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Report No: 53927-GY

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 2.8 MILLION
(US\$4.2 MILLION EQUIVALENT)

INCLUDING SDR 1.2 MILLION IN PILOT CRW RESOURCES
(US\$1.8 MILLION EQUIVALENT)

TO THE

COOPERATIVE REPUBLIC OF GUYANA

FOR AN

IMPROVING TEACHER EDUCATION PROJECT

August 18, 2010

**Human Development Sector
Caribbean Country Management Unit
Latin American and the Caribbean Regional Office**

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CURRENCY EQUIVALENTS

(Exchange Rate Effective July 31, 2010)

Currency Unit = Guyanese dollar

G\$205 = US\$1.00

US\$1.5185 = SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADE	Associate's Degree in Education
AEA	Adult Education Association
BEAMS	Basic Education Access and Management Support
B.Ed.	Bachelor of Education Degree
CARICOM	Caribbean Community
CAS	Country Assistance Strategy
CFT	Competency Framework for Teachers
COM SEC	Commonwealth Secretariat
CRW	Crisis Response Window
CIDA	Canadian International Development Agency
CKLN	Caribbean Knowledge Learning Network
COL	Commonwealth of Learning
CPCE	Cyril Potter College of Education
CPD	Continuous Professional Development Program for Trained Teachers
CSEC	Caribbean Secondary Education Certificate
DE	Distance Education
DFID	Department for International Development
EFA-FTI	Education for All Fast Track Initiative
EGRA	Early Grade Reading Assessment
EPDF	Education Program Development Fund
ESP	Education Strategic Plan
FDI	Foreign Direct Investment
GBET	Guyana Basic Education and Teacher Training
GDP	Gross Domestic Product
GNI	Gross National Index
GoG	Government of Guyana
HIPC	Heavily Indebted Poor Countries Initiative
IAD	Internal Audit Department
IDCE	Institute for Continuing and Distance Education
ICT	Information and Communication Technology
IDA	International Development Agency
IMF	International Monetary Fund
ITEC	Indian Technical Economic Co-operation
LRCs	Learning Resource Centers
MDRI	Multilateral Debt Relief Initiative
MOE	Ministry of Education

NCERD	National Center for Education Resource Development
OECS	Organization of Eastern Caribbean States
PRSP	Poverty Reduction Strategic Plan
PU	Planning Unit
SIC	Specific Investment Credit
STTR	Student to Trained Teacher Ratio
TORS	Terms of Reference
TSC	Teacher Service Commission
TVET	Technical and Vocational Education and Training
UG	University of Guyana
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UWI	University of the West Indies
UWIDEC	University of the West Indies Distance Education Center
VAT	Value Added Tax
VSO	Voluntary Services Overseas
WDI	World Development Indicators
YCG	Youth Challenge Guyana

Vice President:	Pamela Cox
Country Director:	Yvonne Tsikata
Sector Director:	Keith Hansen
Sector Manager:	Chingboon Lee
Task Team Leader:	Angela Demas

GUYANA
Improving Teacher Education

TABLE OF CONTENTS

	Page
I. STRATEGIC CONTEXT AND RATIONALE	1
A. Country and sector issues.....	1
B. Rationale for Bank involvement	6
C. Higher level objectives to which the Project contributes.....	7
II. PROJECT DESCRIPTION.....	7
A. Lending instrument	7
B. Project development objective and key indicators.....	7
C. Project components.....	8
D. Lessons learned and reflected in the Project design	9
E. Alternatives considered and reasons for rejection	11
III. IMPLEMENTATION	13
A. Partnership arrangements (if applicable)	13
B. Institutional and implementation arrangements.....	14
C. Monitoring and evaluation of outcomes/results.....	16
D. Sustainability.....	16
E. Critical risks and possible controversial aspects.....	17
F. Credit conditions and covenants	19
IV. APPRAISAL SUMMARY	20
A. Economic and financial analyses	20
B. Technical.....	20
C. Fiduciary	21
D. Social.....	22
E. Environment.....	22
F. Safeguard policies	23
G. Policy Exceptions and Readiness.....	23

Annex 1: Country and Sector or Program Background	25
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies	33
Annex 3: Results Framework and Monitoring	36
Annex 4: Detailed Project Description.....	43
Annex 5: Project Costs	52
Annex 6: Implementation Arrangements	56
Annex 7: Financial Management and Disbursement Arrangements.....	66
Annex 8: Procurement Arrangements.....	75
Annex 9: Economic and Financial Analysis	80
Annex 10: Safeguard Policy Issues.....	91
Annex 11: Project Preparation and Supervision	96
Annex 12: Documents in the Project File	98
Annex 13: Statement of Loans and Credits.....	104
Annex 14: Country at a Glance	105
Annex 15: Map (33416)	106

GUYANA

IMPROVING TEACHER EDUCATION

PROJECT APPRAISAL DOCUMENT

LATIN AMERICA AND CARIBBEAN

LCSHE

Date: August 18, 2010	Team Leader: Angela Demas
Country Director: Yvonne M. Tsikata	Sectors: Tertiary education (100%)
Sector Manager/Director: Chingboon Lee	Themes: Education for the knowledge economy (50%); Education for all (25%); Other human development (25%)
Project ID: P110018	Environmental category: Not Required
Lending Instrument: Specific Investment Loan	Joint IFC:
	Joint Level:

Project Financing Data

[] Loan [X] Credit [] Grant [] Guarantee [] Other:

For Loans/Credits/Others:

Total Bank financing (US\$m.): 4.20

Proposed terms: The dates for semiannual interest and installment payments of the Credit are June 1 and December 1 of each year. The Grace period is 10 years and a Final Maturity of 20 years.

Financing Plan (US\$m)

Source	Local	Foreign	Total
BORROWER/RECIPIENT	0.60	0.00	0.60
International Development Association (IDA)	1.90	2.30	4.20
Commonwealth of Learning	0.00	0.10	0.10
Local Sources of Borrowing Country	0.22	0.00	0.22
Financing Gap	0.00	0.00	0.00
Total:	2.72	2.40	5.12

Borrower:

Cooperative Republic of Guyana
Ministry of Finance
49 Main and Urquhart Streets
Georgetown
Guyana
Fax: 592-226-1284

Responsible Agency:

Ministry of Education

26 Brickdam

Georgetown

Guyana

Tel: (592) 226-3094 Fax: (592) 225-5570

moe.baksh@gmail.com

Estimated disbursements (Bank FY/US\$m)

FY	2011	2012	2013	2014	2015				
Annual	0.30	1.20	1.20	1.00	0.50				
Cumulative	0.30	1.50	2.70	3.70	4.20				

Project implementation period: Start February 1, 2011 End: January 31, 2015

Expected effectiveness date: January 31, 2011

Expected closing date: July 31, 2015

Does the project depart from the CAS in content or other significant respects? ☐ Yes ☒ No
Ref. PAD I.C.Does the project require any exceptions from Bank policies? ☐ Yes ☒ No
Ref. PAD IV.G.Have these been approved by Bank management? ☐ Yes ☐ NoIs approval for any policy exception sought from the Board? ☐ Yes ☒ NoDoes the project include any critical risks rated “substantial” or “high”? ☒ Yes ☐ No
Ref. PAD III.E.Does the project meet the Regional criteria for readiness for implementation? ☒ Yes ☐ No
Ref. PAD IV.G.Project development objective **Ref. PAD II.C., Technical Annex 3**

The project development objective is to assist the Recipient to improve the effectiveness and efficiency in the delivery of quality teacher education.

Project description [one-sentence summary of each component] **Ref. PAD II.D., Technical Annex 4**

Component 1. Improving the quality and efficiency of teacher education delivery. This component will focus on the delivery of the newly established Associate’s Degree in Education and the Bachelor’s of Education (the “2 + 2 model”) through: (a) the development of appropriate courses and terms of reference for administrators, faculty, lecturers and tutors at the Cyril Potter College of Education and the University of Guyana’s School of Education and Humanities, and their subsequent evaluation based on terms of reference acceptable to the Recipient and the Association; (b) the provision of support for improving the quality and implementation of the practicum for the ADE and B.Ed. programs and designing and implementing an induction year for all Associate Degree graduates; (c) the integration of information and communication technology in the teaching and learning process, and in support of the transition to a dual mode delivery of the initial teacher training programs; and (d) the provision of technical assistance and training, and the acquisition and utilization of goods required therefore.

Component 2. Building Human Resources and Capacity for more Effective Teaching and Learning. This component will provide strengthening of the human resources and technical capacity of the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities through, inter alia: (a) the strengthening of the management of the Cyril Potter College of Education and of the University of Guyana's School of Education and Humanities; (b) the strengthening of the quality of teacher educators at Cyril Potter College of Education and University of Guyana's School of Education and Humanities; (c) the improvement of library access and resources to support independent learning and the professional development of teacher educators, student teachers, and teachers; and (d) the provision of technical assistance and training and the acquisition and utilization of goods required for the carrying out of the Project activities mentioned herein, including the carrying out of minor works under the Project activities mentioned in (c) herein as approved by the Association.

Component 3. Communications, Project Management, and Monitoring and Evaluation. Updating and implementing a public communications campaign to inform stakeholders of potential benefits and changes in education policy and teacher education programs, including a website and communications outreach.

Strengthening of the Ministry of Education capacity to administer and oversee Project implementation (including its procurement and financial management capacity), as well as to monitor and evaluate the Project objectives and outcomes, through the provision of technical assistance and training and the acquisition and utilization of goods required therefore.

Which safeguard policies are triggered, if any? **Ref. PAD IV.F., Technical Annex 10**
None.

Significant, non-standard conditions, **if any**, for:

Ref. PAD III.F.

Board presentation:

N/A

Loan/credit effectiveness:

There are three conditions of effectiveness: (i) the Steering Committee shall have been established in accordance with the TORs; (ii) the Project Coordinator, the Assistant Accountant to the MOE Planning Unit and the Assistant Accountant to the CPCE shall have been hired following Bank procedures and in accordance with the approved TORs; (iii) the final draft of the Operational Manual shall have been completed, approved by the Bank, and adopted by the Recipient.

Covenants applicable to project implementation:

(a) The Recipient shall: (i) establish and thereafter maintain, until completion of the Project, a committee (the Steering Committee) with functions and responsibilities satisfactory to the Association; and (ii) assign the Steering Committee with such resources as shall be required to enable the same to carry out its functions and responsibilities.

(b) The Recipient shall (i) hire a Project coordinator, an assistant accountant to be assigned to the MOE Planning Unit, and an assistant accountant to be assigned to the CPCE, all with qualifications, experience and terms of reference satisfactory to the Association; and (ii) maintain, until the completion of the Project, the personnel mentioned in (i) above, as well as a finance officer and a procurement officer, all with qualifications, experience, and terms of reference satisfactory to the Association.

(c) The Recipient shall adopt a manual (the Operational Manual) in a manner acceptable to the Association, and thereafter carry out the Project in accordance with the provisions of said Operational Manual.

I. STRATEGIC CONTEXT AND RATIONALE

A. Country and sector issues

1. *Guyana's education system is recovering from years of underinvestment experienced in the 1980s.* The country used to be a top performer in the Caribbean until the period of political instability in the 1970s and an economic decline and resulting period of fiscal adjustment from the 1980s through the early 90s. Although the country has been steadily recovering from these events, the negative impact of underinvestment in education during those years has been difficult to overcome. The education budget has risen from 2.1 percent in 1991 to an average of 7 percent of the Gross Domestic Product (GDP) over the last seven years. This level of investment demonstrates the Government's commitment to education as a national priority. In the same period, education as a percentage of the national budget has risen from a low of 4.4 percent to an average of 15 percent. Guyana ranks 114 out of 182 countries in the Human Development Index. It is the second poorest country in the Caribbean region after Haiti (World Development Indicators-WDI, 2008) and has an estimated gross national income (per capita) of US\$1,460.

2. *The global financial crisis is having a serious impact on migration, which already constituted a significant challenge for human capital and socio-economic development in Guyana.* Between 35 and 55 percent of Guyana's nationals live overseas, and between 80 and 90 percent of Guyanese with tertiary education are abroad¹. The Improving Teacher Education Project aims to contribute to strengthening Guyana's human capital through improving the efficiency, effectiveness and quality of education delivery. The additional Crisis Response Window (CRW) resources will help the Bank support the Government's goal of improving learning achievement of Guyanese youth in the classroom and indirectly contribute to addressing the high unemployment in Guyana, especially among youth. Unemployment levels, exacerbated by the crisis, as seen in other countries, could lead to risky-behaviors, gangs, violence, and temptation to earn a living through illicit trade, all of which pose a destabilizing threat to the economy. Improving the quality of education will be critical to opening employment opportunities and filling the labor market's demand for specific skills. In addition, a better educated work force will assist Guyana to be more competitive and face the challenges of the Caribbean Single Market and Economy.

3. *Despite major progress made in access to education, the quality and geographic equity of education in Guyana is low.* Most children start school at the appropriate age, enrolment levels at primary school are high and the completion rate is nearly 100 percent, but poor mastery of literacy and numeracy is widespread and student performance in national and regional examinations is low. An Early Grade Reading Assessment² (EGRA) piloted in Guyana during the 2008-09 school year (targeting students in grades 2 to 4) revealed that students know almost all of their letters, but are not well-skilled in the sounds letters make, an essential step in learning how to read. In the full sample of 2,700 children, 30 percent could not read a single word correctly in the first line of a simple paragraph. At the secondary school level, student learning

¹ Migration and Remittances Factbook, 2008, D. Ratha and Z. Xu.

² EGRA is a diagnostic instrument used to rapidly assess pupils' literacy acquisition that was developed by Research Triangle Institute (RTI) of Washington, DC and customized for use in Guyana.

outcomes are also low. In 2009 only 52 percent of the students that presented for the Caribbean Secondary Education Certificate (CSEC) obtained pass rates in English³ and 31 percent did so in mathematics.

4. *Considerable education disparities between the hinterland and the coastal regions persist; however, some progress has been made on closing this gap.* The Amerindian population (located mainly in the hinterland) has less access to good quality education than the rest of the population. The quality of education provided to communities in remote areas is well below national standards. Repetition and drop-out rates in primary are higher in the hinterland areas. Secondary students in hinterland regions also underperform in most subjects (including math, English, science and social studies). The Government with the support of the Education For All Fast Track Initiative (EFA-FTI) has put considerable effort to counter educational inequalities in the hinterland where service delivery is difficult and targeted incentives have made a difference (e.g. payment of Remote Areas Incentives to teachers, community-based school feeding program, teacher housing, learning materials, Learning Resource Centers).

5. *Low quality of education is largely the result of poor teaching.* Research has shown that good teachers are key for improving the quality of education (e.g. Henevald and Craig 1996, Leu 2004 and 2005). In Guyana many teachers enter and remain in the profession without the necessary academic qualifications and/or professional training. In 2008-09 out of 8,683 teachers nationwide at all levels of education, 36 percent remained untrained, i.e., had no certification as educators (see Table 1 for disaggregated data)⁴. In addition, many trained teachers continue to use traditional (teacher-centered) methodologies to deliver the curriculum which prevents students from meaningful learning and developing higher cognitive, problem-solving skills. These problems have been identified as a primary contributor to low student achievement in the country. Therefore, teacher education and training has been placed squarely at the forefront for addressing ineffective teaching and low quality of learning in the classroom.

6. *Students in the hinterland and riverain regions have the highest levels of untrained teachers.* In 2008-09 the student to trained teacher ratio (STTR) for primary schools in the hinterland were considerably higher (71:1) than for the national average (40:1), however the hinterland has experienced a significant increase in the number of trained teachers (Ministry of Education (MOE) Digest of Education Statistics 2008-09). As an outlier even among the hinterland regions, Region Eight presents the most difficult geographic challenges and has a STTR for primary school at 140:1 which is significantly higher than any other region. This could be explained by the lack of a distance education teacher education program in this region. In the 2008-09 academic year, out of the 553 primary school teachers in the four regions comprising the hinterland area (One, Seven, Eight and Nine) 341 remained untrained and of those 136 were not qualified to enter training since they do not have the minimum academic requirements for

³ This indicator is for English A General Proficiency Exam from the May-June 2009 sitting.

⁴ From the 2007-08 academic year to the 2008-09 academic year, the teaching force decreased in size by 3.1 percent, but the majority of teachers leaving were in the category of untrained teachers with a decrease of 12.3 percent of untrained teachers from 2007-08 to 2008-09. The percentage of untrained teachers has dropped 4 percent points in only one year: from 40 percent in 2007-08 to 36 percent in 2008-09.

being accepted into the Teacher's College⁵ (MOE Digest of Education Statistics 2008-09). In recent years, the MOE has made a considerable effort to upgrade teachers in remote areas so they can enter training programs. The number of unqualified and untrained teachers has decreased by more than 40 percent in the last eight years. This means that hundreds of hinterland primary teachers (who had less than four passing scores on the CSECs or an incomplete secondary education) have been upgraded to reach the minimum qualifications to enter a formalized teacher education program (Demas and Sanchez, 2008).

Table 1. Number of Teachers in Schools by Categories 2008-09

School/level	Trained Graduates (Certificate and Bachelor's)	Untrained Graduates (Bachelor's only, no Certificate)	Trained teachers (Certificate)	Untrained teachers (No certificate)	Total
Nursery	152	3	885	695 (40%)	1735
Primary	323	5	2095	1362 (36%)	3785
Secondary:					
Secondary Dept. of Primary Schools	21	3	158	212 (54%)	394
Community High Schools (CHS)	60	13	192	170 (39%)	435
General Secondary Schools (GSS)	412	165	1082	675 (29%)	2334
Total	968	189	4412	3114 (36%)	8683

Source: Guyana Ministry of Education Digest of Education Statistics, 2008-09

7. *There are two institutions that provide initial teacher training in Guyana: the Cyril Potter College of Education (CPCE) and the University of Guyana's School of Education and Humanities (UG).* The College offers a three year certificate program in Early Childhood Education, Primary and Secondary Education. Successful graduates earn a Trained Teacher Certificate. CPCE has a main campus at Turkeyen (Georgetown) that offers a pre-service program, and 14 satellite centers established throughout the country that provide in-service training via a distance mode for untrained teachers who are already teaching in the system.⁶ The University offers a four year Bachelor's in Education (B.Ed.) which accommodates entrants directly from high school but this has been defunct for many years and as such CPCE is the feeder institution for the School of Education and Humanities. UG also provides a two year Diploma in Education for persons with Bachelor's Degrees who are interested in teaching but do not have pedagogy training, and has re-introduced a Master's degree program in Education.⁷

⁵ To enter the in-service program, untrained teachers must meet the entry qualifications which means passing of four CSEC. Many untrained teachers must take remedial upgrading classes to even qualify, meaning they are teaching without having achieved the basic secondary school exam passes.

⁶ As with other Caribbean countries, Guyana has regularly admitted untrained teachers into the profession to fill vacancy needs, especially in remote regions where qualified candidates and trained personnel are scarce.

⁷ In January 2008, UG launched a one-off Master of Education Program in partnership with Nova South-eastern University and supported by the Basic Education Access and Management Support (BEAMS) Program. There is also a Master's in Education program currently underway.

8. *Teacher training in Guyana takes longer than elsewhere in the region and it is inefficient.* The present model of teacher education in Guyana drags out completion of training, proves to be highly inefficient, and creates vacancy problems. It takes the average teacher seven years of schooling to earn a degree: three at the college and four at the university. A person must first complete the certificate program and then acquire two years of teaching experience before applying for the B.Ed. program.⁸ Although there is overlap in the Certificate and Bachelor's programs, and although the same instructors are often teaching both in the College and at the University, those wishing to pursue a Bachelor's in Education must start from scratch and take the entire four years program. As a result, it takes nine years to obtain a B.Ed. in Guyana, which is about four or five years longer than in most countries.

9. *The quality of teacher training is low.* Upgrading of teacher educators and filling vacancies at both the College and University is of paramount importance. Only five out of the 52 full-time lecturers at CPCE hold a Master's Degree and five more are in the process of obtaining a postgraduate degree. The minimum qualification required for lecturers at this institution is a first degree coupled with five years of experience in a senior position at the school level. On average, distance education (DE) tutors' qualifications are lower than those of CPCE lecturers. Most tutors in this modality are retired teachers with about 15 years of teaching. They receive training in delivery of the DE modules, but they do not necessarily have the qualification or right skill mix to be effective teacher educators. At UG, teacher educators' academic qualifications are higher. About 82 percent of the full-time staff members at Turkeyen Campus hold degrees at or above a Master's level and at the Berbice Campus one lecturer is undertaking postgraduate studies. However, teaching methods both at the university and the college are mainly teacher-centered and do not usually include creative methods of teaching or encourage student teachers' independent learning.

10. *Retaining teachers, especially trained teachers, is a perennial problem for the education sector in Guyana.* Over the last three years 633 trained teachers left the public education system⁹ for various reasons. The average teacher loss is about eight percent annually. This puts pressure on the system and has required that Guyana train more teachers than needed to stem the flow.¹⁰ Better salary options are the main reason for teachers to take jobs in other sectors or to take teaching jobs in other countries. Similar to the nursing profession, recruitment of teachers by wealthier countries is not uncommon in the Caribbean. In response, Guyana has taken measures to provide incentives for teachers to retain them in the profession and in the country. This has come through a variety of means including improving salary and conditions of service for teachers, hardship allowances and housing for teachers in remote areas, and payment of a vacation allowance for special leave after four years of service. The Ministry of Education

⁸ This requirement responds to the need of the MOE to recover the investment on teacher education at the College level since it is free for all individuals and is paid in totality by the MOE. With the start of the Associates Degree in Education (ADE), the policy to require new CPCE graduates to teach for two years before completing the B.Ed. will be discontinued.

⁹ In Guyana, only about two percent of primary schools and four percent of secondary schools are privately funded and the remaining are part of the public education system.

¹⁰ In Guyana 4,838 teachers have been trained over the past five years and 1,818 more should be trained over the next five years (assuming an attrition rate of eight percent a year) to achieve the goal of having at least 70 percent of teachers trained by 2013.

(MOE) is also receiving support under the EFA-FTI to put in place a Continuous Professional Development Program for Trained Teachers (CPD) that would use a flexible, modular approach to keep skills fresh and allow for professional growth.

Government Strategy

11. *One of the main goals of the Government's Education Strategic Plan (ESP) 2008-2013 is increasing the number of trained teachers for quality improvement in education.* The Ministry of Education has clearly stated the goal of having at least 70 percent of teachers trained by 2013. While the goal may be to increase the numbers of trained teachers, if the quality of the teacher education programs is not addressed, the low achievement levels of students will be perpetuated. As Jennings (2008 p.5) states: *"If the practices of the teachers in the schools are to change, those of the College [and University] lectures must also change. Modifications in the curriculum and a change of delivery mode will not by themselves effect the changes desired."*

12. *The Minister of Education is spearheading the efforts to bring both the College and University together to tackle the inefficiencies and ineffectiveness of the present teacher education offered in Guyana.* A Task Force comprised of key officials from the College, UG's School of Education and Humanities, the National Center for Education Resource Development (NCERD) and MOE was established in early 2009. They have produced a concept note for Reforming Teacher Education and Training in Guyana that pulls together a strategy from vision papers produced by both institutions that reflect on the way forward for collaboration and rationalization of a framework for teacher education.

13. In November 2009 a workshop organized by the Bank and the Task Force brought stakeholders from Guyana together to further develop the strategy by articulating the Government's vision, proposed policies, and activities necessary for reforming the delivery of teacher education.

14. As a result of these efforts, the following priorities have been identified for reforming the delivery of teacher education in the Cooperative Republic of Guyana:

- (a) Supporting the collaboration between the Cyril Potter College of Education and the University of Guyana to produce a well articulated, highly competitive teacher education and training program, equal in scope and quality to any within the region. (Upgrading the Teacher Certificate to an Accredited Associate's Degree and corresponding adjustment of the B.Ed. program at UG);
- (b) Building human resource capacity at CPCE and UG to improve the quality of education provided for and by teachers in the education system;
- (c) Improving Science and Technology Education;
- (d) Increasing CPCE and UG's capacity in relation to Information and Communication Technology (ICT) to strengthen their abilities to become true dual mode institutions and integrate ICT into the teaching and learning process; and

(e) Expanding library services and improving research capacity.

15. In the past years, there have been various studies on how to improve curricula and training at the College, however, weak capacity and limited resources have left the implementation of the results of those studies lacking. Now, with high level support (eg. a new Vice Chancellor at UG from the University of West Indies, a new Board of Directors at the CPCE, and the creation of the task force), the timing is finally ripe for both institutions to come together to solve the inefficiencies and quality problems.

B. Rationale for Bank involvement

16. *Improving education quality is one of the main strategic areas of support identified by the International Development Association's Country Assistance Strategy (CAS) for Guyana for the Period FY 2009-12 (Report #47983-GY) discussed by the Executive Directors on May 26, 2009 to assist the Government with its Poverty Reduction Strategic Plan¹¹ (PRSP).* This Project is also consistent with the Pilot CRW objective to provide financial assistance to protect core spending on education at risk as a result of the economic crisis. The Project aims to improve the delivery of teacher education and was formulated in the context of Guyana's Education Strategic Plan (ESP) 2008-13 which centers on developing an education system that is quality oriented and quality driven. A comprehensive teacher training reform will be crucial to achieving the goals of the ESP, universal *quality* primary education and the national target of 70 percent trained teachers nationwide by 2013. To achieve this last goal, Guyana should train 1,818 more teachers over the next five years (assuming an attrition rate of eight percent a year). This investment will only be worthwhile if the education provided to teachers translates into more effective teaching with a positive impact on students' learning.

