

INDEPENDENT VERIFICATION OF EDUCATIONAL DATA FOR A PILOT OF RESULTS-BASED AID (RBA) IN RWANDA



BASELINE REPORT

March 2013

HEART
HEALTH & EDUCATION ADVICE AND RESOURCE TEAM

PREFACE / ACKNOWLEDGEMENTS

This report relates to both components of DFID's RBA pilot in Rwanda; student completion and the English language competency of teachers.

National examinations taken in November 2011 were used as the baseline for student completion, but baseline testing of teachers' English language competencies did not take place until November 2012, hence the lapse in time between baseline national tests and this consolidated baseline report.

This assessment is being carried out by HEART (Health & Education Advice & Resource Team).

The Team leader is David Dean. The remaining team members are Jean Wilson, Claver Yisa and DP Auditors. For further information contact consultancy@heart-resources.org

The contact point for the client is Gemma Wilson-Clark (G-Wilson-Clark@dfid.gov.uk). The client reference number for the project is 7825/8062-0035

Disclaimer

The Health & Education Advice & Resource Team (HEART) provides technical assistance and knowledge services to the British Government's Department for International Development (DFID) and its partners in support of pro-poor programmes in education, health and nutrition. The HEART services are provided by a consortium of leading organisations in international development, health and education: Oxford Policy Management, CfBT, FHI360, HERA, the Institute of Development Studies, IPACT, the Liverpool School of Tropical Medicine and the Nuffield Centre for International Health and Development at the University of Leeds. HEART cannot be held responsible for errors or any consequences arising from the use of information contained in this report. Any views and opinions expressed do not necessarily reflect those of DFID, HEART or any other contributing organisation.

HEART

St Aldates Courtyard
38 St Aldates
Oxford OX1 1BN
Web: www.heart-resources.org

Tel +44 (0) 1865 207 333
Email: info@heart-resources.org
consultancy@heart-resources.org United

Kingdom

CONTENTS

PREFACE / ACKNOWLEDGEMENTS	1
ABBREVIATIONS	5
1 EXECUTIVE SUMMARY	6
1.1 STUDENT COMPLETION IN THE KEY STAGES OF SCHOOLING.....	6
1.2 ENGLISH LANGUAGE COMPETENCY OF TEACHERS	7
1.3 RECOMMENDATION FOR SETTING THE ENGLISH LANGUAGE COMPETENCY BASELINE FOR RBA PAYMENTS.....	8
1.4 RECOMMENDATIONS FOR STRENGTHENING INFORMATION MANAGEMENT	8
2 BACKGROUND	9
2.1 OVERVIEW OF RESULTS BASED AID.....	9
2.2 RBA PILOT IN RWANDA	9
2.3 RBA AND VERIFICATION	10
2.4 THE ROLE OF ENGLISH IN THE RWANDA EDUCATION SYSTEM	10
VERIFICATION PART A: THE STUDENT COMPLETION BASELINE	11
3 VERIFICATION STRATEGY	11
3.1 THE VERIFICATION PROCESS.....	11
<i>data requirements</i>	11
<i>Consistency of national data</i>	11
<i>Field verification</i>	12
4 EXAMINATION ATTENDANCE 2011	13
4.1 THE BASELINE.....	13
4.2 PROPOSED PAYMENT MODEL.....	14
5 THE FIELD SURVEY	15
5.1 AUDITOR TRAINING	15
5.2 SURVEY PROCEDURES.....	15
5.3 SURVEY FINDINGS.....	16
5.4 COMPARISON OF SCHOOL RECORDS WITH REB EXAMINATIONS DATA.....	16
<i>Primary 6</i>	16
<i>Secondary 3</i>	16
<i>Secondary 6</i>	17
5.5 REGISTRATION RATES	17
6 ENROLMENT AND COMPLETION RATES	18
6.1 OVERVIEW OF 2011 DATA.....	18
6.2 PRIMARY 6	18
<i>Enrolment trends</i>	18
<i>Enrolment and examination attendance</i>	20
6.3 SECONDARY 3	21
<i>Enrolment trends</i>	21
<i>Enrolment and examination attendance</i>	23
6.4 SECONDARY 6	24
<i>Enrolment trends</i>	24
<i>Enrolment and examination attendance</i>	25
7 INFORMATION MANAGEMENT	27
7.1 EXAMINATIONS ADMINISTRATION	27

7.2	GENERAL COMMENTS ON MANAGEMENT OF INFORMATION	28
VERIFICATION PART B: TEACHERS' ENGLISH LANGUAGE COMPETENCIES		30
8	THE ENGLISH LANGUAGE TESTING INSTRUMENT	30
9	VERIFICATION STRATEGY	30
9.1	VERIFICATION PROCEDURE IN RWANDA	30
	<i>COMMENTS On THE BASELINE Sample</i>	30
	<i>Meeting with the Aptis technical team members – test delivery</i>	31
	<i>Test content and teachers' reactions to Aptis testing</i>	31
	<i>Scrutiny of test-takers bio-data</i>	31
	<i>Focus group discussion with teachers</i>	32
	<i>Feedback on the test components</i>	33
	<i>Reactions to testing/ computerised testing</i>	34
9.2	SCHOOL VISITS/ CLASSROOM OBSERVATION	34
10	VERIFICATION VISIT TO BRITISH COUNCIL LONDON	34
10.1	THE TESTING INSTRUMENTS.....	34
10.2	SAMPLING OF CANDIDATE RESPONSES	35
	<i>Objectively marked papers</i>	35
	<i>The marking of performance based assessments – speaking and writing</i>	35
	<i>Consistency of marking</i>	35
10.3	RELATION TO CEFR LEVELS	36
10.4	SPECIFIC ISSUES DISCUSSED	36
	<i>Concluding remarks on the Aptis test</i>	38
11	LEVELS OF ENGLISH LANGUAGE COMPETENCE: BASELINE STUDY	38
11.1	TEST OUTCOMES	38
11.2	TEST OUTCOMES BY PROVINCE (EAST, WEST, NORTH, SOUTH, KIGALI CITY).....	42
11.3	RELATIONSHIPS BETWEEN BIO-DATA AND COMPETENCE	46
11.4	LEVELS OF ENGLISH LANGUAGE COMPETENCE: SUMMARY.....	46
11.5	IMPLICATIONS FOR RBA: REWARDING IMPROVEMENT RATHER THAN COMPETENCY.....	46
12	GENERAL CONCLUSIONS.....	49
12.1	STUDENT COMPLETION	49
12.2	TEACHERS' ENGLISH LANGUAGE COMPETENCIES	49
	<i>Population estimates</i>	50
APPENDIX ONE:		52
RESULTS-BASED AID PILOT IN THE EDUCATION SECTOR: ANNEX TO MEMORANDUM OF UNDERSTANDING		52
	<i>Parties and purpose</i>	52
	<i>Term of agreement and possibility of renewal</i>	52
	<i>Results and indicators</i>	52
	<i>Payment schedules</i>	53
	<i>Use of funds</i>	54
	<i>Data verification, citizen empowerment, transparency and accountability</i>	54
	<i>Evaluation and lesson learning</i>	54
	<i>Management arrangements</i>	55
	<i>Amendment, dispute resolution and termination</i>	55
APPENDIX TWO:		56
TERMS OF REFERENCE FOR INDEPENDENT VERIFICATION		56

<i>Scope</i>	56
<i>MethodS</i>	57
<i>Timing</i>	58
<i>Deliverables</i>	58
<i>Institutional arrangements</i>	59
<i>Expertise and team required</i>	59
APPENDIX THREE:	61
RWANDA'S EDUCATION STRUCTURE: SCHOOLING	61
APPENDIX FOUR:	63
FIELD SURVEY GUIDELINES FOR AUDITORS	63
1 PURPOSE	63
2 BEFORE YOU TRAVEL	63
3 THE SCHOOL VISIT	63
3.1 BEFORE REACHING THE SCHOOL.....	63
3.2 ON ARRIVAL.....	64
3.3 VERIFYING THE NUMBER OF SITTERS.....	64
3.4 VERIFICATION OF INDIVIDUAL STUDENTS.....	65
3.5 CONCLUDING THE SCHOOL VISIT.....	65
4 AFTER THE SCHOOL VISIT	65
4.1 AUDITOR FEEDBACK.....	65
APPENDIX FIVE:	66
FIELD SURVEY SCHOOL REPORT	66
VERIFICATION OF RWANDA NATIONAL EXAMINATION CANDIDATES, 2011	67
PART A: SCHOOL INFORMATION.....	67
PART B: VERIFICATION OF STUDENT NUMBERS.....	67
PART C: VERIFICATION OF INDIVIDUAL STUDENTS.....	68
PART D: SIGNATURE PAGE.....	70
PART E: AUDITOR'S FEEDBACK.....	71
APPENDIX SIX:	72
FIELD SURVEY RESULTS BY SCHOOL	72
PRIMARY 6 SAMPLE.....	73
SECONDARY 3 SAMPLE.....	75
SECONDARY 6 SAMPLE.....	76
APPENDIX SEVEN:	77
KEY DOCUMENTS FOR VERIFICATION OF TEACHERS' ENGLISH LANGUAGE	77
APPENDIX EIGHT:	78
SCHEDULE OF MEETINGS FOR ENGLISH LANGUAGE VERIFICATION IN RWANDA	78
APPENDIX NINE	79
QUESTIONNAIRE FOR FOCUS GROUP DISCUSSION AND SUMMARY OF PARTICIPATING TEACHERS' RESPONSES	79

ABBREVIATIONS

CEFR	Common European Framework of Reference (for languages)
DDG	Deputy Director General
DFID	Department for International Development (United Kingdom)
DG	Director General
EDC	Education Development Centre
EMIS	Education Management Information System
ESSP	Education Sector Strategic Plan
GIS	Geographic Information System
GoR	Government of Rwanda
ICT	Information and Communications Technology
KIE	Kigali Institute of Education
MINEDUC	Ministry of Education (Rwanda)
PBR	Payment by Results
PS	Permanent Secretary
Q&S	Quality and Standards (Department of REB)
RBA	Results Based Aid
RBF	Results Based Financing
REAP	Rwanda English in Action Programme
REB	Rwanda Education Board
RESP	Rwanda Education Sector Programme
SBS	Sector Budget Support
TA	Technical Assistance
TDM	Teacher Development and Management (Department of REB)
ToR	Terms of Reference
TTC	Teacher Training College
WDA	Workforce Development Authority

1 EXECUTIVE SUMMARY

In recognition of the UK government's emphasis on Payment by Results DFID has embarked upon pilot programmes in Rwanda, Ethiopia and Uganda. For the Results Based Aid pilot in Rwanda DFID and GoR have agreed that results that will trigger payment are annual improvements in the number of students completing national examinations and increased numbers of teachers with identified levels of English language competencies. DFID has allocated £9 million, with an annual ceiling of £3 million, for RBA payments over the three years of the Rwanda pilot. For examination results in 2012, 2013 and 2014 payments will be made based on the additional number of students sitting the national examinations over the previous year.

Under the RBA pilot GoR will also receive RBA payment based on additional teachers reaching an agreed level of competence by 2014 in comparison to a baseline in 2012. This reflects the recent transition to English as the medium of instruction in schools and GoR's priority to improve teachers' English competencies.

National examinations administered by GoR in November 2011 provide the initial data to be used as the baseline for RBA student completion payment calculations; i.e. student completion at Primary 6, Secondary 3 and Secondary 6, the final grades of the three key stages of education.

The contract for measuring teachers' English language competencies was awarded to British Council and baseline testing took place in November 2012.

This report covers both components of the RBA pilot.

The fundamental purpose of independent verification is to advise DFID on the reliability and accuracy of the data for both RBA components, and in addition report on the validity of the testing instrument and procedures used to measure the English language competencies of teachers.

Independent verification has two dimensions; administrative and procedural.

The team conducting the verification is administratively independent of both DFID, the funding agency, and GoR, the recipient, thereby ensuring accountability, transparency and engendering confidence in the findings.

Also, the verification procedures involve cross-referencing the results to be verified with independent evidence such as, in this particular case, schools' records relating to those results.

1.1 STUDENT COMPLETION IN THE KEY STAGES OF SCHOOLING

GoR has provided the CfBT verification team with relevant statistics for the national examinations in 2011 compiled by the Examinations and Accreditation Department of REB. In 2011 WDA conducted S6 TVET examination for the first time, and their results are also included in the baseline. Analysis of enrolment statistics, including student cohort analyses, provides a context and indicates the credibility of examinations data at the provincial and national levels. Analysis of the national data is supported by audit reports from a field survey of a sample of 100 schools where the REB examination results lists were cross-referenced with school records such as enrolment registers and class lists.

At the national level analyses show that examination statistics are consistent with enrolment data and appear perfectly plausible, giving no cause for concern. The field verification survey conducted in October 2012 found minor discrepancies between the REB results and schools' records but these amount

to less than 1% of the students targeted for verification and we attribute the discrepancies to random errors in record keeping rather than systematic failings.

In the light of the analysis of national data and the field survey results the verification team conclude that the 2011 examinations statistics provided by REB and WDA are accurate and reliable. The numbers submitted by GoR and therefore recommended for adoption by DFID as the baseline for RBA payment calculations for the examination results in 2012, 2013 and 2014 are:

Level	Numbers of students sitting national examinations in 2011	
Primary 6	154,954	
Secondary 3	77,420	
Secondary 6	General plus TTC	30,878
	TVET (WDA)	15,680

Figure 1: Verified numbers of students sitting national examinations in 2011

1.2 ENGLISH LANGUAGE COMPETENCY OF TEACHERS

The English language competencies of primary and secondary school teachers has been included in the Rwanda RBA pilot in response to the recent shift to English as the medium of instruction and as support for GoR's priority to improve teachers' standards of English to meet this challenge.

A contract to assess the English language of a sample of around 600 primary and secondary teachers from across Rwanda was awarded to British Council. Examiners used the Aptis test to identify teachers' English competencies according to CEFR¹ levels and results from the test, subject to verification, are used to provide a baseline of the English competencies of teachers.

Results from the Aptis test show low levels of English, especially in primary teachers, and since the purpose of the RBA pilot is to create incentives for improvement it is important to set achievable targets.

Key stage	CEFR Levels						Missing	Total
	A0	A1	A2	B1	B2	C1		
Primary Teachers	1 0.2%	202 50.1%	187 46.4%	1 0.2%	0 0.0%	0 0.0%	12 3.0%	403 100.0%
Secondary Teachers	0 0.0%	28 16.2%	122 70.5%	15 8.7%	0 0.6%	1 0.0%	7 4.0%	173 100.0%

Figure 2: Summary of Aptis results

We therefore recommend that DFID use CEFR level B1 (Lower Intermediate) as the RBA pilot indicator. However, we should stress that the use of CEFR Level B1 for both for primary and secondary teachers is

¹ Common European Framework of Reference

proposed as an indicator of improvement towards adequate standards that are achievable for some teachers within the timescale of the RBA pilot, and it **should not** be interpreted as endorsement of B1 as an adequate standard for effective teaching with English as the medium of instruction.

Improvement by one CEFR level within the timescale of the RBA pilot, and beyond that to adequate standards for effective teaching in English, is extremely challenging. The Rwanda pilot will assess the effectiveness and impact of RBA incentives on GoR programmes to improve English skills.

1.3 RECOMMENDATION FOR SETTING THE ENGLISH LANGUAGE COMPETENCY BASELINE FOR RBA PAYMENTS

Based on the British Council survey results which show that 3.05% of the 557 teachers tested achieved Level B1, we calculate the best estimate of the current national total of 56,024 teachers who are at Level B1 is 1,709.

We therefore recommend that DFID use this estimate as the baseline for the English language component of the RBA pilot payment calculations.

1.4 RECOMMENDATIONS FOR STRENGTHENING INFORMATION MANAGEMENT

The independent verification team believe that the Examinations and Accreditation Department of REB has a robust system in place for the management of national examinations, ensuring that only genuine candidates attend. Although the number of discrepancies found by the verification process was very small and does not affect the RBA payment baseline, we advise against complacency and recommend a review of procedures relating to the management of information for students who relocate to a different school between registering for and sitting the examinations.

We also note a lack of coordination between the agencies responsible for managing examinations information, located in REB, and general education data, located in the Directorate of Education Planning.

Section 7.2 recommends a restructuring of the Planning Unit and the ICT in Education Unit, that will strengthen EMIS by bringing together posts with responsibility for database systems and information management, and at the same time give a clearer pedagogic focus to the ICT in Education Unit. We believe this would provide a robust platform for more effective collaboration between education planning and the management of examinations data, and provide opportunities for offering technical support to REB staff who are responsible for the examinations database.

2 BACKGROUND

2.1 OVERVIEW OF RESULTS BASED AID

Results based aid (RBA) is an innovative mode of development aid delivery that is grounded in the UK Government's increasing adoption of payment by results in the public sector with its emphasis on value for money and accountability.

RBA has three defining elements:

- payments are calculated against the achievement of results agreed between DFID and the recipient government;
- the recipient has the discretion to decide how results should be achieved and how funds received through RBA are used to achieve results;
- independent verification of results is a *sine qua non* condition for the disbursement of funds.

In order to assess the relevance and efficacy of this approach to international development aid DFID is implementing pilot programmes in Ethiopia, Rwanda and Uganda².

The three pilots are expected to focus on outcomes and build in rigorous verification and evaluation as integral components from the beginning³ in order to report on the efficacy of RBA and to support future policy decisions.

2.2 RBA PILOT IN RWANDA

DFID and GoR have agreed that results for the RBA pilot in Rwanda are:

- annual improvements in the number of students completing primary (P6), lower secondary (S3) and upper secondary (S6) education;
- increased numbers of teachers in Rwanda with identified levels of English language competencies in 2014 from a 2012 baseline.

A total fund of £9 million has been allocated for RBA payments over the three years of the pilot. Taking a national examination will be used as an indicator of students having completed a particular level of education. Payments will be made based on the number of students sitting the national examinations the previous year above the 2011 baseline multiplied by an agreed unit price, subject to the annual ceiling of £3m.

Current levels of English language competence among the majority of teachers are recognised to be limited. Under the RBA pilot the Rwandan Education sector will receive a payment of £50 for each additional teacher reaching an agreed level of competence by 2014 in comparison to a baseline in 2012.

DFID awarded the contract for carrying out the baseline study to a team from British Council Rwanda. It was agreed that level of competence would be assessed by the Aptis test, and reported against the Common European Framework of Reference.

² The model for the Uganda pilot differs from those in Ethiopia and Rwanda and is referred to as Results Based Financing.

³ DFID Primer on Results Based Approaches, 2010.

2.3 RBA AND VERIFICATION

The purpose of independent verification is to ensure the accuracy and reliability of data being used as the basis for results-based aid payments, so that DFID can have confidence that payments are made on the basis of real improvements. In the Rwanda context this means increases in the numbers of students completing the targeted grades and increases in the number of teachers with agreed levels of English.

DFID entered into a contract with CfBT Education Trust to conduct the independent verification and CfBT engaged the services of David Dean (Team Leader), Jean Wilson (English Language Consultant) and Claver Yisa (Education Consultant). During the inception mission to Rwanda David Dean and Claver Yisa held discussions with Ministry of Education and its agencies and DFID as well as conducting visits to seven schools to inform the verification strategy.

It is not within the scope of the verification exercise to comment on the impact of the RBA pilot on results, which is to be the subject of a separate evaluation contract. However, CfBT's reports to DFID will comment on the underlying data management and reporting systems and their ability to report quality data. This will allow the reliability of the systems to be established and reviewed. It will also provide helpful information and practical feedback to MINEDUC, REB and other stakeholders illustrating where they could target resources to improve student completion rates.

2.4 THE ROLE OF ENGLISH IN THE RWANDA EDUCATION SYSTEM

Greater command of English among the population of Rwanda is regarded as one of the keys to future economic development of the country. The use of English in Rwanda has become more prominent in recent years with membership of the East African Community (EAC) and the Commonwealth, along with increasing development of international partnerships, business and commerce. In order to meet the increasing need for English literacy the Cabinet decided in October 2008 to use English Language as the medium of instruction from P4 in all schools. In early years education (P1 – P3) the medium of instruction is Kinyarwanda and English is introduced as a subject. MINEDUC commissioned a needs analysis survey to establish teachers' proficiency levels in English, and as a result the Rwanda English in Action Programme (REAP) was introduced to address the English language learning needs of teachers, and this was followed by the School Based Mentoring programme.

