichewa and English text taken from standard 2 textbooks, and less than 30 percent of the standard 3 pupils had mastered basic mathematics skills (Chilora 2001; Jere 2001). The most recent achievement study documents similar findings, with more than 50 percent of pupils at nonmastery levels, particularly in English and mathematics (Kishindo et al. 2004 in World Bank-UNICEF 2009).

speed does not rise, and they become unable to consult multiple sources in secondary education, as they are expected to do (for a review see Abadzi 2008). Thus, many reference books acquired for conventional schools through project funds lie unused. Given the chronic limitations to textbook exposure, a vicious circle is created.

Figure 4-7: Storage room of a project-financed school



In some schools, books may lie unused to ensure that they remain in good condition

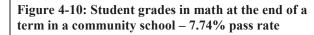
Figure 4-8: Storage room of a community day secondary school



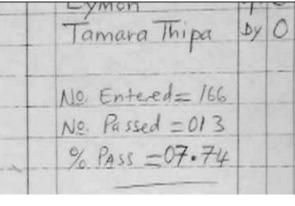
Community schools have few textbooks and no means to produce notes for students

- 4.20 Secondary curricula are complex and cannot be covered merely in classrooms. For example, Malawian senior secondary students mainly rely on their copied notes to study mathematics, which in other countries is the topic of extensive textbooks and exercise books. In class students practice calligraphy rather than solve math problems. Furthermore, it is impossible under such conditions to finish the prescribed annual curricula in math and other subjects. Inevitably classes fall behind, and curricula must be adjusted. For example, in grade 10 (Form 2), by the middle of the year only 76 of the 200 textbook pages had been covered. Thus, lack of textbooks would inevitably distort the entire system. The IEG mission inquired about the effects of book scarcity on the need for curricular revisions, but was told that the Malawi Institute of Education does not conduct systematic classroom observations and relies on workshops with teachers.
- 4.21 *Teacher absenteeism*. The IEG mission observed extensive teacher absenteeism, particularly near urban areas, where teachers may have other opportunities. Also, in some occasions teachers were in the school but not in class and the headmaster was not monitoring instructional time use. Teachers who were interviewed often mentioned the fatiguing effects associated with incessant copying and erasing texts as well as the little amount of subject matter covered through this transmission mode. Research would be needed to establish the effects of copying on student and teacher likelihood to attend school. A Public Expenditure Tracking Survey (PETS) conducted during the project period in 2004 estimated teacher absenteeism at 20 percent on any given day, which would mean an estimated average volume of annual instructional time of only 577 hours. In addition, late entry, strikes, and casual holidays decrease teaching time. The government has not taken clear actions on the PETS results.

Figure 4-9: student copying from the blackboard the contents of the unaffordable textbooks







4.22 As a result of distortions brought about by textbook scarcity and absenteeism the educational system suffers from a severe restriction of knowledge (Annex Table C-5). Average dropout in the four years of secondary schools was about 8 percent, and repetition was 6.7 percent in 2006, but the internal efficiency coefficient for secondary schools was reduced from 76 percent in 1999 to 66 percent in 2006 (Annex Table C-6). The poor standards in the country's schools have meant that secondary schools are unable to produce enough entrants for medical, nursing and midwifery programs due, among other factors, to weak science and math education (MMoHP, 2002b). Training institutions are running below capacity for some courses because of a lack of suitably qualified entrants (McCoy 2003), and the secondary education project did not seem to have significantly improved these conditions.

Objective (c): improve efficiency and effectiveness of the secondary education system by strengthening school-based management (Modest)

- 4.23 The project exceeded training targets of 568; about 724 principals received training (Annex Table A-1). The ICR reports that training enabled district-level managers to increase their capacity to prepare, conduct and monitor training for school-level principals. Project files show that trainees took paper-and-pencil tests and had on average 10 percentage points of improvement between pretest and posttest. Some of the headmasters interviewed by the mission found the course useful, notably the regulatory and financial management aspects. The management courses continued to be offered after the end of the project.
- 4.24 However, there was a consensus among MOE officials and donor staff who were interviewed by the IEG mission that the courses were too general and did not provide information in sufficient depth. There was also a concern that the persons who taught the courses were not sufficiently knowledgeable to provide useful insights to the trainees. The limited attention given by administrators to teacher presence in the classroom and to improvement of classroom time use suggests that administrators may have learned little about improving quality of education.

Objective (d): Stem the spread of HIV/AIDS among teachers and students, through provision of training materials (Negligible)

- 4.25 AIDS booklets were to be the only project input to the community day secondary schools (or distance education centers according to the PAD). According to the ICR 180,000 books were provided, and some donor staff report having seen the text. However, a former director of the National AIDS commission did not recall having seen these materials, and neither did the staff of schools who were interviewed. The IEG mission could not get copies. So, it is unclear which HIV/AIDS materials were provided through this project and in what form.
- 4.26 The project did not involve any linkages with other donors or institutions investing in AIDS prevention in Malawi, and it is unclear how these materials interfaced with other efforts. The effectiveness of the materials in bringing about behavior change was not evaluated. There is no evidence regarding the utility or impact on protecting teachers and students against the effects of AIDS. There was nothing to show that these inputs did anything to stem the spread of HIV/AIDS in the country. Instead, HIV/AIDS infections at national level seem to be increasing rather than decreasing. Life skills books do discuss this health issue extensively, often with cartoons and lurid examples, and it is possible that they were designed on the basis of the 2001 AIDS workshop and materials. However, as mentioned above, students do not regularly read textbooks.