17. World Bank support to a specifically targeted education Project that cuts across all levels of education and focuses on improving the efficiency and quality of teacher education through reform of the delivery of teacher education would be complementary to the handful of other donor interventions at this time, including the Bank managed EFA-FTI which focuses on access to and completion of a quality primary education. It will also build on newly completed analytical work in Guyana. The Canadian International Development Agency (CIDA) has been instrumental over the past ten years in supporting the creation and delivery of the in-service, distance education program that Guyana is now delivering to teachers at the primary and secondary levels on its own. This is the last year of support from CIDA to complete the distance program at the secondary level, as it has shifted its support towards regional programs rather than specific country programs. UNICEF continues to be a partner, and the Commonwealth of Learning is currently mapping out its engagement with Guyana to provide technical assistance to

¹¹ The PRSP centers on sustaining and accelerating economic growth through enhanced competitiveness and social development. The main challenges for poverty reduction addressed by the PRSP are: (i) protecting the environment and managing natural resources with simultaneous sustainable social and economic development; (ii) managing the sea level rise and changes in rainfall patterns through disaster mitigation; (iii) improving infrastructure to promote growth and private sector development; (iv) improving the quality of education; (v) improving the quality of health services which is hampered by the emigration of skilled health personnel; (vi) deepening governance and modernizing the state, while building on progress already made; and (vii) preventing crime and enhancing citizen's security.

implement UNESCO's ICT Competency Framework for Teachers (ICT-CFT) to improve teacher practices.

C. Higher level objectives to which the Project contributes

18. The CAS 2009-12¹² objective is to support the Government of Guyana (GoG) to accelerate and sustain growth through strengthening environmental resilience and sustainability and improving education quality and social safety nets. **The proposed Project will support the higher order objective of improving the learning achievement of Guyanese school children by advancing the quality and delivery of teacher education.** This objective is consistent with the Government's Education Strategic Plan, 2008-13 which aims to raise the standard of living in Guyana through improving education in its overall effectiveness. According to the Strategic Plan, improving the quality of teacher education will contribute to improving students' learning which in turn will help to develop a citizenry able to modernize Guyana, to become more productive and tolerant, and to live in mutual respect.

II. PROJECT DESCRIPTION

A. Lending instrument

19. The proposed Project will be financed by a Specific Investment Credit (SIC).

B. Project development objective and key indicators

20. The Project development objective is to assist the Recipient to improve the effectiveness and efficiency in the delivery of quality teacher education.

21. The following indicators will be used to measure the Project development objective:

- (a) The time (credit hours) it takes to complete a course of study to earn a Bachelor's Degree in Education is reduced from seven years to four years.
- (b) Eighty percent of teacher educators will fulfill the minimum qualifications of their updated terms of reference now in alignment with delivery of the new Associate's and Bachelor's degree programs.
- (c) The percentage of student teachers scoring at or above 80 percent on their practicum performance assessments reaches 70 percent.
- (d) The percentage of teacher educators scoring at or above 80 percent on their performance evaluations, which includes classroom observation, reaches 75 percent.
- (e) Decline in shortfall of trained teachers at the primary level by 7 percentage points.

¹² The International Development Association's Country Assistance Strategy for Guyana for the Period FY 2009-12 (Report #47983-GY) discussed by the Executive Directors on May 26, 2009.

- (f) The share of males among direct Project beneficiaries will increase from 16 to 20 percent.

22. Expected outcomes of the Project would include: (i) more effective performance of teacher educators and student teachers; (ii) more efficient provision of teacher education (reduced time and more focused content and supervision); (iii) better use of resources and improved management of teacher education programs.

23. The Project's main beneficiaries would be teacher educators and administrators at CPCE and UG's School of Education and Humanities and student teachers enrolled in the new Associate's Degree and Bachelor's Degree Programs in Education. Other beneficiaries would include teachers, in general, as a result of support and training to those participating as mentor teachers in the practicum and induction years. Indirectly, school children would benefit from better trained and effective teachers.

C. Project components

24. Teacher quality is affected by several aspects. According to the UNESCO Global Monitoring Report these are: (i) finding the right recruits for teaching; (ii) initial teacher education; (iii) ongoing professional development; (iv) teacher earnings; and (v) teacher deployment and conditions of service (UNESCO, 2005). Given the multifaceted nature of teacher policy, the Ministry of Education is planning to undertake various concurrent initiatives which collectively will revamp teacher quality in the country. The proposed Project will mainly focus on improving effectiveness and efficiency in the delivery of quality teacher education in Guyana.

25. The Project will be comprised of three components:

Component 1. Improving the quality and efficiency of teacher education delivery (US\$2,646,000, Credit amount US\$1,868,000).

26. This component will focus on the delivery of the newly established Associate's Degree in Education and the Bachelor's of Education (the "2 + 2 model") through: (a) the development of appropriate courses and terms of reference for administrators, faculty, lecturers and tutors at the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities, and their subsequent evaluation based on terms of reference acceptable to the Recipient and the Association; (b) the provision of support for improving the quality and implementation of the practicum for the ADE and B.Ed. programs and designing and implementing an induction year for all Associate Degree graduates; (c) the integration of information and communication technology in the teaching and learning process, and in support of the transition to a dual mode delivery of the initial teacher training programs; and (d) the provision of technical assistance and training, and the acquisition and utilization of goods required therefore.

Component 2. Building Human Resources and Capacity for more Effective Teaching and Learning (US\$1,935,500, Credit amount US\$1,828,500).

27. This component will provide strengthening of the human resources and technical capacity of the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities through, inter alia: (a) the strengthening of the management of the Cyril Potter College of Education and of the University of Guyana's School of Education and Humanities; (b) the strengthening of the quality of teacher educators at Cyril Potter College of Education and University of Guyana's School of Education and Humanities; (c) the improvement of library access and resources to support independent learning and the professional development of teacher educators, student teachers, and teachers; and (d) the provision of technical assistance and training and the acquisition and utilization of goods required for the carrying out of the Project activities mentioned herein, including the carrying out of minor works under the Project activities mentioned in (c) herein as approved by the Association.

Component 3. Communications, Project Management, and Monitoring and Evaluation (US\$540,500, Credit amount US\$503,500).

28. Updating and implementing a public communications campaign to inform stakeholders of potential benefits and changes in education policy and teacher education programs, including a website and communications outreach.

29. Strengthening of the Ministry of Education capacity to administer and oversee Project implementation (including its procurement and financial management capacity), as well as to monitor and evaluate the Project objectives and outcomes, through the provision of technical assistance and training and the acquisition and utilization of goods required therefore.

30. See Annex 4 for additional information on the project description.

D. Lessons learned and reflected in the Project design

31. *Building consensus is essential for institutional reform.* Teacher education reform is far from a linear, technical exercise. Rather it is an untidy and complex work conducted by a variety of people and institutions with diverse perspectives and interests. The Project has been careful to consider the inputs of different stakeholders to help generate consensus and ownership. The MOE, CPCE, and UG are all represented in the Minister's task force for reforming teacher education and the working groups draw from experts at all institutions and from teachers themselves. Focus groups with the teacher's union, CPCE lecturers, UG lecturers, student teachers, and teachers were utilized to influence the right mix of incentives and design structure.

32. *Selecting top achievers into the teaching profession can produce better students' academic achievement.* High academic entry requirements for teacher education help ensure that individuals possess sufficient knowledge on content matter which then becomes essential for good teaching (Duthilleul and Allen 2005, Hanushek 2005). In addition, secondary school students tend to have higher academic achievement in countries where teachers come from the

top third graduates of the school system.¹³ By contrast, education systems where teachers are recruited from the bottom third of school graduates tend to have students with low academic achievement (Barber and Mourshed 2007). Minimum entry requirements to teach education programs in the Caribbean region are five Caribbean Secondary Education Certificate (CSEC) passes. Therefore, the Project will support the policy of upgrading and maintaining entry requirements into teacher training at five CSECs.

33. *Good quality pre-service teacher training can help improve students' learning outcomes.* Several studies show that students with high academic achievement have teachers who have received pre-service teacher training (e.g. Duthilleul and Allen 2005). In the Caribbean countries however, (e.g. Barbados, OECS and Guyana), there is a strong tradition of recruiting untrained teachers. This ensures a continuous supply of teachers into the classroom and helps identify those individuals committed to teaching and worth the investment in pre-service training but, this trend is now changing. For instance, Trinidad and Tobago and Jamaica have acknowledged the disadvantages of placing untrained and unqualified teachers into classrooms and have shifted from on-the-job to mandatory pre-service teacher training models. This Project will support initial teacher training for teachers in Guyana (both pre and in-service). It will also support the improvement of the distance education program to provide quality teacher education to people where they live in advance of their entry into the teaching profession (pre-service via distance education). The MOE will eventually introduce a policy to phase out the recruitment of untrained teachers.

34. *Induction courses¹⁴ can significantly reduce teacher attrition in the early working years.* There is wide consensus that teacher training experiences in classrooms often lead to a 'sink or swim' situation. New teachers without coaching or mentoring are left to learn from their own mistakes with no or very little feedback for improvement. The failure of policy makers and planners to allocate resources directly to improve the practical experience of future teachers has largely contributed to this problem. There is also empirical evidence that shows that newly qualified teachers that have gone through sound induction courses cope better with the first years of teaching and stay in the profession longer (Shwille, et.al., 2007). Well articulated induction courses should, for instance, consider mentor teachers' time (in many occasions they are not released from their full teaching responsibilities), training, remuneration and accountability. This Project will support the articulation and sustainability of a formal induction year for newly qualified teachers exiting the Associates' Degree in Education.

35. *Providing diverse career options in the teaching profession improves teacher retention and quality.* As in other areas, professional development is crucial for teachers. This Project will help the MOE to more formally recognize and support the role of mentor teachers during the student teacher practicum experience and during the induction year.

36. *Resistance to change hinders the implementation of education reforms.* It is well documented that stakeholders affected with education reform could be resistant to change. In this case the Project is demand driven and has been designed with local stakeholders' inputs. This

¹³ This is the case of South Korea, Finland, Singapore and Hong Kong SAR, China countries/provinces, with the highest achievement in PISA.

¹⁴ Structured mentoring and supervision in the first year of classroom teaching.

will reduce the resistance to change. In addition, the day to day inertia of keeping things as they are will be addressed by thorough training, coaching and mentoring during a considerable period of time. A network of schools participating in the practicum will receive special attention and teachers will not only be oriented to the ADE curricula and what student teachers should be demonstrating, they will receive coaching sessions to familiarize themselves to new concepts and methods for delivering the curricula to school children.

37. *Keep Project design simple.* Complex Project design in other Caribbean countries has delayed implementation and effectiveness. Although this Project addresses teacher education which is a complex issue, the Project design was kept as simple as possible.

38. *Outreach and communication is essential* for attracting good candidates into the new teacher education programs and informing stakeholders of the different policies that will affect them. The Project will support the design and implementation of a communications campaign to properly inform stakeholders of policies, opportunities, and how they will benefit.

E. Alternatives considered and reasons for rejection

39. *The Bank team conducted a comparative study of recent reforms in delivery of teacher education in the Caribbean.* The findings were presented to the Government counterparts for discussion, and they helped to shape Project design. The following paragraphs highlight the alternatives considered and the reasons for rejection as per the Guyana context.

40. *Length and structure of initial teacher training.* Teachers in most industrialized countries hold Bachelors' degrees, and many developing countries are following suit¹⁵ (e.g. Trinidad and Tobago). However, the assumption that more years of education alone improve teachers' performance in the classroom is questionable (Tatto, 1997). For instance, Navarro and Verdisco (2000) suggest that upgrading teacher training to university level has not improved teacher quality in Latin America. University degrees are costly and thus the cost-effectiveness of universalizing teacher qualifications to a degree level should be thoroughly reviewed technically and economically. In countries with reduced resources, high rates of untrained teachers and teacher attrition the investment to upgrade teachers up to a Bachelor's level can be prohibitive, at least in the short term.

41. As an alternative, some Caribbean countries (e.g. Barbados and the OECS) have retained post-secondary programs at teachers' colleges and linked¹⁶ them to the Bachelor's in Education at the university level (2+2 model). This allows providing basic initial teacher education up to an Associate's Degree level while giving teachers that wish to do so the opportunity to continue studying a Bachelor's in Education (see Barbados model in Table 2). Under this model the years of study at the Teachers' College are recognized by the University, helping to reduce the number of years that teachers need to obtain a Bachelor's Degree in Education. Teachers are not forced to study the B Ed., but can do so for their professional development. This Project will support the

¹⁵ Upgrading teacher education to a Bachelors degree is perceived to have two positive effects: improve teacher quality and enhance the status of the teaching profession (OAS 2006).

¹⁶ This has created inter-institutional collaboration to smooth transition of students from one level of education to the next (vertical articulation) allowing students to advance through the tertiary education system without unnecessary duplication of their efforts.

implementation of a 2+2 model which will allow upgrading initial teacher education in Guyana from a Certificate to an Associate's Degree level (two compulsory years) while providing the opportunity to complete a Bachelor's Degree in two additional years for teachers that wish to do so.

Table 2. Length and structure of initial teacher training in selected Caribbean countries

Country	Structure	Program	Training institution	Minimum length in a full-time program
Barbados	2+2	Associates degree in Education	Teachers' College	2 years
		Bachelor's in Education	University	3 years (2 years with advance placement*)
Jamaica	3+ 1.5 to 2	Diploma in Teaching	Teachers' College	3 years
		Bachelor's in Education	Teachers' College	1.5 -2 years (after graduating from the Diploma in teaching)
	4		The Mico University College	4 years (2 years if an individual already holds a Diploma in Teaching)
			University of the West Indies (UWI)	3 years (2 years with advance placement*)
Trinidad and Tobago	4	Bachelor's in Education	University of Trinidad and Tobago (UTT)	4 years
Guyana present	3+(2)+4	Trained Teacher's Certificate	Teachers' College	3 years
		Bachelor's in Education	University	4 years
* Individuals can start straight into the second year of the B.Ed. if they hold a Diploma in Teaching or an Associate's Degree recognized by the University of the West Indies (UWI).				

42. *Retaining the Teachers' College instead of subsuming it into the University.* Although most teachers in the Caribbean have been college trained, in some cases (e.g. Bahamas and Trinidad and Tobago) universities have a prominent role in teaching training. Teachers' Colleges concentrate exclusively on teachers' education, and can make teacher training more relevant to classroom realities since they usually have closer ties with schools and their needs. They also tend to emphasize practical training over theoretical instruction which is essential for effective teacher education. However, colleges usually lack a multidisciplinary environment and have less teaching staff with high academic qualifications, as well as less financial and learning resources than universities. University-based education usually offers staff high academic training and research experience, a multidisciplinary environment and sufficient and high-quality teaching resources. Nevertheless, universities tend to emphasize theory rather than practice and are

usually distant from school reality (Lewin and Stuart 2003). The Task Force for Reforming Teacher Education in Guyana has decided to keep both institutions to provide the basic and more practical education for teachers at the College and specialized training at the University. Retaining the College will also help train more teachers at a lower cost, which is essential in the Guyanese context given the high level of untrained teachers in the country. Formal inter-institutional mechanisms of collaboration and communication between CPCE and UG are being introduced to ensure a smooth transition of students from one institution to another.

43. *Teacher education modality.* Distance education teacher training programs allow reaching teachers in remote communities while lowering governments' costs for initial teacher education.¹⁷ They also allow in-service teachers to learn at their own pace and help reach larger audiences in remote areas (Jennings 2009). Distance education in some Caribbean countries, is a popular way of delivering teacher education. Printed self-study guides are the prevalent mode of distance education in the region; however, other resources such as teleconferencing and online delivery programs are now being introduced, especially by the UWI's Distance Education Center (UWIDEC). Guyana's geography and scattered population in the hinterland demands CPCE and UG to deliver good quality programs via distance modalities.

III. IMPLEMENTATION

A. Partnership arrangements (if applicable)

44. The World Bank team has been in discussions with The Commonwealth Secretariat (Com Sec), The Commonwealth of Learning (COL) and Microsoft who began actively engaging with Guyana's education sector in late 2009. The three have partnered together to provide in-kind support to the Government to review and implement an ICT-Teacher Competency Framework Project which aims to improve teachers' practice in all areas of their work, combining ICT skills with innovations in pedagogy, curriculum, and school organization. It is also aimed at the teachers' use of ICT skills and resources to improve their teaching, to collaborate with colleagues, and perhaps ultimately to become innovation leaders in their institutions. The overall objective of the Project is to not only improve teacher practice but do it in a way that contributes to a higher quality education system which can advance a country's economic and social development.

45. In April 2010 a consultant from COL visited Guyana to carry out an environmental scan focusing on teacher development and ICT. The partnership will eventually extend this exercise Caribbean-wide and plans to engage with the Bahamas as the next country. In concert with the Bank Project, they will take a long-term, multi-prong approach to targeting pre-service and in-service education of teachers using the common ICT – Teacher Competency Framework established by UNESCO. Their support will focus on three areas:

- (a) Workshops with Education Leaders to facilitate deployment: Microsoft/Com Sec would help facilitate a workshop using the Education Impact

¹⁷ DE could be a cost-effective way of training teachers. In Sri Lanka a quasi-longitudinal study of three different teacher training programs (a residential pre-service program; a residential in-service program; and a distance education program) showed that the distance education program (which included a face-to-face component) was the most cost-effective strategy to improve teachers' knowledge, skills and attitudes (Tattoo et al. 1991).

(www.educationimpact.net) network of Education Consultants that aims to build capacity and leadership within Guyana to allow them to move forward with implementation.

- (b) Ongoing support for implementation: Microsoft/Com Sec would set up a series of reviews to assess progress and ensure that the changes are moving ahead in an agreed fashion. This would be best done through creating a Technical Advisory Group with broad representation to help provide high level advice and guidance.
- (c) Monitoring/Evaluation and Referencing: As part of the assistance provided by COL/Microsoft/Com Sec, they will set up a Monitoring and Evaluation component launched from the start to measure the change/benefit of using the common ICT – Teacher Competency Framework in teacher education and allow it be documented as a reference.

46. Supporting the ICT Teacher Competency Framework has been carefully coordinated with the Government ICT team, COL/Microsoft/Com Sec and the World Bank. Consultations in April 2010 that coincided with the Bank Appraisal mission assisted the parties to make recommendations for the teacher development process that guided the partnership and World Bank engagements. For the further integration of ICT, the Commonwealth of Learning (COL) has already developed learning materials and training modules that have been used in Asia. These will be reviewed and appropriate parts adapted for Guyana.

47. There is also room for partnership for hardware supply from other donors and private groups. Through a Canadian NGO, Scotia Bank has already supplied a large number of computer equipment that is directed towards secondary schools in an effort to support the Ministry of Education's goal to have all secondary schools equipped with computer labs. The World Bank supported Project will provide computing equipment for the benefit of teacher education at CPCE and UG's School of Education.

B. Institutional and implementation arrangements

48. The Ministry of Education is the main implementing agency. The Cyril Potter College of Education (CPCE) and the University of Guyana's School of Education and Humanities will be beneficiaries of the Project. Through their participation in the Steering Committee they will also provide technical advice to MOE in project implementation.

49. The Project components will be executed over a period from 2010 to 2015. Under the Education Act, Chapter 39 - Laws of Guyana, the Ministry of Education is, inter alia, responsible for: (a) setting, enforcing, and providing resources for the implementation of education policy; and (b) the governance and operations of the teacher training institutions. With the appointment of Boards of Governors to some institutions, some management/operational authority is given to the Boards but the Ministry remains the policy making authority.

50. The CPCE was established in 1928 under the Education Act as the Teachers Training Center (TTC). In 1976 TTC adopted its present name in honor of Cyril Potter, its first Guyanese

principal. Currently the CPCE is a Teacher Training College in Guyana and forms part of the MOE. Students who graduate from CPCE are considered Certified Trained Teachers in Guyana. Its current management structure consists of a Principal, three Vice Principals (Administration, Development and Curriculum) and a Board of Governors with representation from MOE, CPCE and UG. The CPCE has a main campus at Turkeyen, Georgetown that offers a face-to-face program, and 14 satellite centers established throughout the country that provide in-service training via a distance mode for untrained teachers who are already teaching in the system.

51. The University of Guyana was constituted and incorporated pursuant to the University of Guyana Act No. 6 dated April 19, 1963, as amended through Act No. 5 of 1965. Subject to the Act and Statutes, the general governing body is the Council which is chaired by a Chancellor and in the absence of a Chancellor a Pro Chancellor, both of whom are appointed by the Government. The University's main campus is situated at Turkeyen, east of Georgetown. In 2000, a second campus was established at Tain, Berbice, Region 6. The UG's School of Education and Humanities is the main school beneficiary of the Project.

52. A Steering Committee will: (a) assist the MOE in the implementation of a strategy for improving the quality of delivery of teacher education programs; (b) provide overall guidance including technical advice to MOE in the carrying out of the Project; and (c) review the progress of Project implementation and achievement of the Project objectives and outcomes. The members of the Steering Committee will be the following *inter alia*: Permanent Secretary of the Ministry of Education, Chief Education Officer, Chief Planning Officer of the MOE, Dean of UG's School of Education, Chair of the CPCE Board of Governors, Principal of CPCE, Director of National Center for Education Resource Development (NCERD), and the Project Coordinator. The Steering Committee's TORs are included in the Operational Manual. Adoption of an Operational Manual satisfactory to the Association is a condition of effectiveness.

53. The activities proposed under the Project will be considered as part of the everyday work of the MOE, CPCE and UG, hence this does not require the establishment of parallel structure or a specific Project Implementation Unit. They will be responsible for the technical aspects of the Project as well as monitoring of the Project development indicators.

54. A Project Coordinator will be hired and maintained in the MOE's Planning Unit. S/he will be responsible to efficiently and effectively carry out the day-to-day management, monitoring and coordination of project implementation, including procurement, accounting, disbursement, financial management and other Project related activities. The Project Coordinator will coordinate Project implementation among MOE departments, CPCE, and UG's School of Education and Humanities and report to the Steering Committee and the Chief Planning Officer of the MOE.

55. The fiduciary responsibilities will rest with the fiduciary staff that fortify the Planning Unit of the Ministry of Education and handle financial management and procurement for the on-going Education for All Fast Track Initiative (see Annex 6 for further detail).

C. Monitoring and evaluation of outcomes/results

56. The CPCE and UG School of Education and Humanities will be supported and its capacity built to enable adequate monitoring and reporting on the results of the performance assessments for teacher educators as well as student teachers. The Project Coordinator will be responsible for bringing together the reports and authorities at UG, CPCE and MOE for Project monitoring of the Project Development Objective and outcomes.

D. Sustainability

57. *The strong ownership by local stakeholders and their demonstrated commitment to the activities supported by the Project will ensure its sustainability.* There is a clear commitment from the Government to teacher education in Guyana. The MOE invests G\$100 million (approximately US\$487,800)¹⁸ on teacher education annually (GBET Year 10 Work Plan, April 2009) and has set a priority to increase the number of trained teachers in the country from 60 percent to 70 percent by 2013. The two teacher education institutions are also committed to improving teacher education, and have developed strategic plans to improve the quality of teacher education delivery. The Task Force for reforming teacher education has produced a concept note, drawing on the vision papers produced by the CPCE and UG for Reforming Teacher Education and Training in Guyana that reflects on the way forward for collaboration between the institutions and rationalization of teacher education programs. The Project builds upon the concept note to set a solid framework for the delivery of teacher education through the harmonization and rationalization of the present teacher education curricula into a newly created Associates Degree in Education and a corresponding Bachelor's Degree. This framework is recognized and supported by both the College and the University and will provide a long-lasting foundation for improved teacher education programs in the country.

58. CPCE and UG's School of Education and Humanities have been engaged in a close dialogue to coordinate efforts for improving teacher education delivery in the country through implementation of the priority areas of the strategy which the Project will support. Both teacher education institutions have widely participated in the Project design and have shown commitment to advance the efficiency and effectiveness of teacher education programs (e.g. consensus on 2+2 model, improving staff knowledge and skills at both institutions, attracting better secondary school graduates into teaching, etc). The involvement and partnership of both institutions in the Project design has and will continue to build stakeholder ownership of the Project, which will be essential for its sustainability.

59. Within the Project design special attention was placed on financing investment costs. At early stages of the Project some recurrent costs will be supported by the Project while gradually engaging the Government in assuming the responsibility by the end of the life of the Project.

¹⁸ This represents an increment of G\$11 million from the previous year.