The Teacher Development & Management Department of REB proposes that in the long term all teacher educators, teachers and student teachers will have their language competency assessed through a standardised assessment tool. The test will be capable of determining whether teachers and student teachers are reaching the target levels of proficiency; proposed by REB as intermediate for primary teachers, upper intermediate for secondary teachers and advanced for teacher educators. Teachers will be given the opportunity of taking the test as often as necessary to attain the appropriate certificate (ESSP, 2010).

In the meantime a contract has been awarded to British Council to conduct a sample survey of around 600 teachers (this being approximately 1% of the total teacher population) in order to establish a baseline of their English language competencies. Results from the British Council test in 2012 will be used as the baseline for DFID's RBA pilot. Improvements in teachers' English language competencies will be assessed by a follow-up test in 2014 and RBA payments will be calculated against an estimate of the overall number of teachers with the agreed levels of improvement.

VERIFICATION PART A: THE STUDENT COMPLETION BASELINE

3 VERIFICATION STRATEGY

The calculation of RBA payments for the Rwanda pilot is very straightforward in theory, involving the annual comparison of only three numbers, students sitting P6, S3 and S6 national examinations, with the previous year. Nevertheless we will present examination results data in a disaggregated format so that stakeholders can see clearly where gains are being achieved and where they need to target additional resources. Since districts and not provinces are the executive levels of government with budgeting and reporting accountability, including responsibility for signing performance contracts, disaggregation to the level of district is appropriate since this could be helpful in terms of creating incentives at the local level.

3.1 THE VERIFICATION PROCESS

Independent verification of the numbers of students sitting national examinations is a two-step process;

1. Checks for consistency of numbers of students reported by the Examinations and Accreditation Department as sitting the national examinations against independent data concerning student enrolments;
2. Field verification in a sample of schools to assess accuracy of school-level data for the national examinations.

DATA REQUIREMENTS

GoR need to provide the verification team with the numbers of students sitting national examinations, disaggregated by district and gender for analysis and management purposes.

The verification team also require from the Examinations and Accreditation Department of REB hard copy of the results (listing students who sat for the examination) by school for the selected sample of 100 schools⁴ for the Baseline Year 2011, and subsequently for the three years for which RBA payments will be calculated⁵.

CONSISTENCY OF NATIONAL DATA

As a first step national data from the Examinations and Accreditation Department reporting the numbers of students sitting the national examinations are compared with EMIS data for student enrolments. Clearly the number of students sitting examinations cannot exceed the number of students enrolled in the relevant grades. Experience of other countries in the region suggests that around 95% of students enrolled at the start of the school year sit end of year examinations.

Since EMIS data are independent of the Examinations and Accreditation Department data the verification team has two sources of evidence to cross-reference for consistency.

Although RBA payments will be calculated against the national totals irrespective of province and gender, we believe there is added value in a disaggregated analysis by district.

⁴ The role of WDA in S6 examinations was not known by the verification team in time for the baseline survey, and consequently TVET was not included in the field verification sample survey.

⁵ This was agreed in principle at the meeting held in REB boardroom on 12th September 2012.

FIELD VERIFICATION

The field survey in a sample of schools allows the verification team to cross reference the examinations data with the independent evidence provided by school records of enrolment and attendance. This is essentially verifying that the students listed on the examinations results for a school are in fact genuine students of that school.

A team of data auditors carry out the field survey according to an agreed verification protocol. On their field visits to schools the auditors compare two sources of evidence for consistency;

- School records of enrolment or attendance;
- Examination results for the school.

These are two independent sources of evidence that should confirm the reliability of numbers of sitting the national examination as reported by the Examinations and Accreditation Department. Visits by the Team Leader to seven schools during the inception phase indicated that schools maintain detailed student records to facilitate this verification strategy.

The field verification process is illustrated in Figure 3.

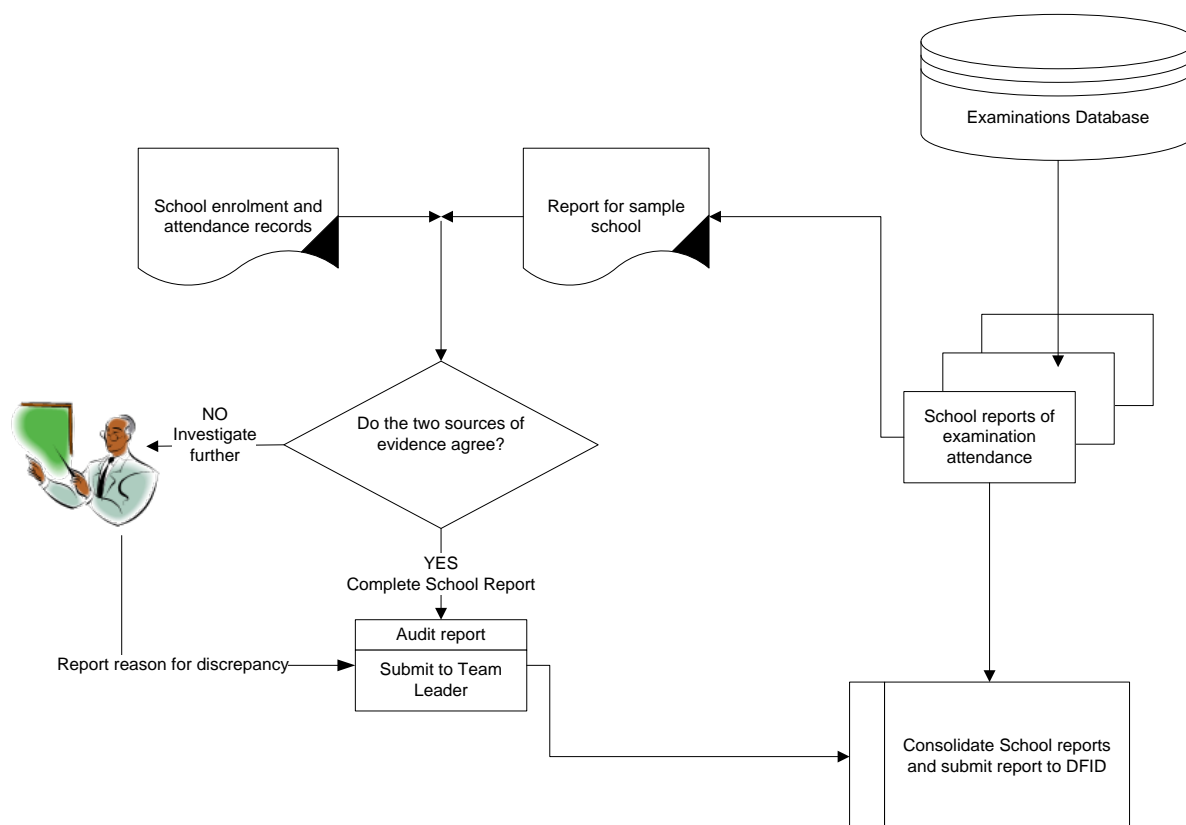


Figure 3: The field verification process

4 EXAMINATION ATTENDANCE 2011

4.1 THE BASELINE

The numbers of students reported by REB as sitting the national examinations are shown in Figure 4, which also includes the number of Senior 6 students sitting the TVET examination administered by WDA.

Province	District	Numbers of students sitting national exams (by district, level and gender)										
		Primary 6			S3 (O Level)			S6 (A Level)				
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
KIGALI	NYAUGENGE	2,081	2,332	4,413	843	936	1,779	927	891	1,818		
	GASABO	3,109	3,515	6,624	1,248	1,278	2,526	1,397	1,199	2,596		
	KICUKIRO	2,124	2,381	4,505	898	805	1,703	747	601	1,348		
	KIGALI TOTALS	7,314	8,228	15,542	2,989	3,019	6,008	3,071	2,691	5,762		
SOUTH	NYANZA	1,650	1,822	3,472	1,011	960	1,971	356	275	631		
	GISAGARA	1,525	1,905	3,430	878	1,042	1,920	270	332	602		
	NYARUGURU	2,330	2,540	4,870	1,200	1,220	2,420	160	139	299		
	HUYE	2,302	2,660	4,962	1,537	1,692	3,229	723	742	1,465		
	NYAMAGABE	2,586	3,291	5,877	1,264	1,321	2,585	694	641	1,335		
	RUHANGO	2,043	2,557	4,600	1,323	1,550	2,873	614	556	1,170		
	MUHANGA	2,389	3,475	5,864	1,267	1,546	2,813	862	1,059	1,921		
	KAMONYI	2,630	3,604	6,234	1,146	1,624	2,770	186	208	394		
	SOUTH TOTALS	17,455	21,854	39,309	9,626	10,955	20,581	3,865	3,952	7,817		
WEST	KARONGI	2,310	2,841	5,151	1,590	1,702	3,292	510	392	902		
	RUTSIRO	2,055	2,432	4,487	1,058	880	1,938	323	160	483		
	RUBAVU	2,220	2,265	4,485	1,311	965	2,276	582	485	1,067		
	NYABIHU	2,167	2,675	4,842	1,582	1,546	3,128	449	221	670		
	NGORORERO	1,782	2,309	4,091	1,093	1,074	2,167	246	257	503		
	RUSIZI	2,828	3,273	6,101	1,539	1,420	2,959	755	625	1,380		
	NYAMASHEKE	3,122	3,758	6,880	1,746	1,874	3,620	589	549	1,138		
	WEST TOTALS	16,484	19,553	36,037	9,919	9,461	19,380	3,454	2,689	6,143		
NORTH	RULINDO	2,287	3,097	5,384	1,136	1,476	2,612	217	311	528		
	GAKENKE	2,943	3,778	6,721	1,524	1,696	3,220	506	400	906		
	MUSANZE	2,656	3,529	6,185	1,334	1,676	3,010	876	755	1,631		
	BURERA	1,955	2,149	4,104	1,201	980	2,181	523	203	726		
	GICUMBI	3,247	4,339	7,586	1,713	1,690	3,403	801	637	1,438		
	NORTH TOTALS	13,088	16,892	29,980	6,908	7,518	14,426	2,923	2,306	5,229		
EAST	RWAMAGANA	2,095	2,470	4,565	893	1,036	1,929	273	255	528		
	NYAGATARE	2,904	3,049	5,953	1,373	1,229	2,602	519	317	836		
	GATSIBO	3,042	3,458	6,500	1,497	1,430	2,927	619	404	1,023		
	KAYONZA	2,068	2,153	4,221	1,389	1,407	2,796	455	327	782		
	KIREHE	1,880	2,012	3,892	1,067	863	1,930	466	334	800		
	NGOMA	1,918	2,257	4,175	1,269	1,363	2,632	761	667	1,428		
	BUGESERA	2,300	2,480	4,780	1,113	1,096	2,209	328	202	530		
	EAST TOTALS	16,207	17,879	34,086	8,601	8,424	17,025	3,421	2,506	5,927		
NATIONAL TOTALS	Primary 6		S3 (O Level)			S6 (A Level)						
	Male	Female	Total	Male	Female	Total	Male	Female	Total			
	70,548	84,406	154,954	38,043	39,377	77,420	16,734	14,144	30,878			
SENIOR 6 TVET STUDENTS (EXAMINATIONS ADMINISTERED BY WDA)										15,680		
Totals including S6 TVET		154,954			77,420			46,558				

Figure 4: Examination sitters by district and gender, as reported by REB.

According to REB, a total of 263,252 students sat national examinations in 2011, disaggregated by sub-sector as follows:

- Primary 6 154,954
- Secondary 3 77,420
- Secondary 6 30,878

We note that the S6 total reported by REB includes Senior 6 students sitting the TTC examination. The TVET examination was set by WDA for the first time in 2011 and a further 15,680 students were reported by WDA as sitting this examination.

We conclude that the total numbers of students reported as sitting national examinations in 2011, and therefore the baseline for DFID RBA payment calculations, are:

- Primary 6 154,954
- Secondary 3 77,420
- Secondary 6 46,558

We also note that the 2011 baseline data provided by REB includes Senior 6 students taking the TTC option, whereas in 2012 the S6 TTC examination will be set and administered for the first time by KIE.

It will therefore be important that KIE provide the 2012 data in a similar disaggregated format to REB so that RBA payment can be calculated accordingly.

Since the TVET results were not available at the time of the baseline field survey we should acknowledge that institution delivering TVET training were not included in the sample. The sample will be adjusted for audit surveys to include both TVET and TTC Senior 6 students from verification of the 2013 examinations results.

4.2 PROPOSED PAYMENT MODEL

For each of the three years of the RBA pilot DFID will make a single payment to GoR but that payment will have three components, calculated according to student completion at P6, S3 and S6; plus an additional component for improvement in teachers' English language competencies in 2014.

The independent verification team propose a disaggregated model whereby the payments for the three student completion components are calculated at the level of province and gender. The rationale behind the proposal is that the disaggregated model recognises and rewards improvement at the provincial level and also provides explicit incentives for improvement in girls' education. It also mitigates against the possibility of regional and gender variations that could otherwise have a negative impact on RBA payments.

5 THE FIELD SURVEY

The purpose of the field survey was to verify examinations data provided by REB at the school level with independent evidence available at the school, such as attendance registers.

CfBT entered into a contract with a Rwandan company, DP Auditors and Consultants, to provide a team of data auditors to work under the supervision of the verification Team Leader and Education Consultant.

A sample of 100 schools was drawn with the assistance of REB for inclusion in the field survey. In each school visited the auditors focussed their attention on one of the three grades targeted by the RBA pilot, irrespective of the availability of other RBA grades taught in the school.

The number of schools visited in each province is shown in Figure 5, under the grade targeted. Details of the schools can be seen in Appendix 6.

Province	Primary 6	Secondary 3	Secondary 6	Total	
Northern	12	5	1	18	
Southern	18	8	2	28	
Western	18	7	2	27	
Eastern	13	5	1	19	
Kigali City	4	3	1	8	
Sub-sector total	65	28	7	Overall total	100

Figure 5: Breakdown of the field survey sample.

5.1 AUDITOR TRAINING

The Team Leader delivered a two-day training workshop⁶ for the auditors in Kigali during which they were familiarised with the purpose, procedures and instruments of the survey. The auditors also used the final session of the workshop to plan the survey logistics. Guidelines to support the auditors are shown in Appendix 4.

5.2 SURVEY PROCEDURES

In advance of the survey the Examinations and Accreditation Department of REB provided for each of the 100 schools a results list showing the examination candidates by name, but with actual examination results removed. This list provided the REB evidence of completion against which school records were used as the independent verification evidence.

In each school visited the auditors completed a Field Visit School Report (see Appendix 5). In their school reports auditors recorded 2011 student enrolment as evidenced by school registers. The purpose of recording student enrolment data was primarily to confirm the credibility of examination results lists, but

⁶ The workshop was held in the Chez Lando Hotel, Kigali, on October 29th & 30th 2012.

also to facilitate analysis of completion rates in order to facilitate provision of management information to REB.

5.3 SURVEY FINDINGS

Two schools were unable to provide some of the independent evidence required for the verification process and they were removed from elements of the analysis.

One private school in Kigali (Apaper, Code 0102051) was unable to provide evidence of student enrolments for 2011 and was removed from the analysis of examination sitters against enrolment.

A second Kigali school (Gasogi, Code 01021101) had no independent evidence of students who sat the examination in 2011 and was removed from the analysis comparing school records with REB data.

5.4 COMPARISON OF SCHOOL RECORDS WITH REB EXAMINATIONS DATA

PRIMARY 6

Agreement between REB results lists for the P6 national examinations and school records was very high, in fact perfect in 63 of the 64 schools surveyed. The only discrepancy was found in Mulinga School in Gatisibo District of Eastern Province, where the headteacher reported that eleven students who appear on the results list left the school before the end of the school year and did not sit the examinations.

SECONDARY 3

A very different picture emerged for the schools where Secondary 3 was the focus of the survey. Perfect agreement between REB results lists for the S3 national examinations and school records was found in only 12 of the 28 schools. In the remaining 16 schools discrepancies of between one and seven students were found. Figure 6 gives the frequency distribution of discrepancies.

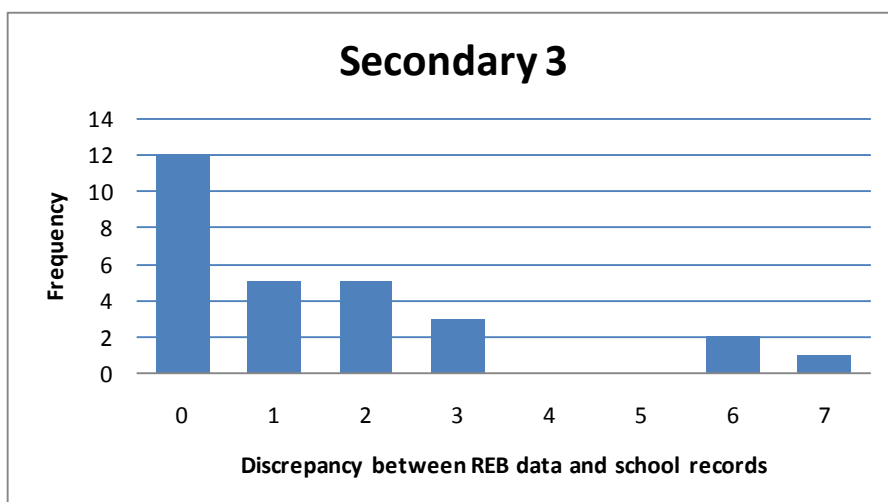


Figure 6: Frequency of discrepancies by school.

Although this appears to be a high number of discrepancies in terms of the number of schools involved, it accounts for a very small percentage of the students. The overall discrepancy found by the field survey was 2.17%; that is to say, 2.17% of the S3 students in the REB results lists were reported by schools as not sitting the examinations.

SECONDARY 6

No discrepancies at all were found in the schools where Secondary 6 was the focus of the survey, although with a sample of only seven schools it would be unreasonable to assume that there is no dropout at this grade.

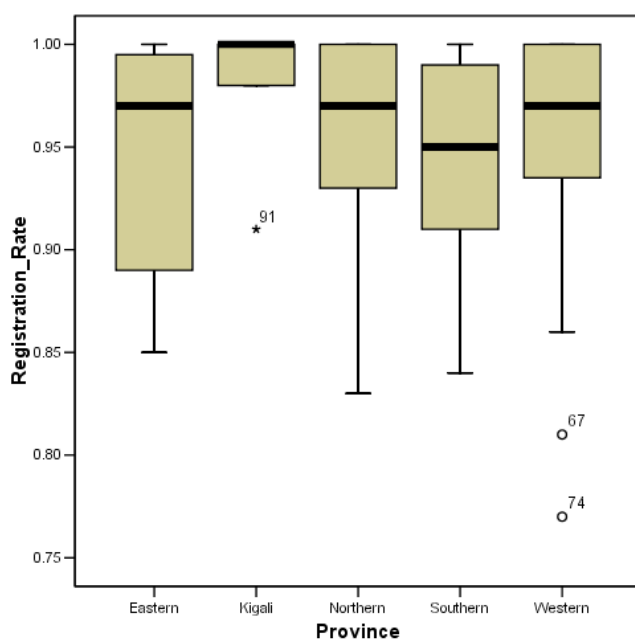
Detailed field survey school reports are attached as Appendix 6.

5.5 REGISTRATION RATES

The primary purpose of the independent verification is to report on the reliability of the national examination attendance rates.

A secondary purpose is to provide management information that may assist GoR in identifying where RBA payments may be effectively targeted in order to improve completion rates at P6, S3 and S6.

This section of the report examines the proportion of students enrolled in the relevant grades of the schools visited who registered for national examinations. REB provided the verification team with lists of students who registered for the national examination in the sample of 100 schools selected for the field survey. Box and whisker plots show that the median examination attendance rate for the sample of schools in four provinces was around 95% with Kigali City close to 100%.



Kigali City appears to be the best performing province but with a sample of only 8 schools it would be unreasonable to draw firm conclusions.

Of the other provinces Western performed marginally better than the other three although the two worst performing schools were found in Western Province.

The schools in question along with the other outlier seen in Figure 7, are detailed in Figure 8.