Objective (e) strengthen project implementation capacity, through technical assistance in procurement and financial management (modest)

- 4.27 Extensive training was provided to project implementation unit staff, but the training did not prevent weak financial management and long periods of inactivity. The project implementation unit repeatedly lost trained financial officers, accountants, and procurement experts to turnover. Audit reports for the project were submitted, but they highlighted deficiencies in procurement and financial management.
- 4.28 As a result of weaknesses, the government replaced all project staff in 2000. After replacement, the educational projects management unit became more functional and was able to implement the follow-on project, which touched on all sectors and was larger in scope.

Objective (f) support the Ministry of Education's policy to encourage provision of private secondary education (Modest)

4.29 According to project documents, a consultant assisted in formulating suitable guidelines to register private schools in the MOE and prepared recommendations for formal working arrangements between the Ministry and the Private Schools Association of Malawi. However, the mission could not find any reports, and the officials interviewed did not recall receiving substantive inputs. Following the end of the project, private sector representatives have been invited to participate in planning events, so some working arrangements have been formalized.

Figure 4-11: A low-income private school

Figure 4-12: Laboratories of project schools

Figure 4-12: Laboratories of project schools

There is evidence of substantial laboratory use textbooks

5. Ratings of the Secondary Education Project

Project Outcomes

- 5.1 Project objectives were *highly relevant* to the needs of the country, given the need for large increases in the provision of secondary education. The relevance of the design is rated *modest* (para. 2.3). Overall, relevance is rated *substantial*.
- 5.2 Project efficacy is rated *modest*. Despite serious implementation difficulties, the project increased the availability of school infrastructure and obtained necessary inputs, such as textbooks and essential training that would enable school operations. Ultimately, most project activities were carried out, and most numerical targets were met. Overall student-teacher ratios remained low, an indication that teacher deployment and management was weak. Furthermore, textbooks were not sustainable, and it is likely that the project has not improved the quality of education in the long run. It is unclear if the project provided AIDS education effectively, because no evaluation was conducted. Also, no private education study was found. (See Annex Table A-2 for detailed results chain.) Overall, the number of graduating students increased by about 41 percent, from 28,886 in 1997 to 40,586 in 2004. However, increases cannot be fully attributed to the project; due to changes in the designation of secondary education, most students do not attend beneficiary schools.
- 5.3 Project efficiency is rated *modest*. The implementation of civil works was delayed, and in some areas workmanship was poor, reducing the efficiency of the building efforts. Unit costs were not available at various points in the project to determine whether goods procured through this project compared favorably with others. Additional efficiency-related data on project implementation are also limited. Cost inefficiencies were caused by the poor quality and delays of civil works, delays in the supply of instructional materials, and delays in procurement processing. Given the ratings

of substantial relevance, modest efficacy, and modest efficiency, project outcome is rated *moderately unsatisfactory*.

Risk to Development Outcome

Risk to development outcome is rated *significant*. Demand from students has increased since the project was completed, and students able to pay the necessary fees are gradually filling many schools to capacity. However, the sustainability of inputs is not ensured. The textbooks proved not to be sustainable, so instructional efficiency has been compromised, along with learning and subsequent labor outcomes. The modest school construction quality has created maintenance needs earlier than expected. This means that schools face significant repair and maintenance expenditures, which take precedence over textbook acquisition. A continuing problem is vandalism of school grounds, which has forced schools to spend money for fences and guards. The scarcity of qualified teachers exacerbates risks to development outcomes.

Bank Performance

- Ouality at entry is rated *moderately satisfactory*; the need for hardware inputs and the importance of financial sustainability were correctly identified as policy priorities. Also some targets and monitoring indicators were included in the PAD. Nevertheless, the appraisal documents show limited insight regarding the amount of information students were learning in class and their limited English language skills. Though the limited instructional time was included as an issue in the PAD, there was no measurement of it or plans for improving it. The Bank did not sufficiently identify the governance risks and implementation limitations of the government in carrying out the planned work. The documents do not refer to environmental assessments related to school construction or to poverty assessments that might elucidate the extent to which the very poor would be served by a secondary project.
- Quality of supervision is rated *moderately satisfactory*. The project changed five task managers, and the lack of continuity may have hurt the pace of implementation, particularly given the lack of continuity among government officials (see next section). Implementation proved challenging to Bank staff, who struggled to keep the project in progress despite government limitations. Some difficult decisions had to be made, for example on the employment of marginal performers in the project implementation unit.
- 5.7 The donor and government staff interviewed by the IEG mission expressed a high regard for the Bank's financial management policies and interest in efficient civil works construction. They also stated that specialist consultants who visited the country on supervision missions were knowledgeable and satisfactorily discussed the state of various components. A concern was expressed, however, that the Bank mainly focused on implementation logistics and paid little attention to the effects of education. Overall, Bank performance is rated *moderately satisfactory*.