E. Critical risks and possible controversial aspects

Description of risks	Risk Mitigation Measures	Risk with Mitigation
Risks to Project Development Objective		
Implementation and institutional capacity. Human capacity constraints remain an issue in Guyana, particularly given the prevailing high emigration rates across sectors. Teacher education institutions also have weak capacity and resources.	The Project is specifically providing support for human capacity building at the CPCE and UG in management and for improving efficiency and effectiveness in provision of education to student teachers in training. The Project (subcomponent 2B) would provide local stakeholders with hands-on, in-situ guidance from recognized experts on a daily basis for executing the implementation of the restructured teacher education programs (ADE and B.Ed.). In addition, international and local consultants will be hired when necessary through the Project to provide technical assistance and conduct analytical work to support the MOE and University of Guyana (UG). The Project will also rely on the Ministry of Education's Planning Unit that has been fortified and trained to carry out the fiduciary aspects of the EFA-FTI Project to manage the fiduciary aspects of this Project.	S
Migration/ brain drain of teachers and teacher educators due to inadequate incentives. Upgrading the quality of teacher education will make Guyanese teachers more marketable in the international arena and could increase their chances to migrate.	The Government will continue to fund the training of more teachers than it needs, taking into account the attrition rate. The MOE in negotiation with the Teachers' Union, continues to work together to offer an adequate and sensible incentives package for recruiting qualified student teachers and retaining skilled teachers. Jointly with EFA-FTI, the MOE is working to improve incentives and working conditions for teachers by providing remote area incentives (RAI) as a hardship allowance and quality teacher housing to those living in rural areas where it is more difficult to recruit teachers.	S
Attracting the right recruits to teacher training will be a challenge. The low quality of secondary school graduates combined with the inadequate incentives and the low social status of the teaching profession could prevent top secondary graduates from choosing teaching as a profession.	The MOE is focusing on improving the general performance of secondary school graduates. This will provide a greater pool of good candidates to all professions, including teaching. The Project will generate more and new incentives that will make the teaching profession more attractive to top secondary school graduates (e.g. upgrading the teacher education programs). The Institute for Continuing and Distance Education (IDCE) an arm of the University of Guyana will also provide a one year foundation program for students who do not satisfy the entry requirements for teacher training and want to become teachers.	M

Description of risks	Risk Mitigation Measures	Risk with Mitigation
Insufficient donor coordination and funding. This Project will rely on leveraging funds from other donors. Delays or poor quality outcomes of other donors could affect the positive impact of the Project.	The Bank team will work in close coordination and collaboration with other development partners/donors as demonstrated by the coordination already taking place with COL/Microsoft/Com Sec. The TTL and Bank Representative will communicate closely with donors during Project implementation period to coordinate efforts and provide representation at Education Thematic Group meetings where donors and Ministry of Education officials discuss strategy and donor support efforts.	M
Risks to component results		
Lack of formal collaboration and communication between teacher education institutions that has led to duplication of efforts and prevented a smooth transition of student teachers from the teachers' college to the university.	The MOE recognizes this situation and has started formal collaboration between UG and the Cyril Potter College of Education (CPCE). This collaborative process will meet the broader objectives of the Ministry of Education, while satisfying the institutional needs and objectives of the entities involved and the students they serve. The Project has brought together stakeholders from CPCE and UG and will help produce well articulated/linked, high quality teacher education programs which are acknowledged and accepted by both teacher training institutions.	M
Guyana's geography demands CPCE and UG to deliver good quality programs face-to-face and via distance modalities. The integration of ICT into the teaching and learning process and the transition to dual mode delivery will require upgrading the existing infrastructure and hardware, increasing access, and appointing the required technical specialists, some of which will be beyond the scope of the resources for the Project.	Other donors (e.g. the Commonwealth of Learning/ Microsoft/ Commonwealth Secretariat) are also collaborating with Guyana to improve capacity for use of ICT in teaching. The Bank will support upgrading hardware at the computer labs at CPCE, production of software for learning, and training under the ICT component. The Project will also offer a subsidy program for Distance Education students and tutors so they can purchase discount Netbooks that will aide in their teaching and learning. The Government will be the main driver for bringing broadband connectivity across the country. Several Satellite centers already have DSL connection but the broadband would enable faster transmittal and more reliable connectivity. The Project will act as a catalyst to leverage other funds for ICT in teacher education from other development partners and private firms. The Government will absorb the recurrent	S

Description of risks	Risk Mitigation Measures	Risk with Mitigation
	cost (e.g. connectivity costs) to make teacher education Distance Education programs sustainable.	
Failing to find, train and retain the right number and mix of managerial and teaching staff with sufficient qualifications and training to deliver the teacher education programs.	The Project will build human resource capacity at both teacher education institutions. This will involve evaluation and support to upgrade teacher educators and administrative staff to adequately implement the revised teacher education programs. Teacher educators that show potential will be targeted to build up the cadre of top quality faculty and lecturers at the College. For staff with shortcomings, training and mentoring will be provided under the Project to improve their skills. The CPCE Board has also developed a proposal (subject to the approval of Government) for increasing teacher educators' salaries and other incentives in order to attract and retain the best.	M
Revision of TORs and evaluation of staff at CPCE and UG may produce anxiety for personnel.	The evaluation of staff at teacher education institutions has been presented as a tool to improve teaching performance and for providing teacher educators with adequate training and remuneration. The purpose of the evaluation is to identify weaknesses and provide capacity building to address those areas.	M
Overall risk rating		M

F. Credit conditions and covenants

60. **Conditions of Effectiveness:** Given the shortened period for Project preparation in order to take advantage of IDA funds available through the Pilot Crisis Response Window (CRW), there will be the following conditions of effectiveness: (a) the Steering Committee shall have been established in accordance with the TORs; (b) the Project Coordinator, the Assistant Accountant to the MOE Planning Unit and the Assistant Accountant to the CPCE shall have been hired following Bank procedures and in accordance with the approved TORs; (c) the final Operational Manual shall have been completed, approved by the Bank, and adopted by the Recipient. GoG has made significant progress already towards meeting each one of the conditions of effectiveness.

61. Covenants applicable to project implementation:

- (a) The Recipient shall: (i) establish and thereafter maintain, until completion of the Project, a committee (the Steering Committee) with functions and responsibilities satisfactory to the Association; and (ii) assign the Steering Committee with such resources as shall be required to enable the same to carry out its functions and responsibilities.

- (b) The Recipient shall (i) hire a Project coordinator, an assistant accountant to be assigned to the MOE Planning Unit, and an assistant accountant to be assigned to the CPCE, all with qualifications, experience and terms of reference satisfactory to the Association; and (ii) maintain, until the completion of the Project, the personnel mentioned in (i) above, as well as a finance officer and a procurement officer, all with qualifications, experience, and terms of reference satisfactory to the Association.
- (c) The Recipient shall adopt a manual (the Operational Manual) in a manner acceptable to the Association, and thereafter carry out the Project in accordance with the provisions of said Operational Manual.

IV. APPRAISAL SUMMARY

A. Economic and financial analyses

62. An economic analysis was carried out to estimate the costs and benefits associated with the Project, and it measures the cost-efficiency of the Project and its impact on Government finances (see Annex 9). The reduction in the number of years to obtain the ADE and the B.Ed. will reduce the cost of teacher education for the Government and for prospective teachers. The Project should lead to a significant decrease in the length of study for prospective teachers. This will reduce the total cost of training teachers for the Government, which bears most of the cost of teacher education. These savings will occur even though the cost of a year of education will increase under the reform due to improvements in quality. The analysis was carried out through a number of scenarios to measure possible changes in costs or changes in the demand for teacher education. From the Government's perspective, the net present value of the Project (with a five percent discount rate) ranges from US\$3.1 million to US\$15.7 million. The rate of return ranges from 13 to 36 percent. When fully implemented, the Project will generate savings ranging from US\$0.6 to US\$1.8 million per year, depending on the changes in costs and the participation in both programs. This shows that the Project is a good investment for the Government and is sensitive to how the cost of teacher education changes and how the demand changes in response to the reform.

63. The Credit will be financed in accordance with current IDA policies and should not have a major impact on Guyana's debt situation. The country has recently restricted its debt, reducing the share of debt in the economy. In addition, economic performance in recent years has been adequate and reflects sound management.

B. Technical

64. The Project design is based on international experiences in teacher education as well as in country-specific needs. A comparative study was conducted by the Bank team to analyze good practices and lessons learned from teacher education reform experiences in the Caribbean (Jamaica, Barbados, and Trinidad and Tobago). International experiences in teacher education drawn from the World Bank's analytical work worldwide were also considered. While the international trend in teacher education (especially among industrialized countries) has been to upgrade teacher qualifications to a Bachelor's degree level, the Project design follows a teacher education framework that complies with regional standards (e.g. upgrading the Trained Teacher

Certificate to an ADE), and at the same time addresses the country need for educating teachers in a shorter period of time while raising quality. The Project design also provides the opportunity to complete a B.Ed. course after graduating from the ADE for teachers that wish to do so.

C. Fiduciary

65. The fiduciary aspects of the Project would be carried out by the fiduciary staff from the EFA-FTI Program. They were hired to fortify the Planning Unit (PU) of the MOE to handle financial management and procurement aspects of program execution.

66. **Procurement:** The overall risk for procurement at the Project level is considered Low. This was confirmed during the appraisal mission on May 6, 2010 and is in accordance with a Procurement Capacity Assessment carried out by desk review following an in-country post review in January 2010 of the EFA-FTI which is implemented by the MOE. The proposed arrangement for procurement implementation under the Guyana Improving Teacher Education Project is to have the Procurement Specialist from the EFA-FTI team handle procurement for the new Project. The team has a well functioning Procurement Specialist who has experience in procuring works, goods and services. Civil works under the EFA-FTI Program has been handled by a well qualified civil works engineer and assistants. The team has prepared the procurement section of the Operations Manual and a procurement plan for the proposed Project.

67. **Financial Management:** The Project's financial management will be handled by the PU's core fiduciary team for EFA-FTI comprising a Finance Officer with a degree in Accounting and over 10 years of experience and two Accounting Clerks. One of the Accounting Clerks has a degree in Accounting and has over four years of experience and the other, who has extensive experience outside of the MOE, was hired in the last year to alleviate the high work load of the current financial management team at the PU partly as a result of the geographical span of the EFA-FTI Program. It is recommended that the PU hire an Assistant Accountant, prior to the effectiveness of the Project, who would work under the guidance of the Finance Officer exclusively on the new Project. The PU will utilize the accounting and financial management systems (Quickbooks and access-produced IFRs) that have worked quite well for the EFA-FTI Program in Guyana. The team has produced a Financial Management Section of the Operations Manual. Interim Unaudited Financial Reports (IFRs) would be prepared and sent to the IDA every quarter by the PU.

68. While the fiduciary responsibilities and reporting for the Project will lie with the financial staff of the PU, it is recommended that CPCE's capacity for basic accounting be strengthened with the hiring of an Assistant Accountant and the installation of a simple accounting package (e.g. QuickBooks). This will facilitate CPCE's financial accounting. In line with Subcomponent 2A–Strengthening Human Resources and Capacity, it will also improve management and financial planning at the CPCE.

69. The financial management systems of the Bursar's office at UG are satisfactory. A number of measures have been included in an action plan which, if implemented properly and in a timely manner would enable the financial management arrangements under the Project to meet fully the

IDA's requirements. Details of the proposed financial management arrangements and required actions can be found in Annex 7.

D. Social

70. The Project is not associated with any social safeguard risk and no World Bank social safeguards are triggered. At the same time, from the onset, the Project has sought to address social and gender factors relevant to the operation as well as potential distributional impacts and risks, so that benefits will be delivered equitably and inclusively. Social and gender factors are important to consider and address in each of the Project's three components. A social assessment was carried out during preparation to analyze the potential social and gender impacts of the Project on stakeholders and beneficiaries. It was based on a gender analysis, a stakeholder analysis, and extensive consultations with administrators, faculty, and students at the two institutions that provide initial teacher education in Guyana. The findings were used to inform Project design and implementation plans for the activities financed by the Project (see Annex 10).

71. Key social factors related to improving teacher education are: (i) access to resources including learning skills and quality delivery, (ii) regional disparities in education service delivery (iii) improving institutional capacity, (iv) sharp differences in labor participation by gender, (v) empowerment in terms of assets, participation and capacity, and (vi) equity and inclusion.

72. Analysis suggests that developments achieved by supporting the improvement of the quality and efficiency of teacher education delivery, by building human resources and capacity for greater learning effectiveness and by strengthening institutions in Guyana, are likely to have different impacts on stakeholders across different demographics. Project beneficiaries will be monitored and evaluated in accordance with IDA-supported investment Project procedures (see Annex 10).

E. Environment

73. This Project has an environmental category C rating. It is expected to be neutral on the environment or marginally positive through an increased awareness for the importance of the environment through a greater level of education and training of teacher educators and teachers.

74. Works under the Project are not envisaged other than minor rehabilitation of the library to introduce a research room, and computer laboratories at the CPCE and UG Turkeyen campuses. This would consist of items such as installation of an air conditioning unit(s), a partition wall, and security bars for the library and labs, and additional electrical outlets. The estimated cost is expected to be well under US\$100,000 per contract. The Operational Manual will include environmental guidelines for small works.

F. Safeguard policies

75. The Project is not associated with any safeguard risk and there are no safeguard policies triggered.

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	☐	X
Natural Habitats (OP/BP 4.04)	☐	X
Pest Management (OP 4.09)	☐	X
Indigenous Peoples (OP/BP 4.10)	☐	X
Physical Cultural Resources (OP/BP 4.11)	☐	X
Involuntary Resettlement (OP/BP 4.12)	☐	X
Forests (OP/BP 4.36)	☐	X
Safety of Dams (OP/BP 4.37)	☐	X
Projects on International Waterways (OP/BP 7.50)	☐	X
Projects in Disputed Areas (OP/BP 7.60)*	☐	X

* By supporting the proposed Project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.

G. Policy Exceptions and Readiness

76. The Project does not require any exceptions from Bank policies.

77. The Project meets the Regional criteria for readiness for implementation.

78. Fiduciary arrangements are in place. Both procurement and financial management capacity assessments have been completed and arrangements agreed. The relevant fiduciary sections of the Operational Manual were reviewed at appraisal and have been completed for negotiations. An access system is being adapted based on the model used for the EFA-FTI for production of IFRs. The Procurement Plan covering the first two years of the project was reviewed and adopted at negotiations.

79. Project Staff and consultants have been mobilized. Core, fiduciary Project staff are in place (Finance and Procurement Officers). A Project Coordinator and two Assistant Accountants will be hired in accordance with TORs approved by the Bank and as a Condition of Effectiveness.

80. Counterpart funds have been identified and agreed. Final costs will determine counterpart responsibilities. Counterpart contributions in the area of US\$1.0 million were reviewed during appraisal and upon request from the Ministry of Finance have been pared back to US\$600,000. The counterpart contribution for US\$600,000 was confirmed at negotiations and counterpart funds will be budgeted accordingly for 2011.

81. TORs for consultants to be hired during the first year of the Project will be part of the Operational Manual to be adopted by effectiveness. For goods and small works the Bank's standard bidding documents will be used.

82. Disclosure requirements. Pursuant to the World Bank Policy on Access to Information, the Association will disclose the Project Appraisal Document, the related legal agreements and other information related to the legal agreements, including any supplemental letters. The Recipient confirmed at negotiations that the Association may publicly release the final version of the PAD before the operation is considered by the Association's Board of Executive Directors.

83. Results Assessment Arrangements have been completed. Targets and results assessment arrangements have been agreed and M&E reporting obligations and instruments were vetted and agreed with the MOE, the CPCE Principal, and UG's School of Education and Humanities.

Annex 1: Country and Sector or Program Background

GUYANA: Improving Teacher Education

A. Country overview

1. **Guyana is laying the foundations for democracy, macroeconomic stability and pro-poor growth, however challenges remain.** Guyana is a democratic country since 1992, and the last general elections (2006) were peaceful. In 1997 and 2001 elections resulted in civil unrest, and the main political parties are still divided along ethnic lines. Guyana, with an estimated GDP per capita of US\$1,460 in 2009,¹⁹ has reaped some benefits of the recent boom in investment and favorable terms of trade: GDP grew above five percent in 2006 and 2007 consecutively; nevertheless, economic growth in Guyana has slowed down in the last three years due to weakened commodity prices including European Union price cuts for a key commodity (sugar), and the global financial crises²⁰. Similar contrasts occur in poverty and human development indicators. Poverty has decreased in the last two decades in the country. In 1992 moderate and extreme poverty rates were of 43.2 percent and 28.7 percent, respectively, whereas in 2006 these rates dropped to 36.1 percent and 18.6 percent, respectively. Poverty-related spending continues to exceed 20 percent of GDP and significant progress has been achieved on the Millennium Development Goals (MDGs) related to women's empowerment, hunger reduction and achieving universal primary education (CAS 2009-12 discussed by the Board on May 26, 2009).²¹ However, Guyana still ranks 114 out of 182 countries in the Human Development Index (UNDP, 2009). It is the second poorest country in the Caribbean region (only after Haiti), and the disparities between urban and rural areas are striking: 70 percent of the Amerindian population²² (mostly living in the hinterland) is poor.

2. **Migration in Guyana is high and has mixed effects on its socioeconomic development.** With an estimated annual migration rate of two percent, Guyana is the greatest recipient of remittances as a share of GDP in Latin America and the Caribbean (in 2007 about one third of the population received remittances, amounting to a quarter of GDP). Remittances are an important safety net and can have positive effects on education²³ (CAS 2009-12 discussed by the Board on May 26, 2009, p.10). However, migration makes difficult to retain qualified and skilled human resources in the country which are essential for its development. Between 35 to 55 percent of Guyanese are living abroad and over 80 percent of those with tertiary education reside overseas (Migration and Remittances Factbook 2008).

¹⁹ Guyana's population is estimated at 763,200 people by the Government of Guyana/Bureau of Statistics.

²⁰ The financial crisis has contributed among others to weakened sugar, rice, timber, bauxite, and gold exports; and has lowered workers' remittances and reduced foreign direct investment.

²¹ The International Development Association's Country Assistance Strategy for Guyana for the Period FY 2009-2012 (Report #47983-GY) discussed by the Executive Directors on May 26, 2009.

²² The Amerindian population represents 9.2 percent of the total population and is mainly located in the hinterland areas (Regions 1, 7, 8 and 9).

²³ For instance, households receiving remittances are more likely to keep their children at school.

B. The Education Sector in Guyana

3. Guyana's education system is recovering from years of underinvestment experienced in the 1980s. The country used to be a top performer in the Caribbean until the period of political instability in the 1970s, followed by an economic decline and resulting period of fiscal adjustment from the 1980s through the early 1990s. Although the country has been steadily recovering from these events, the negative impact of underinvestment in education during those years has been difficult to overcome. The education budget as a share of GDP has risen from 2.1 percent in 1991 to seven percent over the last seven years. This level of investment demonstrates the Government's commitment to education as a national priority. In the same period, education as a percentage of the national budget has risen from a low of 4.4 percent to an average of 15 percent.

4. Guyana has practically achieved Universal Primary Education (UPE). The education system has been able to attract and retain students at the primary school level. The country has already accomplished a full primary completion rate (103.6 in 2006), well before the 2015 MDGs' deadline. National gross enrollment rates in primary schools also average the upper 90s. UPE targets have been mainly met due to the significant gains in primary education coverage on the hinterland area in the last years. Access to primary schooling in the hinterland increased from 77.9 percent in 2001 to 94 percent in 2006-7 (Demas and Sanchez, 2008 p.8). Although Guyana has widely improved access to secondary education and is making great strides towards achieving Universal Secondary Education (USE), it has not yet achieved it. The gross national enrollment rate for secondary education is 87 percent.

5. Quality of education remains the main challenge for the education sector in Guyana. Although quality of education has improved slightly in the last years²⁴ (due to the concerted effort of the Government of Guyana and the Education For All-Fast Track Initiative (EFA-FTI²⁵), student academic achievement remains low. An Early Grade Reading Assessment²⁶ (EGRA) piloted in Guyana during the 2008-09 school year (targeting students in grades 2 to 4) revealed that students know almost all of their letters, but not the sounds the letters make, an essential step in learning how to read. In the full sample of 2,700 children over 60 percent could not read a single word in the first line of a simple paragraph. At the secondary school level, students learning outcomes are also poor. In 2009 only 52 percent of the students that presented for the Caribbean Secondary Education Certificate (CSEC) obtained pass rates in English²⁷ and 31 percent did so in mathematics.

6. Considerable education disparities between the hinterland and the coastal region persist; however, some progress has been made on closing this gap. The Amerindian population (located mainly in the hinterland) has less access to good quality education than the rest of the population. The quality of education provided to communities in remote areas is

²⁴ For instance, repetition rates have dropped from 2.4 in 1999-2000 to 0.8 percent nationally in 2008-09 and primary student to trained teacher ratios have dropped from 53:1 to 40:1 in the same period.

²⁵ Guyana's EFA-FTI is a USD\$32.9 million program supported by the FTI Catalytic Trust Fund and administered by the World Bank. Its goal is to achieve universal quality primary education in the country by 2015.

²⁶ EGRA is a diagnostic instrument used to rapidly assess student acquisition of reading skills. It was developed by Research Triangle Institute (RTI) of Washington, DC and customized for use in Guyana.

²⁷ This indicator is for English A General Proficiency Exam from the May-June 2009 sitting.

below national standards. Repetition and drop-out rates in primary are considerably higher in the hinterland areas. For instance, in the school year 2008-09 the repetition rates averaged 4.2 percent for the hinterland whereas the national average was 0.8 percent. Secondary students in hinterland regions also underperform in most subjects (including math, English, science and social studies). However, the Government with the support of the EFA-FTI has put considerable efforts to counter educational inequalities. EFA-FTI focuses on the underserved students by: i) improving the quality of the teaching force in the hinterland; ii) enhancing the teaching/learning environment and; iii) strengthening school/community partnership. Teachers in the hinterland have also seen improved their conditions of service through remote area incentives and housing provided by the GoG in coordination with EFA-FTI. Learning resource centers have also benefited teachers in remote areas and teachers' distance education will soon be supported through EFA-FTI.

Table 1. Measurement of Indicators Separated by Coastland and Hinterland

Primary School Averages	Baseline 1999-2000	Latest 2008-09
Primary Completion Rate (PCR)	85.5	102.4
Coastland	87.8	101.8
Hinterland	64.8	106.9
Repetition Rate	2.4	0.8
Coastland	1.5	0.3
Hinterland	9.6	4.2
% Trained Teachers	50.5	63.9
Coastland	52.9	68.3
Hinterland	31.5	38.3
Student to Trained Teacher Ratio	53.0	40
Coastland	50.9	37.3
Hinterland	80.6	71.0

Source: MOE, Digest of Education Statistics, 2008-09. Demas, Sanchez. 2008. EFA-FTI Guyana summary documentation p. 8)

7. **Low quality of education is largely the result of poor teaching.** Research has shown that good teachers are vital for improving the quality of education (e.g. Henevald and Craig 1996, Leu 2004 and 2005). In Guyana many teachers enter and remain in the profession without the necessary academic qualifications and/or professional training. In 2007-08 about 40 percent of nursery, primary and secondary school teachers (on average) remained untrained. In addition, many trained teachers continue to use traditional (teacher-centered) methodologies to deliver the curriculum which prevent students from constructing independent and meaningful learning. These problems have been identified as primary contributors to low student achievement in the country. Therefore, teacher education and training has been placed squarely at the forefront for addressing ineffective teaching and low quality of learning in the classroom.

8. **Students in the hinterland and riverain regions have the least prepared teachers.** In 2008-09 the student to trained teacher ratio (STTR) for primary schools in the hinterland were considerably higher (71:1) than for the national average (40:1), however the hinterland has experienced a significant increase in the number of trained teachers over the last nine years as illustrated by the drop in STTR since the 1999-2000 school year (MOE Digest of Education Statistics 2008-09). As an outlier even among the hinterland regions, Region Eight presents the most difficult geographic challenges and has a student to trained teacher ratio for primary school

at 140:1 which is significantly higher than any other region. This could be explained by the lack of a distance education teacher education program in this region. In the 2008-09 academic year, out of the 553 primary school teachers in the four regions comprising the hinterland area (One, Seven, Eight and Nine) 341 remained untrained and of those 136 were not qualified to enter training since they do not have the minimum academic requirements for entering. (MOE Digest of Education Statistics 2008-09). In recent years, the MOE has made a considerable effort to upgrade teachers in remote areas so they can enter training programs. The number of unqualified and untrained teachers has decreased by more than 40 percent in the last eight years. This means that hundreds of hinterland primary teachers (who had less than four passing scores on the CSECs or an incomplete secondary education) have been upgraded to reach the minimum qualifications to enter a formalized teacher education program (Demas and Sanchez, 2008).

C. Description of teacher education delivery in Guyana

9. **The Cyril Potter College of Education (CPCE)** is the only teachers' college in Guyana. The College offers a three year certificate program in Early Childhood, Primary and Secondary Education²⁸. Successful graduates earn a Trained Teacher Certificate which qualifies them as trained. However, the Teacher's Certificate granted by the college is not yet at the same level and quality as an Associate's Degree. CPCE has a main campus at Turkeyen (Georgetown) that offers a face-to-face program, and 14 satellite centers established throughout the country that provide in-service training via a distance mode for untrained teachers²⁹ who are already teaching in the system³⁰. In recent years, enrolment and graduation rates (per year) have increased considerably (see Table 2 for enrollment).

Table 2. Number of Students CPCE

	2007	2008	2009
Total number of Students	1490	1562	1967
Number of In-service students	910	877	1128
Percentage of In-service students	61.07%	56.15%	57.35%
Average percentage of in-service students 2007, 2008 and 2009.	58.19%		

²⁸ Special Education Needs has been introduced as a major for early childhood and primary school teacher trainees that want to further specialize in this area. Secondary school teachers specialize in two academic or pre-vocational subjects.

²⁹ To enter the in-service program, untrained teachers must meet the entry qualifications which means passing of four CSEC. Many untrained teachers must take remedial upgrading classes to qualify, meaning they are teaching without even having completed the basic secondary school exam passes. To address this issue, the National Center for Educational Resource Development (NCERD), the Adult Education Association (AEA) and the Institute of Distance and Continuing Education at UG (IDCE) offer upgrading programs for admission into CPCE. Unqualified practicing teachers have been given three year deadlines to obtain their four CSEC passes and enroll in teacher training courses. In most Caribbean countries the minimum entry requirement for teacher training is five CSEC passed subjects. However, CPCE has been forced to temporarily reduce this requirement considering the low numbers of secondary students (especially in remote areas) who obtain five CSEC passes.

³⁰ Therefore, initial teacher's education in Guyana, refers to both pre and in-service programs. As with other Caribbean countries, Guyana has regularly admitted untrained teachers into the profession to fill vacancy needs, especially in remote regions where qualified candidates and trained personnel are scarce.