Figure 7: Box and whisker plots showing provincial rates of examination attendance for the schools sample

Province	School name	School number in box plots	Registration rate
Kigali City	Gikomero	91	90.6%
Western	Kasumo	74	77.1%
Western	Kagabiro	67	81.5%

Figure 8: The three outliers shown in the box and whisker plots

6 ENROLMENT AND COMPLETION RATES

This section of the Baseline Report proceeds to investigate examination attendance statistics in greater detail and in relation to student enrolments for the baseline year. Data are also reviewed in a historical context in order to comment on their credibility and fitness for purpose as the 2011 RBA baseline.

6.1 OVERVIEW OF 2011 DATA

In Figure 9 numbers of students reported by REB as sitting the national examinations in 2011 are compared with student enrolment data published by the GoR Ministry of Education Directorate of Planning in the Rwanda Education Statistics⁷ (January 2012)

Grade	Enrolment according to EMIS			National Examination Sitters according to REB			Percentage sitters		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
P6	79,850	92,699	172,549	70,548	84,406	154,954	88.4%	91.1%	89.8%
S3	40,059	41,762	81,821	38,043	39,377	77,420	95.0%	94.3%	94.6%
S6	20,568	18,689	39,257	16,734	14,144	30,878	81.4%	75.7%	78.7%

Figure 9: Examination attendance rates

Initial inspection shows that the data are reasonably consistent, especially for P6 and S3 where examination attendance rates vary from 88.4% of enrolment (P6 male students) to 95.0% (S3 male students). Lower rates of attendance in S6 examinations (81.4% for male students and 75.7% for females) leave some scope for improvement.

6.2 PRIMARY 6

ENROLMENT TRENDS

Student enrolments in Primary 6 increased steadily from 2007 to 2010, followed a reduction in 2011, the RBA baseline year. Figure 10 shows the detailed statistics and these are illustrated graphically in Figure 11.

	2007	2008	2009	2010	2011
Male	67,207	69,004	81,209	86,464	79,850
Female	71,487	75,725	92,185	98,376	92,699
Total	138,694	144,729	173,394	184,840	172,549

Figure 10: Five year trend in Primary 6 enrolments

⁷ Caveat: Since enrolment data are not verified, conclusions involving their analysis cannot be guaranteed.

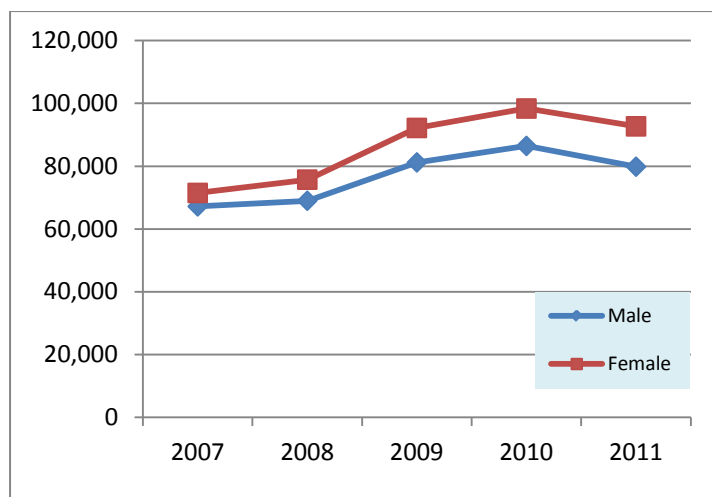


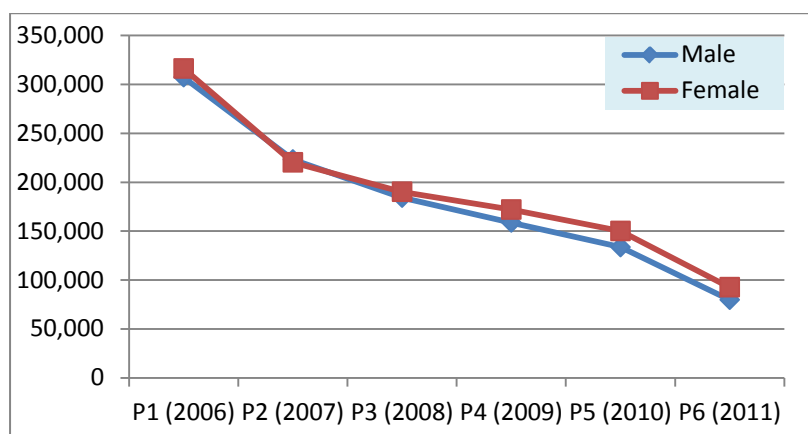
Figure 11: Five year trend in Primary 6 enrolments

Figure 12 shows 2011 P6 enrolments in the context of their cohort data from P1 in 2006. Although this analysis is not directly relevant to the independent verification of examination statistics, it is included here to provide GoR with an indication of where resources need to be targeted to improve student retention.

	2006	2007	2008	2009	2010	2011
	P1	P2	P3	P4	P5	P6
Male	307,271	223,142	184,194	158,809	133,634	79,850
Female	316,134	220,247	190,201	172,031	150,123	92,699
Total	623,405	443,389	374,395	330,840	283,757	172,549

Figure 12: 2011 P6 student cohort⁸ from P1 – P6

According to GoR statistics only 27.7% of the children who enrolled in P1 in 2006 reached P6 in 2011.



It can be seen in Figure 13 that the sharpest falls occur from P1 to P2 and from P5 to P6.

Figure 13: 2011 P6 students cohort from P1 – P6

⁸ The cohort analyses throughout this report do not take into account students repeating grades. Since repetition can bring new students into a cohort as well as lose them, we make the assumption here that the net effect is not significant for our purposes.

ENROLMENT AND EXAMINATION ATTENDANCE

Comparison of the enrolment data with numbers of students reported as sitting the P6 national examination between 2006 and 2011 reveals some variation in the attendance rate from 83.3% in 2007 to 90.6% in 2009.

P6 Exam sitters against enrolment						
Year	2006	2007	2008	2009	2010	2011
Enrolment	137,893	138,694	144,729	173,394	184,840	172,549
Sitters	119,708	115,577	129,741	157,754	161,287	154,954
Attendance rate	86.81%	83.33%	89.64%	90.98%	87.26%	89.80%

Figure 14: Six year trend in P6 examination attendance and enrolment

Figure 14 illustrates that although both enrolment and examination attendance in 2011 fell from the previous year, and were also below 2009 levels, the attendance rate of 89.8% at the national examination is consistent with the pattern of previous years. This trend is clearly seen in the graphical representation (Figure 15).

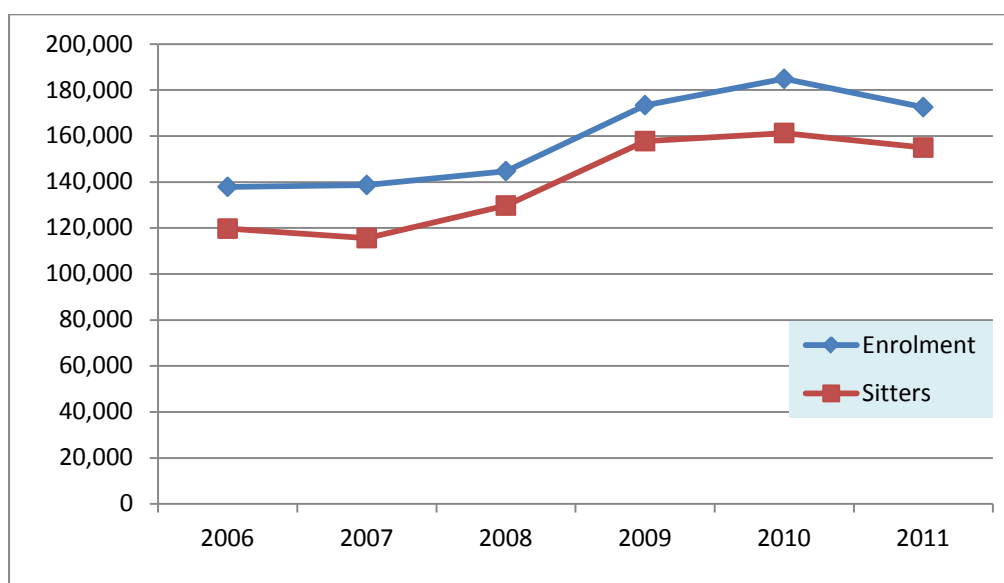


Figure 15: Graphical representation of trend in P6 examination attendance and enrolment

In the light of all available evidence the verification team's overall conclusion for P6 is that the reported number of sitters is consistent with recent national examination trends and student enrolment statistics and should therefore be accepted by DFID as the baseline for RBA payments.

6.3 SECONDARY 3

ENROLMENT TRENDS

Figure 16 shows the detailed S3 enrolment statistics from 2007 to 2011 and these are illustrated graphically in Figure 17.

	2007	2008	2009	2010	2011
Male	25,754	26,467	27,329	30,729	40,059
Female	22,995	25,562	25,221	30,977	41,762
Total	48,749	52,029	52,550	61,706	81,821

Figure 16: Five year trend in Secondary 3 enrolments

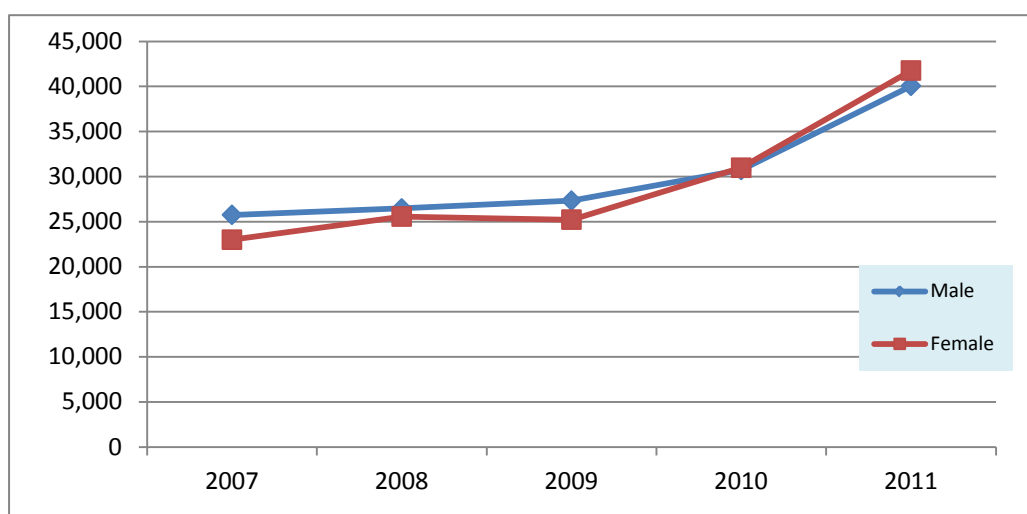


Figure 17: Five year trend in Secondary 3 enrolments

Unlike Primary 6, enrolment in Secondary 3 has risen steadily in the four years from 2007, culminating in a rise of 32.6% from 2010 to 2011.

Analysis of the S3 cohort enrolments from 2006 to 2011 (Figure 18) reveal the one major anomaly in student data for this period, clearly demonstrated in Figure 19.

Enrolment of the cohort appeared to increase by 25.2% in 2007, followed by a drop of 57.7% the following year.

	P4(2006)	P5(2007)	P6(2008)	S1(2009)	S2(2010)	S3(2011)
Male	132,836	167,865	69,004	57,504	50,412	40,059
Female	143,040	179,019	75,725	60,001	53,617	41,762
Total	275,876	346,884	144,729	117,505	104,029	81,821

Figure 18: S3 student cohort from 2006 to 2011.



Figure 19: Reported enrolment statistics for the 2011 S3 cohort.

Clearly there is an error in the data for P5 in 2007 and since it has no direct impact on the RBA analysis the cohort analysis is repeated in Figure 20 with the anomalous data replaced by estimates obtained by interpolation of P4 in 2006 and P6 in 2008.

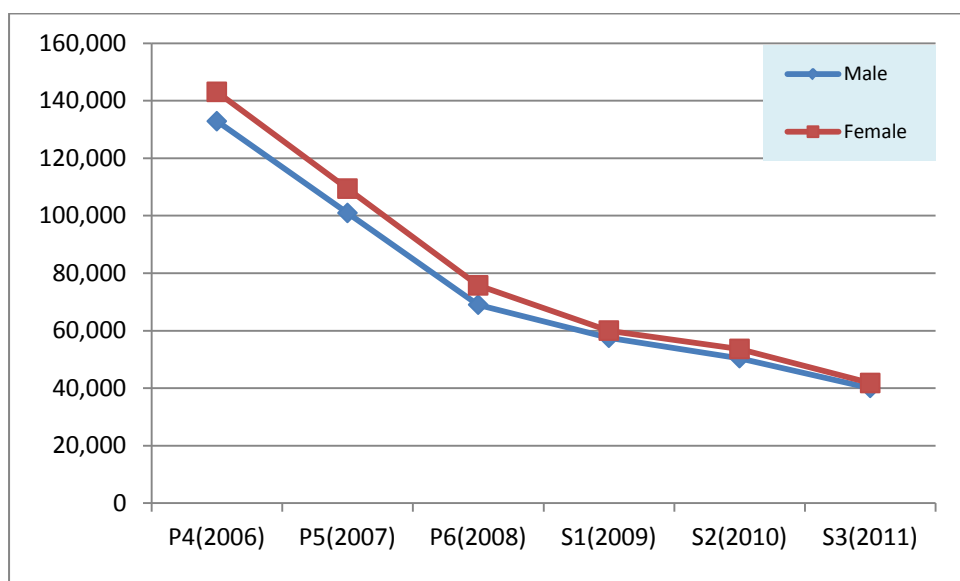


Figure 20: Reported enrolment statistics for the 2011 S3 cohort with correction

ENROLMENT AND EXAMINATION ATTENDANCE

The sharp rise in S3 enrolments in 2011 (Figure 17) is reflected in the sharp rise (30.8%) in national examination attendance from 2010 to 2011.

	2006	2007	2008	2009	2010	2011
Male	23,846	24,461	25,396	26,730	29,411	38,043
Female	21,022	22,264	23,486	25,065	29,783	39,377
Total	44,868	46,725	48,882	51,795	59,194	77,420

Figure 21: Examination attendance 2006 to 2011.

Attendance rates against enrolment are shown in Figure 22. Examination attendance has been reasonably stable over the five years leading up the RBA baseline, averaging 95.7%.

Year	2006	2007	2008	2009	2010	2011
Enrolment	43,485	48,749	52,029	52,550	61,706	81,821
Sitters	44,868	46,725	48,882	51,795	59,194	77,420
Attendance rate	103.18%	95.85%	93.95%	98.56%	95.93%	94.62%

Figure 22: Examination attendance 2006 to 2011.

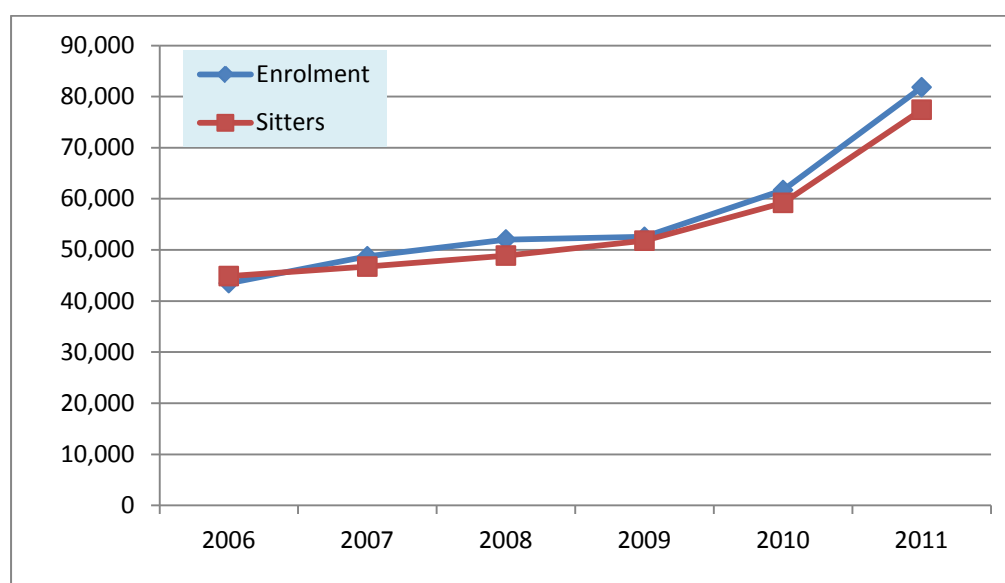


Figure 23: Secondary 3 enrolment and examination attendance

Figure 23 demonstrates that reported statistics for the RBA baseline are consistent with recent trends.

In the light of all available evidence the verification team's overall conclusion for S3 is that the reported number of sitters for 2011 is consistent with recent national examination trends and student enrolment statistics and should therefore be accepted by DFID as the baseline for RBA payments.

6.4 SECONDARY 6

ENROLMENT TRENDS

The numbers of student enrolled in S6 has risen steadily in recent years (Figure 24) although the increase from 2010 to 2011 was lower than previous years, as can be seen in Figure 25.

	2007	2008	2009	2010	2011
Male	14,385	15,846	17,366	20,265	20,568
Female	12,351	13,072	14,112	18,102	18,689
Total	26,736	28,918	31,478	38,367	39,257

Figure 24: S6 enrolments, 2007 – 2011.

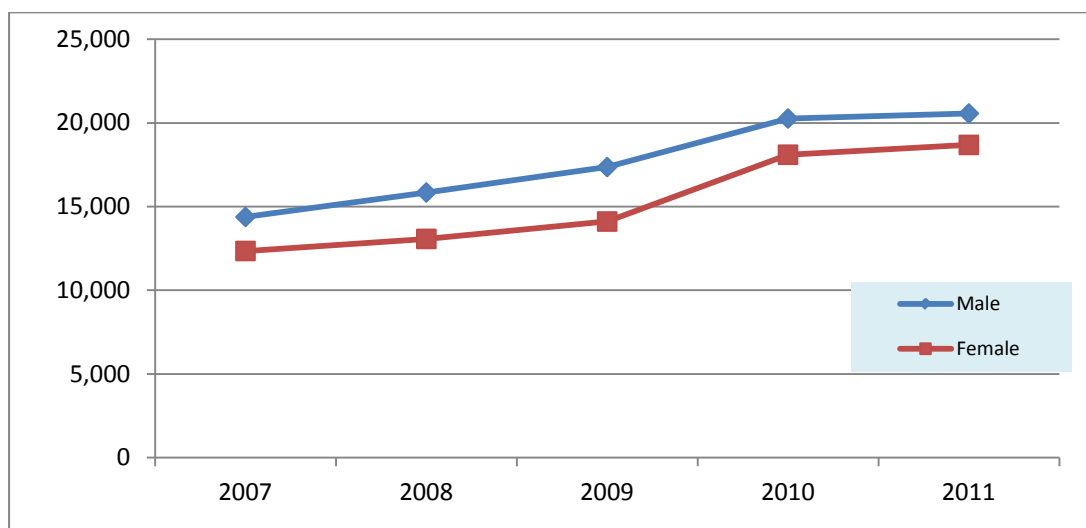


Figure 25: Five year trends in S6 enrolments.

Analysis of the enrolment data from 2006 to 2011 show that the cohort of students who began S1 in 2006, has followed typical trends with 65.9% of the cohort reaching S6 in 2011 (Figure 26).

	S1(2006)	S2(2007)	S3(2008)	S4(2009)	S5(2010)	S6(2011)
Male	31,120	30,402	26,467	21,681	20,600	20,568
Female	28,410	28,648	25,562	20,428	19,104	18,689
Total	59,530	59,050	52,029	42,109	39,704	39,257

Figure 26: The S6 cohort from 2006 to 2011.