Borrower Performance

- 5.8 Overall, Borrower performance is rated *unsatisfactory*. Government performance is rated *moderately unsatisfactory*. Initially the government demonstrated commitment to secondary education through the design and implementation of the project. The government also developed a plan for secondary education that has remained under implementation. Subsequent governments, however, offered limited leadership and attention. Steering committees met rarely, and MOE had little guidance to provide. Multiple ministers and permanent Secretaries were changed during the project. Counterpart funding was often unavailable.
- 5.9 Implementing agency performance is rated *unsatisfactory*. The project implementation unit failed to supervise the private contractors building civil works, and thefts of materials occurred along with incidences of school vandalism. The implementing agency hired private consultants to supervise the works but did not supervise the consultants, so it did not detect early on the substandard materials that some contractors were using. In 2000 the MOE dismissed the project implementation unit for poor performance and hired new team that pushed the project forward. Also MOE staff were seconded to the project implementation unit to ensure adequate linkage with the Ministry. However, considerable time had been lost in the process.

Monitoring and Evaluation Design, Implementation, and Utilization

- 5.10 Monitoring and evaluation design is rated *modest*. The project was appraised before monitoring indicators were required in the Bank, so limited baseline data for monitoring and evaluation were collected before project initiation. A monitoring and evaluation system that would be used to monitor progress and outcome of the project was retrofitted after 2002. Essential information was missing, and baseline data had been poorly estimated on project effectiveness. Thus, project documents do not show the development of an evaluation design to establish cause-effect relationships, and no systematic means was put in place for data collection during the project.
- 5.11 Evaluation implementation and utilization are also rated *modest*. A monitoring committee was established in the PIU, but meetings were irregular (ICR p. 11), and monitoring was weak. For example, data on HIV infections were unavailable. The Ministry's Management Information System improved in 2004-5 following donor technical assistance (notably USAID), but the lack of reliable baselines in earlier years hampers estimation of numerical project effects. These limitations have caused difficulties in assessing implementation progress and outcomes of the project. Overall, monitoring and evaluation are rated *modest*.

6. Issues: An educational system with a very restricted knowledge base

- 6.1 The donors and government are preparing a sector-wide approach (SWAp) as the next instrument of support for Malawian education. Below are some policy issues that this operation could consider.
- 6.2 The efforts of the government to expand secondary education have been conducted within a system that makes very little knowledge available to students. Students attending secondary schools, universities, and teachers' colleges go through their studies without structured and available sources of knowledge. If an educational institution is run without textbooks, class time has to be spent in transcription. There is not enough time to cover the curriculum or to contemplate its contents in class. Optional readings in libraries are likely to be carried out mainly by the few better students. Furthermore, students cannot consult multiple texts and authors when they barely can read and have insufficient vocabulary; just reading a page may take five minutes, and short-term memory is overwhelmed by the volume of slowly processed words.
- As a result, a number of secondary students in Malawi (as in other sub-Saharan Africa countries) read at third-grade level and may be unable to learn material from complex secondary-level textbooks. Many teachers reportedly also have limited knowledge and may give insufficient explanations. Because knowledge is cumulative and instructional time is poorly used, students may learn little additional material in school. Learning outcomes may be minimal, and certificates may have mainly social value rather than attest to preparation for higher-level work
- 6.4 Sustainable textbooks at all levels. Educational institutions must have ample sources of information, and since computers are not broadly available, textbooks must be acquired. The provision of feasible and affordable sources of information must drive the design and supervision of future lending. The IEG mission heard from headmasters and publishers alike that textbooks are simply too expensive to procure; textbooks in Malawi may cost US\$10-20 each, whereas comparable textbooks in east Asia or Latin America may only cost US\$2-5. The reasons for price disparities are unclear. Nevertheless, schools have proved their ability to manage textbook rental schemes, and if affordable textbooks became available, the schools would obtain them.
- 6.5 Overall, concerted efforts should be undertaken to obtain English-language textbooks at affordable prices for all levels through rentals, cheap international editions, and potentially local printing. Up-to-date textbooks of broad international circulation are likely to have material organized in ways that students understand and retain. Efforts to acquire affordable textbooks could be expanded to teacher training colleges and the university. For example, a nonprofit subsidiary could be set up to manage textbook rentals at the university. Malawi is fortunate because students learn English in school, although many may have poor command of the language. It would be advisable to conduct a study similar to an expenditure tracking survey and find out what factors result in price increases at various levels of the procurement process. Also, a consultation conference could be held on textbook availability for all levels with local and

international publishers as well as with authorities from the MOE, universities, and private schools.

6.6 Improvement of reading skills and time use in primary school should result in improved performance in secondary schools. Investment and supervision are needed for grades 1-2 at least, where students are numerous, lack preschool experience, and learn little. The possibility would be considered of hiring additional (and better teachers) for these two grades and dividing students so that literacy can be better managed. Grants to schools could pay for advanced primary or secondary students to tutor the young ones in basic skills for a small fee, so that fluency can be acquired early.