The Distance Education Program

10. Distance education has been critical for upgrading unqualified teachers and expanding teacher training in the country especially in remote areas. The Guyana Basic Education and Teacher Training Project (GBET) supported by the Canadian International Development Agency (CIDA)³¹ offers a three-year in-service (distance education) program for teachers who live in hard to reach areas and are usually employed full-time. GBET allow these teachers to obtain a Trained Teacher Certificate in Early Childhood (EC) and Primary Education. Starting in 2008 the program was further developed to offer distance training for secondary school teachers in four academic subjects (English, Mathematics, Science and Social Studies). There are 970 successful graduates from the DE Trained Teacher Certificate Program in EC and Primary and 349 unqualified teachers from regions one, two, seven, eight and nine have been upgraded through the GBET Distance Education Foundation Program.

11. Teacher trainees undertaking the GBET program are coached by tutors that receive three weeks of training at the beginning of each academic year. The program relies on printed self-study materials and face-to-face sessions. Some studies (e.g. Jennings 2009) show that GBET's study materials are relevant³², of good quality and usually arrive on time for trainee teachers to use. However, some challenges remain. For instance, teachers do not always find the time to read the materials before face-to-face sessions; recruiting and retaining well-trained and motivated GBET tutors is difficult; and not all regional resource centers are in good condition, well equipped, and accessible to all teachers enrolled in the program. It has also been suggested that the introduction of information and communication technologies (ICT) could help improve GEBT (Fernandez 2004). Nevertheless, ICT will only be useful if it is accompanied by the necessary infrastructure, hardware, software and technical support for teacher educators and trainees.

University of Guyana

12. The University was created in 1963 and up to 2008 had produced 26,771 graduates, mainly for undergraduate programs. The University's main campus is situated at Turkeyen, east of Georgetown. In 2000, a second campus was established at Tain, Berbice (Region 6).

13. The tuition fees which are the largest contributor to the university's income³³ have remained unchanged (at G\$127,000³⁴ for national students annually) since their

³¹ The Project implementation began in 1999. The first face lasted for five years (until 2007) and then GBET was expanded for two more years. CIDA will pull out its financial assistance from the project in March 2010 and the GoG will take full responsibility for it.

³² GBET has involved local teachers for adapting and making the CPCE curriculum relevant to the Amerindian communities it reaches.

³³ In 2007/2008 about 55% of the University's total income came from tuition fees. In this year the university total income was of G\$1,272 million (approximately US\$6,176,256) (UG, Strategic Plan 2009/2012). In addition, there have been years where the University's capital and recurrent expenditures have been greater than the provisions received from the Government for these purposes.).

introduction in 1994. UG's Strategic Plan (2009-2012)³⁵ recognizes that low tuition fees have contributed to the financial detriment of the institution and plans to introduce a new tuition fee structure on 2010.

14. One of the main weaknesses of the University is to offer uncompetitive remunerations for staff, which leads to rapid turnover and poor ability to attract well qualified personnel. Several actions have been considered to improve teaching staff performance and retention: i) training programs for lecturers to improve program delivery; ii) incentive driven programs for staff engagement in distance and on-line delivery; iii) supporting teaching staff to obtain higher degrees; iv) adjusting full time staff; and v) aligning teachers' emoluments with competing market value of corresponding skills and revision of incentives including retirement and pensions (UG Strategic Plan 2009-2012).

Teacher education at the University of Guyana

15. UG's School of Education and Humanities delivers several teacher education programs. The Bachelor's in Education (B.Ed.) is undertaken by in-service teachers that have graduated from CPCE and lasts four years. The Bachelor is divided in two sections: i) the Certificate in Education which comprises the first two years of the program and the Bachelor's in Education that account for the remaining two years. Students undertaking the B.Ed. can specialize in Nursery Education, Primary Education, Educational Administration, Agriculture, Business Education, English, Geography, History, Home Economics, Mathematics, Modern Languages, Science, Social Studies, Teaching and Reading and Technical Education.

16. The Division of Education also offers a two-year (part-time) Diploma in Education for untrained graduate teachers (e.g. secondary school teachers with a Bachelor in the subject they teach but without pedagogical training). A Diploma in Educational Administration for school principals is also available. In addition, the SEH has introduced Master's degrees in Education³⁶, but no doctoral programs in education, as most of the few available resources in the university are channeled to teaching, not research.

17. In 2008 the Division of Education had 252 graduates from which the majority obtained a Bachelor's in Education in Primary Education (36) or Early Childhood (28). In contrast only one student graduated from the B.Ed. in Science (see Table 3).

³⁴ This tuition was calculated based on the cost of training each student which at the time was of USD\$1,000. However, the value of the Guyana's Dollar has decline against the US Dollar and now the same G\$127,000 is equivalent to US\$618.8 approximately.

³⁵ The Plan foresees a university that consolidates its curriculum in a manner that reflects the needs and constrains of Guyana and is in a trajectory to a Center of Excellence for the delivery, administration and management of tertiary programs and research. The plan centers on four strategic areas: i) curriculum, ii) governance and administration, iii) finance, and iv) plant and equipment.

³⁶ For instance, in January 2008 the UG launched a one-off Masters of Education Program in partnership with Nova Southeastern University and supported by the Basic Education Access and Management Support (BEAMS) Project.

Table 3. Graduates in the Division of Education (2008)

No.	Specialization	Number of Students				
		Cert. Ed.	B. Ed.	Dip. Ed.	Total	%
1	Administration	10	10	10	30	11.9
2	Agriculture	7	6	0	13	5.2
3	Business Studies	0	2	0	2	0.8
4	Early Childhood	22	28	0	50	19.8
5	English	5	2	4	11	4.4
6	Home Economics	9	4	0	13	5.2
7	Mathematics	1	6	6	13	5.2
8	Primary	40	36	0	76	30.2
9	Reading	19	3	0	22	8.7
10	Science	0	1	7	8	3.2
11	Social Studies	5	2	4	11	4.4
12	Technical Education	1	2	0	3	1.2
	Total	119	102	31	252	

18. **Continuous Professional Development for trained teachers.** Given the lack of trained teachers in the country the focus has been on delivering initial teacher education rather than in providing continuous professional development for teachers. However, the National Center for Education Resources Development (NCERD) has started providing distance education courses on school management, and offers two specialized courses in English and Mathematics for secondary school teachers with the assistance of GBET. In addition, a number of new courses are being currently developed at NCERD as part of the introduction of a continuous professional development for trained teachers program which is supported by the EFA-FTI program.

D. Teacher Education challenges

19. **Teacher training in Guyana takes longer than elsewhere in the region and it is inefficient.** The present model of teacher education in Guyana elongates completion of training, proves to be highly inefficient, and creates vacancy problems. It takes the average teacher seven years of schooling to earn a degree: three at the college and four at the university. A person must first complete the certificate program and then acquire two years of teaching experience before applying for the B. Ed. program. Although there is some overlap in the Certificate and Bachelor's programs, and although the same instructors are often teaching both in the College and at the University, those wishing to pursue a Bachelor's in Education must start from scratch and take the entire four years program. The perception that the quality of graduates from the College is low has perpetuated this requirement. As a result, it takes nine years to obtain a B. Ed. in Guyana, which is about four or five years longer than in most countries.

20. **The quality of teacher training is low.** Upgrading of teacher educators and filling vacancies at both the College and University is of paramount importance. Only five out of the 52 full-time lecturers at CPCE hold a Master's Degree and five are in the process of obtaining a postgraduate degree. The minimum qualification required for lecturers at this institution is a first degree coupled with five years of experience in a senior position at the school level. On average,

distance education tutors' qualifications are lower than those of CPCE lecturers. Most tutors in this modality are retired teachers with about 15 years of teaching. As mentioned earlier DE tutors receive training in delivery of the DE modules, but they do not necessarily have the qualification or right skill mix to be effective teacher educators. At UG teacher educators' academic qualifications are higher. About 82 percent of the staff members at Turkeyen Campus hold degrees at or above a Master's level and the remaining teaching staff are currently engaged in post graduate studies. On the other hand, at UG's Berbice Campus just one lecturer is undertaking postgraduate studies and the rest only have a first degree. However, teaching methods both at the university and the college are mainly teacher-centered and do not usually include creative methods of teaching or encourage independent learning.

21. Retaining teachers, especially trained teachers, is a perennial problem for the education sector in Guyana and hinders the quality of education. Over the last three years 633 trained teachers left the public education system³⁷ for various reasons. The average teacher loss is about 8 percent³⁸ annually. This puts pressure on the system and has required that Guyana train more teachers than needed to stem the flow.³⁹ In addition, the Government continues to recruit unqualified individuals into the teaching profession and/or relies on volunteers to provide their services as teachers in remote areas⁴⁰. Better salary options are the main reason for teachers to take jobs in other sectors or to take teaching jobs in other countries. Similar to the nursing profession, recruitment of teachers by wealthier countries is not uncommon in the Caribbean. In response, Guyana has taken measures to provide incentives for teachers to retain them in the profession and in the country. This has come through a variety of means implemented by the Ministry of Education (MOE) with support of the EFA-FTI including improving salary and conditions of service for teachers, hardship allowances and housing for teachers in remote areas, and payment of a vacation allowance for special leave after four years of service. A Continuous Professional Development Program for Trained Teachers (CPD) that would use a flexible, modular approach to keep skills fresh and allow for professional growth is also being put in place. All these measures have contributed to a small but steady increase in the average years of teachers' experience from 7.8 in 2002 to 9.4 in 2006 which reflects a small raise in qualified teachers' retention (CAS 2009-12 discussed by the Board on May 26, 2009).

³⁷ In Guyana, only about two percent of schools are privately funded and the remaining 98 percent are part of the public education system.

³⁸ Other data indicates that the percent of trained teachers leaving the country is at the rate of 12 percent annually.

³⁹ In Guyana 4,838 teachers have been trained over the past five years and 1,818 more should be trained over the next five years (assuming an attrition rate of eight percent a year) to achieve the goal of having at least 70 percent of teachers trained by 2013.

⁴⁰ In 2007 a Nation Volunteering Teacher Program was piloted in eight schools in Regions one and nine and in 2008, the Voluntary Service Overseas (VSO) and Youth Challenge Guyana (YCG) sent a batch of 12 volunteers to the same regions. The MOE has partnered with these two institutions to increase the number of volunteers in the program. In this academic year (2009-2010) 21 volunteers were placed in schools in Regions one, seven and nine. Volunteers need to have four subjects CSEC at one sitting (including English and Math) and receive one month of training. Volunteers are entitled to G\$30,000 (approximately US\$150) for living expenses, travelling and medical costs are also taken care of and they live with a host family.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

GUYANA: Improving Teacher Education

Sector Issue Addressed	Project	Project Information		
		Status	Latest Supervision (ISR) or OED Ratings (Bank-financed Projects)	
Project Description				
Bank-financed/managed operations in the Guyana			IP	DO/GEO
Education	Education for All/Fast-Track Initiative (P089324) To achieve quality universal primary school completion. EA/Partner: Ministry of Education TTL: Angela Demas; Amount \$32,500,000	Active	S	HS
Health	HIV/AIDS Prevention and Control Project (P076722) This Project intends to slow the increase or reverse in preventing and controlling the transmission of HIV. EA/Partner: Ministry of Health TTL: Shiyen Chao; Amount \$10,000,000	Active	S	S
Public Administration	National Statistical Strategy Development (P099848) Supports the strengthening of statistical capacity, monitoring and evaluation, including Ministry of Education. EA/Partner: Bureau of Statistics TTL: Maria Beatriz Orlando; Amount \$285,000	Closed		
World Bank-Caricom/Regional		Status	Amount	
Economic and Sector Work	CARICOM: Managing Nurse Migration (P104547) The study reviews key features of the nurse labor market in the CARICOM, specifically in comparison to OECD countries; furthermore it evaluates the market, technical and financial feasibility of innovative business models for nurse education that would permit governments to target public investment to students most likely to remain and practice in the CARICOM. TTL: Christoph Kurowski	Active		
Economic and Sector Work	CARICOM: Managing Nurse Migration II (P109685) The study will be a continuation of the CARICOM Nurse Labor and Education Market Study carried out in FY08. TTL: Christoph Kurowski	Active		
DONOR: Canadian International Development Agency (CIDA)-Guyana *				
Education	Guyana Basic Education Teacher's Training Project (GBET) (A020252) To strengthen the basic education teacher training system in Guyana. The Project focuses on building capacity of Cyril Potter College of Education (CPCE), the National Centre for Educational Resource & Development (NCERD), the hinterland and other regional educators to deliver distance education programs. CRC Sogema Inc.	Active	C\$8,100,000	
Gender/ Social	Caribbean Gender Equality Programme 11 (CGEP)	Active	C\$7,500,000	

Sector Issue Addressed	Project	Project Information	
		Status	Latest Supervision (ISR) or OED Ratings (Bank-financed Projects)
Investment	(A021397). To empower key civil society and governmental organizations in their capacities to address gender equality issues in economic, political and social sectors and to recognize violence against women as a critical development issue.		
Health	<i>Enhanced Support to HIV/AIDS in the Caribbean (ESAC) (A031238)</i> Support the implementation of the Caribbean Regional Plan of action for HIV/AIDS	Active	C\$14,500,000
Health	<i>Caribbean Epidemiology Centre (CAREC) HIV/AIDS Project Phase III (A031238).</i> To assist CAREC in fighting the spread of HIV/AIDS in the Commonwealth Caribbean	Active	C\$20,000,000
DONOR: Inter American Development Bank (IDB) Guyana*			
Education	Basic Education Access and Management Support Phase I (GY0063) To improve literacy and numeracy in the primary cycle, expand secondary access in underserved and poverty areas, and improve management practices.	Completed	\$30,000,000
Health	<i>Supporting the implementation of an Integrated National Nutrition Programme (GY-T1066).</i> To assist the Government in achieving a viable, effective and comprehensive maternal and child health care programme.	Implementation.	\$725,000
DONOR: United Nations Development Programme (UNDP) CARICOM/Regional*			
Regional Integration	Handbook and Capacity Building Workshop for Schools on CSME (No00061489). To improve the availability of information to upper level students on CSME and support the regional debates. EA/Partner: CARICOM Secretariat Amount \$63,000	Active	
DONOR: United Nations Children's Fund (UNICEF)-Guyana*			
Social Investment	Early Childhood Development. To support development of policy and strategy for safe motherhood, early childhood development and programming capacity building of care givers including parents, ECD practitioners, health workers. Ensure children who test positive for HIV and need treatment receive adequate care and support.		
Social Investment	Quality Basic Education and Gender Equality. To have 80% of girls and boys in Guyana complete quality education in gender sensitive and child friendly environments and addresses regional and gender disparities in learning achievements and drop-out rates.		
Social Investment	Adolescents Development and Participation Amount		US\$1,500,000
DONOR: United States Agency for International Development (USAID)-Guyana*			
Education	Improving Mass Communication and Journalism in Guyana.	Active	US\$300,000

Sector Issue Addressed	Project	Project Information	
		Status	Latest Supervision (ISR) or OED Ratings (Bank-financed Projects)
	Provides for the improvement of curriculum content and delivery, staff development and training opportunities for local media and communications professionals. EA/Partner: University of Guyana's Centre for Communication Studies		
DONOR: Department for International Development (DfID)- CARICOM/Regional*			
Health	HIV/AIDS Prevention and Control Project –PANCAP (P080721). To enhance the coordination and harmonization of HIV/AIDS activities in the Caribbean. EA/Partner : CARICOM-Secretariat	Active	US\$9,000,000
Donor: World Bank-CARICOM/Regional*			
Infrastructure/Education	Technical and Vocational Education and Training (TVET). Will provide for the construction of two technical institutes in Regions 3&5, equipment, learning materials and teachers' training. It will also provide the improvement of overall governance of the subsector and the establishment of an institutional framework for the further development of TVET in Guyana.	Approved	\$7,500,000
Donor: India-Guyana*			
Education	Indian Technical Economic Co-operation (ITEC) Scholarship. Guyanese nationals are trained at various ITEC institutions in India in diplomacy, mass media, foreign trade, audit and accounts, banking, agriculture, information technology, manpower, training, rural development and small scale industries.		

Annex 3: Results Framework and Monitoring
GUYANA: Improving Teacher Education

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information
To assist the Recipient to improve the effectiveness and efficiency in the delivery of quality teacher education in Guyana.	1. The time (credit hours) it takes to complete a course of study to earn a Bachelor's Degree in Education is reduced from seven years to four years. (efficiency) 2. Eighty percent of teacher educators will fulfill the minimum qualifications of their updated terms of reference now in alignment with delivery of the new Associate's and Bachelor's degree programs. (effectiveness) Monitoring Instrument: New TORs and formalized evaluation and reporting process established under 1B. 3. The percentage of student teachers scoring at or above 80 percent on their practicum performance assessments reaches 70 percent. (effectiveness) Monitoring Instrument: classroom observation tool 4. The percentage of teacher educators scoring at or above 80 percent on their performance evaluations, which include classroom observation, reaches 75 percent. (effectiveness) Monitoring Instrument: Performance assessment instrument. 5. Seven percentage point decline in shortfall of trained teachers at the primary level.	Monitor progress toward achieving the PDO.

	6. The share of males among direct Project beneficiaries will increase from 16 to 20 percent.	
Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring
TORs for administrative/ lecturer/distance education tutors completed for CPCE and UG.	Number of new TORs completed.	To monitor implementation progress.
Evaluation tool for teacher educators finalized.	New evaluation tool completed.	
Evaluation tool for student teachers finalized and teacher educators trained in its use.	New evaluation tool completed. Training delivered. Teacher educators using tool to evaluate student teacher performance.	
The teaching practicum and induction year are redesigned and improved. The first cohort passes through new practicum and induction.	New practicum and induction year are offered to at least one cohort of Associate's degree students.	
More teacher educators are using ICT as a tool for teaching and learning to improve classroom instruction.	% of teacher educators using some form of ICT as a tool for teaching and learning.	
CPCE and UG management using new skills.	Percent of CPCE and UG administrators, Department Heads, and Heads of Satellite Centers having completed the management course.	

Arrangements for results monitoring

		Data Collection and Reporting						
	Baseline	YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Project Outcome Indicators								
The time (credit hours) it takes to complete a course of study to earn a Bachelor's Degree in Education is reduced from seven years to four years. (efficiency)	Seven (7) years	N/A	N/A	N/A	Four (4) Years	One at the baseline and one at end of Project.	Curriculum and credits for Certificate; Associate's Degree, Bachelor's Degree, Diploma in Education and Double Major	CPCE and UG. Consultant for harmonization of programs between CPCE and UG will document new programs, curriculum, and credit hours. The Dean of School of Ed. and the Academic Board of UG will confirm the B.Ed. credit hours. The Principal of CPCE will confirm the ADE credit hours.
Eighty percent of teacher educators will fulfill the	(will be collected with new	40%	50%	60%	80%	Annually.	New TORs and formalized	Joint Evaluation Committee.

		Data Collection and Reporting						
	Baseline	YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
minimum qualifications of their updated terms of reference now in alignment with delivery of the new Associate's and Bachelor's degree programs. (effectiveness)	TORs and observation tool. Y1 is estimate based on current status.						evaluation and reporting process established under 1B.	
The percentage of student teachers scoring at or above 80 percent on their practicum performance assessments. (effectiveness)	TBD	N/A	50%	60%	70%	Annual assessment	Classroom observation tool	CPCE VP for Curriculum in coordination with the Sr. Lecturer for Teaching Practice Dean of UG School of Education and Humanities in Coordination with the Registrar
The percentage of teacher educators scoring above 80 percent on their performance evaluations which	TBD	55%	65%	70%	75%	Annual Assessment	Performance assessment instrument.	-CPCE Principal -UG Dean of School of Education and Humanities. -UG Office of the

		Data Collection and Reporting						
	Baseline	YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
includes classroom observation. (effectiveness)								Registrar
IDA Core Indicator								
Decline in shortfall of trained teachers at the primary level (%)	36% untrained primary teachers	34%	32%	30%	29%	Annual	MOE Digest of Education Statistics	MOE Planning Unit
The share of males among direct Project beneficiaries (teacher educators) will increase from 16 to 20 percent.	16%	17%	18%	19%	20%	Annual	Staff roster for CPCE and UG School of Ed. and Hum., Student registration records, and MOE Digest of Ed. Statistics	CPCE VP for Administration, UG Registrar, MOE Planning Unit Final reporting is responsibility of Project Coordinator
Intermediate Outcome Indicators								
TORs for administrators/ lecturer/DE tutors completed for CPCE.	0	100%	100%	100%	100%	Consultant report product	TOR	CPCE Principal and Project Coordinator
Evaluation tool for teacher educators finalized.	No	Yes	Yes	Yes	Yes	Consultant report product	Evaluation tool for teacher educators	CPCE Principal and UG Dean

		Data Collection and Reporting						
	Baseline	YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Evaluation tool for student teachers finalized and teacher educators trained in its use.	No	No	Tool finalized, training delivered.	Teacher Educators using tool.	Teacher Educators using tool.	Consultant report product	Practicum evaluation tool for student teachers	CPCE Principal and UG Dean
New practicum and induction year offered to at least one cohort of ADE students.	None		Design completed and mentors trained.	Cohort 1 completes practicum	Cohort 1 completes induction year	ADE practicum reports detailing: (i) status in Y1; (ii) final design in Y2; (iii) practicum results in Y3 and Y4	Classroom observation tool Supervisor/mentor reports	Project coordinator. For practicum results: CPCE Senior Lecturer in Teaching Practice in Coordination with CPCE VP for Curriculum. For induction: MOE, Mentor teachers and supervisors
Percent of teacher educators at both UG and CPCE using some form of ICT as a tool for teaching and learning.	5%	20%	40%	60%	80%	Annual Staff Survey	Survey Classroom Observation Evaluation Tool	ICT Coordinator at CPCE, Vice Principal for Curriculum. Dean of School of Ed&Hum. in coordination with Head of Curriculum and Instruction.

		Data Collection and Reporting						
	Baseline	YR1	YR2	YR3	YR4	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
% of CPCE and UG administrators, Department Heads, and Heads of Satellite Centers having completed the management course.	0	0	80%	90%	100%	Annual	Certification upon completion of management course	CPCE VP-for Development Project Coordinator UG Planning Officer for Human Resources.

Annex 4: Detailed Project Description

GUYANA: Improving Teacher Education

1. The Project will be comprised of three components:

Component 1. Improving the quality and efficiency of teacher education delivery.

2. This component will focus on the delivery of the newly established Associate's Degree in Education and the Bachelor's of Education (the "2 + 2 model") through: (a) the development of appropriate courses and terms of reference for administrators, faculty, lecturers and tutors at the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities, and their subsequent evaluation based on terms of reference acceptable to the Recipient and the Association; (b) the provision of support for improving the quality and implementation of the practicum for the ADE and B.Ed. programs and designing and implementing an induction year for all Associate Degree graduates; (c) the integration of information and communication technology in the teaching and learning process, and in support of the transition to a dual mode delivery of the initial teacher training programs; and (d) the provision of technical assistance and training, and the acquisition and utilization of goods required therefore.

3. ***Subcomponent 1A. Development of new courses, TORs for administrative/faculty/lecturer/tutor positions and evaluation of current staff to bring them in line with the requirements and standards of delivering the new Associate's Degree in Education (College) and the Bachelor's in Education (UG).*** This subcomponent would provide technical assistance to the College and University's School of Education and Humanities to design new courses and plot out the essential administrative/faculty/lecturer/tutor structure that would be required to deliver the courses under the new Associate's and Bachelor's Degrees. It would also provide assistance to detail the Terms of Reference for those positions. This will allow the institutions to review their current skill mix, identify weaknesses and strengths, and move forward to recruit staff with the right skills and/or target current staff with potential to upgrade their skills to meet the requirements.

4. Based on the new staffing structure aligned with the requirements of the ADE, TORs for all CPCE staff (including the Principal, Vice-Principals, administrators, heads of department, teacher educators, etc.) will be developed under the Project with the assistance of international and national experts.

5. *This subcomponent would also support the creation of a multi-discipline evaluation committee⁴¹ who under the assistance of outside impartial advisors would evaluate the qualifications and performance of existing administrators/faculty/lecturers/tutors using the newly designed TORs and teaching practice observation tool which would be designed and tested. It would support the evaluation process, including observations of teaching practice at the various campuses and satellite centers, as well as desk review. A formalized evaluation and reporting process would be articulated and followed (see Annex 6 and the Operational Manual).*

⁴¹ An adhoc subcommittee of the CPCE Board of Governors.

6. *The evaluation process will consist of two stages.* The first Part will be carried out for CPCE only, and will consist of an internal desk review to assess each member of the staff's qualifications and experience against the corresponding TORs. The second Part will involve teaching staff at both, CPCE and UG's School of Education and Humanities (Division of Education). International experts will provide technical assistance to develop a classroom observation tool, test it, train CPCE and UG School of Education management and Heads of Departments in how to use the tool, and then apply the tool as a baseline instrument to assess teacher educators' skills for delivering their courses. In the first year of the Project, international experts will assist CPCE and UG to develop the tool, train the necessary personnel and collect the baseline information (carry out the assessment of teaching staff at both institutions). In the subsequent years of the Project those local stakeholders trained in the use of the tool will be responsible for assessing teaching skills of CPCE and UG staff with coaching provided by the consultants.

7. ***Subcomponent 1B. Improving the quality and implementation of the teaching practicum for the ADE and B.Ed. programs and designing and implementing an induction year for all Associate Degree graduates.*** This subcomponent would support MOE, CPCE, and UG through technical assistance to map out and include more structured support for the implementation of the teaching practicum and the induction year. It would analyze the current delivery approach, identify weaknesses, design realistic solutions, and the necessary funding to execute those solutions. This would include: (i) training selected MOE officers, supervisors and lecturers at CPCE and UG; (ii) training and costs for mentor teachers at school placement sites; (iii) improvement of assessment tools and feedback loops; (iv) hiring additional supervisors, setting standards, and providing travel allowances for supervision visits to cover travel costs; and (v) formalizing requirements for completion of the induction year.