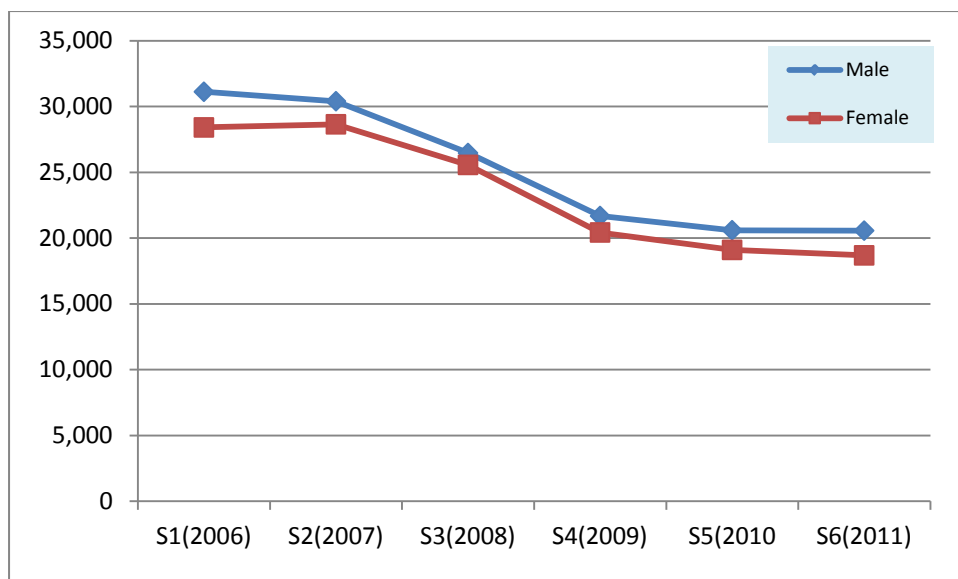


Figure 27: The S6 cohort from 2006 to 2011.

Figure 27 shows a much reduced drop-out in the final two years of secondary education. It seems that the students who survive to S4 are less likely to drop out before completing S6.

ENROLMENT AND EXAMINATION ATTENDANCE

Although the enrolment statistics appear plausible and consistent from year to year, data for the S6 national examination attendance contain anomalies that cannot readily be explained.

The first feature of note is the 37.1% drop in number of examinees from 2010 to 2011 (Figure 28).

	2006	2007	2008	2009	2010	2011
Male	17,519	18,765	20,286	23,004	26,288	16,734
Female	16,983	16,890	18,574	19,541	22,807	14,144
Total	34,502	35,655	38,860	42,545	49,095	30,878

Figure 28: S6 National examinations attendance, 2006 to 2011.

Comparison of S6 student enrolment with examination attendance over the same period further illustrates the anomaly.

	2006	2007	2008	2009	2010	2011
Enrolment (Male + Female)	25,255	26,736	28,918	31,478	38,367	39,257
Exam sitters (Male + Female)	34,502	35,655	38,860	42,545	49,095	30,878
Percentage attendance	136.61%	133.36%	134.38%	135.16%	127.96%	78.66%

Figure 29: Comparison of S6 enrolments with examination attendance.

Unlike the error in S3 enrolments for 2007, which is assumed to be an isolated error, the numbers of students reported as sitting the S6 national examinations reveal the consistent anomaly of more sitters than enrolments for each of the five years prior to 2011 (Figure 29). This phenomenon is illustrated in Figure 30.

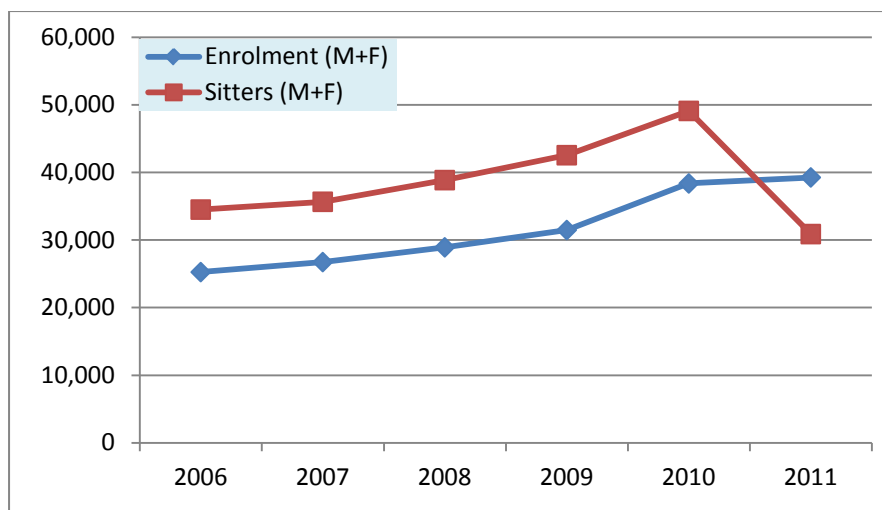


Figure 30: Comparison of S6 enrolments with examination attendance.

There is an obvious anomaly in the data shown in Figure 30, where the numbers of examination sitters appears to exceed the numbers of students in the years preceding 2011, when a correction appears to the expected relationship between enrolment and examinees.

It is significant that the 2011 correction corresponds with WDA administering TVET examinations for the first time and therefore hints at a logical explanation to the anomaly. In the years from 2006 to 2010 REB data include the numbers of TVET examinees, but these students are not included in the enrolment statistics, whereas in 2011 the REB data include neither enrolment nor examinees. Another possibility is that statistics prior to 2011 include 'private candidates' that sit S6 examinations.

In the light of all available evidence the verification team recommends that DFID accepts the number of sitters reported by REB as the baseline for RBA payments, with the addition of the number of S6 students reported as sitting the TVET examination set by WDA.

7 INFORMATION MANAGEMENT

7.1 EXAMINATIONS ADMINISTRATION

The Examinations and Accreditation Department of REB appears to have established a rigorous and efficient system for managing national examinations.

The system, outlined in Figure 31, takes all possible steps to ensure that only bona fide properly registered students sit the examinations.

1. The process begins with students completing two copies of the registration form to which they must attach a photograph for identification.
2. Following checks by the school one copy is forwarded to the examinations department where it is checked further for obvious errors and the other copy remains in school.
3. The candidates' data are then entered into the examinations database, where a unique candidate number is assigned.
4. The Examinations and Accreditation Department then prints candidates' personal data and returns lists to schools for verification.
5. At this stage P6 and S3 candidates nominate their choice of school for their next stage of education.
6. When the candidates attend the examinations they are required to bring ID cards which are checked against the registration list to ensure only genuine candidates sit the examinations.
7. Examinations are marked centrally and results lists are then distributed to schools.

Figure 31: National Examinations administration system

In spite of such a rigorous system the verification baseline survey noted a small number of random errors. These appear mostly to have occurred when families relocated and students moved to a different school between completing the registration process and sitting the examination. In theory the examinations department system should cope with such changes, but comments from headteachers during the baseline survey suggest that there can be difficulties updating the system; the most likely cause being the school's failure to inform REB of changes.

We therefore recommend that REB reviews its procedures and the advice given to schools in the event of students moving to a different school after registering for the examinations.

We also note a lack of coordination between the agencies responsible for the management of examinations data and those managing other educational data, such as information gathered through the annual schools census conducted by the EMIS unit. There would be advantages of establishing relational databases for example, but this would require common school codes as unique identifiers, and currently the examinations department and EMIS unit employ different school codes.

7.2 GENERAL COMMENTS ON MANAGEMENT OF INFORMATION

On a broader note, a review of the management structure of the Ministry of Education suggests that there is scope for strengthening information management through restructuring existing resources.

The GoR organisational structure (Figure 32) shows a degree of separation between the agencies responsible for educational data. The Examinations and Accreditation Department, and therefore the examinations database, is located in REB, whereas the EMIS database with school level data is found in the Planning Unit under the Director General Education Planning.

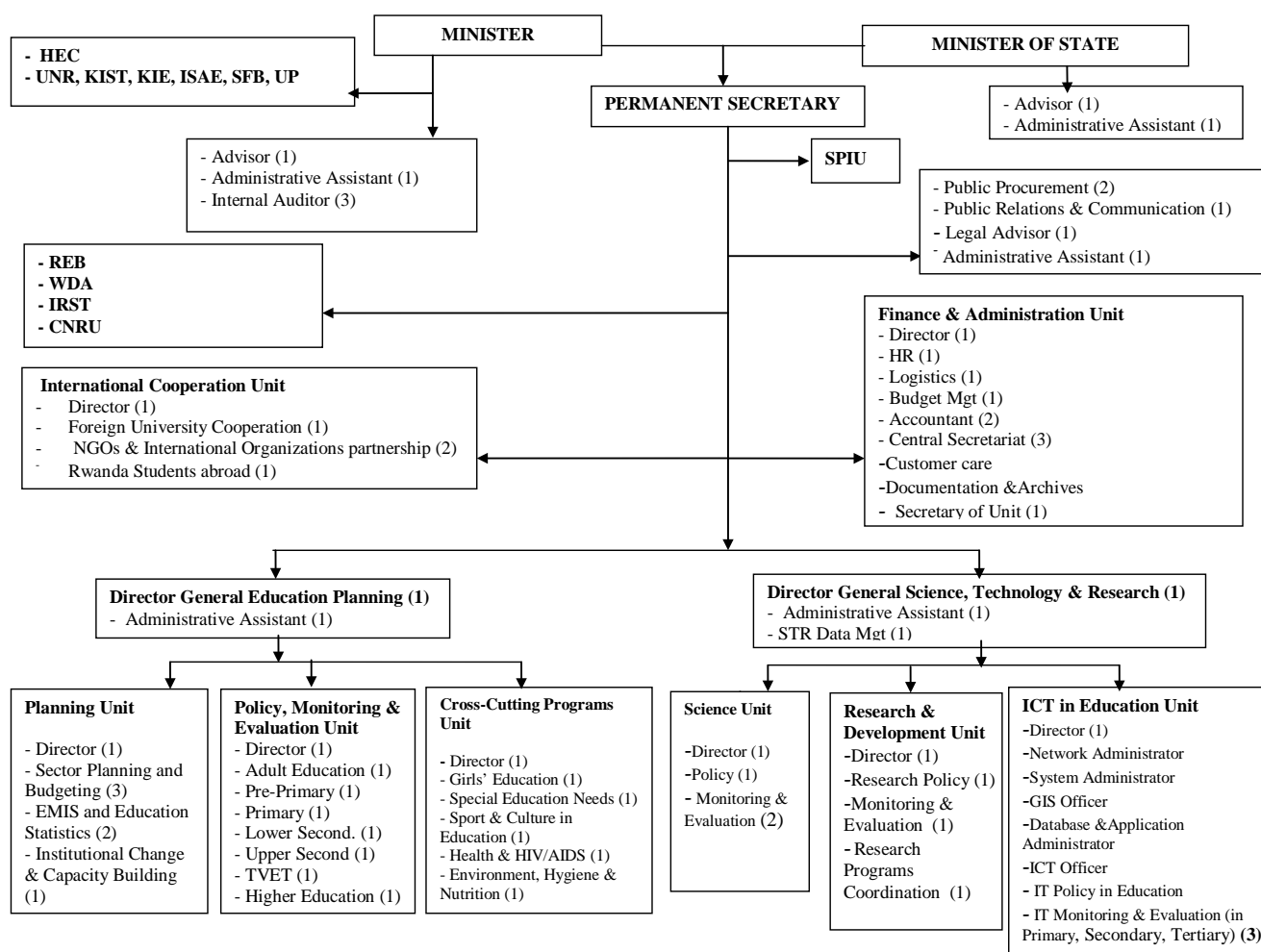


Figure 32: Ministry of Education organisational chart.

It has been suggested that the EMIS Unit is not especially strong in the relevant technical areas, and yet we note that there is an ICT in Education Unit under the Director General Science Technology and Research, in which there are posts of:

- GIS⁹ Officer,
- Network Administrator,
- Database & Application Administrator,
- IT Monitoring & Evaluation.

There is an apparent mismatch between the title of the ICT in Education Unit and its listed posts. The title suggests that the focus of the unit is the pedagogic role of ICT in effective teaching and learning, and this is consistent with the post of IT Policy in Education.

However, the rationale for locating the GIS officer and database administrator in the unit is not clear, given that Geographic Information Systems are typically integral components of the most effective EMIS.

We therefore recommend a review that considers departmental restructuring, bringing together the posts with responsibility for managing educational data (EMIS Unit) and technical expertise in network administration and database management, including the GIS post. This would considerably strengthen the planning unit and at the same allow a clearer focus for the ICT in education Unit.

Such a restructuring would then provide a robust platform for more effective collaboration between education planning and the management of examinations data, with the opportunity of offering technical support for over-stretched staff responsible for the examinations database.

⁹ Geographic Information Systems

VERIFICATION PART B: TEACHERS' ENGLISH LANGUAGE COMPETENCIES

8 THE ENGLISH LANGUAGE TESTING INSTRUMENT

DFID awarded the contract for carrying out the baseline assessment of teachers' English language to a team from British Council Rwanda, and it was agreed that levels of competency would be measured by the Aptis test.

The Aptis is a relatively new assessment instrument that has been developed by British Council, and recently trialled in a number of countries. Since Aptis is novel, and has not been used in Rwanda before, it was believed appropriate to examine the performance of the test in some detail.

After discussion, a sampling methodology was also agreed with British Council which ensured that a representative sample of school teachers was selected for the baseline assessment. It was also agreed the target sample size would be 600 teachers. As detailed in the verification Inception Report, the confidence intervals associated with this sample size are quite broad, but within this constraint the sample can provide an estimate of current levels of competence.

9 VERIFICATION STRATEGY

The specific verification tasks described here concerned the standards that were used to assess English language competence and the efficacy of the methodology. The following aspects were examined:

- Documentary evidence of the validity and reliability of the Aptis.
- The methodology used to link the Aptis to the Common European Frame of Reference.
- Samples of Rwandan teachers' responses covering the five test papers.
- The marking criteria that were used in the assessment.
- Adherence to agreed methods of teacher sampling in Rwanda.
- The practical implementation of the exam.
- Feedback from a focus group of teachers who had taken the examination.
- The distributions of levels of competence achieved for each skill area.

A list of key documents referred to by the verification team is included as Appendix 7.

9.1 VERIFICATION PROCEDURE IN RWANDA

The verification team English language expert and team leader were in Rwanda for the purpose independent verification from 23rd February to 2nd March¹⁰.

COMMENTS ON THE BASELINE SAMPLE

British Council employed the following three-stage sampling design methodology:-

1. A random sample of districts was selected from each of the five provinces to form geographical clusters from which schools and teachers were selected.
2. A stratified sample of schools was selected from within each cluster (using status of school, and level of students taught).
3. Simple random sample of teachers was selected from within each of the stratified groups of schools.

¹⁰ See Appendix 8 for an overview of the verification schedule.

Within practical and logistical constraints British Council closely adhered to the agreed sampling methods. The final sample consisted of 576 valid cases and was thus close to the target of 600 cases. It is worth noting that this was achieved by setting an initial target 20% higher than the 600 needed. Participants thus consisted of 173 secondary teachers out of 240 identified (72%) and 403 primary school teachers out of 480 (84%). These numbers are satisfactory from the perspective of a study in which allocation to testing was randomised, but the possibility of some bias, particularly in the secondary school teachers tested, cannot be excluded. The details of the methods are contained in the Baseline Assessment draft report. Overall, British Council Rwanda is to be commended for adhering to the agreed methodology and achieving a sample of teachers within the time frame.

MEETING WITH THE APTIS TECHNICAL TEAM MEMBERS – TEST DELIVERY

The EL expert met with three members of the technical teams. British Council Rwanda ensured that the composition of the technical teams provided full support for the test delivery process. Each team had an IT technician and a member who was a Kinyarwanda speaker. All six invigilators were teachers from International Education Exchange, and all were experienced in the use of educational technology. During discussion, the team members made the following points about test administration:

- A great deal of staff time was needed to deal with the various challenges which arose during the administration and delivery of the test. This was underestimated in the project outline and should be realistically assessed for retesting in 2014.
- Communication was challenging. The Rwandan Education Board does not have line management responsibility for the districts and there was a lack of information about the RBA pilot at district level.
- The listening test (computer-based by design) had to be delivered using an audio CD with pen and paper. British Council Rwanda is investigating the exact nature of the technical problems (believed to be incomplete downloading from the USB memory device).
- Conditions for taking the Speaking test were not ideal. The presence of young babies, for example, sometimes created background noise for all test takers and disadvantaged mothers who needed to keep infants and babies close by when taking the test.

TEST CONTENT AND TEACHERS' REACTIONS TO APTIS TESTING

The technical team members raised the issue of test context for the Speaking test, where it was felt that the picture prompts in particular were culturally unfamiliar to many of the test-takers. However, team members reported that teachers found the experience of taking the Aptis test to be very positive. Candidates enjoyed being tested and in particular enjoyed the experience of taking the speaking test and teachers asked for more exposure to this kind of test. Clearly the candidature found Aptis to be a learning experience. This was borne out by a focus group discussion with thirteen test-takers.

SCRUTINY OF TEST- TAKERS BIO-DATA

All bio data were available for the EL expert to examine. A random sample of forty papers was scrutinised. There were no emerging issues with the data.

FOCUS GROUP DISCUSSION WITH TEACHERS

Thirteen teachers attended a focus group discussion with the English Language expert. A questionnaire was used to elicit responses to the experience of taking the Aptis test. The questionnaire and complete responses are available in Appendix 9.

All thirteen teachers chose to make additional comments on the testing experience. The majority of written responses (5) highlight the teachers' desire for more training in English language, in particular in the skills of speaking and listening:

E.g. The test was very difficult for teachers in speaking and listening because there are not practice in them so they need training where they can use English in Speaking and Listening

Three written responses also expressed a need for examination preparation, and this theme emerged during structured discussion:

E.g. The Aptis test was difficult because of some reasons: 1) using computer is not easy for some teachers and it was the first time. To help teachers to know English, ask British Council to prepare for us different Aptis tests.

Four responses stated a need for EL teaching materials to be available in schools:

E.g. It will be better to provide some materials in schools which will help teachers and learners to develop all those skills especially listening some schools don't have computers or radios to use for that. To know some vocabularies we also need dictionaries

Again, this point was made by the majority of participants during open discussion; and the teachers also expressed a willingness to undertake self-study in speaking and listening if materials could be made available to them.

When asked to provide reasons why writing and reading scores were higher than speaking and listening, the group agreed with one teacher who stated:

Our reading and writing skills are better than speaking and listening because we have books.

Three teachers stated that they enjoyed the testing experience – again, this point emerged in open discussion. Teachers are interested in developing their English language skills; and whilst the Aptis test was a novel experience for most, if not all, teachers, it has been perceived as an opportunity to learn:

E.g. Aptis test is very important because I can know my level in English language. Aptis test has given all others knowledge for example how to use a computer to speak and listen. I enjoyed developing my listening skills because it was the first time.