7. Lessons

- 7.1 This assessment provides a number of lessons for the education sector:
- Civil works have procurement issues that may exceed the supervisory capacity of the implementing units in low-income countries. Private-sector contractors may be able to execute civil works, but a lack of supervision may result in fraud, vandalism, and poor-quality buildings. The complexities of civil-works procurement may become the focus of education projects at the expense of learning issues. Governments should make efforts to employ staff with continuity and expertise that would ensure efficient execution of civil works and allow managers time to focus on learning-related improvements.
- Textbooks or systematically reproduced materials are a prerequisite for knowledge management at all levels of education. Their sustained availability should be a policy priority, particularly in countries where they are expensive. Without textbooks and training of teachers in their use, class time is spent in transcription; knowledge becomes constricted and systemic efficiency is low. Because of their crucial role, decisions on textbook purchases might best not be left to the discretion and financial strength of individual schools. A national strategy of sustainable and affordable secondary education textbooks is needed in low-income countries.
- Often projects provide inputs to educational institutions and expect improved learning outcomes as a result of these. To help students process information and retain it, however, instructionally oriented interventions are needed. Project designs lacking specific elements for improving the learning conditions of schools may not obtain the needed learning and subsequent educational outcomes.
- Large-scale curricular reforms will only have a positive effect if curricula are
 realistically implementable in classrooms. The Bank should be more proactive in
 advising governments on realistic curricular structures. Since curricular revisions often
 necessitate new textbooks, it is important to ensure that there is sufficient rationale for
 the revisions.

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31 Annex A

Annex A. Implementation of project components

Table A-1: Secondary Education Project (Cr. 3051)

Components/ subcomponents	Activities	Targets to be achieved	Outputs	Outcomes Info obtained during mission
Expanding access to secondary education	Civil works	15 day rural schools 5 urban schools for 8600 students (capacity 320 students); five operating two shifts	9600 additional places	New schools are visually appealing but have high maintenance costs. Some are underused due to students' inability to pay fees
		Increase female enrollment from 29% to 40%	Increased from 25% to 34% Pass rate of those taking the exam rose from 17% to 43%	Gender gap is closing, but unclear whether pass criteria have remained the same
		Increase overall enrollment from 13% to 26%	Increased to 18%; 40% during the project 28,886 in 1997 to 40,586 in 2004	Community day secondary schools rather than project responsible for the increase
		Reduce vandalism by engaging communities	Fences were built, watchmen hired, reportedly some reduction	Expenditures increased; no means to repair vandalized buildings
		Ensure that toilets are available	Generally available	In principle they should not inhibit girls' enrollment
Provision of instructional materials	Instructional materials	To the 20 new schools Government and 93 grant-aided schools	Sufficient quantities received at project end	Textbooks insufficient for every student by 2009, class time spent copying
	Textbooks in core subjects	Provide textbooks to 86 schools and ensure their use 1:1 in 6 basic subjects 1:3 in geography, history, agriculture 1:2 in history, geography, physical science	Book rental scheme was established but DANIDA withdrew matching grant support; students' contributions insufficient for purchases (6 students can buy 1 book)	Conventional schools pass rate in Malawi School Certificate Examination from 58% to 60% Pass rate was lower at entry, rose to above to 56% (Country status report)
	Reference books for libraries	For 96 schools	Delivered	Use uncertain, since most class time spent copying, and students' reading rates seem too low for scanning texts
	Basic school supplies		Schools may buy through budget	Uncertain if sufficient
	Consumables for science	For 96 schools; science and home economics equipment in 20 schools	Consumables obtainable through budgets and mainly available	Home economics equipment (electric stoves) unsuitable for Malawian environment)
	Assess learning outcomes Revise curricula over a	Show learning improvements A curricular revision	Pass rate 23% in 1997->50% in 2004 (those taking exam) Some new textbooks were	Comparable tests across time not yet available Rationale unclear;
	five-year period	conducted	recommended	revisions make textbooks obsolete.
Training on school- level management and teacher support	Training course for managers on teacher effectiveness (vision, scholarship, staffing, rules, discipline, gender, sensitivity, AIDS, financial management, and community relations	About 568 managers 100 school deputies 450 department heads 40 methods advisors 10 new school heads Train 100% of managers in school-based management	About 724 managers received training	Informants reported that the 14 modules developed were too general and brief to result in long-term change in managers' behaviors
	Monitor activities,	Obtain student and	Limited activities, difficulties in	MOE issues annual
	results, impact 50% of the teaching staff in new schools should support new teachers	school-level data Teachers to staff new schools to be identified and notified early	obtaining baseline data System improved, though there are still delays	statistics Real impact remains unclear

Components/ subcomponents	Activities	Targets to be achieved	Outputs	Outcomes Info obtained during mission
	Study on private provision of secondary education		A consultant assisted in formulating suitable guidelines to register private schools and prepared recommendations for formal working arrangements between the Ministry and the Private Schools Association of Malawi.	Study apparently not conducted; IEG mission could not locate it.
HIV/AIDS materials reproduction and adoption	Rapidly adapt materials from Zimbabwe for use in all grades of secondary schools	Provision of 180,000 sets	According to ICR, distribution target was met, informants disagreed	No staff were familiar with the booklets; Life skills books discuss AIDS, but no evaluation conducted of the material use or effects
Support to administrative unit, monitor, evaluation,	Support project implementation team	Computer purchases Get email capacity for the Ministry	Computers purchased, training given Email capacity established	Computers and email functional
studies	Support financial monitoring system	Achieved	Financial management specialist turnover	Turnover stabilized around 2009
	Communications equipment	Furniture and vehicles for the education management development unit	Procured	Furniture functional
	Management information system	Improvement through USAID	Difficulties in getting baseline data	Data collection improving
	Studies to orient project	Study on fees and on grant-aided schools	Studies conducted	Impact uncertain. Unknown if study on fees actually influenced fee structures