8. ***Improvement of the practicum.*** At present the third year of the Trained Teacher Certificate at CPCE is entirely dedicated to the practicum. Each week student teachers spend three days at schools and two days in the Teachers' College. Due to the upgrading and restructuring of the teacher education programs into a 2+2 model, the length of the practicum for the new Associates Degree in Education provided by CPCE will be reduced to one term (about 13 weeks). However, it is expected that student teachers receive a more intensive and better quality practicum experience. To achieve this goal a relevant and good quality classroom observation instrument will be developed for providing regular feedback and ultimately assessing student teachers' practices in the classroom. Teacher educators and practicum supervisors will be thoroughly trained to use this tool on a regular basis to create systematic feedback loops for guiding and improving their students' teaching practices.

9. *The Project will also help CPCE to strength a network of forty (40) nursery, primary and secondary schools that show good practice and provide a rich learning environment for student teachers for their practicum placements.* The selected schools will be closely connected to the Teachers' College, its new practices and teaching methodologies. CPCE will provide briefing sessions on the ADE program to head teachers, heads of departments and teaching staff at network schools. Selected trained teachers at network schools will also receive a three day intensive training on the new methodologies introduced by the ADE and coaching strategies to

develop their mentoring skills. These teachers will serve as on-site mentors to student teachers during their practicum. Their role will be to provide one-on-one support and coaching to practicum students in their very first teaching experiences in the classroom.

10. *CPCE will also be strengthened with a cadre of supervisors who will make school visits to student teachers during their practicum and to new teachers during the induction year.* The Project will support the hiring and training of supervisors at Turkeyen main campus and at the satellite centers to reinforce CPCE's capacity to deliver quality supervision. Their main role will be to provide close support and assess students in their practicum and induction year. Supervisors will alleviate the overload of practicum supervision visits that CPCE teacher educators experience at the Turkeyen campus and will provide guidance and feedback to students in the DE program that at present cannot be reached by CPCE (Turkeyen campus) lecturers. It is expected that lecturers at Turkeyen continue to visit face-to-face students during their practicum. The supervisors whose main focus will be to provide regular and good quality supervision to practicum and induction students provide a quality assurance for an enriched hands-on training experience for new teachers.⁴² Supervisors for practicum and induction will need to hold a least a Bachelor's degree and a Trained Teacher Certificate or a post graduate Diploma in Education and have proven experience in the teaching profession.

11. ***Development of the induction year.*** *The Project will support the MOE to introduce a formal induction program to provide systematic support and supervision to newly trained teachers in their first year of teaching.* The new one-year induction will ensure that new teachers meet the established benchmarks through the proper monitoring and supervision mechanisms. After CPCE students successfully graduate from the ADE they will be placed by the Teacher Service Commission (TSC) in a school that will need their services. The MOE will be responsible for the induction year and will ensure that it is fully implemented by overseeing the work of the different actors (supervisors and mentor teachers) involved in the induction program. Newly qualified teachers will receive guidance and supervision from: CPCE supervisors (supervisors), trained and experienced teachers at placement schools (mentors), and Regional and District Officers (monitors) who will oversee the work of mentors and CPCE supervisors.

12. *Trained teachers at the schools where newly qualified teachers are placed will be selected and trained as mentors.* They will also receive a small allowance⁴³ to support and coach new teachers on-site and on a regular basis. It is expected that mentors dedicate at least three hours a week to deal with new teacher's concerns, doubts and challenges. They will provide professional coaching to new teachers and assist them in coping with their teaching challenges. If there are not trained teachers available at the schools where the new teachers are placed, a local senior teacher trained as a mentor will be selected to work with clusters of new teachers that meet on a regular basis.

13. *The supervisors hired for the practicum will also be responsible for supporting and assessing teachers in their induction year.* They will visit newly qualified teacher in their schools

⁴²There will be a year in which student teachers in the current program (Trained Teacher Certificate) and student teachers undertaking the new ADE program will overlap during their practicum. The new arrangements with supervisors fortifying lecturer visits for the practicum and induction year will help CPCE to deal with this situation.

⁴³ Honorarium.

three times every term to ensure that they continue to use the new methodologies and strategies learned during the ADE program. They will also work with placement school personnel to create a supportive environment for the new teacher(s).

14. *The MOE will also ensure that the Regional and District Officers adequately guide and monitor the work of newly qualified teachers, mentors and CPCE supervisors.* The Project will provide regional stakeholders in charge of monitoring new teachers, their mentors and CPCE supervisors, up-to-date information and training related to the new ADE and the purpose of the induction year program.

15. ***Subcomponent 1C. Integration of ICT in the teaching and learning process and support transition to a dual mode delivery⁴⁴ of the initial teacher training programs.*** Attention must be placed on making the teacher education distance programs equivalent to the face-to-face Associate's Degree. As the Government policy to allow untrained teachers a window of three years to enter a teacher training program and to cease accepting untrained teachers in the classroom plays out, the Distance Education program should be strengthened. Specifically, it should become an initial teacher training program allowing intake of individuals at the pre-service stage in the areas close to where they live. It should be the equivalent quality of the Associate's Degree delivery at the Turkeyen campus.

16. This subcomponent will assist the institutions to integrate ICT into the teaching and learning processes of the institutions. Specifically, it will support the training of teacher educators, including the DE tutors, to phase in the use of alternative methods for teaching and learning using low and high tech resources. The training will emphasize use of learning and multi-media to convey content and demonstrate methodology. It will also support the upgrading and converting of distance education self-study, print-based learning materials into multimedia and e-learning software. By the end of the Project teacher educators will have the ability to convert or newly develop course materials for e-learning. It will finance the production or purchase of multi-media teaching aides (eg. instructional videos) for both distance and face-to-face sessions.

17. The GoG and the Bank should work together to leverage funds from other donors to upgrade the existing infrastructure to improve connectivity, increase overall access; improve the existing hardware and software and appoint the required technical and support specialists to maintain the distance education program. In remote areas the reliable supply of electricity should also be considered. Possibilities for partnering include the Commonwealth for Learning and the Caribbean Knowledge Learning Network (CKLN) for technical expertise and for equipment a private sector entity could get involved.

⁴⁴ The Guyana Basic Education and Teacher Training Project (GBET) funded by CIDA and the GoG has supported the introduction of teacher training programs through distance education. However GBET relies on printed self-study materials and face-to-face sessions only (for more information on GBET see Annex 1). The vision of the MOE is to advance teachers' distance education so that it is of equal quality to the face to face program and phase in the introduction of alternative methods using technology that could be more adequate for supporting student teachers (e.g. the use of videos for micro-teaching experiences, phasing in e-learning, etc).

Component 2. Building Human Resources and Capacity for more Effective Teaching and Learning.

18. The quality of the teachers depends highly on the quality of the leadership and the teacher educators to whom they are exposed. As such, any attempts to improve the overall level of education delivery must address issues with regard to the human resource capacity both at the tertiary level (teacher educators at both institutions) and the school level (teachers). Therefore the strategy to build human resource capacity within the education system in Guyana should be two-fold: strengthen teacher educators and attract and keep good teachers.

19. This component will provide strengthening of the human resources and technical capacity of the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities through, inter alia: (a) the strengthening of the management of the Cyril Potter College of Education and of the University of Guyana's School of Education and Humanities (b) the strengthening of the quality of teacher educators at Cyril Potter College of Education and University of Guyana's School of Education and Humanities; (c) the improvement of library access and resources to support independent learning and the professional development of teacher educators, student teachers, and teachers; and (d) the provision of technical assistance and training and the acquisition and utilization of goods required for the carrying out of the Project activities mentioned herein, including the carrying out of minor works under the Project activities mentioned in (c) herein as approved by the Association.

20. ***Subcomponent 2A. Strengthen the Management of CPCE and UG.*** In the current state of affairs, finding the personnel with the right skill mix to fill key positions is challenging. Positions will be reviewed using the upgraded TORs for Management and Faculty/lecturers for the College established under Component One. To strengthen the capacity of the new management and key Department Heads for teaching, the Project will finance a course in leadership and organizational management for the Principal, Vice Principals and Heads of Departments/Satellite Centers and selected UG lecturers, and MOE personnel. In addition, the Principal and Vice Principal will benefit from a two week attachment to a Regional Education Institution that currently conducts a 2+2 Associate's Degree and B.Ed. programs.

21. The Project will finance a bi-modal short-course (part face to face and part on-line) on institutional management that suits CPCE and UG leadership and administrative staff needs. This course will be delivered by a University that is competitively selected. Managers and Heads of Departments at both, CPCE and the School of Education and Humanities (Division of Education), selected IDCE and MOE personnel, and Heads of DE Satellite Centers will benefit from this course. One experienced specialist in leadership (for tertiary education) under this contract will also be retained to provide follow up workshops (in year one and in year three) and s/he will coach the selected UG staff with specialization in management to build their capacity to conduct other upgrading teacher-educator workshops/seminars for CPCE and UG staff members and other relevant stakeholders. This will help to strengthen the management of CPCE and UG and ensure that innovative and proven leadership and management techniques are implemented on a regular basis to improve the productivity of teaching staff and ultimately student teachers' learning.

22. The Principal and three Vice Principals at CPCE and four management staff at UG's School of Education and Humanities (Division of Education) will also be enrolled in short, internationally recognized courses on institutional management and leadership for teacher training institutions. CPCE staff who benefit from these courses will be required to develop and follow an action plan to apply what they have learned to improve their everyday work. The UG's School of Education and Humanities (Division of Education) beneficiaries will be tasked with developing and delivering follow-up support workshops to administrative and leadership staff at CPCE and the School of Education and Humanities on a regular basis.

23. In the second year of the Project, the CPCE Principal and the Vice Principal for Administration will be attached to an institution that offers a good quality Associate's Degree in Education Program. This will help them observe how the program is run on a daily basis and learn how their peers lead personnel to successfully deliver the ADE. The attachments will be staggered so that each person will spend two weeks at an institution but at a different time. This will help to avoid a situation where the College would have two of its main leaders away at the same time.

24. ***Subcomponent 2B. Strengthen the teacher educators at CPCE and UG.*** With the introduction of the Associate's Degree and revised B.Ed., there would be an immediate need for strengthening teacher educators at CPCE and UG's School of Education and Humanities especially for the delivery of methodology courses which would convey modern, active learning approaches. The Project will provide a targeted group of teacher educators with the long-term support of international experts who would help them focus on modernizing teaching practices and teaching methodologies to improve student teachers' learning and their practices in the classroom. This could be coupled with enrolling teacher educators in specialized courses and master programs via on-line learning that respond to their specific needs. Methods for teaching reading, math, science, multi-grade methodologies, English as a Second Language, guidance and counseling and special needs education are areas that need to be strengthened according to the diagnosed weaknesses among teaching practices in the classroom. Teacher educators or other educators that show potential, motivation and willingness to be good teacher educators should be targeted to build up the cadre of top quality faculty and lecturers at the College. Lecturers at UG's School of Education would also benefit from the international experts and specialized courses. Most full-time lecturers have Master's Degrees and so a select few would be targeted for a master's program.

25. Recognized universities and some international experts with known expertise in training teachers to deliver specific subject areas will be hired for about six months to provide in-situ training and support to CPCE and the UG's School of Education and Humanities teaching staff. This will ensure that efficient teaching practices and methodologies are implemented on a daily basis to improve student teachers' learning and practice in the classroom. Reading, math, science, multi-grade methodologies, English as a second language, guidance and counseling and special needs education will be the targeted areas. Each of the Departments involved in delivering these subject areas will receive regular support from an expert (representing a university or an independent consultant as needed) through a six month period. Each expert will diagnose the current quality of delivery in a subject/area, identify weaknesses and design and implement relevant and realistic solutions to improve teaching and learning in the respective

area. This will include guidance and coaching on class planning, development of lesson objectives, practicing teaching and learning methodologies and strategies, and the use of formative and summative assessment, among others. The experts in the delivery of specific curriculum subjects will work closely with Heads of Departments and teacher educators at both CPCE and UG to ensure that they put in practice efficient teaching and learning methods that will be applied on an on-going basis.

26. The in situ coaching will be followed by enrolling teacher educators in specialized courses based on their diagnosed needs and master's degree programs. The universities/experts hired for providing in-situ coaching to teacher educators will explore the programs that best suit the contextual needs to formally upgrade teacher educators' qualifications in Guyana. Staff that do not meet the necessary qualifications set out by the revised TORs for CPCE (Associate's Degree Program) and select staff at UG's School of Education and Humanities that only have a first degree and demonstrate commitment and willingness to pursue postgraduate courses will be supported to enroll in short courses and master's programs. Different courses will be selected to respond to the specific needs of each teacher educator. Therefore, the courses would range from regional face-to face or blended short courses and master's degrees to international on-line short courses and master degrees offered by recognized universities abroad.

27. ***Subcomponent 2C. Improving the main library, satellite, and Learning Resource Centers to support research, independent learning and the professional development of teacher educators, student teachers, and teachers.*** The existing library resources and related services at the College and University fall short of that what is expected of a tertiary level institution. This subcomponent will support training for library staff and modest improvements in modernizing the libraries at both institutions by funding subscriptions to online databases and e-journals and improving other didactic and learning materials. The Project could partner with the EFA-FTI to finance key library resources for the LRCs and main libraries. In the past EFA-FTI has purchased a substantial amount of learning and teaching materials for the College and LRCs. An inventory and identification of needs would be necessary to prioritize essential resources.

28. CPCE library is in great need of more personnel to operate effectively. At present there are only three individuals working in the library: a Lecturer I/ Librarian: (on extended leave) a Library Assistant and an Office Assistant that should be supporting CPCE administrative tasks but is acting for the Librarian. CPCE will fill the existing five vacancies⁴⁵ to operate the library and extend its opening hours to accommodate student and faculty needs⁴⁶. A library volunteer corps of students to assist the library staff will also be introduced and supported by the Project. They will receive a small allowance for their services.

29. The Project will also finance library staff training at CPCE and UG. All CPCE library staff will be enrolled in the one-year Diploma in Library Science offered by the Institute of Distance and Continuing Education (UG). Librarians will also benefit from on-line postgraduate training in Library Science/Library and Information Science. Once trained, the library staff will be in charge of providing in-house training for teaching staff to use the library and the new materials and encourage their students to do so.

⁴⁵ One Librarian, one Assistant Librarian and three Library Aides.

⁴⁶ The library will be open from 7:30 am to 8:00 pm.

30. Key library resources for UG and CPCE main campus and CPCE satellite centers will also be procured. Inventory of the existing resources at LCRs and CPCE satellite centers will help determine resource gaps. A needs assessment of the main libraries and satellite centers/LRCs will be conducted in conjunction with EFA-FTI. Textbook and other alternative teaching and learning hands-on aids that can be easily transported and used in classrooms and have proven to foster effective learning (e.g. realia, manipulatives, audio, video and multimedia software/interactive materials) will be purchased for supporting the professional practice of student teachers in their practicum and teacher educators at CPCE.

31. Currently CPCE library has no computers for research or access to internet. Six computers with internet connectivity will help to establish a designated research lab for the library. Small works including a partition wall, installation of outlets, an air conditioning unit, and security bars will be installed for the research area. Subscriptions to a library data base and several e-learning and printed journals in education, pedagogy, teacher training and other relevant knowledge areas will be financed for UG and CPCE libraries.

Component 3. Communications, Project Management and Monitoring and Evaluation.

32. Updating and implementing a public communications campaign to inform stakeholders of potential benefits and changes in education policy and teacher education programs, including a website and communications outreach.

33. Strengthening of the Ministry of Education capacity to administer and oversee Project implementation (including its procurement and, financial management capacity), as well as to monitor and evaluate the Project objectives and outcomes, through the provision of technical assistance and training and the acquisition and utilization of goods required therefore.

34. ***Subcomponent 3A. Communication Campaign. As many policy changes will be enacted*** and programs delivering teacher education will be upgraded, stakeholders including those working in the education system, the general public, the Teaching Service Commission, and those interested in entering the teaching profession will need to keep abreast through a variety of communication methods. This subcomponent will assist the Government to create a communications strategy lead by the MOE to conduct communications outreach and ownership of the reforms to delivery of teacher education. This strategy will delineate all the necessary activities and the timeline for communications campaigns, promotional materials, website, delivery of public forums, and consultation.

35. Policies will be communicated through public speeches of the Minister and other MOE Senior Officers', the MOE newsletter, media conferences and other formal communication means conventionally used by the MOE. Formal written notifications will be also provided to all stakeholders that will be affected by the new policies and teacher education program changes. Brochures and similar materials will be designed, reproduced and distributed to relevant stakeholders. This will be coupled with regular briefing and consultation meetings with teacher educators and student teachers. Visits to secondary schools will also be conducted to attract more and better qualified people into teacher training.

36. Radio, TV, newspapers, posters, billboards, text messages, and other mass media will be used to inform the general public. In addition, a Project webpage will be designed, developed and maintained under the main MOE website. This Project webpage will be key for providing up to date information related to the Project and its results. The webpage will have links to CPCE and UG websites which will also provide information on the new teacher education programs.

37. ***Subcomponent 3B. Project Management and Monitoring and Evaluation.*** This subcomponent would assist the Ministry of Education with administration and oversight of Project implementation for the improvement of delivery of teacher education at both CPCE and UG. It will also finance training in fiduciary aspects of Project management and training to improve capacity for quality monitoring and evaluation of Project objectives and outcomes. A Steering Committee with representatives from CPCE, UG and the MOE will be created to provide overall guidance to Project implementation. This subcomponent will finance the hiring of a Project Coordinator to organize the efforts of the institutions involved in the Project and to provide support to different stakeholders during implementation. Two accountant clerks will also be employed to support the Project management; one will be placed at the Planning Unit and another at CPCE. The team in charge of EFA-FTI at the MOE Planning Unit will also support the management and implementation of this new Project. The rest of the Project will be managed by mainstream staff at CPCE and UG and other MOE departments (Annex 6).

Annex 5: Project Costs
GUYANA: Improving Teacher Education

Table 5.1: Project Cost by Component/Subcomponent and Financier (US\$)

Improving Teacher Education Project											
Components by Financiers											
(US\$)											
		Commonwealth				The		IDA		Total	
		Other		of Learning		Government					
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Improving the Quality and Efficiency of Teacher Education Delivery											
1. ADE/B.Ed. - TORS and Evaluation of Staff		-	-	-	-	49,005	14.0	301,779	86.0	350,784	6.8
2. Improving the Practicum and the Induction Year		-	-	-	-	288,893	31.8	620,582	68.2	909,475	17.8
3. Integration of ICT & Transition to Dual Mode Delivery , F2F and DE		220,553	15.9	101,201	7.3	118,375	8.5	945,298	68.2	1,385,426	27.0
Subtotal Improving the Quality and Efficiency of Teacher Education Delivery		220,553	8.3	101,201	3.8	456,272	17.2	1,867,660	70.6	2,645,686	51.7
B. Building Human Resource Capacity for More Effective Teaching and Learning											
1. HR - Strengthen Management of CPCE and UG		-	-	-	-	-	-	280,382	100.0	280,382	5.5
2. HR - Strengthen Teacher Educators at CPCE and UG		-	-	-	-	0	-	1,383,247	100.0	1,383,247	27.0
3. Improving Libraries and LRCs		-	-	-	-	106,612	39.2	165,119	60.8	271,732	5.3
Subtotal Building HR Capacity for More Effective Teaching and Learning		-	-	-	-	106,612	5.5	1,828,748	94.5	1,935,360	37.8
C. Project Management and Communication											
1. Communications Campaign		-	-	-	-	37,116	31.4	81,162	68.6	118,277	2.3
2. Project Mgmt and Monitoring and Evaluation		-	-	-	-	0	-	422,431	100.0	422,431	8.2
Subtotal Project Management and Communication		-	-	-	-	37,116	6.9	503,592	93.1	540,708	10.6
Total PROJECT COSTS		220,553	4.3	101,201	2.0	600,000	11.7	4,200,000	82.0	5,121,754	100.0

Table 5.2: Project Cost Summary by Component in G\$ and US\$

Improving Teacher Education Project		
Components Project Cost Summary		
	G\$	US\$
	Total	Total
A. Improving the Quality and Efficiency of Teacher Education Delivery		
1. ADE/B.Ed. - TORS and Evaluation of Staff	70,559,770	344,194
2. Improving the Practicum and the Induction Year	172,884,700	843,340
3. Integration of ICT & Transition to Dual Mode Delivery, F2F and DE	270,620,500	1,320,100
Subtotal Improving the Quality and Efficiency of Teacher Education Delivery	514,064,970	2,507,634
B. Building Human Resource Capacity for More Effective Teaching and Learning		
1. HR - Strengthen Management of CPCE and UG	55,944,500	272,900
2. HR - Strengthen Teacher Educators at CPCE and UG	276,545,000	1,349,000
3. Improving Libraries and LRCs	52,764,950	257,390
Subtotal Building HR Capacity for More Effective Teaching and Learning	385,254,450	1,879,290
C. Project Management and Communication		
1. Communications Campaign	22,910,554	111,759
2. Project Mgmt and Monitoring and Evaluation	81,692,500	398,500
Subtotal Project Management and Communication	104,603,054	510,259
Total BASELINE COSTS	1,003,922,474	4,897,183
Physical Contingencies	7,663,013	37,381
Price Contingencies	38,374,077	187,191
Total PROJECT COSTS	1,049,959,564	5,121,754

Table 5.3: Project Components by Year (US\$)

Improving Teacher Education Project					
Project Components by Year -- Totals Including Contingencies (US\$)					
	Totals Including Contingencies				
	2011	2012	2013	2014	Total
A. Improving the Quality and Efficiency of Teacher Education Delivery					
1. ADE/B.Ed. - TORS and Evaluation of Staff	214,193	85,978	25,056	25,557	350,784
2. Improving the Practicum and the Induction Year	56,661	227,355	260,821	364,638	909,475
3. Integration of ICT & Transition to Dual Mode Delivery, F2F and DE	578,116	315,875	249,436	241,999	1,385,426
Subtotal Improving the Quality and Efficiency of Teacher Education Delivery	848,971	629,208	535,313	632,194	2,645,686
B. Building Human Resource Capacity for More Effective Teaching and Learning					
1. HR - Strengthen Management of CPCE and UG	168,203	53,502	58,677	-	280,382
2. HR - Strengthen Teacher Educators at CPCE and UG	738,888	450,359	101,372	92,628	1,383,247
3. Improving Libraries and LRCs	65,321	56,785	83,329	66,297	271,732
Subtotal Building HR Capacity for More Effective Teaching and Learning	972,411	560,646	243,377	158,926	1,935,360
C. Project Management and Communication					
1. Communications Campaign	28,592	29,305	29,891	30,489	118,277
2. Project Mgmt and Monitoring and Evaluation	77,568	79,483	114,498	150,881	422,431
Subtotal Project Management and Communication	106,160	108,788	144,389	181,370	540,708
Total PROJECT COSTS	1,927,542	1,298,643	923,079	972,490	5,121,754

Table 5.4: Disbursement Accounts by Financiers (US\$)

Improving Teacher Education Project										
Disbursement Accounts by Financiers (US\$)										
	Other		Commonwealth of Learning		The Government		IDA		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Goods, Works, Services, & Op Costs										
1. Refurbishment	-	-	-	-	5,591	100.0	-	-	5,591	0.1
2. Computer Equipment	220,553	30.6	-	-	0	-	499,531	69.4	720,084	14.1
3. Office Equipment	-	-	-	-	-	-	5,151	100.0	5,151	0.1
4. Teaching and Learning Materials	-	-	-	-	0	-	251,025	100.0	251,025	4.9
5. Subscriptions	-	-	-	-	-	-	23,310	100.0	23,310	0.5
6. Furniture	-	-	-	-	-	-	7,298	100.0	7,298	0.1
7. Materials and Supplies	-	-	12,953	12.9	-	-	87,131	87.1	100,084	2.0
8. International Technical Assistance	-	-	81,707	6.4	-	-	1,194,905	93.6	1,276,611	24.9
9. National Technical Assistance	-	-	-	-	15,702	2.1	723,313	97.9	739,015	14.4
10. Supv Travel Allow /Mentor Teacher Costs	-	-	-	-	-	-	77,276	100.0	77,276	1.5
11. Training - Admin & logistics	-	-	6,541	1.8	21,414	5.9	337,966	92.4	365,920	7.1
12. Education Grants	-	-	-	-	0	-	955,236	100.0	955,236	18.7
13. Institutional Attachment	-	-	-	-	0	-	37,859	100.0	37,859	0.7
Subtotal Goods, Works, Services, & Op Costs	220,553	4.8	101,201	2.2	42,706	0.9	4,200,000	92.0	4,564,460	89.1
B. Incremental Recurrent Costs										
1. CPCE Administrative Cost	-	-	-	-	228,584	100.0	-	-	228,584	4.5
2. Operating Costs	-	-	-	-	179,976	100.0	-	-	179,976	3.5
3. Govt Paid Supv Travel Allow /Mentor Costs	-	-	-	-	148,734	100.0	-	-	148,734	2.9
Subtotal Incremental Recurrent Costs	-	-	-	-	557,294	100.0	-	-	557,294	10.9
Total PROJECT COSTS	220,553	4.3	101,201	2.0	600,000	11.7	4,200,000	82.0	5,121,754	100.0

Table 5.5: Expenditure Accounts by Years (US\$)