FEEDBACK ON THE TEST COMPONENTS

Aptis has five parts: Reading, Writing, Speaking, Listening, and Grammar/Vocabulary. Teachers were asked “Which part of the test did you find most difficult? Rate each paper on the following scale, where 1 = very easy and 5 = very difficult”

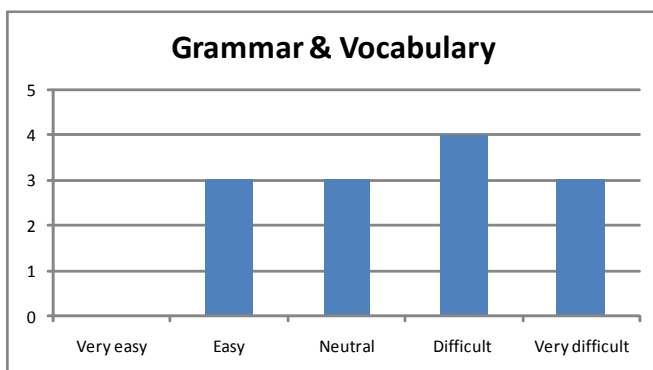
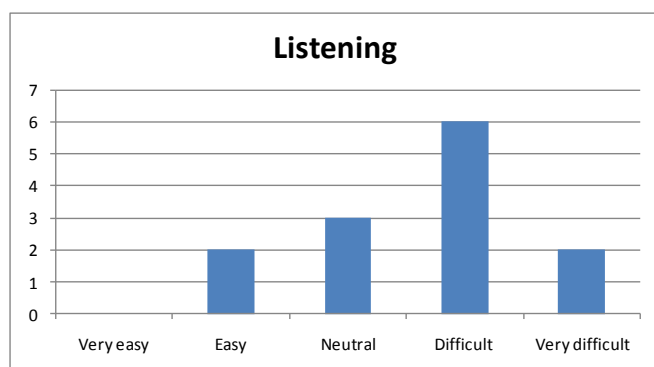
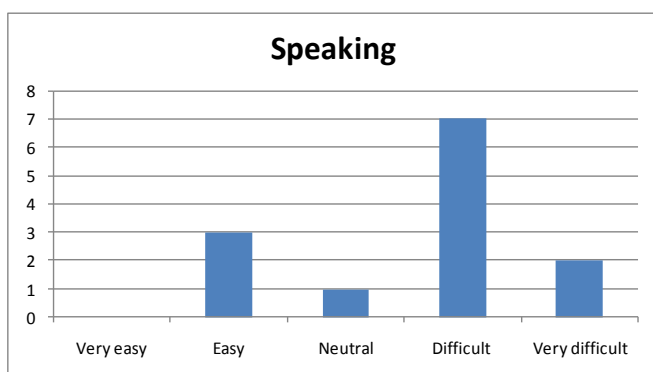
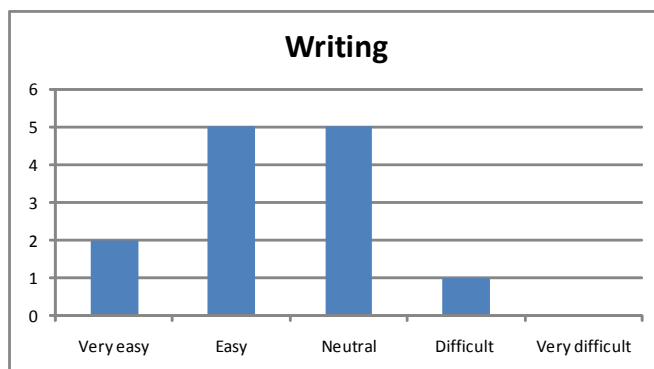
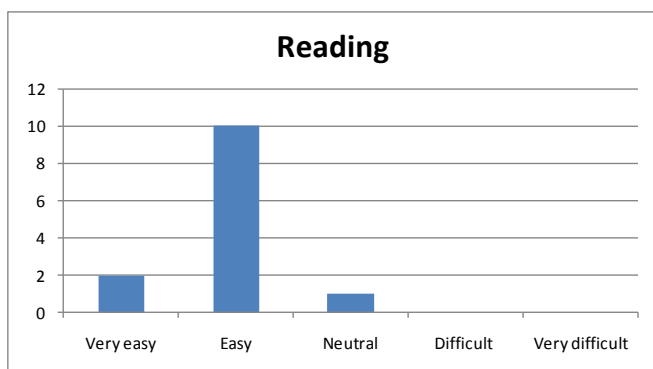


Figure 30: Teachers’ perceptions of test difficulty

Nine of the thirteen teachers experienced the speaking test as difficult or very difficult. Eight experienced the listening test as difficult or very difficult.

Responses show that teachers generally found the speaking and listening tests more difficult than the reading and writing tests, with a greater spread of responses to the question on grammar and vocabulary.

The findings above are in keeping with responses to the following question: “Of the four language skills – Speaking, Listening, Reading, and Writing, which is your strongest area?”

- Speaking - 0 teachers
- Listening - 1 teacher
- Reading – 7 teachers
- Writing - 5 teachers

REACTIONS TO TESTING/ COMPUTERISED TESTING

The focus group discussion also elicited the candidates' responses to computerised testing. None of the participating teachers had ever experienced computerised language testing before, and six had never used a computer. More generally, the teachers were unfamiliar with communicative language testing. However, both the focus group discussion and the information provided by the technical teams indicate that teachers, overall, enjoyed the test and perceived test-taking as a way to practice and improve their English language skills – the focus group discussants asked if the listening and speaking tests could be made available to them as learning materials for further practice.

9.2 SCHOOL VISITS/ CLASSROOM OBSERVATION

The verification team visited two schools and observed four classes – three English lessons and a science lesson. Observation confirmed that teachers generally have a low level of spoken English. The classroom methodology used by all three English teachers suggests that there is an urgent need for training in communicative approaches to language teaching. The teachers are currently using a structural, grammar-based approach, focusing on meta-language and rote-learning of grammar rules. This is unlikely to lead to effective language learning.

During our school visits we were also able to meet with a school-based mentor. The schools based mentoring programme (SBM) is at present the intervention which is in place to develop teachers' English language skills and teaching methodology. Anecdotal evidence indicates that there are some challenges with the SBM programme.

10 VERIFICATION VISIT TO BRITISH COUNCIL LONDON

Jean Wilson (English language expert) and David Dean (team leader) met the British Council Aptis team in London on 12th February, between 12.00 and 6.00. Verification included an overall check on the validity and reliability of Aptis, and a thorough check on activities undertaken to benchmark Aptis to the Common European Framework of Reference for Languages (CEFR).

10.1 THE TESTING INSTRUMENTS

The verification team was provided with all testing instruments, and found them of a satisfactory standard. Additional background evidence of test quality was provided by the following sources:

Aptis formal trials report:

<http://www.britishcouncil.org/sites/default/files/documents/aptis-formal-trial-report.pdf>

Aptis test development approach:

<http://www.britishcouncil.org/sites/default/files/documents/aptis-test-dev-approach-report.pdf>

10.2 SAMPLING OF CANDIDATE RESPONSES

The verification team scrutinised samples of candidate responses as fully as possible within the time available. We focused firstly on borderline candidates, and then sampled randomly from the responses provided. A summary of this is given in the table below:

<i>Aptis test paper</i>	<i>Responses available for verification</i>	<i>Responses scrutinised</i>
Writing	Random sample of 50	20
Reading	Random sample of 50	20
Grammar/ vocabulary	Random sample of 50	20
Speaking	All responses	15
Listening	All responses	15

OBJECTIVELY MARKED PAPERS

For objectively marked papers (reading, grammar and vocabulary), marking keys were also scrutinised against candidate responses. No anomalies or inaccuracies were found.

THE MARKING OF PERFORMANCE BASED ASSESSMENTS – SPEAKING AND WRITING

Speaking and writing are marked according to criteria. Verification thus involved a consideration of the criteria used, the consistency with which raters applied these criteria to candidate responses, and the overall fit between items, candidate responses and CEFR levels. No anomalies were found. A rationale for the criteria is given below in an extract from the Aptis test development approach:

“In the writing paper, a holistic approach is taken, in which the reader is expected to apply a single descriptive scale when forming a judgement on the written work. This was done both to reflect the nature of the writing tasks (candidates are asked to perform a series of relatively short tasks, often reacting to brief written prompts) and to facilitate ease of marking”

“In the speaking paper, where the examiner has some time to reflect on the language of the response, the tasks are assessed using a number of criteria in a series of task-specific scales. The descriptors of ability contained vary with the different tasks to reflect the expected language of the response”

<http://www.britishcouncil.org/sites/default/files/documents/aptis-test-dev-approach-report.pdf>, page 9

CONSISTENCY OF MARKING

After examining candidate responses, the team was satisfied that marking of speaking and writing items was fair and consistent. We note the following as evidence of best practice:

“Aptis also ensures fairness of marking by having the same markers focus on specific tasks, rather than on whole test results. This has significant benefits for the test integrity, as it stops contamination of the marking, and markers are not influenced by how a candidate has performed in previous tasks” Aptis test development approach, Page 9

10.3 RELATION TO CEFR LEVELS

The British Council / Equals Core Inventory for general English was used to support the development of items within the Aptis test. The process of linking Aptis to the CEFR performance standards has been undertaken in a thorough and principled way: this is set out in the Aptis Tech4 report, which was made available to the verification team in final draft form on the day of verification in London.

On the basis of candidate responses scrutinised, the verification team was satisfied that grading conformed to the standards set out in the CEFR.

10.4 SPECIFIC ISSUES DISCUSSED

The following specific issues were raised with the British Council Aptis team, and their responses are summarised.

Q 1 – The Aptis documentation states that the test has been “*validated for users round the world*”. Could the BC Aptis team outline in what contexts has the test been used, and specifically, has it been used in other parts of Africa?

Yes – in North Africa – Egypt and Morocco; in sub-Saharan Africa - Tanzania

Q 2 Is there any information on test - retest reliability? Has there been any work validating the test against other established assessments?

Yes – test- retest reliability showed a 96% agreement. The validation work is to the CEFR and this is outlined in Tech4 report (currently in final draft – this was provided for the verification team).

Q 3 Can the Aptis team clarify how the test was benchmarked to the CEFR? Is there any documentation as evidence of the process?

This is fully documented in the Tech4 report.

Q 4 The website refers to a document “Aptis Standard setting Report”. Is this report available?

This is the Tech4 report, which will be available on the Aptis website by the end of March 2013

Q 5 Who declined to be tested? Was the sample, for example, biased because those who declined to be tested might have particularly weak EL skills? What is the potential size of any such bias?

Only a few teachers were not able to participate in testing; reasons were various – family commitments, illness, unavailability due to the timing.

Q 6 The British Council Proposal (inception report V3) states that a random selection of 10% of tests will be checked by a second marker. This is evidence of strong internal moderation and is an area of strength. Can the verification team have feedback from this process? What happens in the event of a discrepancy in marking/ rating? If there is a great deal of discrepancy, what would happen? For example, would the entire set of responses be re-marked?

Information was provided to the verification team and is set out in the Aptis test development report:

“Moderation is managed automatically within the rating system by placing pre-scored performances in the batches to be rated by each examiner. Failure to rate a set number of these within a given tolerance means that the examiner is automatically offered an in-service training package. Upon successful completion of this package, rating can resume. In addition, all rater data will be explored using many-facet Rasch analysis to highlight inconsistency, harshness and other potentially problematic rater behaviours”. See Page 9 of <http://www.britishcouncil.org/sites/default/files/documents/aptis-test-dev-approach-report.pdf>

Q 7 To what extent are the speaking test results affected by unfamiliarity?

The British Council draft baseline report acknowledges that the Speaking test may have been problematic for the test-takers in this context:

“The online delivery of the speaking test will have been an unfamiliar experience for Rwandan teachers being assessed in this study. It is possible that the relative lack of familiarity with the delivery mode and task type may have ... resulted in weaker than expected performance in this test component. This assumption is to some extent confirmed by the significant positive correlation between the speaking test scores and scores for all other skill areas”

Feedback given in Page 5 of the Aptis formal trials report <http://www.britishcouncil.org/sites/default/files/documents/aptis-formal-trial-report.pdf>

Also notes “a wariness of taking the test with limited computer literacy” as an issue.

Q 8 In relation to performance assessments - speaking and writing – what training did markers receive? Can the Aptis team also outline how the internal moderation of speaking and writing was carried out?

The verification team was provided with the materials produced for the marker training course. This was of a high standard. There are also clear processes in place for internal moderation: “Moderation is managed automatically within the rating system by placing pre-scored performances in the batches to be rated by each examiner. Failure to rate a set number of these within a given tolerance means that the examiner is automatically offered an in-service training package. Upon successful completion of this package, rating can resume. In addition, all rater data will be explored using many-facet Rasch analysis to highlight inconsistency, harshness and other potentially problematic rater behaviours”

<http://www.britishcouncil.org/sites/default/files/documents/aptis-test-dev-approach-report.pdf>

page 9

Q 9 How much impact do the speaking scores have on the overall scores? How much does the distribution change if this component is treated as missing? What is the best estimate of overall performance?

Importantly, if the speaking test results are removed from the final test score, there is very little change to the overall findings – the majority of teachers are still at A2 level.

CONCLUDING REMARKS ON THE APTIS TEST

There appear to be some specific issues with the Speaking test in the Rwandan context. However, overall, the verification team found the Aptis test to be of very high quality.

11 LEVELS OF ENGLISH LANGUAGE COMPETENCE: BASELINE STUDY

The key findings concerning teacher English Language competence from the baseline study are contained in the report prepared by the British Council and summarized here for reference.

11.1 TEST OUTCOMES

CEFR levels derived from the exams are shown in Figure 33 (below). Percentages are shown of raw totals, i.e. the percentage for each CEFR level in any given skill area. These figures allow comparison of performance of participants across each skill area. Performances on the Listening and Writing tests were overall stronger than those on the Reading test, with the Speaking test levels significantly below that.

Examination of the distributions of different skill levels shows that competence in speaking was particularly low. A number of possible reasons for this were identified as part of verification, including lack of skill in this particular language area, unfamiliarity and difficulty with the test environment, and lack of contextualisation of testing materials.

For the sake of ensuring optimum performance at re-testing in 2014 we recommend that:

- 1) Training / familiarisation with the Aptis test format is extended to one full day.
- 2) The British Council Aptis test development team consider developing picture prompts for the speaking test which are specific to Rwanda or regionally specific.

	CEFR level						Missing	Total
	A0	A1	A2	B1	B2	C1		
Reading	60 (10.4%)	279 (48.4%)	163 (28.3%)	64 (11.1%)	8 (1.4%)	1 (0.2%)	-	576 (100%)
Listening	8 (1.4%)	117 (20.3%)	412 (71.5%)	28 (4.9%)	2 (3%)	-	9 (1.6%)	576 (100%)
Writing	2 (0.3%)	49 (8.5%)	363 (63.0%)	161 (28.0%)	1 (0.2%)	-	-	576 (100%)
Speaking	264 (45.8%)	263 (45.7%)	37 (6.4%)	-	-	-	12	576 (100%)
Overall	1 (0.2%)	230 (39.9%)	309 (53.6%)	16 (2.8%)	1 (0.2%)		19 (3.3%)	576 (100%)

Figure 33: Breakdown of CEFR levels in each of the skill areas (all teachers)

Test outcomes by teacher level (P1-P3; P4-P6; S1-S3; S4-S6)

Figures 34 – 38 below show the test outcomes for teachers working at each level for each skill area following their conversion to CEFR levels.

Both the score statistics and CEFR level summary give relatively similar information. In essence, as the teaching level increases there is a trend towards teachers achieving more highly in each of the skill areas. As is to be expected, the pattern described with regard to the overall scores is followed, i.e. achievement in the speaking tests is lower than the other skill areas. Speaking is a crucial skill – arguably the most important skill – for English language teachers and for all teachers who are tasked with delivering the curriculum using English as the medium of instruction. It is important to remember that within the CEFR Level A1 is a beginner. On the Aptis the category “A0” is used to indicate that there is insufficient language competence for this to be meaningfully measured.

Level teach	Reading CEFR level						Missing	Total
	A0	A1	A2	B1	B2	C1		
P1-P3	42 (19.1%)	136 (61.8%)	39 (17.7%)	3 (1.4%)	-	-	-	220 (100%)
P4-P6	10 (5.5%)	84 (45.9%)	65 (35.5%)	22 (12.0%)	2 (1.1%)	-	-	183 (100%)
S1-S3	6 (5.4%)	38 (34.2%)	42 (37.8%)	22 (19.8%)	2 (1.8%)	1 (0.9%)	-	111 (100%)
S4-S6	2 (3.2%)	21 (33.9%)	17 (27.4%)	17 (27.4%)	4 (6.5%)		1 (1.6%)	62 (100%)

Figure 34: Reading CEFR: by teacher level

Level teach	Writing CEFR level						Missing	Total
	A0	A1	A2	B1	B2	C1		
P1-P3	1 (.5%)	31 (14.1%)	171 (77.7%)	17 (7.7%)	-	-	-	220 (100%)
P4-P6	1 (.5%)	13 (7.1%)	116 (63.4%)	53 (29.0%)	-	-	-	183 (100%)
S1-S3	5 (4.5%)	49 (44.1%)	56 (50.5%)	1 (.9%)	-	-	-	111 (100%)
S4-S6	-	-	27 (43.5%)	35 (56.5%)	-	-	-	62 (100%)

Figure 35: Writing CEFR: by teacher level

	Speaking CEFR level						Missing	Total
Level teach	A0	A1	A2	B1	B2	C1		
P1-P3	135 (61.4%)	73 (33.2%)	5 (2.3%)	-	-	-	7 (3.2%)	220 (100%)
P4-P6	72 (39.3%)	103 (56.3%)	7 (3.8%)	-	-	-	1 (.5%)	183 (100%)
S1-S3	43 (38.7%)	52 (46.8%)	14 (12.6%)	-	-	-	2 (1.8%)	111 (100%)
S4-S6	14 (22.6%)	35 (56.5%)	11 (17.7%)	-	-	-	2 (3.2%)	62 (100%)

Figure 36: Speaking CEFR: by teacher level

	Listening CEFR level						Missing	Total
Level teach	A0	A1	A2	B1	B2	C1		
P1-P3	6 (2.7%)	53 (24.1%)	151 (68.6%)	7 (3.2%)	-	-	3 (1.4%)	220 (100%)
P4-P6	2 (1.1%)	48 (26.2%)	130 (71.0%)	2 (1.1%)	-	-	1 (.5%)	183 (100%)
S1-S3	9 (8.1%)	87 (78.4%)	9 (8.1%)	2 (1.8%)	-	-	4 (3.6%)	111 (100%)
S4-S6		7 (11.3%)	44 (71.0%)	10 (16.1%)	-	-	1 (100%)	62 (100%)

Figure 37: Listening CEFR: by teacher level

Level teach	Overall CEFR level						Missing	Total
	A0	A1	A2	B1	B2	C1		
P1-P3	1 (.5%)	138 (62.7%)	71 (32.3%)	-	-	-	10 (4.5%)	220 (100%)
P4-P6	-	64 (35.0%)	116 (63.4%)	1 (.5%)	-	-	2 (1.1%)	183 (100%)
S1-S3	-	20 (18.0%)	79 (71.2%)	6 (5.4%)	1 (.9%)	-		111 (100%)
S4-S6	-	8 (12.9%)	43 (69.4%)	9 (14.5%)	-	-	2 (3.2%)	62 (100%)

Figure 38: Overall CEFR: by teacher level

11.2 TEST OUTCOMES BY PROVINCE (EAST, WEST, NORTH, SOUTH, KIGALI CITY)

Score statistics for teachers in each province are presented in Figures 39 to 43 below. These show the test outcomes for teachers in each province for each skill area following their conversion to CEFR levels. There is a much more consistent pattern in CEFR levels across the provinces than between the different teaching levels. However, investigation of statistical distinctions between the scores across the different provinces using regression analysis shows that the averages are significantly lower for the Northern Province for reading, speaking and writing, and significantly lower for listening and speaking in the western province. It must be emphasised, however, that the sample was collected for the purposes of description rather than statistical comparison; British Council Rwanda point out that “the findings of such analysis should be taken as indicative of trends to be further investigated rather than conclusive evidence”.

	Reading CEFR level						Missing	Total
Province	A0	A1	A2	B1	B2	C1		
East	11 (8.5%)	77 (59.7%)	28 (21.7%)	10 (7.8%)	2 (1.6%)	1 (.8%)		129 (100%)
West	17 (11.0%)	73 (47.1%)	42 (27.1%)	19 (12.3%)	3 (1.9%)	-	1 (.6%)	155 (100%)
North	14 (12.6%)	60 (54.1%)	25 (22.5%)	12 (10.8%)	-	-		111 (100%)
South	15 (9.3%)	60 (37.3%)	64 (39.8%)	19 (11.8%)	3 (1.9%)	-		161 (100%)
Kigali	3 (15.0%)	9 (45.0%)	4 (20.0%)	4 (20.0%)	-	-		20 (100%)

Figure 39: Reading CEFR: by province

	Writing CEFR level						Missing	Total
Province	A0	A1	A2	B1	B2	C1		
East	1 (.8%)	13 (10.1%)	77 (59.7%)	37 (28.7%)	1 (.8%)	-		129 (100%)
West	1 (.6%)	4 (2.6%)	107 (69.0%)	43 (27.7%)	-	-		155 (100%)
North	-	18 (16.2%)	69 (62.2%)	24 (21.6%)	-	-		111 (100%)
South	-	12 (7.5%)	96 (59.6%)	53 (32.9%)	-	-		161 (100%)
Kigali	-	2 (10.0%)	14 (70.0%)	4 (20.0%)	-	-		20 (100%)

Figure 40: Writing CEFR: by province

Province	Speaking CEFR level						Missing	Total
	A0	A1	A2	B1	B2	C1		
East	48 (37.2%)	68 (52.7%)	13 (10.1%)	-	-	-		129 (100%)
West	62 (40.0%)	80 (51.6%)	2 (1.3%)	-	-	-	11 (7.1%)	155 (100%)
North	81 (73.0 %)	25 (22.5%)	4 (3.6%)	-	-	-	1 (.9%)	111 (100%)
South	63 (39.1%)	81 (50.3%)	17 (10.6%)	-	-	-		161 (100%)
Kigali	10 (50.0%)	9 (45.0%)	1 (5.0%)	-	-	-		20 (100%)

Figure 41: Speaking CEFR: by province

	Listening CEFR level						Missing	Total
Province	A0	A1	A2	B1	B2	C1		
East	2 (1.6%)	19 (14.7%)	101 (78.3%)	5 (3.9%)	2 (1.6%)	-		129 (100%)
West	3 (1.9%)	43 (27.7%)	102 (65.8%)	3 (1.9%)			4 (2.6%)	155 (100%)
North	-	21 (18.9%)	85 (76.6%)	4 (3.6%)	-	-	1 (.9%)	111 (100%)
South	3 (1.9%)	32 (19.9%)	114 (70.8%)	12 (7.5%)	-	-		161 (100%)
Kigali	-	2 (10.0%)	10 (50.0%)	4 (20.0%)	-	-	4 (20.0%)	20 (100%)

Figure 42: Listening CEFR: by province

	Overall CEFR level						Missing	Total
Province	A0	A1	A2	B1	B2	C1		
East	1 (.8%)	50 (38.8%)	72 (55.8%)	5 (3.9%)	1 (.8%)	-		129 (100%)
West	-	56 (36.1%)	86 (55.5%)	1 (.6%)	-	-	12 (7.7%)	155 (100%)
North	-	59 (53.2%)	49 (44.1%)	1 (.9%)	-	-	2 (1.8%)	111 (100%)
South	-	57 (35.4%)	96 (59.6%)	7 (4.3%)	-	-	1 (.6%)	161 (100%)
Kigali	-	8 (40.0%)	6 (30.0%)	2 (10.0%)	--	-	4 (20.0%)	20 (100%)

Figure 43: Overall CEFR: by province

11.3 RELATIONSHIPS BETWEEN BIO-DATA AND COMPETENCE

The British Council report also analysed whether information provided by teachers in the bio-data questionnaire was related patterns of test scores.