Source: project documents and interviews

Table A-2. Evidence Chain for Objective-wise Ratings

Objective	Evidence for Efficacy Rating - Plausible Association	Outcomes	Efficacy
Expand access, by constructing 20 new day secondary schools and related physical facilities;	School buildings would house students who would then have learning opportunities; new buildings would add 16.1% more student places in conventional schools	Civil works satisfactorily provided, most places are occupied. Enrollments have increased, though 96% of students are in community schools (Table A-1)	Substantial
Improve educational quality, through provision of teaching and learning materials in all Government and grant-aided general ("conventional") secondary schools	Improved knowledge expected through one-time textbook distribution.	Textbooks distributed only once; later schools decided to use funds for infrastructure (Table A-1)	Modest
Improve efficiency and effectiveness of the secondary education system by strengthening school-based management through training of methods advisors, deputy heads and heads of department in all schools, and new heads of schools;	Better management expected through manager training	Extensive training provided. quality uncertain; no long-term evaluation (Table A-1)	Modest
Stem the spread of HIV/AIDS among teachers and students, through provision of training materials;	Plausible association unclear, no collaboration with other AIDS-related agencies; materials were not piloted	Materials produced but unclear if they were distributed. Effectiveness not evaluated	Negligible
Strengthen project implementation capacity, through technical assistance in procurement and financial management	Knowledge about procurement would improve project financial outcomes	High turnover and governance challenges compromised effectiveness	Modest
Support the Ministry of Education's (MOE) policy to encourage provision of private secondary education by supporting short-term consultancy services on private education.	Information about private schools would improve government policies towards them	No evidence of study was found Outcomes unknown	Modest

33 Annex B

Annex B. Objectives and Implementation of the Education Sector Support Project

Table B-1: Objectives and Implementation of the Education Sector Support Project

The project will improve education quality by improving the *conditions* and processes of teaching and learning at the school level, and the *capacity* for education service delivery *across* the education system by:

- (a) Increasing the number of qualified teachers;
- (b) Improving the capacity and the quality of education service delivery by fostering community participation and by strengthening the management of human and financial resources at district and primary school levels, and
- (c) Improving learning outcomes at all levels by providing enhanced conditions for school effectiveness that will contribute to changes in the *behaviors* of teachers and students.

Components

- (a) Teacher Capacity Development (US\$15.5 million at base cost) to complement government and donors' efforts to improve quality and expand capacity of teacher development and training at all levels: (i) Refurbishment of Education Faculties at Chancellor College, Malawi Polytechnic, and new works at Mzuzu University related to additional needs of secondary teacher education; (ii) Construction of a new primary teacher training college; (iii) Staff development of lecturers at tertiary, secondary and primary teachers' colleges; and (iv) Student assessment surveys to establish a baseline against which student achievement can be measured.
- **(b) Quality Improvements and Inputs** (US\$3.7 million at base cost) to improve the conditions of learning at selected secondary schools staffed with trained teachers or newly trained teachers: (i) refurbishment of four Government secondary schools, and (ii) provision of additional textbooks for graduating CDSS teachers (complementary to CIDA financed SSTEP).
- (c) Mitigating externalities affecting the quality of education (US\$3.0 million at base cost) to provide a School Health and Nutrition package to all primary schools, which will include the following cost-effective interventions: distribution of vitamin A and iron-folic acid to school children under 10 years old, de-worming, treatment of malaria and fever, and the promotion of good health and nutrition practices.
- (d) Direct support to primary schools (US\$3.7 million at base cost) to supply basic learning materials directly to schools while strengthening the participation of communities in school management. The component will provide grants directly to about 50% of all primary schools twice per school year, finance media campaigns, and provide training for MOE staff at all administrative levels and to communities. School committees will manage the grants, which must be used to purchase basic learning materials for the school.
- (e) National education policy consolidation and capacity building (USS\$1.4 million at base cost) for studies; Support to implementation of Government decentralization policy in education.
- **(f) Project Implementation Unit** (US\$4.9 million) to support the physical implementation and management of fiduciary and procurement issues.