Improving Teacher Education Project					
Expenditure Accounts by Years --					
Totals Including Contingencies					
US\$	2010	2011	2012	2013	Total
I. Investment Costs					
A. Civil Works					
Refurbishment	6,416	421	-	-	6,837
B. Goods					
1. Computer Equipment	368,870	150,707	97,125	102,135	718,838
2. Office Equipment	5,151	-	-	-	5,151
4. Teaching and Learning Materials	-	63,481	92,844	94,700	251,025
5. Subscriptions	5,643	5,773	5,888	6,006	23,310
6. Furniture	5,642	-	-	1,656	7,298
7. Materials and Supplies	26,797	27,781	24,408	19,458	98,444
Subtotal Goods	412,104	247,741	220,266	223,956	1,104,066
C. Consultant Services					
1. International Technical Assistance	891,830	273,351	70,339	41,091	1,276,611
2. National Technical Assistance	93,090	215,852	246,251	183,822	739,015
Subtotal Consultant Services	984,920	489,203	316,589	224,914	2,015,626
D. Non Consultant Services					
1. Training - Administration & Logistics	82,494	125,359	97,518	65,334	370,704
2. Education Grants	387,508	307,535	164,420	92,628	952,091
3. Institutional Attachment	6,193	18,624	6,456	6,585	37,859
Subtotal Non Consultant Services	476,195	451,519	268,394	164,547	1,360,655
E. Stipend					
1. Supv Travel Allow/Mentor Costs	4,202	5,867	7,311	59,896	77,276
Total Investment Costs	1,883,837	1,194,751	812,560	673,313	4,564,460
II. Recurrent Costs					
A. CPCE Admin. Expenses	21,376	21,909	37,648	147,651	228,584
B. Operating Costs	22,330	81,983	37,457	38,206	179,976
C. Govt Paid Supv Travel Allow/Mentor Costs	-	-	35,414	113,320	148,734
Total Recurrent Costs	43,706	103,891	110,519	299,177	557,294
Total PROJECT COSTS	1,927,542	1,298,643	923,079	972,490	5,121,754

Table 5.6: Expenditure Accounts by Financier (US\$)

Improving Teacher Education Project										
Expenditure Accounts by Financiers (US\$)										
	Other		Commonwealth of Learning		The Government		IDA		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs										
A. Civil Works										
Refurbishment	-	-	-	-	5,591	81.8	1,246	18.2	6,837	0.1
B. Goods										
1. Computer Equipment	220,553	30.7	-	-	0	-	498,284	69.3	718,838	14.0
2. Office Equipment	-	-	-	-	-	-	5,151	100.0	5,151	0.1
3. Teaching and Learning Materials	-	-	-	-	0	-	251,025	100.0	251,025	4.9
4. Subscriptions	-	-	-	-	-	-	23,310	100.0	23,310	0.5
5. Furniture	-	-	-	-	-	-	7,298	100.0	7,298	0.1
6. Materials and Supplies	-	-	12,953	13.2	-	-	85,491	86.8	98,444	1.9
Subtotal Goods	220,553	20.0	12,953	1.2	0	-	870,560	78.9	1,104,066	21.6
C. Consultant Services										
1. International Technical Assistance	-	-	81,707	6.4	-	-	1,194,905	93.6	1,276,611	24.9
2. National Technical Assistance	-	-	-	-	15,702	2.1	723,313	97.9	739,015	14.4
Subtotal Consultant Services	-	-	81,707	4.1	15,702	0.8	1,918,218	95.2	2,015,626	39.4
D. Non Consultant Services										
1. Training - Administration & Logistics	-	-	6,541	1.8	21,414	5.8	342,750	92.5	370,704	7.2
2. Education Grant	-	-	-	-	0	-	952,091	100.0	952,091	18.6
3. Institutional Attachment	-	-	-	-	0	-	37,859	100.0	37,859	0.7
Subtotal Non Consultant Services	-	-	6,541	0.5	21,414	1.6	1,332,700	97.9	1,360,655	26.6
E. Stipend										
1. Supv Travel Allow /Mentor Costs	-	-	-	-	-	-	77,276	100.0	77,276	1.5
Total Investment Costs	220,553	4.8	101,201	2.2	42,706	0.9	4,200,000	92.0	4,564,460	89.1
II. Recurrent Costs										
A. CPCE Admin Expenses	-	-	-	-	228,584	100.0	-	-	228,584	4.5
B. Operating Costs	-	-	-	-	179,976	100.0	-	-	179,976	3.5
C. Govt Paid Travel Allow /Mentor Costs	-	-	-	-	148,734	100.0	-	-	148,734	2.9
Total Recurrent Costs	-	-	-	-	557,294	100.0	-	-	557,294	10.9
Total PROJECT COSTS	220,553	4.3	101,201	2.0	600,000	11.7	4,200,000	82.0	5,121,754	100.0

Annex 6: Implementation Arrangements

GUYANA: Improving Teacher Education

1. The Ministry of Education will be responsible for implementing the Project. The Cyril Potter College of Education (CPCE) and the University of Guyana's School of Education and Humanities will be beneficiaries of the Project. Through their participation in the Steering Committee they will also provide technical advice to MOE in Project implementation.
2. The Project components will be executed over a period of four years from 2010 to 2014. Under the Education Act, Chapter 39 - Laws of Guyana, the Ministry of Education is, *inter alia*, responsible for: (a) setting, enforcing, and providing resources for the implementation of education policy; and (b) the governance and operations of the teacher training institutions. With the appointment of Boards of Governors to some institutions some management/operational authority is given to the Boards but the Ministry remains the policy making authority.
3. The CPCE was established in 1928 under the Education Act as the Teachers Training Center (TTC). In 1976 TTC adopted its present name in honor of Cyril Potter, its first Guyanese principal. Currently the CPCE is a Teacher Training College in Guyana and forms part of the MOE. Students who graduate from CPCE are considered Certified Trained Teachers in Guyana. Its current management structure consists of a Principal, three Vice Principals (Administration, Development and Curriculum) and a Board of Governors with representation from MOE, CPCE and UG. The CPCE has a main campus at Turkeyen, Georgetown, that offers a face-to-face program, and 14 satellite centers established throughout the country that provide in-service training via a distance mode for untrained teachers who are already teaching in the system.
4. The University of Guyana was constituted and incorporated pursuant to the University of Guyana Act No. 6 dated April 19, 1963, as amended through Act No. 5 of 1965. Subject to the Act and Statutes, the general governing body is the Council which is chaired by a Chancellor and in the absence of a Chancellor a Pro Chancellor, both of whom are appointed by the Government. The University's main campus is situated at Turkeyen, east of Georgetown. In 2000, a second campus was established at Tain, Berbice, Region 6. The UG's School of Education and Humanities is the main school beneficiary of the Project.
5. A Steering Committee will be established prior to effectiveness with TORs satisfactory to the Association to: (a) assist the MOE in the implementation of a strategy for improving the quality of delivery of teacher education programs; and (b) provide overall guidance to MOE in the carrying out of the Project; (c) review the progress of Project implementation and achievement of the Project objectives and outcomes. The members of the Steering Committee will be the following *inter alia*: Permanent Secretary of the Ministry of Education, Chief Education Officer, Chief Planning Officer of the MOE, Dean of UG's School of Education, Chair of the CPCE Board of Governors, Principal of CPCE, Director of National Center for Education Resource Development (NCERD), and the Project Coordinator. The Steering Committee's TORs are included in the Operational Manual. Adoption of an Operational Manual satisfactory to the Association is a condition of effectiveness.

6. The activities proposed under the Project will be considered as part of the everyday work of the MOE, CPCE and UG, hence this does not require the establishment of parallel structure or a specific Project Implementation Unit. They will be responsible for the technical aspects of the Project as well as monitoring of the Project development indicators. Details of the institutional roles and responsibilities are specified below for each of the subcomponents of the Project.

7. A Project Coordinator with qualifications, experience and TORs satisfactory to the Association will be hired and maintained in the MOE's Planning Unit as a condition of effectiveness. S/he will be responsible to efficiently and effectively carry out the day-to-day management, monitoring and coordination of Project implementation, including procurement, accounting, disbursement, financial management and other Project related activities. The Project Coordinator will coordinate Project implementation among MOE departments, CPCE, and UG's School of Education and report directly to the Chief Planning Officer and provide regular reports to the Steering Committee. To ensure smooth coordination of Project implementation and communication among the major actors, the Project Coordinator acts as main liaison with: (i) the World Bank, (ii) the Permanent Secretary of the MOE and other senior representatives of the Ministry, (iii) the Financial and Procurement staff at the MOE Planning Unit, (iv) the Principal and Vice Principals of the CPCE, (vi) the Dean of the School of Education and Humanities of UG, and (vii) the Department Heads at the College and UG's School of Education and Humanities. His/Her responsibilities include:

- directing and facilitating the planning of Project components and activities;
- overseeing the implementation of the Project components and activities;
- ensuring accurate, timely, and continuous monitoring and evaluation of the Project;
- serving as the spokesperson and advocating the Project and its goals nationally and internationally;
- promoting and sustaining partnerships and collaboration with Project partners in particular, and other donor agencies more generally;
- fulfilling all reporting requirements of the Project.

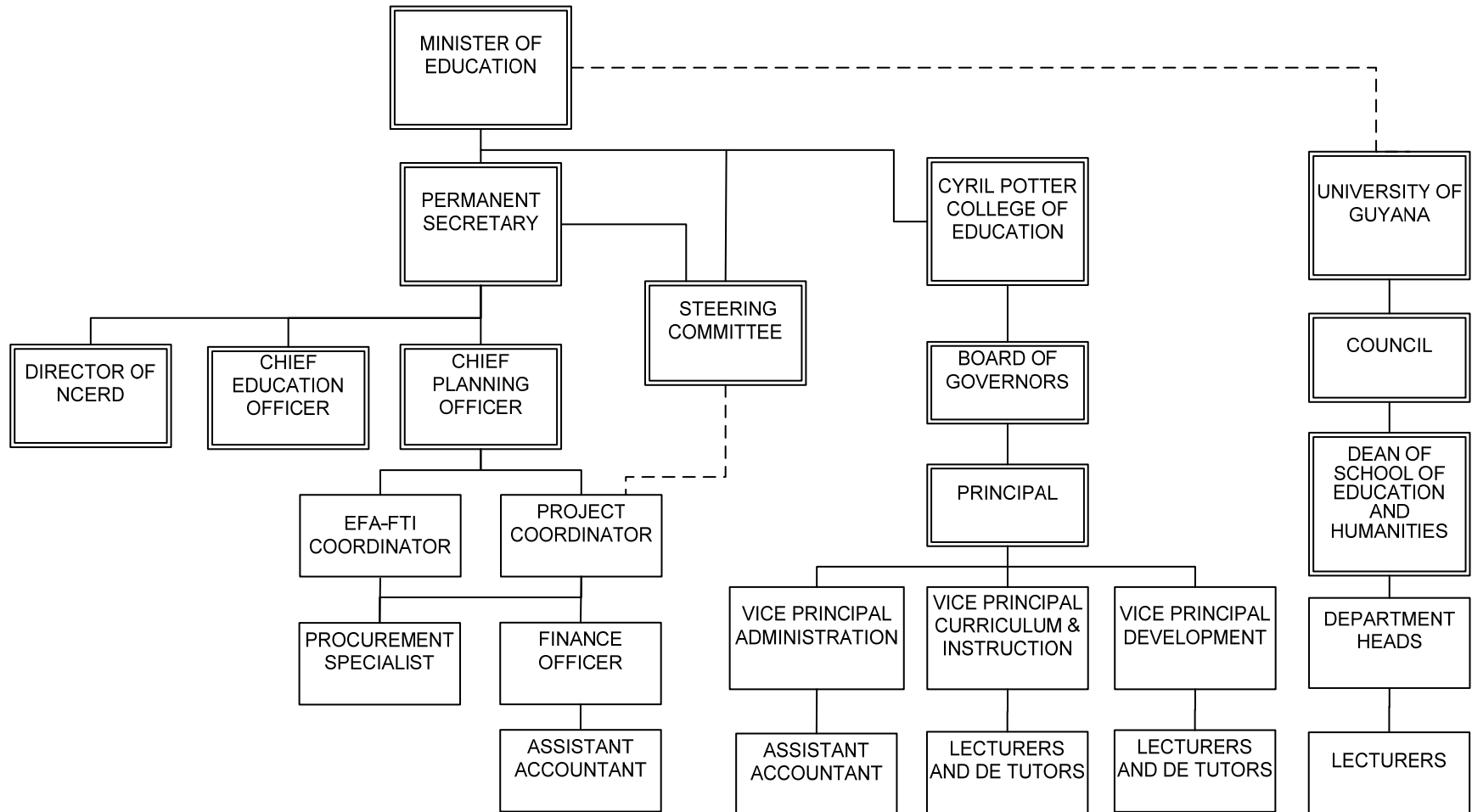
8. The Finance Officer of the MOE's Planning Unit has the overall responsibility for the entire financial management of the Project, including reporting, disbursements, accounting and audit related matters, as well as with general implementation aspects as needed. S/he will also be required to provide supervisory financial management, planning and budgeting services.

9. An Assistant Accountant with qualifications, experience and TORs satisfactory to the Association will be hired as a condition of effectiveness. S/he will assist the Finance Officer with the financial management, disbursement, accounting and audit related matters of the Project. S/he will ensure that all financial records and reports are prepared and submitted correctly and in a timely manner.

10. The Procurement Specialist of the MOE's Planning Unit is responsible for all aspects of procurement related to the Project, including the development and implementation of its Procurement Plan.

11. The following organizational chart illustrates the main actors who are involved in the implementation and supervision of the Project.

GUYANA IMPROVING TEACHER EDUCATION PROJECT IMPLEMENTATION STRUCTURE



12. **Summary.** The Project components are interrelated and designed to improve efficiency and effectiveness of a quality delivery of teacher education. The first component will set the foundation for delivering the new ADE and B.Ed. (Component 1A, 1B, 1C). The second will address the weaknesses assessed in staff under 1A through targeted TA and improve library and research capabilities. The third will be instrumental in conveying policy and program changes related to each of the components and provide capacity for monitoring and evaluation of the Project.

13. **Sub-component 1A. Revision of TORs and evaluation of staff.** Based on the requirements of the new ADE program, TORs for current staff positions will be reviewed and updated by CPCE with the assistance of one international consultant and three local consultants. Approval for the reviewed staffing structure for the ADE will follow the following procedure: (i) the Human Resources Committee of the CPCE Board of Governors will review the structure; (ii) the CPCE Board of Governors will then present the structure to the Human Resources Division of the MOE; (iii) the Minister provides approval; (iv) the Public Service Ministry then approves the structure and recognizes the reviewed positions. For approval of the revised TORs the following steps are necessary: (i) the Human Resources Committee of the CPCE Board of Governors will review all TORs; (ii) the HR Committee will present the final drafts to the CPCE Board of Governors; (iii) the CPCE Board will present the final drafts of the TORs to the School Board Secretariat for endorsement and approval.

14. Part 1 of the evaluation process will only be carried out at the CPCE. A committee comprising representatives of the two primary institutions (CPCE and UG) and persons from the MOE not affiliated with CPCE and UG will be formed for the first level of the assessment (internal) that will consist of a review of qualifications and experience based on the new TORs. (Paper review of each staff's qualifications and experience against the new TORs.)

15. Part 2. The second level of assessment will be an external evaluation using international experts. This part of the assessment of staff will focus on demonstrated skills for all staff including administrators (Principal and VPs too). For teacher educators classroom observation and other tools will be used to assess the content base, pedagogical practice, methods, etc. The Project will also support strengthening the teacher educator assessment tool with technical assistance and training in the use of the tool provided by an international firm. The purpose of the assessments is to identify weaknesses and tailor appropriate capacity building to be provided under subcomponent 2B. Staff at both CPCE and UG will participate in the assessment. At the UG's School of Education, the assessment will be incorporated as part of the Department Review.

16. **Subcomponent 1B. Improving the Practicum and the Induction Year.** The ADE practicum will be delivered by CPCE. The consultant that is presently restructuring the curriculum of the teacher education programs will develop the new structure of the practicum in terms of length and number of credit hours. The same model of three days at schools and two days at CPCE will remain. A firm will be contracted by the MOE/CPCE to provide technical support to diagnose the current delivery, identify weaknesses and design realistic solutions for the practicum and the induction year. This firm will provide assistance to CPCE to assess the current classroom observation instrument used during the practicum and adapt it to develop a good quality tool for assessing performance of student teachers. The firm will train not only CPCE lecturers and supervisors, but also those from UG. CPCE will clearly map out Nursery,

Primary and Secondary schools that show good practice and provide a rich learning environment for student teachers to work with as network schools for practicum placements. CPCE will train teachers who will serve as on-site mentors to student teachers during their practicum placements.

17. The induction course will be the responsibility of the MOE although it will be strongly supported by CPCE to ensure that new methodologies learned at initial training are sustained and reinforced during the first year of teaching practice. The induction course will involve actors at three different levels:

- (i) MOE as part of the regular responsibilities of the Regional and District Officers will monitor the Induction Year on a sample basis to ensure that local mentors and supervisors are providing support to new teachers and their placement schools. This monitoring already exists, but some awareness training on the new induction year and the ADE program will need to be provided to the Regional and District Officers that conduct the monitoring visits.
- (ii) Mentors teachers, ideally located at placement schools, will provide one-to-one support to new ADE graduate teachers on a regular basis. They will be trained under the Project and supported by CPCE. A mapping of trained teachers for selecting possible mentors for training will be carried out by the Planning Unit at the MOE. The consulting firm will assist MOE/CPCE to develop a training course that responds to mentor's needs and is in accordance with the methodologies and content taught under the ADE.
- (iii) CPCE lecturers and a cadre of trained supervisors will visit newly qualified teachers in their schools three times every term and coordinate feedback and support with the on-site mentor teachers. The Project will provide funds for transportation and training.

18. **Subcomponent 1C. ICT in Teaching and Learning.** The ICT sub-component consists of three main areas: (i) ICT integration; (ii) distance education and (iii) administration. Each area is comprised of a mix of curriculum/course development, capacity building, infrastructure provision, and monitoring and evaluation. The implementation will occur in three phases:

- Year One - procurement of goods and TA for course design;
- Year Two - capacity building and course implementation; and
- Year Three and Four - expansion based on evaluation results.

19. Monitoring and evaluation will be done annually. The following are the implementation arrangements for each area:

ICT integration

- Curriculum/course design and development. Three courses will be developed: ICT/computer literacy, ICT integration and a course for specialist ICT teachers. For each course there will also be training materials developed for the capacity building of lecturers and facilitators. The ICT Coordinator at NCERD will assist MOE to coordinate this effort, including drafting the TORs for the local content developers and the

international expert; interviewing and hiring the development team; coordinating partners; and overseeing the development and quality oversight of the materials and course development.

- Capacity Building: the above courses require focused lecturer and facilitator capacity building to ensure quality delivery to students. This activity will be the responsibility of a Training Coordinator who will be hired by MOE and assigned to work with CPCE, UG, and NCERD. This ICT Training Coordinator will plan, coordinate logistics, delivery, and evaluation of the lecturer and facilitator capacity building activities.
- Infrastructure provision: Computer and networking infrastructure will be required at CPCE, UG's School of Education and Humanities, and the satellite centers. The IT Unit Head at the MOE, will be responsible for working closely with the Project Procurement Specialist to draft specifications, participate on the evaluation committee for bids, and oversee installation of equipment by the winning bidder. The installation will also be overseen by the respective technical teams (IT staff) at CPCE and UG.

Distance Education

- Curriculum Course Design and Development. Three courses will be developed as part of this area: ICT literacy distance course, distance education delivery; and digital resource development. For each course there will also be training materials developed for the capacity building of lecturers and facilitators. NCERD's IT Coordinator will coordinate this effort and be responsible for drafting the TORs for the local content developers and the international expert; serving on the evaluation committee for hiring the development team; coordinating partners; and overseeing the development and quality oversight of the materials and course development.
- Capacity Building: the above courses require focused lecturer and facilitator capacity building to ensure quality delivery to students. The above-mentioned Training Coordinator will also assist MOE in implementing this Project sub-component which includes all planning, logistics, delivery, and evaluation of the lecturer and facilitator capacity building activities. The Training Coordinator will also be responsible for working with existing CPCE processes for distribution of learning materials to satellite centers for distance education.
- Infrastructure provision: Additional software and associated equipment will be required for the development and hosting and delivery of distance education content. The same procedures for procuring this equipment will be followed as above.

Administration

- Infrastructure and software provision for student registration. CPCE's IT Officer will be responsible for drafting the specifications and working closely with the Procurement Officer, serving on the evaluation committee, and overseeing installation of the software and hardware for this activity. CPCE will coordinate with UG to ensure that a common registration system is put in place.

- **Capacity Building.** Management and Administration staff will be offered the same ICT literacy training as the lecturers under the same implementation arrangements described above.

20. **Subcomponent 2A. Strengthening Human Resource Capacity for Management.** Based on approved TORs developed jointly between the CPCE Vice Principal for Administration and the Head of Research Methods and Graduate Studies at UG's School of Education, an international consultant will be hired to provide in situ technical assistance to both CPCE and UG's School of Education management teams. As part of his/her TOR the consultant will advise the Board of Governors at CPCE and the Dean at UG's School of Education and Humanities on short internationally recognized courses in management and leadership for the Principal and three Vice Principals at CPCE and two management staff at UG.

21. Under advisement from the consultant, the CPCE Board of Governors and the Dean of the School of Education and Humanities will select an on-line foundation course in educational institutional management for fifty staff in management positions at CPCE, UG's School of Education and Humanities, IDCE and the MOE (Principal, Vice Principals, Dean, Deputy Dean, Heads of Department at UG and CPCE, Heads of Satellite Centers.) Under instruction of MOE, the UG's School of Education and Humanities, Department of Foundation and Education Management will also provide follow-up workshops and short courses to administrative staff at CPCE and UG on a regular basis for sustainability purposes.

22. **Subcomponent 2B. Strengthening Human Resource Capacity for Heads, Lecturers, Distance Education Tutors.** The CPCE Vice Principal for Curriculum and the UG School of Education's Head of Curriculum Instruction will work together to oversee the technical assistance provided by experts in subject areas in order to receive the maximum support in a coordinated manner between UG and CPCE staff.

23. The CPCE Vice Principal for Curriculum will supervise and coordinate the technical assistance that will be provided by an international firm and individual experts to teacher educators at CPCE. The Heads of the Department will work closely with the consultants to tailor the technical assistance to the lecturers needs in their respective departments including the Distance Education Tutors.

24. The Project Coordinator with the assistance of UG's School of Education, the Head of Curriculum and Instruction will supervise and coordinate the subject specialists' support to teacher educators. The Heads of Departments at UG's School of Education will work closely with the consultants to plan activities.

25. In addition to the technical assistance from long-term consultants above, the CPCE and UG lecturers will benefit from postgraduate programs and/or short, targeted, upgrading courses. The consultants will research and recommend appropriate postgraduate programs and short courses to the VP for Curriculum and the UG Head of Curriculum and Instruction. The VP and the Head will use this information and based on the evaluations undertaken under subcomponent 1A, they will identify which teacher educators need which courses for upgrading. They will make recommendations to the CPCE Board of Governors and the Dean of the School of Education who will have final approval.

26. **Subcomponent 2C. Improving the main library, satellite, and LRCs to support the professional development of teacher educators, student teachers, and teachers.** The MOE/CPCE also will be responsible for the implementation of this subcomponent. Advice will be provided by the University's Librarian and journal subscriptions and e-journals will be coordinated between the University and CPCE librarians to benefit both students at CPCE and UG's School of Education. The procurement process for filling of existing vacancies at the CPCE library will be undertaken by the Procurement Officer using TORs developed by the CPCE and approved by the Bank. The salaries of new staff will be counterpart funded by the MOE through the budget allocated to CPCE personnel.

27. Textbooks, learning materials, printed journals and e-journals essential for supporting teacher educators and enhancing the learning of students in the ADE and B.Ed. programs will be identified by the CPCE and UG librarians. The materials will be procured by the Procurement Specialist who will ensure that the materials purchased under this Project are not duplicating the materials that have been purchased for the main campuses and the LRCs under EFA-FTI. Free trials (whenever possible) will be used before taking final decision regarding journals subscriptions and other materials. The Principal at CPCE will review and authorize the list of resources before subscriptions are made and/or materials purchased.

28. Internet access and the requisite hardware are also prerequisite to modernize the library at CPCE. Access to broad band internet connection is essential for undertaking activities under this sub-component but will be addressed under subcomponent 1C. The MOE will be responsible for the small works to enclose the library's reading room to house the computer research space (wall, air conditioning and security) following the environmental guidelines for small works.

29. **Subcomponent 3A. Communications.** The MOE's Communications Officer will take the lead in communications and will coordinate with NCERD, CPCE and UG's Public Relations Department to develop a strategy and timeline for the communications campaign, promotional materials, website, delivery of public forums, and consultation.

30. The MOE's Communications Officer will be in charge of communicating new policies and changes in teacher education to the media and the general public. Whenever necessary the MOE's Communications Unit (following the Bank procurement guidelines) will secure services for marketing campaigns targeting the general public or specific stakeholders.

31. Visits to secondary schools to attract students into the teaching profession will be responsibility of the Assistant Chief Education Officer (ACEO) for Secondary. She/he will work closely with the Principal Education Officer (Georgetown) and Regional Education Officers to deliver talks and information regarding the ADE and B.Ed. programs at the secondary schools.

32. The Distance Education Coordinator (Communications Specialist) at NCERD in synchronization with the MOE's Human Resources Department and Deputy Chief Education Officer for Administration will be responsible for developing and delivering formal notifications (authorized by the Chief Education Officer and ultimately by the Minister of Education) to different stakeholders affected by the policies that will be introduced during the Project.

33. Within CPCE the Principal and the Vice-Principal for Administration under the oversight of the CPCE Board of Governors will be responsible for keeping teachers and students informed of

the main policy and program changes that will occur in the College during the Project. In UG's case the notification and communication processes will follow established practices at the University. Before any changes or policies are communicated they will need final approval from the Academic Board. The main person responsible for carrying out internal communications in relation to the Project will be the Dean of the School of Education and Humanities in coordination with UG Registry and HR Personnel Officer, and the Public Relations Department.