A summary of the main significant relationships is listed below:

- Test takers whose highest qualification is a degree or Post Graduate degree have higher scores on average than teachers who have a certificate or diploma.
- Teachers who focus on English as their main subject have significantly higher scores in each skill, with the exception of listening.
- Male teachers have higher scores, on average, in reading, writing, and speaking.

11.4 LEVELS OF ENGLISH LANGUAGE COMPETENCE: SUMMARY

Overall CEFR level						Missing	Total
A0	A1	A2	B1	B2	C1		
1 (0.2%)	230 (39.9%)	309 (53.6%)	16 (2.8%)	1 (0.2%)		19 (3.3%)	576 (100%)

Figure 42: Baseline levels of English language competency – all teachers.

As can be seen from the table, very few teachers reached Lower Intermediate Level (B1).

Despite some reservations concerning the Speaking test, the overall level of competence shown in Figure 42 seems to be a fair reflection of the current English language skills of Rwandan teachers. These results are in line with previous studies of language levels in this group¹¹ (for example, REAP Report (British Council, 2012) and Baseline Study of Language Ability of Primary, Secondary and Higher Education Students and Teachers in Rwanda (Williams, 2004).

11.5 IMPLICATIONS FOR RBA: REWARDING IMPROVEMENT RATHER THAN COMPETENCY

In the light of the baseline data, the target levels proposed by REB¹² (CEFR B1 for primary teachers and B2 for secondary teachers) appear optimistic given the lack of specific intervention and the short timeframe of the RBA pilot. Primary school teachers are more or less equally divided between A1 (50.1%) and A2 (46.4%), while the majority (70.5%) of secondary school teachers are currently at A2. Progression to B2 is unlikely to be realistic for large numbers of Rwandan secondary teachers within the timescale of the RBA pilot.

¹¹ See for example: REAP Report, British Council 2012; and Baseline Study of Language Ability of Primary, Secondary and Higher Education Students and Teachers in Rwanda (CfBT, 2004).

¹² See Terms of Reference for Independent Verification

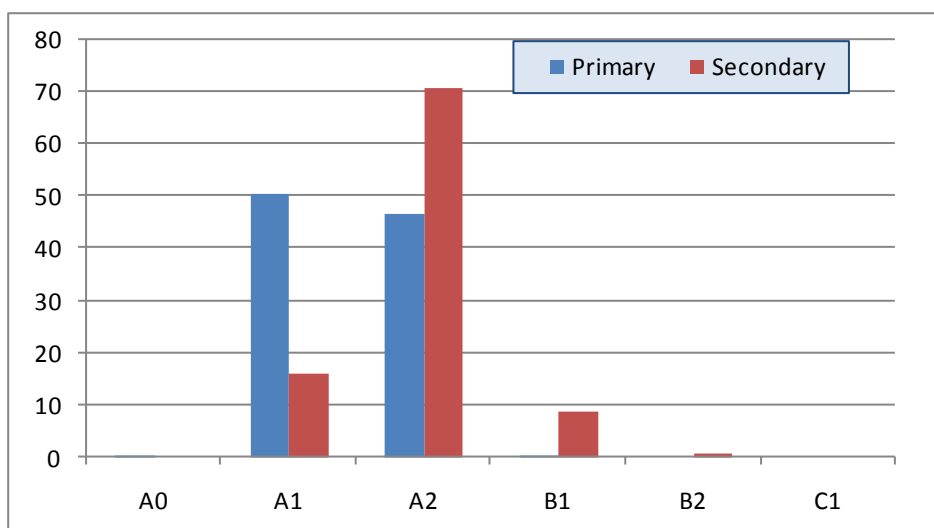


Figure 43: Baseline distribution of teachers on the CEFR.

We recommend therefore that DFID and REB set B1 as an interim target for both primary and secondary teachers for the purpose of the RBA pilot. This provides an attainable level of improvement for Rwandan teachers currently at A2. However, the use of CEFR level B1 as an indicator of English language competence for the RBA pilot should **not** be interpreted as endorsement of B1 as an adequate standard for effective teaching using English as the medium of instruction. These levels are suggested only as indicators of improvement **towards** adequate standards that are achievable within the timescale of the RBA pilot.

It is difficult to estimate the time that individual language learners need in order to demonstrate improvement within CEFR levels. However, the Association of Language Testers in Europe (ALTE) has produced the following guidelines¹³:

A1	Approximately 90 – 100 hours
A2	Approximately 180 – 200 hours
B1	Approximately 350 – 400 hours
B2	Approximately 500 – 600 hours
C1	Approximately 700 – 800 hours
C2	Approximately 1000 – 1200 hours

Figure 44: Estimated study time needed to attain CEFR levels

¹³ Source: <http://www.pearsonlongman.com/ae/cef/cefguide.pdf>

Note that the timings refer to guided teaching hours in a formal context such as a dedicated language learning classroom. At present there is no formal teaching in place to support the development of Rwandan teachers' English Language skills. Teachers often work double shifts, and thus have little free time available for self-study. Finally, there is a lack of English language materials available to teachers. Under

these circumstances, it is unlikely that the re-testing of teachers in 2014 will reveal large-scale improvements in English language competence. It is very difficult to estimate precise numbers, but if 10% of teachers currently at A2 are able to improve to B1 then the RBA payment will be approximately £155,000, while if 20% improve the figure will be £310,000. Over the short timescale the 10% figure would represent a very substantial achievement.

12 GENERAL CONCLUSIONS

12.1 STUDENT COMPLETION

We are pleased to note that in 83 of the 100 schools surveyed the auditors found perfect agreement between the REB results list and school records.

In the remaining 17 schools headteachers reported that a small number of their students named in the list had left before the end of the school year and did not actually sit the examinations. This was particularly noticeable in the Secondary 3 results lists, where 16 of the schools with discrepancies were found.

When discrepancies were found the intuitive initial hypothesis was that the results lists provided by REB for the sample of 100 schools included all students who registered for the national examinations, and not just those who attended.

However, REB confirmed that the lists provided to the verification team contained only the names of students who actually sat the examinations.

This leaves unexplained discrepancies for which this report cannot provide definitive answers. The most likely explanation is that the students who left schools continued their education elsewhere and sat the examinations without alerting REB to their change of schools, so that the REB examinations database was not updated. Without tracing and interviewing individual students the precise cause of these discrepancies will remain unknown.

Nevertheless, we are confident that the discrepancies are random rather than systematic errors and are in such small number¹⁴, amounting to less than 1% of students targeted for verification, that they will have a negligible impact on RBA payment calculations.

The overall conclusion therefore is that the figures reported by REB should be accepted and taken as the baseline for RBA payment calculations.

Before the next phase of independent verification the team will discuss with the Examinations and Accreditation Department of REB the information management system in order to investigate whether a change in an examination candidate's school from registration to sitting is recorded on the database.

12.2 TEACHERS' ENGLISH LANGUAGE COMPETENCIES

The baseline assessment of the English language competence of teachers was carried out in line with the agreed protocol, and to a high standard. The Aptis test appears to have performed satisfactorily as an assessment of overall level of the English language competence of school teachers in Rwanda. Improvement to CEFR Level B1 is recommended as the target level for the calculation of RBA payments although this should not be interpreted as endorsing B1 as an adequate level for effective teaching in English.

¹⁴ Out of the 6,301 students targeted only 37 could not be verified.

POPULATION ESTIMATES

Making population estimates based on a sample size of 557 tested teachers is not an exact science, but it is nevertheless possible to estimate the numbers of teachers nationally based on the British Council baseline assessment. Binomial distribution is used to calculate best estimates, with 95% confidence intervals corrected for continuity. Overall CEFR B1 is identified as the level of competency to be used as the indicator of improvement in teachers' English and in order to estimate national totals teachers in the sample are classified binomially as "reached B1" or "not reached B1". In the baseline study 17 teachers (3%) were at level B1 or above. The total number of Rwandan teachers given in the British Council baseline report is 56,024. On this basis the best estimate of the number of teachers nationally at CEFR level B1 is 1,709 admittedly with a relatively wide confidence interval.

	N	n	p	1-p	Upper & Lower limits	Interval
2012 Baseline	56,024	557	0.0305	0.9695	2,768	1,737
	56,024	557	0.0305	0.9695	1,031	

Figure 45: Estimate of primary teachers at CEFR Level B1

In the absence of national data we recommend that the number of teachers accepted to be at CEFR Level B1 for the purpose of the RBA pilot is 1,709.

APPENDICES

APPENDIX ONE:**RESULTS-BASED AID PILOT IN THE EDUCATION SECTOR:
ANNEX TO MEMORANDUM OF UNDERSTANDING****PARTIES AND PURPOSE**

This annex outlines key, agreed elements of a pilot of results-based aid (RBA) in the education sector in Rwanda. In this pilot, DFID will make additional Sector Budget Support payments in 2013-2015 to the Government of Rwanda for results achieved in academic years 2012, 2013 and 2014. This is referred to as a Results Compact in the DFID Rwanda Education Sector Programme Business Case (2011-2015). This annex guarantees that DFID will make a fixed payment for each additional unit of progress towards educational outcomes, as stipulated below.

The arrangements under which the Grant will be disbursed are set out in the attached MoU and DFID's Partnership Commitments. The Government of Rwanda will decide on the use of any funds received.

TERM OF AGREEMENT AND POSSIBILITY OF RENEWAL

This agreement is from date of signature until May 2015. There is a possibility of renewal and/or expansion of the programme depending on the results of the pilot. Any renewal or expansion would require the agreement of both DFID and the Government of Rwanda.

In extreme circumstances, if DFID is concerned that the provisions of this agreement, or partnership commitments made under the arrangement may not have been fulfilled by the Government of Rwanda or if any changes occur which significantly impair the development value of this project/ programme, DFID will discuss with the Government of Rwanda and where appropriate undertake assessment. If warranted, such an assessment could lead to cessation of this agreement.¹⁵

RESULTS AND INDICATORS

The main results to be rewarded in this pilot will be the number of children completing key stages of 12 year basic education, namely year 6 primary (P6), year 3 secondary (S3) and year 6 secondary (S6). These results will be measured by the number of children taking the P6, S3 and S6 examinations annually. These results should include all students taking each of these examinations for the first time regardless of the sector in which they are learning, i.e. public or private. However, students who are retaking an examination should be excluded from the figures of those taking the examination in a particular year. Payments will be made for any results achieved above 2011 levels. Payments will only be made after independent verification of the results. Payments will be made as set out in section D and will be an additional DFID contribution to the Government of Rwanda's efforts to meet ambitious education targets as articulated in the Education Sector Strategic Plan (ESSP).

In addition, it is agreed that an additional one-off payment will be made in 2015 based on results achieved to improve the English language competency of teachers in the education sector. It is agreed that this payment would be based on assessing the English language skills of a representative sample of Rwandan teachers at baseline (2012) and in 2014, as outlined in the payment schedule below. The level

¹⁵ More details of situations of this nature are provided in the main body of the Memorandum of Understanding.

of competence in English required for a primary and secondary school teacher will be agreed by Government of Rwanda in consultation with DFID and will be set out as a further annex to this agreement. Data from this assessment would be used to calculate the number of teachers in Rwanda achieving an agreed level of competency in English. DFID will then pay the Government of Rwanda an agreed amount for every additional teacher with that level of competency in English.

PAYMENT SCHEDULES

It is agreed that DFID will pay the Government of Rwanda additional sums up to a ceiling of £9m in the three year period 2013-2015. Payments will be made annually in 2013, 2014 and 2015 based on verified results of the previous year's exams, i.e. 2012, 2013 and 2014. RBA payments will be made no later than April/May each year.

GoR FY	2011/12	2012/13	2013/14	2014/15
SBS	£8.57m	£6.37m	£7.72m	£9.17m
RBA		Up to £3m	Up to £3m	Up to £3m

Table 1: SBS and RBA Disbursement schedule

Payments will be based on independently verified data, as set out in section F below.

It is agreed that payments will be calculated as follows.

For each additional child sitting the P6 exam above the previous year's results, DFID will pay the Government of Rwanda £50. In addition to this payment, in years 2014 and 2015, DFID will also pay the Government of Rwanda £10 for each additional child sitting the P6 examination above 2011 levels.

For each additional child sitting the S3 exam above the previous year's results, DFID will pay the Government of Rwanda £100. In addition, in years 2014 and 2015, DFID will also pay the Government of Rwanda £10 for each additional child sitting the S3 examination above 2011 levels.

For each additional child sitting the S6 exam above the previous year's results, DFID will pay the Government of Rwanda £50. In addition, in years 2014 and 2015, DFID will also pay the Government of Rwanda £10 for each additional child sitting the S6 examination above 2011 levels.

So for example, if 77,473 students took the S3 exam in 2011 and 85,000 take it in 2012 DFID would pay the Government of Rwanda $(85,000 - 77,473) * £100 = £752,700$ in 2013. If 93,000 students then took the S3 exam in 2013, DFID would make two payments to the Government of Rwanda in 2014, namely $(93,000 - 85,000) * £100 = £800,000$ plus $(85,000 - 77,473) * £10 = £75,270$. This would be a total of £875,270. More details of the calculations involved are available in an Excel calculator developed by DFID.

In addition, it is agreed that in 2015 DFID will also pay Government of Rwanda £50 per additional teacher competent to use English as the medium of instruction. This will be based on a baseline assessment conducted by the Government of Rwanda in 2012 and a follow-up assessment conducted by Government of Rwanda in 2014. Any payment due would be made in 2015 based on independently verified results and subject to available funds within the £9m three year ceiling.

Payment levels are fixed and expected to apply throughout the life of the pilot project. They can only be changed under exceptional circumstances with the express written agreement of both DFID and

Government of Rwanda. DFID and the GoR will meet to review programme related impact, targets and costs immediately after results have been verified'

USE OF FUNDS

The funds that will be provided by DFID through the RBA pilot can be used as desired by the Government of Rwanda. DFID will not provide any restrictions for the use of these funds in accordance with the principles of results based aid¹⁶. It is expected that these will be used to further improve the results being tracked, namely the number of pupils completing key education levels – P6, S3 and S6. Any decisions as to how these funds will be used rests solely with the Government of Rwanda. In line with the overall provisions of this memorandum of understanding, DFID retains the right to access audited financial statements, prepared by the Government of Rwanda, to verify that the income received has been declared and used to support the country expenditure.

DATA VERIFICATION, CITIZEN EMPOWERMENT, TRANSPARENCY AND ACCOUNTABILITY

It is essential that data used to trigger payments is accurate and reliable. It is therefore necessary for the data reported for payment purposes to be verified independently. Payments will **only** be made on the basis of independently-verified results. DFID will hire an external contractor to conduct this work. DFID will select the contractor in consultation with the Government of Rwanda. Government of Rwanda agrees to cooperate fully with the work of this contractor which will involve checking the systems for collecting and reporting P6 to S6 exam participation rates and checking a data sample. The external contractor will also verify the Government of Rwanda baseline and end assessment of teacher competence in English language. Data verification needs to be both robust and timely. Government of Rwanda will provide DFID and designated verification and evaluation teams with full access to any necessary data required to validate results achieved. Both DFID and Government of Rwanda recognise and agree that if issues are identified in the data verification process, this may result in funds being delayed and/or withheld.

In line with DFID's Transparency commitments, the Government of Rwanda gives consent for this arrangement, and any subsequent amendments, to be published on DFID's website. The Government of Rwanda also agrees to make this agreement and the annual results of the exercise publically known.

It is essential that the design of the Results-Based Aid programme be communicated to schools and parent teacher associations (PTAs). Government of Rwanda agrees to ensure that this happens. This will ensure that teachers and parents are aware that the education sector will receive additional funds based on increasing the number of students taking P6, S3 and S6 examinations and the English language competency of teachers.

EVALUATION AND LESSON LEARNING

As this is a programme to pilot an innovative way of providing aid, both DFID and Government of Rwanda agree that it is essential that lessons are learned from this process. This will be done through a rigorous evaluation. The evaluation will seek to determine the extent to which the results-based aid has had an

¹⁶ See for example DFID (2010) Primer on results based aid and results based financing and Birdsall, Savedoff and Mahgoub (2011) Cash on Delivery: A New Approach to Foreign Aid

effect additional to what would have happened without it. This will involve using modelling to forecast what would happen without the results-based aid and then compare actual observed results with this model.

In addition, both DFID and the Government of Rwanda are committed to learning lessons about the processes followed to achieve the expected results. This will be done through a rigorous process evaluation based on a causal chain leading from the inputs and processes to expected outputs and outcomes. Indicators and/or evaluation questions will be identified for each of these elements/levels. These process indicators will not be used as a basis for payments but will be used solely for learning purposes. The evaluation will also explore unexpected consequences of the results-based aid programme. Government of Rwanda agrees to cooperate fully with any evaluations of the RBA pilot project including through allowing access to data that the evaluation team requires and allowing the evaluation team access to MINEDUC/REB staff, schools, teachers and students.

MANAGEMENT ARRANGEMENTS

It is expected that there will be issues which arise in the course of operations of the RBA pilot which will require discussion, dialogue and resolution. These will be handled through the routine DFID/PS forums which take place on a monthly basis.

AMENDMENT, DISPUTE RESOLUTION AND TERMINATION

Amendments to this arrangement need to be agreed by both governments in writing. In case of dispute arising, attempts will be made to resolve these through the regular meeting between DFID and the Permanent Secretary of the Ministry of Education.

This arrangement may be terminated by three months written notice from either government. Any decision of either government regarding termination of this Arrangement will first be subject to discussion.

APPENDIX TWO:

TERMS OF REFERENCE FOR INDEPENDENT VERIFICATION

A critical component of the RBA pilot in Rwanda will be the independent verification of the results reported. Robust independent verification of results is critical to the concept of results-based aid as this process is the trigger for payments to be made within the programme.

SCOPE

The scope of this work is focused on annual verification of reported data in the Rwandan academic years 2012-2014. This will also involve conducting a preliminary, baseline data quality audit of educational data up to and including 2011, focusing particularly on the number of students taking the P6, S3 and S6 national examinations for the first time. The contractor will particularly be asked to:

- Ensure that mechanisms are in place to ensure the figures are complete, i.e. that all students taking these examinations for the first time are included. This means that students in all parts of the education sector should be counted, including those in private schools, if relevant.
- Ensure that mechanisms are in place to avoid double counting, i.e. to ensure that students re-taking a particular exam are excluded from the reported figures
- Ensure that the figures for the 2011 baseline are accurate and reliable
- Assess year to year variability of sitting rates and assess causes

The baseline data quality audit should also ensure that Government of Rwanda plans to measure the competency of teachers to use English as a medium of instruction in 2012 and 2014 are robust and likely to produce reliable data.