Project Activities

The follow-on project mainly centered on primary education. The *Education Sector Policy Framework* and other policy documents outlined the specific policy targets for the sector until 2012. The framework addressed both the need for improving the quality of basic education and the need to improve quality and access to post-primary levels. For basic education, the focus was on providing a *sufficient supply of qualified teachers and essential teaching and learning resources to achieve improved learning outcomes and reduce dropout and repetition rates.* At post-primary levels, *the objective was to produce more graduates* in order to provide the number of teachers required at other levels of the education system and to meet the demand for qualified labor from other sectors of the economy (PAD 2005). Indicators included:

- improving the student-teacher ratio in Standards 1-8 from 123:1 in 2000 to a maximum of 80 by closing date (67:1 by 2012);
- In community day secondary schools, the student-teacher ratio was to improve from 102:1 in 2000 to a maximum of 65:1 by closing date (58:1 by 2012)
- Effective school health and nutrition intervention to at least 80 percent of primary school pupils under the age of 10 by closing date (none to secondary students)
- Direct support to schools grants would be provided to primary schools: (a) within
 the first quarter of the school calendar year to some primary schools by March 3 1
 , 2007; and (b) to at least 2,000 primary schools by closing date. (Most secondary
 schools receive a budget ranging according to IEG mission estimates, from 11m
 kwacha to 0.5 m kwacha).
- A few selected dilapidated conventional secondary schools would be rehabilitated on the condition of piloting new financing and management interventions.

Overall, the project provided few additional investments on secondary education. There has been expansion of the education faculty in Chancellor College, notably with professors' offices. Four secondary schools have also gotten rehabilitated. However, the cost of construction by far exceeded appraisal estimates, so much less work has been done than was planned.

35 Annex C

Annex C. Supplementary Tables

Annex Table C-1: Statistics of various educational levels

	1998	2001	2004	2006	2007	Average Annual Growth Rate 2001–2004	Average Annual Growth Rate 2004–2007
Early Childhood Development	38,166	72,760	229,823	615,478	683,826	47%	44%
Primary Education	2,805,785	3,187,835	3,166,786	3,280,714	3,306 926	0%	1%
Public	N/A	N/A	3,140,440	3,242,483	3,264,594	N/A	1%
Private	N/A	N/A	26,346	38,231	42,332	N/A	17%
Including:					,		
Std1-Std4	2,090,728	2,296,039	2,315,171	2,379,302	2,365,307	0%	1%
Public	N/A	N/A	2,298,971	2,356,063	N/A	N/A	1%*
Private	N/A	N/A	16,200	23,239	N/A	N/A	20%*
Std5-Std8	715,057	891,796	851,615	901,412	941,619	-2%	3%
Public	N/A	N/A	841,469	886,420	N/A	N/A	3%*
Private	N/A	N/A	10,146	14,992	N/A	N/A	22%*
Secondary Education							
Form1-Form4	59,636	176,252	180,157	218,310	210,325	1%	5%
Public	N/A	153,119	137,822	166,307	161,575	-3%	5%
CDSS	N/A	114,751	83,492	104,161	99,172	-10%	6%
Conventional	N/A	25,738	36,051	47,996	42,734	12%	6%
grant-aided	N/A	8,764	16,322	9,717	12,730	23%	-8%
open school	N/A	3,866	1,957	4,433	6,939	-20%	52%
Private	N/A	23,133	42,335	52,003	48,750	22%	5%
Adult Literacy	63,035	88,240	103,965	146,301	N/A	6%	19%*
State	63,035	85,807	95,515	128,967	N/A	4%	16%*
non-state	N/A	2,433	8,450	17,334	N/A	51%	43%*
University	3,385	4,304	6,478	6,346	7,263	15%	4%
Public	3,385	4,304	6,478	6,346	6,458	15%	0%
Banda	490	592	666	780	886	4%	10%
Chancellor	1,292	1,555	2,017	2,252	1,108	9%	-18%
Kamuzu Nursing	263	180	331	251	454	23%	11%
Polytechnic	1,031	1,239	2,345	1,980	2,147	24%	-3%
Medicine	93	88	179	N/A	419	27%	33%
Mzuzu	N/A	264	475	1,083	1,444	22%	45%
Board of Governors Private	216 N/A	386 N/A	465 N/A	N/A N/A	N/A 805	6% N/A	N/A N/A
Technical-vocational edu.	N/A	N/A	N/A	N/A	4,807	N/A	N/A

Annex Table C-2: Student-Teacher Ratio in Public Schools by Level of Education (2007)

	Primary	Secondary	Higher
Malawi	80	20	11
Southern African Development	41	22	17
Sub-Saharan Africa average	45	28	20

Sources: Chapter 4, Chapter 7, and World Bank data; Country Status Report Table 3.9, p. 85

Annex Table C-3: Reading (English) and Mathematics Scores and Percentage of Students Reaching Minimum and Desirable Levels of Reading Mastery (SACMEQ I and II)

	SACMEQ I	SACMEQ II	
	Reading	Reading	Mathematics
Means score	462.6	428.9	432.9
Students reaching minimum level of mastery	19.4%	8.6%	
Students reaching desirable level of mastery	1.3%	0.3%	

Source: SACMEQ 2005 Report; Country Status Report 2009, Table 4.6t

Note: SACMEQ scores are scaled so that the average of all students is 500 and the Standard deviation is 100.