34. **Subcomponent 3B. Project Management and Monitoring and Evaluation.** The MOE Planning Unit's Project Coordinator, fiduciary staff, and Planner will be responsible for gathering data from CPCE and UG for reporting purposes.

Annex 7: Financial Management and Disbursement Arrangements

GUYANA: Improving Teacher Education

A. Executive Summary

1. This annex summarizes the findings of the financial management capacity assessment for the Guyana Improving Teacher Education Project undertaken during the preparation mission which visited Guyana in February 2010. The objective of the assessment was to determine whether the financial staff hired to fortify the Ministry of Education's Planning Unit (PU) for the Education For All Fast Track Initiative, has acceptable financial management arrangements, including accounting systems, reporting, auditing and internal controls to provide reasonable assurance on the use of the Credit Proceeds and that Project funds would be utilized for the purposes intended. For the financial management arrangements to be acceptable, the financial management systems would need to possess the ability to record, process, summarize and report transactions consistent with the assertions of management in the financial statements. The financial management assessment has been carried out in accordance with the OP/BP 10.02 and the Guidelines for Assessment of Financial Management Arrangements in Bank Financed Projects issued by the Financial Management sector board on October 15, 2003.

2. The financial management arrangements for the proposed Project build on the Integrated Fiduciary Assessment (IFA) undertaken in 2007 as well as on the IDA experience in implementing the Education for All-Fast Track (EFA-FTI) Initiative Catalytic Trust Fund operation. The IFA provides a comprehensive overview of the strengths and weaknesses of public financial management and public procurement systems in Guyana and indicates areas of improvements. While the IFA points to significant progress in the establishment of a strong legislative framework for public financial management, additional steps are needed to establish a common internal control framework and strengthen the internal audit functions. The extensive experience of the fiduciary staff of the EFA-FTI Project as part of the Planning Unit (PU) of the Ministry of Education, which will have the sole fiduciary responsibility for all Project funds, would substantially mitigate financial management risk of the Project. Even though the overall initial assessment of the financial management risk of this Project is substantial, mitigation measures are being put in place which, if implemented as planned, would reduce the Project risk to moderate.

3. The conclusion of this assessment is that, following the implementation of the measures indicated in the financial management action plan, the financial management arrangements for the new Project would satisfy the World Bank's minimum requirements under OP/BP10.02. The main financial management actions to be taken by the PU and Cyril Potter College of Education (CPCE) are:

- For the PU: (i) a qualified Assistant Accountant should be recruited to work on the new Project; (ii) the Project chart-of-accounts should be prepared; and (iii) the financial management section of the Operational Manual should be written.
- For the CPCE: (i) a qualified Assistant Accountant should be hired; and (ii) a simple accounting software should be installed (QuickBooks) as part of an overall strengthening of CPCE's financial management capabilities.

B. Summary Project Description

4. The Project comprises three components as follows: Component 1 aims to help improve the quality and efficiency of teacher education delivery and to help the Government of Guyana to implement the newly articulated Associate's Degree and Bachelor's of Education (2 + 2 model); Component 2 supports the building of human resources and capacity for more effective teaching and learning. The quality of the teachers depends highly on the quality of the leadership and the teacher educators to whom they are exposed. As such, any attempts to improve the overall level of education delivery must address issues with regard to the human resource capacity both at the tertiary level (teacher educators at both institutions) and the school level (teachers); and Component 3 will also support the development and implementation of a communications strategy as well as Project management and monitoring and evaluation.

C. Country Issues

5. As reported in the Integrated Fiduciary Assessment undertaken in 2007, the GOG has engaged in significant legislative and regulatory reform in key areas of public financial management and procurement, since 2003. Currently, Guyana has a strong legislative framework for public financial management and procurement processes. The laws governing the management of public funds include the Financial Management and Accountability Act enacted in 2004, the Audit Act enacted in 2003, and the Procurement Act enacted in 2004. The Government is in the process of implementing the key findings of the IFA with the assistance of the IDB. There are plans to seek the involvement of other donors in further strengthening of public financial management and procurement.

Risk Assessment

6. The initial overall assessment of the financial management risk of this Project is substantial, given the country's governance challenges and the Project implementation arrangements. Even though the financial management functions will be carried out exclusively by the fiduciary staff for EFA-FTI within the PU, it would depend on the CPCE and UG for reports on the documentation of the utilization of Project funds and the progress in the Project activities under their respective jurisdiction. The current financial management weaknesses at CPCE point to the need for specific mitigation measures at CPCE to ensure that effective controls are in place at the CPCE and to limit the reliance on spreadsheets. The implementation of the mitigation measures is expected to reduce the inherent risk of the Project from substantial to moderate and low. Section D provides greater detail on the current and proposed actions to achieve these improvements.

D. Financial Management Arrangements

7. **Project Entities.** The overall responsibility for the Project's financial management will lie with the fiduciary staff attached to the PU that has successfully managed the fiduciary aspects of the EFA-FTI Project in Guyana since 2004. Overall financial management would be under the responsibility of a Finance Officer. He has a degree in Accounting and has been the Project accountant for the EFA-FTI Project. He has 10 years of experience. He will be assisted by two Accounting Clerks. One of the Accounting Clerks has a degree in Accounting and has over four

years of experience and the other Accounting Technician has been working at the PU for about four months and has previous accounting experience in the private sector. Because of the high work load of the current financial management team at the PU, partly as a result of the geographical span of the EFA-ETI Project, it is recommended that the PU hire an Assistant Accountant, by the end of the 2010, who would work under the Finance Officer exclusively on the new Project. The qualifications, experience and TOR of the Accountant should be satisfactory to the IDA. The TOR of the Assistant Accountant should be prepared and reviewed prior to Loan Negotiations.

8. The role in the financial management of the Project by University of Guyana's School of Education and Humanities (UG) and CPCE would be limited to the documentation of the progress of the Project activities and the safe guarding of Project assets under their jurisdiction. However the financial management systems at CPCE are quite weak and it currently lacks accounting software to record, manage and report its transactions. CPCE currently relies on spreadsheets which generally are completely lacking in an audit trail. To build its management capacity, as part of the Project, CPCE would be required to hire an Assistant Accountant with qualifications and experience satisfactory to the IDA. The TOR of the Assistant Accountant for CPCE was reviewed at Negotiations and approved. The financial management systems of the Bursar's office at UG are satisfactory.

9. **Accounting System.** The EFA-FTI Project uses QuickBooks accounting software to record, manage and report its Project transactions. An accounting system, also QuickBooks based, requiring a separate chart-of-accounts would also need to be established for the Project. It is recommended that the chart-of-accounts should be designed to be consistent with the budget codes of the Government of Guyana. The draft chart-of-accounts was presented and should be finalized before disbursements commence. Similarly, the Access based reporting system developed for preparing IFRs under the EFA-FTI Project should be expanded to include the new Project. It is expected that the expansion of the reporting system would include modalities for enhancing its interconnectivity with QuickBooks in order to limit the extent of the manual input of data that would be required for preparing the new Project's interim financial reports.

10. CPCE presently relies on a manual system for its accounting processes. Manual systems are deficient in maintaining an acceptable audit trail. The University of Guyana's Bursary currently performs all internal audits and book keeping for the College. While the CPCE will not be responsible for fiduciary reporting on the Project to the IDA, it is recommended that in line with the Component 2 of the Project – Building Human Resource Capacity, the CPCE acquire a simple accounting package accompanied by training to strengthen its management capacity.

11. **Financial Management Procedures.** The financial management section of the Operational Manual (OM) for the EFA-FTI Project could easily be adapted to cover the requirements of the new Project. Presently the OM incorporates the key financial procedures for all major financial transactions that cover the needs of the EFA-FTI Project. It also includes the procedures on budgeting, reporting and internal control.

12. **Reporting and Monitoring.** Interim Unaudited Financial Reports (IFRs) would be prepared by the fiduciary staff attached to the PU and sent to the IDA every quarter, covering the entire Project utilizing the contributions from the CPCE and the UG. One single set of reports with inputs from the CPCE and UG on technical related implementation would be used for

monitoring Project implementation and as the basis for disbursement (see the section below on disbursement). To this end, the IFRs would include an Executive Summary covering the overall status of Project implementation, the description of the status of the attainment of key performance indicators, a summary of the physical progress of Project implementation, and the status of procurement. Agreement was reached on the IFR format and content prior to negotiations and confirmed during negotiations. The IFRs would include: (a) sources and uses statement (b) use of funds by Project components; (c) use of cash and cash forecast statements (d) cumulative investment statement (with actual and budgeted figures); and (d) notes to the financial statements.

13. As they would be used for disbursements, IFRs will be sent to the Bank each quarter, within 45 days after the end of each such period. The IFRs will serve as a basis for the annual audited financial statements. The supporting documentation of the financial statements will be maintained by the fiduciary staff of the PU, CPCE, and UG and made easily accessible to IDA supervision missions and to the external auditors. All financial reports will be made public.

14. **Flow of Funds.** The IDA will disburse the proceeds of the Credit into a segregated Designated Account (DA) denominated in US dollars in the name of the Project, held at a commercial bank to be designated by the Bank of Guyana (Central Bank). The PU will maintain a segregated local currency Project Account at the Bank of Guyana to finance day-to-day expenditures of the Project. The Credit proceeds will finance eligible expenditures to support key Project activities to be included in the Project annual implementation plan and included in the MOE's capital budget approved by the GOG. The initial advance will be provided on the basis of a withdrawal application and the projected expenditures during the period covering Credit effectiveness until the end of the second quarter following Credit effectiveness. After the initial advance, disbursements under the Project will be on basis of quarterly advances linked to the IFRs. There will also be retroactive financing not to exceed US\$420,000. Details of the flow of funds arrangements are provided in the Operations Manual. A flow chart of the flow of funds was prepared during Project appraisal and attached as Appendix 3.

15. **Audit.** The audit report of the MOE for FY2007, prepared by the Audit Office of Guyana, indicates a significant level of internal control lapses in the Ministry relating to teachers' salaries, payment systems, misappropriation of funds, management of checks and bank accounts, recovery of outstanding funds, poor contract management and procurement procedures poor stores management, NIS contributions, and overpayments in the renovation of the library building. Even though these weaknesses are not connected with the Project, they would be discussed with the Internal Audit Department (IAD) of the MOE, to determine the extent that these matters are being addressed. Satisfactory resolution of the audit findings will facilitate the eventual use of country systems in the education sector in Guyana.

16. **External Audit.** The appraisal mission reviewed the TORs for the audit for the Project. Agreement on the audit TORs has been reached. Subsequently an auditor, satisfactory to the IDA would be hired in sufficient time to enable the submission of the audit report in accordance with the Development Credit Agreement.

17. **Disbursement Arrangements.** Disbursement under the Project will be in the form of Advances, Direct payments, Special Commitments, and Reimbursements. Disbursements for Project eligible expenditures via the US Dollar denominated DA under the Project will be reports

based. Funds will be transferred periodically from the DA to a Project account which will be denominated in Guyana Dollars. Both accounts will be segregated. The DA will be opened at a commercial bank designated by the Bank of Guyana (Central Bank) and the Project Account will be opened at the Bank of Guyana. Disbursements on the basis of direct payments will be fully documented. The minimum application size for Direct Payments, Special Commitments, and Reimbursements is US\$100,000 equivalent and expenditures paid out of the DA should be reported quarterly.

18. **Initial Advance.** An initial advance would be made upon Credit Effectiveness. The initial advance will be provided on the basis of a withdrawal application and the projected expenditures during the period covering Credit Effectiveness until the end of the quarter following the quarter after effectiveness (a period up to six months).

19. **Subsequent Advances.** Subsequent advances for disbursements via the DA will be made on the basis of the IFRs which will include a cash forecast statement of the funding needs for the next two quarters.

20. **Direct Payments.** Disbursements could be made on the basis of direct payment to suppliers, contractors or service providers. The applications for direct payments would be fully documented and would include the original records evidencing eligible expenditures such as invoice and receipts.

21. **Retroactive Financing.** The GOG has requested that US\$420,000 be considered for retroactive financing. This corresponds to eligible Project expenditures incurred after Project Appraisal, May 6, 2010, up to the date of signing of the Development Credit Agreement. The disbursement request for retroactive financing will consist of IFRs and other evidence of payments as needed.

22. **Disbursement Schedule.** The following table sets forth the disbursement category and the percentage of expenditure to be financed out the loan proceeds.

Table 1. Disbursement category and percentage of expenditure to be financed out of the loan proceeds.

Category	Amount of the Credit Allocated (SDR)	% of Expenditures to be Financed (inclusive of taxes)
	(equivalent to US\$4.2 million)	
1. Goods, Minor Works, Consultant Services, Non-Consultant Services, Training, Supervisors Travel Allowance, Mentor Teacher Costs, and Operating Costs for all parts of the Project.	SDR 2,800,000	100%
Total	SDR 2,800,000	

E. Credit Conditions and Summary of Annual Audits Requirements

23. The main conditions of the Credit are the following:

Legal covenants: (i) standard financial management provisions; (ii) transmission of audit reports within 6 months of the end of Guyana's fiscal year, i.e. by the end of June each year; (iii) transmission of the IFRs together with the disbursement requests not later than 45 days after the end of each quarter.

F. Supervision Plan

24. Given the relatively limited capabilities within Guyana, and given the involvement of multiple education institutions, the financial management supervision will focus on: (i) the evolution of the internal control mechanisms of the Project with more frequent and intensive transactions testing; (ii) more frequent consultation with the Internal Audit Department of the MOE; and (iii) review of the quarterly IFRs which will help monitor financial performance of the Project. FM staff would undertake two supervision missions a year during the first year of implementation and at least one supervision mission every year thereafter. The overall financial management system of the PU would be monitored on an on-going basis to ensure it continues to be satisfactory. The financial information flows between the PU and the two Project implementing entities will be monitored during supervision.

Appendix 1: Financial Management Action Plan

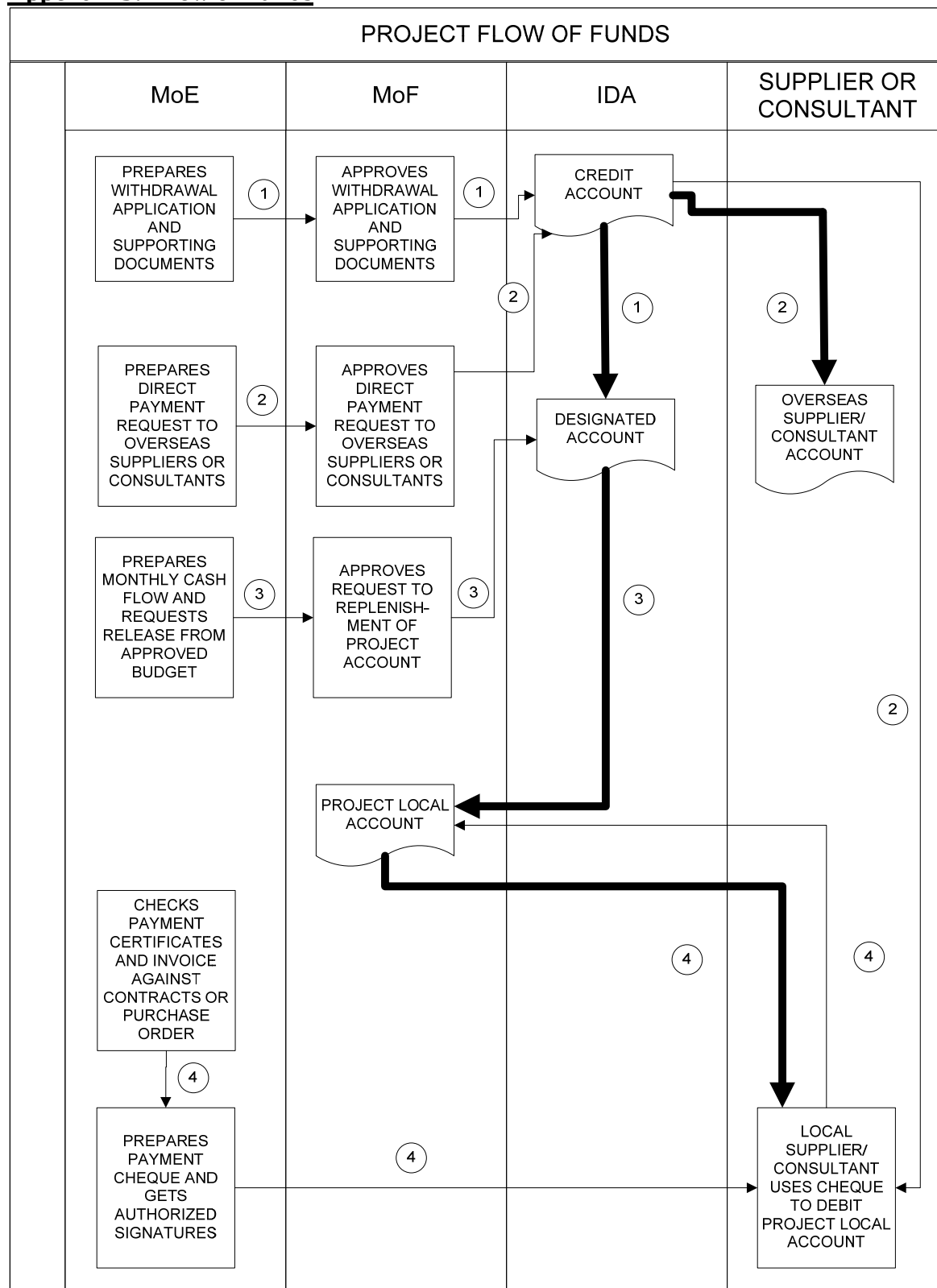
Action	Responsible Agency	Completion Date
1. Prepare TOR for Assistant Accountant	PU	Negotiations - done
2. Prepare TOR for Assistant Accountant	CPCE	Negotiations - done
3. Prepare Chart-of-Accounts	PU	August 16, 2010
4. Acquire Accounting Software	CPCE	Negotiations - done
5. Complete Financial Management Section of Operations Manual	PU	Negotiations - done
6. Agree on content and format of IFRs	PU	Negotiations - done
7. Agree on TOR of Audit	PU	Negotiations - done

Appendix 2: Risk Assessment and Mitigation Matrix

	Risk Assessment				Risk Mitigation Measures	Residual Risk
	H	S	M	L		
Inherent Risk						
Country Level.	X				Other donors are assisting the Government to strengthen the PFM framework on the basis of the recommendations of the IFA report prepared the Bank, IDB and EU.	S
Entity Level.		X			A number of measures are being proposed as part of Project preparation which if properly implemented as planned should substantially mitigate the risk of Planning Unit which has implemented the EFA-FTI Program quite satisfactorily	L
Project Level.		X			Project Implementation will entail the strengthening of financial management capability of the CPCE which has only a limited role in the financial management aspects of the Project	M
Overall Rating Inherent Risk		X				M
Control Risk						
Budget.		X			The counterpart contribution is only about 20% of total Project cost which is well within the capabilities of the Government of Guyana.	M
Accounting.			X		Implementation of the action plan in Appendix 1 will help reduce the risks.	L
Funds Flow.		X			Flow of funds arrangements will be closely monitored and is being implemented by an experienced entity.	M
Financial Reporting.		X			Format and contents of the reports (IFRs) were approved during negotiations. The PU has ample experience in preparing IFRs	L
Auditing.		X			The IDA would agree on the TORs for the audit and the audit firm to undertake the engagement will be subject to IDA's concurrence.	L
Overall Control Risk		X				M
Residual Risk Rating		X				M

Note: H-High; S-Substantial; M-Moderate; L-Low

Appendix 3: Flow of Funds



Annex 8: Procurement Arrangements

GUYANA: Improving Teacher Education

A. General

1. Procurement for the proposed Project would be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004, revised October 2006 and May 2010; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, revised October 2006 and May 2010, and the provisions stipulated in the Legal Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.
2. **Procurement of Works:** Works under the Project are not envisaged other than minor rehabilitation of the library to introduce a research room, and computer laboratories at the CPCE and UG Turkeyen campuses. This would consist of items such as installation of an air conditioning unit(s), a partition wall, and security bars for the library and labs, and additional electrical outlets. The estimated cost is expected to be well under US\$100,000 per contract, and may be conducted using Shopping (<US\$100,000 per contract). The procurement may be conducted using either NCB or Shopping (three Quotations) documents, as the case may be, agreed with or satisfactory to the Bank. The Operational Manual will include environmental guidelines for small works.
3. **Procurement of Goods:** Goods procured under this Project would include computer equipment for ICT and distance education, teaching and learning materials, library resources, subscriptions for journals, and manipulatives for the satellite centers and campuses. The procurement will be done using the Bank's SBD for all ICB and National SBD agreed with or satisfactory to the Bank.
4. **Procurement of non-consulting services:** Non-consulting services under the Project would include items related to training and communications such as renting venues, printing materials, brochures, public service announcements.
5. **Selection of Consultants:** Consulting services will be required for writing of terms of reference, evaluations of staff, training for capacity building in provision of distance education and use of ICT for teaching and learning, strengthening management and subject specialists at CPCE and UG, among others. Short lists of consultants for services estimated to cost less than US\$100,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. Universities and training institutions may be considered for consulting assignments in accordance with paragraph 2.8 of the Consultant Guidelines.

6. **Operating Costs:** Operating costs such as expenditures for training in Bank procedures and fiduciary aspects of the Project, salaries of the Project Coordinator and fiduciary staff, administrative costs, and supervision costs associated with the teaching practicum and induction program as well as mentor teacher costs will be financed by the Credit during the Project in accordance with the annual plan agreed with the Bank.

7. **Others:** Tuition cost, attachments at a College or University for the CPCE Principal and Vice Principal, leadership course, fellowships, and masters programs, will be financed by the Credit during the Project in accordance with the annual plan agreed with the Bank.

8. The procurement procedures and Standard Bidding Documents (SBDs) to be used for each procurement method, as well as model contracts for works and goods procured, are presented in the Project's Operations Manual.

B. Assessment of the agency's capacity to implement procurement

9. An assessment of the capacity of the Implementing Agency to implement procurement actions for the Project was carried out on March 12, 2010 and confirmed by the Bank's appraisal mission on May 6, 2010. The assessment reviewed the organizational structure for implementing the Project and the interaction between the Project's staff responsible for procurement and the Ministry's relevant central unit for administration and finance. The overall Project risk for procurement is rated as low based on the proposed arrangement for procurement implementation under the Guyana Improving Teacher Education Project which is to have the MOE Planning Unit's Procurement Specialist from the EFA-FTI team handle procurement for the new Project. The team has a well functioning Procurement Specialist who has experience in procuring work, goods, and services. Civil works under the EFA-FTI Project has been handled by a well qualified Civil Works Engineer and assistants.

Table 1. Procurement Risk Assessment and Mitigation Matrix

	Risk Assessment				Risk Mitigation Measures	Residual Risk
	H	S	M	L		
Country Level	X				Other donors are assisting the Government to strengthen the PFM framework including PR reform on the basis of the recommendations of the IFA report prepared the Bank, IDB and EU	S
Project Level			X		Project which is to have the MOE Planning Unit's Procurement Specialist from the EFA-FTI team handle procurement for the new Project. The team has a well functioning Procurement Specialist who has experience in procuring work, goods, and services. Civil works under the EFA-FTI Project has been handled by a well qualified Civil Works Engineer and assistants	L
<i>Overall Rating</i>		X				M

Note: H-High; S-Substantial; M-Moderate; L-Low

C. Procurement Plan

10. The Borrower, by negotiations, will have developed a procurement plan for Project implementation which provides the basis for the procurement methods. This plan has been agreed between the Borrower and the Project Team on August 5, 2010 and will be available at the Planning Unit of the MOE in Georgetown, Guyana. It will also be available in the Project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

D. Frequency of Procurement Supervision

11. Prior review supervision will be carried out in accordance with the procurement thresholds. In addition, in compliance with the results of the capacity assessment of the Implementing Agency, there will be one supervision mission annually to carry out post review of procurement actions during implementation.

E. Details of the Procurement Arrangements Involving International Competition

1. Goods, Works, and Non Consulting Services

(a) List of contract packages to be procured following ICB and direct contracting:

1	2	3	4	5	6	7	8	9
Ref. No.	Contract (Description)	Estimated Cost	Procurement Method	P-Q	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
GY/ITE/CB/01	Computer equipment under all components	US\$297,400	ICB	N	N	Prior	02/2011	
GY/ITE/CB/02	Computer equipment under all components	US\$147,758	ICB	N	N	Prior	02/2012	

(b) ICB contracts estimated to cost above US\$150,000 (goods) per contract and all direct contracting will be subject to prior review by the Bank.

2. Consulting Services

(a) List of consulting assignments with short-list of international firms.

1	2	3	4	5	6	7
Ref. No.	Description of Assignment	Estimated Cost	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments
GY/ITE/QCBS-1B/001	Develop standard instrument for performance appraisal/classroom observation, testing and training to use tool.	US\$125,543	QCBS	Prior	2/2011	
GY/ITE/QCBS S-2B/002	Long term TA in Math, Science Methodology	US\$202,000	QCBS	Prior	03/2011	
GY/ITE/QCBS S-2B/003 ⁴⁷	Long term TA in two other subjects areas, Yr. 1	US\$101,000	QCBS	Prior	03/2011	
GY/ITE/QCBS S-2B/004	Long term TA in three other subjects areas, Yr. 1	US\$206,040	QCBS	Prior	03/2011	

⁴⁷ The other subject areas to be covered by long-term technical assistance include: reading, multi-grade methodologies, English as a second language, guidance and counseling, and special needs education.