In addition, the baseline audit should:

- Review proposed definitions of English language competency. According to REB¹⁷, it is expected that primary school teachers would have 'intermediate' levels of English language proficiency and that secondary school teachers would have 'upper intermediate' levels.
- Review available evidence on the competency of Rwandan teachers to use English as a medium of instruction, including any previous survey data. This will include particularly data from the survey conducted with the support of British Council, in 2009, as part of the Rwanda English in Action Programme (REAP).
- Review proposed plans for measurements in 2012 and 2014.
- Review estimates/measurements of the number of teachers in Rwanda.

In particular, the Government of Rwanda is proposing to assess teachers' level of competency in English through surveys in 2012 and 2014. Is this the most appropriate method? Are there any other methods that could be considered, such as a nationally-administered, certificated English test for teachers?

The baseline data quality audit should assess the overall accuracy and reliability of data in the educational sector in Rwanda including enrolment data and examination results.

¹⁷ See http://www.tsc.gov.rw/In-Service_Teacher_Training.html accessed 22.04.12

In its baseline and annual reports, the contractor is expected to express clearly its opinion on whether or not it considers the figures reported to be accurate and reliable, and to form a sound basis on which DFID can make the additional results-based aid payments. If this is not the case, the contractor will be expected to advise DFID of revised figures which it considers to be accurate, which DFID can use as a basis for the additional results-based aid payments. Clear reasons for disputing any figures provided by the Government of Rwanda need to be provided. DFID will only make payments based on independently-verified results.

The contractor's baseline and annual reports are expected to assess underlying MINEDUC data management and reporting systems, particularly their ability to report quality data. This will allow the reliability of data systems to be established and reviewed. It will also provide helpful information and practical feedback to MINEDUC on how they could improve the quality of their data systems. The contractor's annual and baseline reports are expected to include a management report for MINEDUC providing clear, practical recommendations on how data systems could be strengthened and improved. It is expected that this report would focus only on those data systems related to the RBA pilot, i.e. numbers of students taking examinations and competency of teachers to use English as the medium of instruction. This report would not be expected to focus on other areas of data systems, e.g. EMIS.

The process of data quality audit and verification needs to identify both unintentional mistakes and any deliberate 'gaming' of the system. Reports should clearly distinguish these.

METHODS

Precise methods for data verification should be proposed by the contractor as part of the tender process. However, DFID does not expect these to include staging repeat examinations¹⁸.

It is DFID's expectation that the method proposed would be relevant to the Rwandan context, in general, and would be based on the results of the baseline data audit, in particular.

Options contractors may wish to consider include:

A random sample of schools. If this method is proposed, the tender would be expected to outline how the sample size would be determined.

A rapid review of a small number of schools with options for a larger sample if any discrepancies are detected.

However, alternative methods can also be proposed, if adequately justified. Bids should outline clearly the proposed method, the reasons that a particular method has been selected and the perceived strengths and weaknesses of the method. The bid should also outline what guarantees or assurances the contractor would provide that the verified results are accurate and reliable.

In terms of verifying figures for the number of teachers competent to use English as the medium of instruction, it is expected that this will be assessed by the Government of Rwanda through a survey of a representative sample of teachers in both 2012 and 2014.

The contractors will be expected to:

¹⁸As has been proposed by the Centre for Global Development.

- Advise DFID on the adequacy of the plans for this approach in their inception/baseline report and suggest alternatives if considered necessary
- Advise DFID on the adequacy or otherwise of the design of these studies during the design/development phase
- Review the results of the survey and advise DFID on the accuracy of the results and any extrapolation of those results to all teachers in Rwanda

DFID expects that the final methods to be followed would be agreed with the contractor as part of an inception phase prior to the start of the baseline data quality audit.

DFID expects that, whatever methods are followed, the contractor will produce a baseline assessment and audit of data quality up to 2011, and annual reports for each of the years from 2012 to 2014.

TIMING

Rwanda's school year currently follows the calendar year¹⁹. Students take exams at the end of the school year in November. Exam results are available in January/February of the following year. However, data on the number of students taking the examinations will be available sooner.

The contractor will be expected to conduct its data verification work in a timely manner to allow DFID to make any payments by April/May of the following year. So, for example, verification of 2012 exam data would be expected to take place between November 2012 and January 2013, with the report available in March 2013.

It is expected that surveys of the competence of teachers to use English as the medium of instruction will be conducted in both 2012 and 2014. The contractors would be expected to complete verification of data from these surveys before the end of each of these years.

DELIVERABLES

It is expected that the data verification exercise will produce the following deliverables. Timings are based on the assumption that a contractor will be in place by end August 2012.

An inception report by end September 2012. This report would be expected to finalise the approach the contractor would take to data verification, particularly the baseline assessment of data up to 2011.

A baseline quality assessment of data up to and including 2011. It is expected that this assessment would be completed by end October 2012.

Annual data verification reports for exams conducted in 2012 -2104. These reports are expected to be produced by March of the following year. So, the verification report of 2012 data would be available by March 2013. It is expected that the reports produced in 2013 and 2015 would also report on data related to the competency of teachers to use English as the medium of instruction, based on surveys conducted by Government of Rwanda in 2012 and 2014 respectively. It is expected that these reports would make clear recommendations for DFID on what payments should be made based on results achieved. It is also expected that the reports would include a management report for MINEDUC highlighting any steps which could be taken to strengthen data systems and data quality. It is expected that the final annual

¹⁹ There are plans to change to a September-June calendar but dates for this have not yet been decided.

report, due in March 2015, would summarise experience from all three years of the project's implementation.

INSTITUTIONAL ARRANGEMENTS

Although these terms of reference cover both the data verification and the evaluation of the results-based aid programme, and DFID expects that one contractor will implement both aspects of this work, it is expected that these teams would be independent of each other. Bidders are expected to explain how they would ensure this, e.g. by having a consortium approach in which one organisation leads on data verification with another leading on evaluation. Reasons why this independence and separation of roles is important include:

The fact that the way the data verification is conducted may affect the delivery of the RBA pilot. DFID would expect the evaluation team to consider this, if appropriate. This would only be possible if the teams are completely independent of each other.

The fact that data verification relates to payment and evaluation relates to learning. It is considered important to keep these processes separate to enable the evaluation to focus on learning and not to become unduly associated with compliance and payment issues.

The contractor will report directly to the DFID Rwanda Education Adviser. For all contractual issues, the contractor will report to the DFID Procurement Officer.

It is essential for the integrity of the RBA pilot that the data verification exercise is completely independent. Bidders will be expected to demonstrate how they will ensure this in their proposals.

EXPERTISE AND TEAM REQUIRED

Broadly, DFID expects the data auditing and verification team to be based on skills and expertise found in financial auditing firms, but with additional technical expertise related to examination systems. Numbers of staff required are to be determined by prospective contractors, but DFID would welcome applications that include a mixture of both Rwandan and international experience. Staff numbers and cost should be proportionate to the overall size of the RBA project.

Preference will be given to bids which demonstrate that they will build the capacity of local firms to undertake similar independent data verification exercises.

The data quality audit and verification function requires the following skills and expertise:

- International track record of data quality audit and verification in resource-poor settings (essential) including of results-based approaches (desirable).
- A proven track record in verifying data in the education sector generated from examinations (essential).
- Experience of using surveys to assess teachers' competencies (essential)
- A good understanding of donor financing instruments (essential) including of results-based approaches (desirable).
- Good understanding of the education sector in Rwanda (essential).
- Experience of designing and/or revising of educational management information systems (essential).
- Excellent written and verbal communication skills (essential).

APPENDIX THREE:

RWANDA'S EDUCATION STRUCTURE: SCHOOLING

The structure of education in Rwanda²⁰ has been the subject of many reforms including in 2009 the introduction of compulsory nine year basic education (9YBE) from age 7 to age 15 covering six years of primary and three years of lower secondary education.

The structure is as follows:

1. Pre primary Education is organised in private nursery schools for a period of three years for children between the ages of 3 and 6. This level of education aims to encourage the socialisation of children and stimulate their senses by allowing them to live and play with other children and to practice numerous physical, rhythmic and manual activities.

2. Primary Education lasts six years; the official age school at this level is from 7 years to 12 years. The objective of primary education is to ensure that all children receive civic, intellectual and physical education. This stage, designed to prepare children for secondary studies, ends with the P6 National Examination leading to Lower Secondary education.

3. Secondary Education lasts six years; the official age for this level is from 13 years to 18 years. It comprises three years of **Lower Secondary** (S1 – S3) followed by three years of **Upper Secondary** (S4 – S6). Both phases end with National Examinations which respectively yield eligibility for upper secondary and all higher education studies. At upper secondary students enter in to different field of study such as sciences, humanities, languages, teacher training and technical studies.

It is significant for the purposes of the RBA pilot to note that one option at upper secondary level allows students to enter Teacher Training Colleges (TTCs) where success in the S6 examination is an entry qualification for teaching at the primary level. From this year (2012) the S6 examination for TTCs will be set and marked by the Kigali Institute of Education (KIE).

A further upper secondary level option is for students to enter Technical Schools for which the S6 examination has been set by the Rwanda Workforce Development Authority since last year (2011). This academic technical upper secondary education should not be confused with the more traditional Technical and Vocational Training (TVET).

4. Regional Integrated Polytechnic Centres (IPRCs) provide young people and the unemployed with the skills to gain productive employment and also provides those already in employment with an opportunity to upgrade their skills, including entrepreneurs and those wishing to work for themselves. They offer a variety of vocational and technical skills from short term certificates to diploma and as regional centres they also oversee small training centres in their catchment areas.

5. Tertiary Education, varies between 3 and 6 years according to the institution and the field of study. Awarded degrees include Bachelor's Degree, Engineering Degree, Doctorate in Medicine and Masters Degree.

²⁰ With acknowledgment to MINEDUC Annual Education Statistics (January 2012)

The academic year in Rwanda follows the calendar year, with national examinations held in November (Figure 3).

Events in the academic year	Dates in 2012	Duration
First Term	09/01 ²¹ – 30/03	12 weeks
Holiday	31/03 – 22/04	3 weeks
Second Tem	23/04 – 20/07	13 weeks
Holiday	21/07 – 02/09	6 weeks
Third Term	03/09 – 09/11	10 weeks
P6 National Examinations	06/11 – 08/11	3 days
O-Level (S3) and A-Level (S6) Examinations	14/11 – 23/11	2 weeks

Figure 3: Academic calendar 2012

²¹ Although the first term officially starts in January S1 students do not enter school until February as the P6 exam results are not ready by January.

APPENDIX FOUR:**FIELD SURVEY GUIDELINES FOR AUDITORS**

This document details the procedures to be followed by auditors before, during and after their school visits to verify numbers of students sitting national examinations in 2011.

Auditors should thoroughly familiarise themselves with procedures and documents related to this exercise before travelling.

If advice or clarification is needed contact details for the CfBT Team are provided on Page 3 of this document.

1 PURPOSE

(The auditors can use this paragraph in their introduction to head teachers.)

This school visit is taking place in connection with an agreement between the Government of Rwanda and the United Kingdom Department For International Development, DFID.

DFID has agreed to provide additional support for education in Rwanda, and that support will take the form of financial incentives (known as Results Based Aid) for improvements in the numbers of students completing key levels of education (P6, S3 and S6), as measured by the numbers of students sitting national examinations at those grades. The examinations conducted in 2011 are being taken as the baseline against which future improvements will be measured for the calculation of payments.

In order that both governments can have confidence in the examination statistics that will be used as the basis for Results Based Aid payments, DFID has awarded a verification contract to CfBT Education Trust (based in the UK) and CfBT has entered into partnership with DP Auditors and Consultants, based in Kigali. I represent DP Auditors and Consultants and as part of the verification contract we have a mandate to conduct a field survey of 100 schools across all provinces. The school visits have the support of MINEDUC and Rwanda Education Board at the highest level.

2 BEFORE YOU TRAVEL

Before embarking on the field visits auditors should make sure that:

- Schools have been informed in advance of the visit and have been asked to have relevant documents ready for the auditors' use.
- You have sufficient copies of the School Visit Report for all schools to be visited, plus a few spare copies, and sufficient copies of the letter of authorisation and introduction.
- You have lists of results for schools to be visited.

3 THE SCHOOL VISIT**3.1 BEFORE REACHING THE SCHOOL**

Make sure you have a school report ready with the name of school and other details entered in the appropriate spaces at the top of Page 1.

Enter in Box 1 on Page 1 of the school report the numbers of students on the National Examination attendance list for that school in the relevant grade, as reported by REB.

Since many schools have large enrolments it will not be practical to verify all examination candidates. The target number for verification is **30** in each school to be visited. Before visiting a school use the table below to identify which students on the list you need to verify. Mark those students on your list.

Select a sample of names from the National Examinations list for verification in the school's registers. This table will tell you which names to select for verification.

If the number of students is	Select names from your examination candidates list as follows until 30 students have been verified
$N \leq 30$	all names in the Examinations list
$30 < N \leq 60$	alternate names in the Examinations list
$60 < N \leq 90$	every third name in the Examinations list
$90 < N \leq 120$	every fourth in the Examinations list
$120 < N$	every fifth name in the Examinations list

If you reach the end of the list before 30 students are selected return to the second name in the list and continue to select until you have 30 names.

Exception to the rule: If there are more than 30 but less than 35 candidates in the list verify all candidates.

3.2 ON ARRIVAL

On reaching the school you should first locate the headteacher (or deputy if the head is not available) and introduce yourself, offering your copy of the letter of authorisation from the REB Director General.

Explain the background and purpose of your visit. See Section 1 for a summary of what you might say, but remember that you must deliver the explanation in conversational tones and not appear that you are reading from a script.

Outline the programme for the visit, briefly explaining that you need to cross check numbers of P6, S3 or S6 (as appropriate) examination students for 2011 as provided by REB with school records for 2011 and last year's class registers. At this stage, before beginning your work, ask of the headteacher has any questions, and if so do your best to respond succinctly.

3.3 VERIFYING THE NUMBER OF SITTERS

In order to verify the examination candidates you will need access to the school's records for 2011.

Find out:

- how many students **in total** were enrolled in the Grade you are verifying (male and female)?
- enter the numbers (male & female) in Box 2 on Page 1 of the Field Visit School Report.
- according to the school's records, how many students sat the National Examinations in 2011? Enter the numbers in Box 3 of the school report.

If the school is unable to provide documentary evidence to verify any of the above responses, annotate the box accordingly, e.g. *No records kept by the school*.

Make sure that Box 3 only counts the students who were enrolled at the school. Check that Box 3 numbers are less than (or equal to) Box 2, and if not, seek clarification.

3.4 VERIFICATION OF INDIVIDUAL STUDENTS

This is the key task of the verification.

Cross check the REB list of examination candidates with school records (class enrolment or attendance registers). Identify, one by one, the 30 names pre-selected for verification. When you identify a selected candidate in the school records annotate your list with a tick (✓).

If you cannot locate a candidate in the school's registers annotate your list with a cross (✗) and seek an explanation from the head teacher, as to why this name appears as a candidate in the national examinations but does not appear as a student of the school. Enter the explanation in the Comments box in Part C of the School Visit Report.

Finally, enter the total number of students verified and not verified in Box 4 of the School Visit Report.

3.5 CONCLUDING THE SCHOOL VISIT

When you have completed the tasks thank the headteacher and staff of the school for their co-operation, and reassure them they have made a valuable contribution to the Results Based Aid pilot.

Ask if they have any questions before you conclude the visit and depart.

If they have and you can answer, do so. If they ask questions that you cannot answer, note the question and tell them that you will find the answer and let them know.

Finally, ask the headteacher (or his representative) to sign in the space provided on Page 4 of the School Visit Report. Invite the headteacher to write comments in the box provided if he wishes, but only if he wishes to do so.

There is also a space for the auditors to sign and you should do so in the presence of the headteacher.

4 AFTER THE SCHOOL VISIT

4.1 AUDITOR FEEDBACK

After the visit reflect briefly on your experience and complete the feedback section of the school report.

On your return from the field visits separate this feedback form from the rest of the school visit report and file separately.

**APPENDIX FIVE:
FIELD SURVEY SCHOOL REPORT**

At each school to be visited the auditors were required to complete a Survey School Report.

Reports were tailored to the level targeted by the visit.

The example illustrated here is the version for Primary 6.

VERIFICATION OF RWANDA NATIONAL EXAMINATION CANDIDATES, 2011

PRIMARY 6: FIELD VISIT SCHOOL REPORT

PART A: SCHOOL INFORMATION

School Name	
School Code	
Province	
District	

	Govt. Aided	Private	Public
<i>Tick as appropriate</i>			

Date of Verification Visit ____ / ____ / ____

PART B: VERIFICATION OF STUDENT NUMBERS

Before visiting the school record the number of students who appear on the results list for P6.

BOX 1: Students who sat the P6 examination in 2011 (REB data)			
	Male	Female	Total
According to the REB results list how many students of this school sat the P6 examination in 2011?			

Now enter the numbers of P6 students enrolled in the school during 2011 according to school registers.

BOX 2: School enrolment			
	Male	Female	Total
According to school records for 2011 how many students were enrolled in Primary 6?			

According to school records, how many of the P6 students sat the national examination in 2011?

BOX 3: Students who sat the P6 examination in 2011 (School data)			
	Male	Female	Total
According to school records for 2011 how many of these students sat the P6 national examination?			

PART C: VERIFICATION OF INDIVIDUAL STUDENTS

The auditors will now verify the existence of a sample of candidates on the National Examinations list for the school as genuine students of the school.

Select a sample of names from the National Examinations list for verification in the school's registers. This table will tell you how many names to select for verification.

If the number of students is	Select names from your examination candidates list as follows until 30 students have been verified
$N \leq 30$	all names in the Examinations list
$30 < N \leq 60$	alternate names in the Examinations list
$60 < N \leq 90$	every third name in the Examinations list
$90 < N \leq 120$	every fourth in the Examinations list
$120 < N$	every fifth name in the Examinations list

The auditors will now verify the existence of the sample as genuine Primary 6 students of the school at the time of the examinations. You will need to ask the headteacher to give you access to the P6 registers for 2011.

You now need to check that each name you select in this way can be identified in the school class registers as a student in P6.

Enter your findings in Box 4

If any of your target students cannot be verified in the school's register, seek an explanation from the head teacher and record the response in the comments box below.

BOX 4	
This is your target of students for verification in the school's registers?	30
How many did you verify as genuine students on the school registers?	
How many were you not able to verify in reaching this target?	

Comments:

PART D: SIGNATURE PAGE

Before completing a school visit the auditor should request that the head teacher (or his representative) signs the declaration below.

I hereby confirm that auditor appointed to verify data relating to the national examinations conducted in 2011 completed the assignment as arranged.

I also confirm that all information collected during the school visit is correct to the best of my knowledge.

School Headteacher	Signature
Headteacher's comments	

Auditor (Print names)	Signature

PART E: AUDITOR'S FEEDBACK

After the visit reflect on your experience and answer the following questions.

On your return from the field visits separate this feedback form from the rest of the school visit report and file separately.

School name		School Code	
Province		District	

Date of Verification Visit ____ / ____ / ____

How do you rate the overall level of co-operation that you received at the school?	Very good _____ Satisfactory _____ Unhelpful _____
Were you allowed access to the information you needed to perform the verification task?	YES _____ NO _____
If NO, why do you think you did not get access to the information you needed?	The headteacher was reluctant to co-operate _____ The information (e.g. P6 register for 2011) was not available _____ Other reason (specify)
<u>Other comments</u>	

**APPENDIX SIX:
FIELD SURVEY RESULTS BY SCHOOL**

Appendix 6 presents the Field Verification Survey results school by school.