Annex Table C-4: SACMEQ Results

	SACMEQ 1	SACM	EQ 2
	2000	200)5
Country	Reading	Reading	Math
Botswana		521.1	512.9
Kenya	543.3	546.5	563.3
Lesotho		451.2	447.2
Malawi	462.6	428.9	432.9
Mauritius	550.2	536.4	584.6
Mozambique		516.7	530
Namibia	472.9	448.8	430.9
Seychelles		582	554.3
South Africa		492.3	486.1
Swaziland		529.6	516.5
Tanzania		545.9	522.4
Uganda		482.4	506.3
Zambia	477.5	440.1	435.2
Zanzibar	489.2	478.2	478.1
Zimbabwe	504.7		

Source: www.sacmeq.org

Annex Table C-5: Dropout and Repetition Rates in All Types of Secondary Schools (2006)

	Form 1	Form 2	Form 3	Form 4
Dropout	9.9	7.6	8.0	7.1
Repetition	1.0	9.8	2.2	12.1

Sources: EMIS 2006, 2007; Country Status Report, Table 4-4

Repetition is calculated here as the number of repeaters in standard X in year 2007 divided by the total enrollment in standard X in year 2006. Thus, repetition refers to the year 2006. (Source: Country Status Report 2009)

Annex Table C-6: Internal Efficiency Coefficient in Primary and Secondary Schooling (1999/00–2006/07) 18

	1999/00*	2006/07
Primary		
Internal efficiency coefficient	39%	35%
Dropout related (w/o repetitions)	50%	49%
Repetition related (w/o dropouts)	80%	71%
Student-years required to produce one graduate	20.1	23
Secondary (lower and upper)		
Internal efficiency coefficient	76%	66%
Dropout related (w/o repetitions)	81%	71%
Repetition related (w/o dropouts)	95%	94%
Student-years required to produce one graduate	5.2	6

Sources: *CSR 2004, EMIS 2006, 2007; HIS 2004 for repetition structure; Country Status Report 2009, Table 4.5

Annex Table C-7: Donor Financing and Extra Budgetary Grants to Education (MK Millions)

Level of Education	Objective of Assistance	Committed 05/06	Disbursed 05/06	Committed 06/07	Disbursed 06/07	Committed 07/08
General	General	3.973	1.650	2.619	2.224	2.113
	TA and Other	396	242.73	387.01	270	460
Primary	Construction	608	599	916	739	1.618
	Curriculum and books	1.343	931	2.346	1.557	1.346
	PRESET	1.092	409	616	510	792
	School feeding	1.335	1.261	1.428	1.406	1.685
Secondary	PRESET	40	40	33	30	290
Higher	Universities	30	30.45	-	-	-
Total		8.818	5.163	8.346	6.737	8.303

Source: DFID; Country Status Report, Table 3.14

Annex Table C-8: JCE and MSCE Examination Results at the Secondary Level by Gender (2006)

	Entered			Sat			Passed		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
JCE									
Total	34,790	26,415	61,205	33,490	25,075	58,565	23,230	12,989	36,219
% who				96.3	94.9	95.7	69.4	51.8	61.8
MSCE									
Total	26,749	17,693	44,442	25,703	16,711	42,414	12,522	6,054	18,576
% who				96.1	94.4	95.4	48.7	36.2	43.8

Sources: EMIS 2006, 2007; Country Status Report, Table 5.5.

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¹⁸ Internal efficiency coefficient ratio between the number of pupil-years theoretically required to produce the number of pupils reaching grade 6 (without counting repeaters) in a system without repetition or dropout and the actual number of pupil-years spent to produce the same number of pupils, expressed in percentage. This coefficient ranges theoretically between 0 (school system where no child reaches grade 6) and 1 (system without repetition or drop-out).

Annex Table C-9: Differences of Access and Completion Rates in Primary and **Secondary Education**

Difference According to	Access to Primary (Std 1)	Primary Completion (Std 8)	Access to Lower Secondary (Form 1)	Completion of Lower Secondary (Form 2)	Access to Upper Secondary (Form 3)	Completion of Upper Secondary (Form 4)
Gender (boys-girls)	0%	14%	8%	10%	12%	9%
Income (q5–q1)	4%	44%	50%	45%	35%	29%

Source: Calculation from MICS 2006 database; Country Status Report, Table 5.6

Annex Table C-10: Rate of Return in Malawi Compared to Selected Other African **Countries**

	Private ROR	Social ROR	Benin (priv.)*	Benin (soc.)*	Congo (priv.)*	Congo (soc.)*
Lower primary	5%	3%				
Upper primary	15%	12%	4%	3%	3%	3%
Lower secondary	22%	11%	1%	1%	3%	2%
Upper secondary	44%	25%	9%	7%	4%	2%
TC (compared to						
upper sec.)	54%	35%	2%	2%	3%	2%
Higher education	171%	23%	5%	3%	4%	1%

Table source: Country Status Report 2009; Table 8.11

Annex Table C-11: Rates of Return by Level of Education in Malawi (2004)

	Malawi		Benin		Congo	
	Private	Social				
	ROR	ROR	Priv.	social	Priv.	social
Lower Primary	5%	3%				
Upper Primary	15%	12%	4%	3%	3%	3%
Lower Secondary	22%	11%	1%	1%	3%	2%
Upper Secondary	44%	25%	9%	7%	4%	2%
TC (compared to						
Upper sec)	54%	35%	2%	2%	3%	2%
Higher	171%	23%	5%	3%	4%	1%

Source: Country Status Report 2009

Data source: Malawi IHS 2004; Country status report (CSR) Benin; CSR Republic of Congo
* In Benin and Congo, TEVET is post-primary. The ROR represents the return from primary education to TEVET.

Annex D. Basic Data Sheet

SECONDARY EDUCATION PROJECT (CREDIT NO. 3051)

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
IDA Loan	26.0	26.0	100
Government	28.0	28.0	100
Total project cost	54.0	54.0	100

Cumulative Estimated and Actual Disbursements (US\$ million)

	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Appraisal estimate	8.96	16.52	30.05	43.47	47.93	47.93	47.93	47.93
Actual	4.66	7.68	13.92	25.75	35.16	44.52	48.98	48.90
Actual as % of estimate	52	46	46	59	73	93	102	102

Project Dates

	Original	Actual
Departure of Appraisal Mission		05/07/1997
Appraisal		10/06/1997
Board approval		03/24/1998
Effectiveness	08/19/1998	08/19/1998
Mid-Term Review	01/15/2001	01/15/2001
Closing date	06/30/2003	12/31/2005

Staff Inputs (staff weeks)

	Actual/Latest Estimate					
	N° Staff weeks	US\$US\$('000)				
Identification/Preparation	239.0	521.0				
Appraisal/Negotiation	53.2	145.9				
Supervision	48.6	100.8				
Completion						
Total	340.8	767.7				

Mission Data

	Date	No. of		Performance rating		
	(month/year)	persons	Specializations represented	Implementation status	Development objectives	
Identification Preparation	02/27/1995	02/27/1995 14 Task Team Leader, Education Specialists (5), Economists (2), Education Planner, Text Book Specialist, Architect Consultant, Distance Education Specialist, Teacher Training Specialist, Gender Specialist				
	05/25/1997	8	Task Team Leader, Senior Education Specialist, Economist Consultants (2), Management Specialist Consultant, RM Economist, Principal Education Specialist, Consultant Architect, Procurement Specialist			
Appraisal/ Negotiation	10/06/1997	9	Task Team Leader, Senior Education Specialist, Economists (2) Consultant Architect (2), Procurement Specialist, Financial Management Specialist, Management Consultant Specialist, Consultant, Principal Education Specialist			
Supervision 1	10/10/1998	6	Task Team Leader, Education Specialist, Senior Education Specialist, Economist, Consultant Architect, Procurement Specialist	S	S	
Supervision 2	02/13/1999	2	Educator Task Team Leader, Economist	U	U	
Supervision 3	05/08/1999	4	Education Specialist, Economist, Architect Consultant, Procurement Analyst	S	S	
Supervision 4	05/08/1999	6	Education Specialists (2), Architect, Procurement Analyst, Financial Management Specialist, Social Sector Specialist	S	S	
Supervision 5	02/05/2000	5	Education Consultant, Senior Education Specialist, Social Sector Specialist, Procurement Analyst, Financial Management Specialist	S	S	
Supervision 6	04/07/2000	6	Education Specialist, Architect, Procurement Analyst, Financial Management Specialist, Social Sector Specialist, Implementation Specialist	S	S	
Supervision 7	07/27/2000	3	Senior Education Specialist, Consultant Implementation Specialist, Financial Management Specialist	S	S	
Supervision 8	10/27/2000	4	Senior Education Specialist (TTL), Financial Management Specialist, Social Sector Specialist, Consultant and Implementation Specialist	S	S	
Supervision 9	02/23/2001	5	Senior Education Specialist (TTL),	U	U	

	Date	No of		Performa	ice rating
	(month/year)	No. of persons	Specializations represented	Implementation status	Development objectives
			Consultant Implementation Specialist, Senior Procurement Specialist, Financial Management Specialist, Consultant Architect		
Supervision 10	12/02/2001	4	Senior Education Specialist, Financial Management Specialist, Consultant Architect, Senior Operations Officer	U	U
Supervision 11	03/27/2002	4	Senior Education Specialist, Senior Operations Officer, Procurement Specialist, Consultant Architect	S	S
Supervision 12	03/27/2002	6	Task Manager, Education Specialist, Operations Specialist, Teacher Specialist, Procurement, Financial Management Specialist	S	S
Supervision 13	03/27/2002	7	Task Team Leader, Senior Education Specialists (2), Senior Operations Officer, Architect, Procurement, Financial Management Specialist	S	S
Supervision 14	10/10/2003	5	Task Team Leader, Co-Task Team Leader, Senior Education Specialist, Senior Operations Officer, Senior Financial Management Specialist, Procurement Analyst	S	S
Supervision 15	09/30/2004	3	Task Manager, Senior Financial Management Specialist, Senior Procurement Specialist	S	U
Supervision 16	01/25/2005	6	Task Team Leader, Senior Operations Specialist, Architect, Senior Procurement Specialist, Senior Financial Management Specialist, Team Assistant	S	S
Supervision 17	06/18/2005	4	Task Team Leader, Operations Officer, Architect, Team Assistant	S	S
ICR	03/12/2006	1	Senior Education Specialist	S	S

Performance Rating: S: Satisfactory; U: Unsatisfactory