PRIMARY 6 SAMPLE

Province	District	School name	School Code	School Status (Gov/Pr/Pu)	REB Data						School Data						Discrepancy in number of sitters	Percentage Discrepancy	Registered as percentage of enrollment	Number of students verified			
					Box 1: Exam sitters			Box 2: Enrollment			Box 3: Exam sitters			M	F	T					M	F	T
					M	F	T	M	F	T	M	F	T										
Northern	Gicumbi	Rebero	04051906	Pu	43	56	99	44	60	104	43	56	99				0	0.0%	95.2%	30			
Northern	Gicumbi	Ngange	04051104	Gov	23	32	55	23	33	56	23	32	55				0	0.0%	98.2%	30			
Northern	Gicumbi	Byumba Inyange	04050303	Gov	54	58	112	56	58	114	54	58	112				0	0.0%	98.3%	30			
Northern	Rulindo	Rubona	04010803	Pu	50	64	114	55	67	122	50	64	114				0	0.0%	93.4%	30			
Northern	Musanze	Kivumu	04030603	Pu	14	13	27	15	13	28	14	13	27				0	0.0%	96.4%	27			
Northern	Gakenke	Rutenderi	04020505	Pu	21	35	56	23	37	60	21	35	56				0	0.0%	93.3%	30			
Northern	Musanze	Kabara	04031202	Gov	31	52	83	34	66	100	31	52	83				0	0.0%	83.0%	30			
Northern	Gakenke	Joma	04021902	Gov	25	34	59	25	34	59	25	34	59				0	0.0%	100.0%	30			
Northern	Burera	Jean de la Menna	04040404	Gov	23	24	47	26	28	54	23	24	47				0	0.0%	87.0%	30			
Northern	Burera	Nemba I	04041204	Gov	6	24	30	6	24	30	6	24	30				0	0.0%	100.0%	30			
Northern	Rulindo	Rwahi	04011604	Gov	16	26	42	16	26	42	16	26	42				0	0.0%	100.0%	30			
Northern	Gakenke	Bwanda	04021302	Pu	17	21	38	19	22	41	17	21	38				0	0.0%	92.7%	30			
Southern	Nyamagabe	Rugeyo	02051707	Gov	12	23	35	14	25	39	12	23	35				0	0.0%	89.7%	30			
Southern	Cusagara	Linda	02020801	Pu	14	42	56	16	43	59	14	42	56				0	0.0%	94.9%	30			
Southern	Ruhango	Muyumve	02060504	Gov	41	58	99	41	63	104	41	58	99				0	0.0%	95.2%	30			
Southern	Nyanza	Gahombo	02010506	Pu	9	15	24	10	18	28	9	15	24				0	0.0%	85.7%	24			
Southern	Kamonyi	Gihara	02081202	Gov	52	72	124	52	73	125	52	72	124				0	0.0%	99.2%	30			
Southern	Kamonyi	Shaka	02080107	Gov	20	16	36	21	16	37	20	16	36				0	0.0%	97.3%	30			
Southern	Nyaruguru	Nyanza	02030804	Gov	15	34	49	16	36	52	15	34	49				0	0.0%	94.2%	30			
Southern	Nyaruguru	Cyahinda	02030201	Gov	50	76	126	56	77	133	50	76	126				0	0.0%	94.7%	30			
Southern	Nyamagabe	Turyango	02051107	Gov	14	13	27	18	14	32	14	13	27				0	0.0%	84.4%	27			
Southern	Nyamagabe	Kaduha B	02050502	Gov	17	17	34	17	17	34	17	17	34				0	0.0%	100.0%	34			
Southern	Muhanga	Bishake	02070102	Gov	30	32	62	32	34	66	30	32	62				0	0.0%	93.9%	30			
Southern	Nyanza	Runga	02011006	Pu	14	17	31	15	18	33	14	17	31				0	0.0%	93.9%	31			
Southern	Huye	Sheke	02041206	Gov	40	31	71	48	31	79	40	31	71				0	0.0%	89.9%	30			
Southern	Huye	Mutunda Eer	02046706	Gov	21	25	46	23	30	53	21	25	46				0	0.0%	86.8%	30			
Southern	Muhanga	Nyanza	02070907	Gov	11	25	36	12	28	40	11	25	36				0	0.0%	90.0%	30			
Southern	Muhanga	Mata	02070505	Pu	15	24	39	15	25	40	15	24	39				0	0.0%	97.5%	30			
Southern	Huye	Vumbi	02040104	Gov	21	18	39	25	19	44	21	18	39				0	0.0%	88.6%	30			
Southern	Kamonyi	Migina	02080106	Gov	29	28	57	33	29	62	29	28	57				0	0.0%	91.9%	30			

Province	District	School name	School Code	School Status (Gov/Pr /Pu)	REB Data						School Data						Discrepancy in number of sitters	Percentage Discrepancy	Registered as percentage of enrolment	Number of students verified
					Box 1: Examsitters			Box 2: Enrolment			Box 3: Exam sitters									
					M	F	T	M	F	T	M	F	T							
Western	Rusizi	Gisagara	03060404	Gov	30	24	54	32	26	58	30	24	54	0	0.0%	93.1%	30			
Western	Rusizi	Ruhoko	03061707	Gov	17	15	32	17	15	32	17	15	32	0	0.0%	100.0%	32			
Western	Nyamashwe	EP Gasanane	03071306	Gov	12	20	32	13	20	33	12	20	32	0	0.0%	97.0%	32			
Western	Nyamashwe	Kaburir	03070903	Gov	19	26	45	20	28	48	19	26	45	0	0.0%	93.8%	30			
Western	Karongi	Rutabo	03010910	Gov	14	20	34	16	20	36	14	20	34	0	0.0%	94.4%	34			
Western	Rutsiro	Cyivugiza	03021102	Gov	38	27	65	38	27	65	38	27	65	0	0.0%	100.0%	30			
Western	Rusizi	Shara	03061005	Gov	37	27	64	38	27	65	37	27	64	0	0.0%	98.5%	30			
Western	Karongi	Nyarimyango	03011306	Gov	6	6	12	7	6	13	6	6	12	0	0.0%	92.3%	12			
Western	Karongi	Kagabiro	03010503	Pu	10	12	22	14	13	27	10	12	22	0	0.0%	81.5%	22			
Western	Rutsiro	Rutsiro	03020505	Gov	37	24	61	42	29	71	37	24	61	0	0.0%	85.9%	30			
Western	Rubavu	Rusoro	03030901	Gov	42	36	78	46	36	82	42	36	78	0	0.0%	95.1%	30			
Western	Ngororero	Giko	03051202	Gov	11	22	33	14	23	37	11	22	33	0	0.0%	89.2%	33			
Western	Nyabihu	Cyumba	03040301	Pu	32	36	68	34	36	70	32	36	68	0	0.0%	97.1%	30			
Western	Rubavu	Amahoro	03030401	Gov	33	25	58	36	27	63	33	25	58	0	0.0%	92.1%	30			
Western	Nyabihu	Rambura	03040905	Gov	22	32	54	24	32	56	22	32	54	0	0.0%	96.4%	30			
Western	Ngororero	Kasumo	03050609	Gov	9	18	27	14	21	35	9	18	27	0	0.0%	77.1%	27			
Eastern	Bugesera	Ruhuha	05071304	Pu	43	56	99	44	58	102	43	56	99	0	0.0%	97.1%	30			
Eastern	Bugesera	Musenye	05070604	Gov	27	40	67	33	46	79	27	40	67	0	0.0%	84.8%	30			
Eastern	Gatsibo	Mullinga	05070304	Gov	50	61	111	53	74	127	42	58	100	11	9.9%	87.4%	28			
Eastern	Gatsibo	Munini	05031402	Pu	31	29	60	36	32	68	31	29	60	0	0.0%	88.2%	30			
Eastern	Ngoma	Muhurire	05061203	Gov	21	23	44	28	24	52	21	23	44	0	0.0%	84.6%	30			
Eastern	Kirehe	Butezi	05050102	Pu	8	10	18	9	11	20	8	10	18	0	0.0%	90.0%	18			
Eastern	Ngoma	Les Hirondelles	05060505	Pr	51	30	81	51	30	81	51	30	81	0	0.0%	100.0%	30			
Eastern	Rwanganza	Munyiginya	05010801	Pu	33	22	55	37	23	60	33	22	55	0	0.0%	91.7%	30			
Eastern	Gatsibo	Casange	05030102	Gov	47	42	89	51	51	102	47	42	89	0	0.0%	87.3%	30			
Eastern	Kayanza	Buhabwa	05040601	Pu	27	33	60	28	34	62	27	33	60	0	0.0%	96.8%	30			
Eastern	Nyagatare	Gakiragi	05021003	Pu	70	69	139	71	74	145	70	69	139	0	0.0%	95.9%	30			
Eastern	Mushikiri	Kirehe	05050902	Pu	39	41	80	45	43	88	39	41	80	0	0.0%	90.9%	30			
Kigali	Nyarugenge	Cyahaifi	01010101	Pu	40	56	96	40	58	98	40	56	96	0	0.0%	98.0%	30			
Kigali	Kicukiro	Petit Prince	01030304	Pr	24	34	58	24	34	58	24	34	58	0	0.0%	100.0%	30			
Kigali	Gasabo	Gasogi	01021101	Pu	31	60	91	34	63	97	No data available				0.0%	93.8%	30			
Kigali	Gasabo	Gikomero	01020302	Gov	55	51	106	61	56	117	55	51	106	0	0.0%	90.6%	30			

SECONDARY 3 SAMPLE

Province	District	School name	School Code	School Status (Gov/Pr/ Pu)	REB Data						School Data						Discrepancy in number of sitters	Percentage Discrepancy	Sitters as percentage of enrollment	Number of students verified	
					Box 1: Exam sitters			Box 2: Enrollment			Box 3: Exam sitters			Discrepancy	Percentage	Sitters as percentage of enrollment					Number of students verified
					M	F	T	M	F	T	M	F	T								
North	Burera	ES Gahunga	0404051	Pr	23	37	60	23	37	60	22	37	59	1	1.7%	100.0%	30				
North	Musanze	Marie Reine Rwanda	0403050	Pr	8	11	19	8	13	21	8	11	19	0	0.0%	90.5%	19				
North	Gakenke	Rushashi	0402030	Gov	38	27	65	38	27	65	37	27	64	1	1.5%	100.0%	28				
North	Gicumbi	Apegi Rubuki	0405052	Pu	11	14	25	11	15	26	11	14	25	0	0.0%	96.3%	25				
North	Gicumbi	Shangasha	0405139	Pu	68	66	134	68	66	134	68	66	134	0	0.0%	100.0%	30				
South	Nyamagabe	Bugarama	0204058	Gov	17	26	43	17	26	43	17	26	43	0	0.0%	100.0%	30				
South	Gisagara	ES Gikonko	0202032	Gov	33	47	80	33	47	80	33	47	80	0	0.0%	100.0%	30				
South	Ruhango	GS NDL Byimana	0206031	Gov	0	160	160	0	160	160	0	160	160	0	0.0%	100.0%	30				
South	Kamonyi	Runda Isonga	0208136	Gov	19	34	53	19	35	54	19	34	53	0	0.0%	98.1%	29				
South	Nyaruguru	GS Masiga	0203100	Gov	31	23	54	31	23	54	30	22	52	2	3.7%	100.0%	28				
South	Muhanga	Essifih Gitirama	0207057	Pr	0	52	52	0	56	56	0	50	50	2	3.8%	92.9%	30				
South	Huye	Virgo Fidelis Karubanda	0204058	Pr	63	0	63	63	0	63	61	0	61	2	3.2%	100.0%	30				
South	Kamonyi	St Bernadette Kamonyi	0208055	Pr	13	22	35	13	23	36	13	22	35	0	0.0%	97.2%	35				
Western	Karongi	GS Ngoma	0301118	Gov	17	18	35	17	18	35	17	18	35	0	0.0%	100.0%	35				
Western	Rusizi	TT C Mururu	0306030	Gov	37	57	94	37	57	94	37	57	94	0	0.0%	100.0%	30				
Western	Nyamashenge	GS Rwabidage	0307138	Gov	50	42	92	50	42	92	49	40	89	3	3.3%	100.0%	30				
Western	Nyamashenge	Sainte Famille Nyamashenge	0307035	Gov	0	86	86	0	86	86	0	86	86	0	0.0%	100.0%	30				
Western	Rutsiro	GS Rusororo	0302118	Gov	20	11	31	21	11	32	20	11	31	0	0.0%	96.9%	31				
Western	Ngororero	Apejerwa-Nyange	0305030	Gov	55	19	74	55	19	74	55	18	73	1	1.4%	100.0%	30				
Western	Rubavu	Rwansekuma	0303117	Gov	43	17	60	42	18	60	42	16	58	2	3.3%	100.0%	30				
Eastern	Bugesera	GS Twimpala	0507123	Pu	55	42	97	55	42	97	54	40	94	3	3.1%	100.0%	30				
Eastern	Gatsibo	GS Munini	0503113	Pu	23	12	35	23	12	35	23	11	34	1	2.9%	100.0%	29				
Eastern	Nyagatare	GS Katabagamu	0502110	Gov	44	26	70	43	28	71	41	26	67	3	4.3%	98.6%	29				
Eastern	Kayanza	GS Ndego I	0504117	Pu	42	23	65	42	23	65	37	22	59	6	9.2%	100.0%	30				
Eastern	Ngoma	GS Gahima	0506102	Gov	77	94	171	79	97	176	76	89	165	6	3.5%	97.2%	30				
Kigali City	Gasabo	Kinyinya	0102111	Gov	12	32	44	12	32	44	11	31	42	2	4.5%	100.0%	30				
Kigali	Gasabo	Apaper	0102051	Gov	34	31	65	No data available	No data available	No data available	30	28	58	7	10.8%	1.00	28				
Kigali City	Kicukiro	GS Kicukiro	0102105	Gov	62	57	119	62	57	119	63	55	118	1	0.8%	100.0%	29				

SECONDARY 6 SAMPLE

Province	District	School name	School Code	School Status (Gov/Pr/Pu)	REB Data						School Data						Discrepancy in number of sitters	Percentage Discrepancy	Sitters as percentage of enrolment	Number of students verified
					Box 1: Exam sitters			Box 2: Enrolment			Box 3: Exam sitters									
					M	F	T	M	F	T	M	F	T							
Northern	Musanze	Apotras Rwanza	0403037	Gov	0	65	65	0	65	0	65	65	0	65	0	0.0%	1.00	30		
Southern	Nyamagabe	ES Mahesho	0205052	Gov	59	64	123	59	66	125	59	64	123	0	0.0%	0.98	30			
Southern	Nyanza	College du Christ Roi	0201030	Gov	60	17	77	61	17	78	60	17	77	0	0.0%	0.99	30			
Western	Karongi	ES Gasenyi	0301011	Pu	81	44	125	82	44	126	82	43	125	0	0.0%	0.99	30			
Western	Nyabihu	GS Shyira	0304033	Gov	63	28	91	63	29	92	63	28	91	0	0.0%	0.99	30			
Eastern	Kayanza	ES Nyamirama	0504013	Pu	112	66	178	112	67	179	112	66	178	0	0.0%	0.99	30			
Kigali	Gasabo	Ifak	0102062	Pr	50	21	71	50	21	71	50	21	71	0	0.0%	1.00	30			

APPENDIX SEVEN:

KEY DOCUMENTS FOR VERIFICATION OF TEACHERS' ENGLISH LANGUAGE

The following documents accessed by the verification team's English language expert:

- i. Independent verification of educational data for a pilot of results-based aid (RBA) in Rwanda: Inception report; CfBT, 2012
- ii. Baseline assessment of English language proficiency of school teachers in Rwanda: Inception Report V3; British Council, 2013
- iii. Baseline assessment of English language proficiency of school teachers in Rwanda: Draft report (dated 4/02/13)
- iv. Aptis website: <http://www.britishcouncil.org/exams/aptis>
- v. Aptis formal trials report: <http://www.britishcouncil.org/sites/default/files/documents/aptis-formal-trial-report.pdf>
- vi. Aptis test development approach: <http://www.britishcouncil.org/sites/default/files/documents/aptis-test-dev-approach-report.pdf>
- vii. Aptis Technical Report 4 (made available to the verification team in final draft form on 11th February 2013)
- viii. Aptis marker training materials
- ix. Aptis procedures and protocol manual
- x. British Council – Equals Core Inventory for General English: <http://www.teachingenglish.org.uk/publications/british-council-equals-core-inventory-general-english>

APPENDIX EIGHT:

SCHEDULE OF MEETINGS FOR ENGLISH LANGUAGE VERIFICATION IN RWANDA

Sunday 24 th Feb	Jean Wilson's schedule
2.30 - 3.00	Meeting with David Dean
3.00 – 4.00	Meeting with Claver Yisa
Monday 25 th Feb	
8.00 – 9.30	Meeting with Gemma Wilson-Clark
10.00 – 12.45	Meeting with British Council staff involved with Aptis
2.00 – 5.00	Meeting with REB staff group
Tuesday 26 th	
9.00 – 12.00	Meeting with Damian and Norma Evans
1.00 – 5.00	Preparation of meeting note and correspondence with REB staff team re Aptis and CEFR
7.00 – 9.00	Evening meeting with British Council's Aptis managers
Wednesday 27 th	
8.00. – 1.30	Field visit – classroom observation and focus group discussion
2.00. – 6.00	Writing up of notes; consideration of future planning
Thursday 28 th	
9.00 – 1.00	Focus group discussion with Aptis test-takers
2.00 – 4.00	Preparation for wrap-up meeting
5.00 – 7.00	Meeting with Gemma Wilson-Clark (DFID) and Norma Evans
Friday 29 th	
10.00 – 1.00	Wrap-up meeting with DFID
2.00 – 3.30	Wrap-up meeting with David Dean
Saturday 30 th	
	Leave for UK

APPENDIX NINE

QUESTIONNAIRE FOR FOCUS GROUP DISCUSSION
AND SUMMARY OF PARTICIPATING TEACHERS' RESPONSES

DFID Results-based Aid pilot in Rwanda:

Verification of the baseline assessment of the English Language competence of teachers

Focus group discussion questions

We are going to discuss the Aptis test which you took to assess your level of English language skills. Please think about the following:

Aptis has five parts: Reading, Writing, Speaking, Listening, and Grammar/Vocabulary.

Which part of the test did you find most difficult? Rate each paper on the following scale, where 1 = very easy and 5 = very difficult

Reading

1	2	3	4	5
Very easy	easy	neutral	difficult	Very difficult
2	11	1		

Writing

1	2	3	4	5
Very easy	easy	neutral	difficult	Very difficult
2	5	5	1	

Speaking

1	2	3	4	5
Very easy	easy	neutral	difficult	Very difficult
	3	1	7	2

Listening

1	2	3	4	5
Very easy	easy	neutral	difficult	Very difficult
1	2	3	6	2

Grammar and Vocabulary

1	2	3	4	5
Very easy	easy	neutral	difficult	Very difficult
	3	3	4	3

Have you ever used a computer to take a language test before?

100% : No (13 responses)

Did you find it easy or difficult to use the computer to take your test?

Of the four language skills – Speaking, Listening, Reading, Writing – which is your strongest area?

Please make any other comments on the Aptis test below:

Thank you very much for your time.

Open response item:

- Grammar and vocabulary was difficult for me because it was multiple choice
- The Aptis test was difficult because of some reasons: 1) using computer is not easy for some teachers and it was the first time. To help teachers to know English, ask British Council to prepare for us different Aptis tests.
- It could better for all teachers to have computers as teaching material will help teachers to know pronunciation of words through computers. After listening words from micro – phones computer. The more you practice the more you become perfect – more training please in listening and speaking.
- Because it was a first time using a computer in a test and to test listening and speaking it was challenge and we had a short time. I didn't have time to think about what I had to answer. The following time I need the time to think and if it will be possible I need to be trained more in the system.
- The test was very difficult for teachers in speaking and listening because there are not practice in them so they need training where they can use English in Speaking and Listening and using materials like radio and computer.
- English is very difficult we want the trainings in listening, speaking and grammar also.
- It will be better to provide some materials in schools which will help teachers and learners to develop all those skills especially listening some schools don't have computers or radios to use for that. To know some vocabularies we also need dictionaries.

- It would be better to let someone write on draft paper what he is going to say and may be doing speaking and reading at the same time of recording the voice. Note that: it was difficult to combine thinking and saying suddenly a meaningful sentence in a few minutes and a follow up as well as training of teachers is recommended
- I need the training
- In general the tests are difficult for me because it is my first time to use English;
- For me, I like reading and listening because those skills help me get more vocabulary and grammar. Listening helps me to hear new words, expressions. When I listen the radio that helps me know many things in the world which pass in the countries
- Aptis test is very important because I can know my level in English language. Aptis test has given all others knowledge for example how to use a computer to speak and listen. I developed my listening skills because it was the first time.
- According to me, the Ministry of Education can try to give the necessary or enough materials to the schools, that can help the teaching and learning process (enough didactic materials examples radios books)