- (b) Consultancy services estimated to cost above US\$100,000 equivalent per contract for firms, US\$50,000 equivalent per contract for individual consultants, and all single source selection of consultants (firms and individuals) for assignments regardless of estimated contract amount will be subject to prior review by the Bank.
- (c) Short lists composed entirely of national consultants: Short lists of consultants for services (firms) estimated to cost less than US\$100,000 equivalent per contract, may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

Table 2. Thresholds for Procurement Methods and Prior Review (in US\$ thousands)

Expenditure Category	Contract Value (Threshold)	Procurement Method	Contracts Subject to Prior Review
1. Works	≥1,000	ICB	All
	100-1,000	NCB	None
	<100	3 Quotations	None
2. Goods	>100	ICB	All
	25-100	NCB	None
	<25	Shopping	None
3. Consulting Services			
Firms	>100	QCBS, QBS, LCS, CQS, FBS	All
	<100	QCBS, QBS, LCS, CQS, FBS	TOR only (by TTL)
	Regardless of value	Single Source	All
Individuals	>50	Comparison of 3 CVs in accordance with Chapter V of the Guidelines	All (by TTL)
	<50		TOR only (by TTL)

Note: ICB = International Competitive Bidding; NCB = National Competitive Bidding
 QCBS = Quality- and Cost-Based Selection; QBS = Quality-Based Selection; LCS = Least-Cost Selection; CQS = Selection based on Consultants' Qualifications; FBS = Selection under a Fixed Budget

Annex 9: Economic and Financial Analysis

GUYANA: Improving Teacher Education

1. This annex summarizes the economic rationale behind the World Bank's support for the Cooperative Republic of Guyana's Improving Teacher Education Project with a US\$4.2 million IDA credit, including approximately US\$1.8 million in Pilot CRW IDA funds. The annex provides the country's macroeconomic position and the impact of the World Bank Credit on the overall debt situation. The annex also analyzes the expected impact of the Project on the Government's fiscal position and analyzes the expected costs and benefits of the Project to the Government and to teachers. The Project supports a systematic reform that, if successful, will transform how teachers are trained in the country and the overall cost of training by improving the efficiency of the current system.

A. Economic Situation in Guyana

2. **Guyana has significantly progressed in terms of macroeconomic stability, growth and poverty reduction.** The country experienced several years of instability (1998-2005), but its Gross Domestic Product (GDP) growth recovered in 2006 (5.1%) and in 2007 (5.4%). The Gross National Income (GNI) per capita in 2009 was US\$1,460. According to the last International Monetary Fund (IMF) Executive Board Consultation with Guyana (Article IV, published on February 27, 2009)⁴⁸, despite external shocks and social pressures, the country preserved macroeconomic stability in 2008. This has been possible thanks to prudent fiscal and monetary policies, as well as a stable exchange rate, which is well aligned with the fundamentals. In 2008, growth decreased to about 3 percent due to a reduction of sugar production and by the end of 2008, inflation declined to 6.4 percent, which was lower than the target (6.8 %).

3. **The country faces serious fiscal concerns and is working to improve its fiscal balance. In 2008, fiscal deficit increased to 7.9 percent of GDP** (compared to the 6 percent target). Reforms have been adequately implemented in this sector and the Value Added Tax (VAT) is now well established with a new and more effective system for better monitoring of taxes and risk profiling. In 2008, the external current account increased to 21 percent of GDP, but it was mainly financed by concessional loans, grants, and FDI. There was also a higher deficit because of lower sugar exports⁴⁹, higher fuel prices and import of capital goods. However, in 2009, the oil import prices were expected to decrease, which helped to compensate the reduction of commodity export prices. Moreover, Guyana has plans to reduce the external current account deficit through an increase in non-traditional exports and the development of petroleum and hydropower resources.

4. **Guyana faces serious challenges and risks that constrain its growth**, such as high levels of emigration (particularly for education and health professionals), weakened commodity exports (sugar, rice, timber, bauxite, and gold), and reduced foreign direct investment. The global slowdown is also reducing workers's remittance to the country. To overcome these challenges, Guyana will have to improve infrastructure to promote growth and private sector development, improve the quality of education and health services, deepen governance, and modernize the

⁴⁸ IMF, <http://www.imf.org/external/country/GUY/index.htm>

⁴⁹ EU price cuts on Guyana's main commodity – sugar. The country's main exports are: sugar, gold, bauxite/alumina, rice, shrimp, molasses, rum and timber.

state, while building on progress already made and preventing crime and enhancing citizen's security.⁵⁰ In order to face these challenges, prudent fiscal and monetary policies must be continued.⁵¹

Table 1. Guyana: Selected Economic Indicators

				Est.	Proj.
	2005	2006	2007	2008	2009 ⁵²
(Annual percent change)					
Production and prices					
Real GDP	-1.9	5.1	5.4	3.2	4.6
Real GDP per capita	-2.3	4.8	5.1	2.9	4.3
Consumer prices (average)	6.9	6.7	12.2	8.2	3.6
Consumer prices (end of period)	8.3	4.2	14.0	6.4	5.0
Terms of trade	-6.1	3.2	3.1	-7.2	8.5
(In percent of GDP)					
National accounts					
Investment	32.3	33.6	33.2	30.6	31.0
Private sector	8.9	9.3	10.8	12.4	10.8
Public sector	23.4	24.3	22.4	18.3	20.3
National saving	17.5	12.6	15.2	9.9	12.9
Private sector	10.8	3.7	3.4	2.5	2.3
Public sector	6.7	8.9	11.7	7.4	10.7
External savings	14.8	20.9	18.0	20.8	18.1
Nonfinancial public sector					
Revenue and grants	44.1	46.7	44.5	43.2	45.4
Expenditure	57.7	58.2	52.1	51.1	51.9
Current	34.4	34.0	29.7	33.3	31.6
Capital	23.4	24.3	22.4	17.8	20.3
Overall balance (after grants) ^{1/}	-13.6	-11.5	-7.6	-7.9	-6.5
Total public sector debt (end of period) ^{2/}	183.9	148.5	94.2	92.5	95.1
External ^{2/}	147.5	114.5	65.6	66.1	70.9
Domestic	36.5	33.9	28.6	26.3	24.2
(Annual percentage change, end of period)					
Money and credit					
Broad money	8.3	15.9	13.6	13.4	8.9
Domestic credit of the banking system	3.9	4.3	5.6	35.8	15.2

⁵⁰ World Bank, *Op.Cit.*

⁵¹ IMF, Executive Board Consultation with Guyana (Article IV), February 27, 2009

⁵² 2009 data may not be consistent with the data presented in the CAS (2009-2012) as the data reflected in the PAD is updated.

Public sector (net)	-224.0	-229.1	-83.6	20.1	-19.3
Private sector	8.4	17.9	18.7	21.3	15.9

(In millions of U.S. dollars, unless otherwise indicated; end of period)

External sector

Current account balance ^{1/}	-121.9	-190.8	-193.0	-239.6	-223.3
Gross official reserves	251.9	277.3	324.0	355.7	373.0
Months of imports of goods and services	3.1	3.1	3.0	2.8	3.2

Memorandum items:

Nominal GDP (G\$ billion)	164.9	183.1	217.6	236.2	256.9
Per capita GDP, US\$	1086	1197	1400	1505	1603
Guyana dollar/U.S. dollar (period average)	199.9	200.6	202.5	...	...

Source: World Bank. Based on: Guyanese authorities; UNDP Human Development Report; WB poverty indicators and staff estimates.

^{1/} Including official transfers.

^{2/} After delivery of HIPC assistance and MDRI and excluding unspent portion of PetroCaribe in 2007-09.

B. Debt Analysis

5. **Guyana has a higher level of debt that it is addressing debt relief and support from the IMF.** The Public Debt as a percentage of GDP in Guyana in 2008 was 92.5 percent: 66.1 percent corresponds to external debt and 26.3 percent to domestic debt. Following debt relief, the external debt-to-GDP ratio in Guyana declined from over 100 percent in 2006 to about 66 percent by end-2008⁵³. Table 2 shows basic debt statistics for Guyana.

Table 2. Guyana: Domestic and External Debt (in % of GDP)

				Est.	Proj.
	2005	2006	2007	2008	2009
Total public sector debt (end of period) ^{1/}	183.9	148.5	94.2	92.5	95.1
External 1/	147.5	114.5	65.6	66.1	70.9
Domestic	36.5	33.9	28.6	26.3	24.2

^{1/} After delivery of HIPC assistance and MDRI and excluding unspent portion of PetroCaribe in 2007-09.

Source: The World Bank.

6. **The Project's credit should not have an impact on the country's debt position.** The amount of the Credit is US\$4.2 million for the Project. When comparing the amount of this credit to the country's GDP, Exports and Public Debt; it is evident that the impact of the Credit on the country's debt situation is not considerable.

⁵³ www.worldbank.org

C. Poverty

7. **Guyana has seen a gradual decline in its poverty rate.** The poverty rate declined from 43.2 percent in 1992 to 36.1 percent in 2006 (about 274,000 people)⁵⁴ and extreme poverty rate declined from 28.7 percent to 18.6 during the same period of time. Guyana has made some important advances in reaching the Millennium Development Goals⁵⁵ and Guyana presents relatively moderate or even low levels of poverty compared to other Highly Indebted Poor Countries⁵⁶. Despite these gains, important inequalities persist between the regions in the country.

Table 3. Guyana: Poverty and Extreme Poverty by Geographic Areas, 2006. Percentage of the population

	Poverty	Extreme Poverty	Total Population
National	36.1	18.6	100.0
Urban	18.7	7.3	28.2
Rural Coastal	37.0	17.1	60.1
Rural Interior	73.5	54.0	11.7
Population (thousands)	274	141	760

Source: The World Bank. June 30, 2008. *Guyana, Poverty Assessment: Accelerating Poverty Reduction*. Based on Household Budget Survey data 2006 and measured using consumption expenditure.

8. **There is a correlation between geography, poverty and educational attainment.** The most recent Population and Housing census in Guyana was in 2002 (182,609 households). Based on the information provided in this Census, the World Bank carried out a Poverty Map for Guyana, which analyzes data on the access of households to basic services in order to measure poverty. The two indices consulted were:⁵⁷ the Living Conditions Index (LCI) and the Enumeration District Marginality Index (EDMI). Since no data on household consumption was provided, the EDM I may be considered as a “better” measure of poverty than the LCI, since it considers a wider variety of variables, which are correlated with the level of household consumption.

9. **The two measures are broadly consistent.** Both measures point to four groups of regions: the poorest group (Regions 8, 9, and 1), the lower middle or poor group (Regions 7 and 2), the upper middle (or less poor) group (Regions 3 and 5) and the wealthier group (Regions 6, 4, 10 and Georgetown, which is the wealthiest region according to both indices).

⁵⁴ Guyana, Household Budget Survey, 2006.

⁵⁵ Ibid

⁵⁶ The World Bank. June 30, 2008. *Guyana, Poverty Assessment: Accelerating Poverty Reduction*.

⁵⁷ The way these indices are calculated can be further consulted in the mentioned document.

Table 4. Comparison of the ranking of regions based on the LCI and EDM I (means weighted by the number of households in the ED)

Based on LCI		Rank (Poorest on top less Poor at Bottom)	Based on EDM I	
Region 8	162	1	Region 1	2.125
Region 9	184	2	Region 9	2.049
Region 1	207	3	Region 8	1.982
Region 7	259	4	Region 7	1.023
Region 2	278	5	Region 2	0.583
Region 3	352	6	Region 5	0.303
Region 5	355	7	Region 3	0.234
Region 10	364	8	Region 6	0.188
Region 6	373	9	Region 4	-0.137
Region 4	375	10	Region 10	-0.299
Georgetown	453	11	Georgetown	-1.024

Source: World Bank. September 2005. Skoufias, *Poverty Map for Guyana*.

D. Geographic Inequalities in Education in Guyana

10. **Geographic inequality is an important theme in education in Guyana.** There are important and persistent disparities between regions in Guyana. Table 5 shows the inequalities in teachers' qualifications in primary education in different regions.⁵⁸ The poorest regions present lower number of graduate teachers and other qualified teachers with a relatively high number of unqualified teachers. It is worth noting that 88 percent of primary teachers are women. At the secondary level, the same pattern is seen, with most graduate teachers in richer regions. Seventy percent of secondary teachers are women.

Table 5a. Number of Primary Teachers by Region, Qualification and Gender, 2007-2008

Region	Graduate				Other Qualified				Unqualified		Total		
	Trained		Untrained		Trained		Untrained		M	F	M	F	T
	M	F	M	F	M	F	M	F					
Region 1	3	1	0	0	23	51	18	58	10	49	54	159	213
Region 2	0	6	0	0	39	157	7	50	2	22	48	235	283
Region 3	3	24	0	1	31	302	16	137	2	17	52	481	533
Region 4	1	67	0	1	29	328	27	258	2	22	59	676	735
Georgetown	2	89	0	0	21	358	21	119	1	34	45	600	645
Region 5	0	11	0	0	14	147	10	120	3	15	27	293	320
Region 6	4	20	0	0	46	241	49	247	9	31	108	539	647
Region 7	0	4	0	0	6	54	1	41	2	17	9	116	125
Region 8	0	0	0	0	1	12	2	13	4	26	7	51	58
Region 9	0	3	0	0	23	22	19	40	14	27	56	92	148
Region 10	1	7	0	0	15	195	3	35	1	10	20	247	267
Total	14	232	0	2	248	1867	173	1118	50	270	485	3489	3974

Source: MOE, Digest of Education Statistics, 2007-08.

⁵⁸ MOE, Digest of Education Statistics, 2007-08.

Table 5b. Number of Secondary Teachers by Region, Qualification and Sex, 2007-2008

Region	Graduate				Other Qualified				Unqualified		Total		
	Trained		Untrained		Trained		Untrained		M	F	M	F	T
	M	F	M	F	M	F	M	F					
Region 1	3	0	0	0	7	16	2	9	1	2	13	27	40
Region 2	6	6	0	1	41	89	14	24	1	3	62	123	185
Region 3	7	22	1	5	36	77	27	54	1	2	72	160	232
Region 4	8	30	6	18	15	53	16	37	0	0	45	138	183
Georgetown	33	132	38	59	81	220	66	119	2	5	220	535	755
Region 5	7	14	2	1	28	69	10	44	3	12	50	140	190
Region 6	9	23	8	8	67	129	54	139	2	6	140	305	445
Region 7	2	3	0	0	11	17	4	12	0	2	17	34	51
Region 8	0	0	0	0	3	6	3	6	0	4	6	16	22
Region 9	1	3	3	2	6	8	3	5	0	1	13	19	32
Region 10	9	44	2	1	41	109	25	23	0	3	77	180	257
Total	85	277	60	95	336	793	224	472	10	40	715	1677	2392

Source: MOE, Digest of Education Statistics, 2007-08.

11. This inequality is also evident regarding number of pupils per trained teacher in the different regions. In the poorest regions, the number of students per trained teacher is substantially higher than in richer areas at both the primary and secondary levels.

Table 6a. Primary education pupil/teacher ratio by region, 2007-2008

Education District	Number of pupils per trained teacher
Region 1	78
Region 2	34
Region 3	35
Region 4	46
Georgetown	41
Region 5	46
Region 6	53
Region 7	47
Region 8	130
Region 9	94
Region 10	29
Total	44

Source: MOE, Digest of Education Statistics, 2007-08.

Table 6b. Secondary education pupil/teacher ratio by education district, 2007-2008

Education District	Number of pupils per trained teacher
Region 1	41
Region 2	29
Region 3	34
Region 4	30
Georgetown	29
Region 5	33
Region 6	43
Region 7	48
Region 8	55
Region 9	50
Region 10	22
Total	32

Source: MOE, Digest of Education Statistics, 2007-2008.

12. The majority of the indigenous population (9.2 percent of the total population⁵⁹), live in the poorest regions. Amerindians represent more than three-quarters of the populations of Regions 8 and 9 (75.9 and 89.2 percent respectively) and two-thirds of the population (62.2 percent) of Region 1 (Population and Housing Census 2002 – Guyana National Report, Chapter 2, p. 30-31).

13. The poorest regions present the lowest educational attainment and secondary enrollment rates. Hinterland students register the highest repetition rates and the lowest test results (MOE, Digest of Education Statistics 2008-09). In addition, although enrolment rates at the primary level are high in the hinterland, enrollment rates at the secondary level in Regions 1, 8 and 9 are below the national average.

E. Cost-Benefit Analysis

14. The economic analysis measures the economic benefits of the Project. The economic analysis assesses the extent to which the reduction in the number of years needed to obtain the Associates Degree and to obtain the Bachelor's Degree in Education will reduce the costs of teacher training for the government. Moreover, the analysis considers the gains that the prospective teachers will obtain from the reform.

15. The reform will reduce the number of years required to become a teacher, reducing the length of education and reducing repetition of coursework. At present, students are required to complete three years of study at CPCE followed by two years of practice in order to obtain the Certificate as a Trained Teacher. With the reform, this will change to a two-year Associate's Degree in Education at CPCE. After graduating, new teachers will participate in an Induction Year where they receive regular guidance from a supervisor and a mentor at their

⁵⁹ "The largest nationality sub-group is that of East Indians comprising 43.5 percent of the population in 2002. They are followed by persons of African heritage (30.2 percent). The third in rank are those of Mixed Heritage (16.7 percent), while the Amerindians are fourth with 9.2 percent..." Census 2002

placement school. Therefore, the reform will upgrade the Teacher Certificate Program to an Associate's Degree and reduce by one year the years of schooling to be considered a Trained Teacher. It will also provide a higher quality induction year and reduce by one year the time of in-service practice. At present, to enter into the UG School of Education and Humanities requires students to have a Trained Teacher Certificate and complete a four year Bachelor's Degree in Education. With the reform, the Associate's Degree holders will be able to earn a Bachelor's Degree at UG in a two-year program. In total, students will have to complete four years to earn a Bachelor's Degree in Education (2 + 2). The reform represents a reduction of three years of formal education by providing a higher quality teacher education program that eliminates inefficiencies and duplication of courses.

16. The Project will provide economic benefits to both the Government and teachers. Program changes benefit the Government as well as the prospective teachers in terms of economic gains. The Government will face lower costs to train a teacher. The teachers will gain since they will have to study fewer years to obtain their degrees and will gain extra years of salary. In addition, they will save in terms of tuition fees and other expenses that they assume during their studies. Teachers' gains would probably encourage more teachers to continue with their formal education. The education system would potentially gain more trained teachers in a shorter period of time and be able to train those teachers where they live which has shown to encourage teachers to stay in their communities.

17. In order to estimate the savings for the Government, the economic analysis compares the estimated costs to obtain the Associates Degree and the Bachelor's Degree before the reform with the costs after the reform. The average cost uses data for the last three years (2007, 2008 and 2009) for both institutions. The average annual cost per student at CPCE for the last three years is US\$1,050 (Table 7a), compared to US\$1,980 for the School of Education at the University of Guyana. It costs almost double to train a teacher at UG than at CPCE.

Table 7a. Cost of Teacher Education at CPCE

	2007	2008	2009
Total Expenditure G\$	G\$324,672,334	G\$339,096,988	G\$361,688,800
Total number of Students	1,490	1,562	1,967
Average annual Cost per Student G\$	G\$217,900	G\$217,090	G\$183,877
Average 2007-2008-2009 G\$		G\$206,289	
Average annual Cost per Student US\$	US\$1,111,903	US\$1,101,981	US\$937,337
Average 2007-2008-2009 US\$		US\$1,050	

Source: Own elaboration based on Ministry of Education data. Guyana, 2010, using exchange rates correspond to the 31st of July of 2007, 2008 and 2009.

Table 7b. Cost of Teacher Education at the University of Guyana

	2007	2008	2009
Total Expenditure	\$ 295.647.844	\$ 288.127.484	\$ 336.788.223
Total number of Students	848	750	777
Average annual Cost per Student G\$	\$ 348.641	\$ 384.170	\$ 433.447
Average 2007-2008-2009 G\$		G\$388,753	
Average annual Cost per Student US\$	\$ 1.779	\$ 1.950	\$ 2.210
Average 2007-2008-2009 US\$		US\$1,980	

Source: Own elaboration based on UG Financial Reports, 2007, 2008 and 2009. Guyana, 2010, using exchange rates correspond to the 31st of July of 2007, 2008 and 2009. The Average cost per student considers only Turkeyen Campus, which is the main campus and has 85 percent of students enrolled in the School of Education and Humanities at both campus. Berbice Campus presents comparatively higher costs, since this campus is relatively new and the number of enrolled students is much lower than expected.

18. There are several underlying assumptions behind the economic analysis. First, this analysis assumes that the marginal cost of educating teachers is equal to the average cost. This is a reasonable assumption because both UG and CPCE are well established and most of the capital costs have been amortized. The second assumption is that quality of teacher education programs will not be reduced even if there will be less number of years of education. In other words the system will produce good quality teacher education for less cost. This is also a reasonable assumption since many of the current courses of study at CPCE and UG are duplicative and since the Project will invest in improving the quality of both institutions including the introduction of an induction year for new graduates of the ADE program.

19. The analysis considers several different scenarios to present a range of estimates. The reform will affect the cost of educating each teacher. Two scenarios (1 & 2) consider the impact of the reform when the number of students remains exactly the same after the reform. In the first scenario, annual costs of educating teachers remain the same (US\$1,050 and US\$1,980 respectively) with an additional cost for the induction year (1/3 of CPCE annual cost). The latter represents a new cost. The reform is likely to increase the number of students seeking a Bachelor's of Education from UG. Two scenarios (3 & 4) assume that the average number of UG School of Education graduates increases from about 200 graduates per year to about 300 graduates per year as teachers respond to the new system. A third type of change that was not considered was an increase in the total number of students at CPCE. While this is a possibility, it is a major policy change since it requires a decision to increase the number as opposed to the quality of teachers. The analysis assumes a relatively high cost to establish the reform, paid in the first four years through the Project and Government counterpart costs while the cost savings (the benefits) are gradually accrued. The analysis assumes a five percent discount and twenty five year cost and benefits flow. The results are outlined in Table 8.

Table 8. Net Benefits of the Project under different Scenarios, US Dollars

	Net Benefits per Scenario			
	Current number of students is maintained at CPCE and UG Sch. Of Education		Number of students graduating from UG Sch. Of Education increases by 50%	
	<u>Scenario 1</u> Current cost per graduate	<u>Scenario 2</u> Cost increases by 30% per graduate	<u>Scenario 3</u> Current Cost per graduate	<u>Scenario 4</u> Cost increases by 30% per graduate
Year 1	-\$900,000	-\$900,000	-\$900,000	-\$900,000
Year 2	-\$635,913	-\$732,716	-\$696,501	-\$811,481
Year 3	-\$371,826	-\$565,432	-\$493,002	-\$722,961
Year 4	-\$107,739	-\$398,148	-\$289,503	-\$634,442
Year 5	\$1,056,348	\$669,136	\$813,996	\$354,078
Year 6	\$1,320,435	\$836,420	\$1,017,495	\$442,598
Year 7	\$1,584,522	\$1,003,703	\$1,220,994	\$531,117
Year 8	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 9	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 10	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 11	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 12	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 13	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 14	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 15	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 16	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 17	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 18	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 19	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 20	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 21	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 22	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 23	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 24	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Year 25	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130

Annual Cost Savings	\$1,760,580	\$1,115,226	\$1,356,660	\$590,130
Net Present Value	\$15,721,470	\$8,788,830	\$11,382,406	\$3,148,047
Internal Rate of Return	36%	24%	29%	13%

20. **Regardless of the scenario, the results show that the costs savings are substantial.** The cost savings to the Government range from \$590,000 per year (Scenario 4) to \$1,761,000 per year (Scenario 1). The Net Present Value of the Project ranges from \$3.1 million to \$15.7 million with rates of returns from 13 percent to 36 percent. This represents a high level rate of return for the Project.

21. **Teachers will also benefit from the reform.** The economic gains for teachers are based on the current teacher scale positions and salaries. Teachers will benefit from a shorter time at both CPCE and UG and from the saved tuition and fees at UG. They will be practicing in the classroom sooner and using new skills, teaching methodologies and pedagogical training to more effectively deliver learning concepts to students. Teachers who only plan to go to CPCE will save, on average, US\$4,044 while those who proceed to UG will save a total of \$13,561. Both of these are estimated lifetime savings. Put another way, when teachers receive the full benefit of the reform they will save collectively around \$4.1 million per year, under Scenario 1.

22. **To conclude, Government savings are considerable.** These savings could be invested in other areas of education to ensure high quality for students. Teachers' gains with the reform are also substantial. Untrained teachers will be further encouraged to pursue formal education. Teachers will have better incentives to complete not only the Associates Degree, but also the Bachelor's Degree in Education. This will be beneficial for the country since more well-trained teachers would be available. Finally, the economic gains generated by the reform, accompanied by the development of career paths and an appropriate incentives system will help to reduce the probability of teachers' emigration to other countries.

Annex 10: Safeguard Policy Issues

GUYANA: Improving Teacher Education

A. Social Safeguards

1. The Project is not associated with any social safeguard risk and no World Bank social safeguards are triggered. The Bank's policy on Indigenous Peoples (OP/BP 4.10) is not triggered because the Project does not target and does not involve any direct intervention on communities of indigenous peoples. The Project includes a Communication Campaign (Component 3B) to promote awareness of the education policy changes and reforms to delivery of teacher education to stakeholder groups including communities and individuals.

Social Impacts

2. From the onset, the project has sought to address social and gender factors relevant to the operation as well as potential distributional impacts and risks, so that benefits will be delivered equitably and inclusively. Other social factors such as access, quality, capacity building, empowerment, equity and inclusion are important to consider and address in each of the Project's three components. At the institutional level social factors are critical to strengthening both human resources practice and the quality of teacher education. At the country level, it is widely recognized that low quality of education is largely the result of poor teaching and previous underinvestment in the sector. The social analysis suggests that developments achieved as a result of the Project, by building human resources and capacity for greater learning effectiveness and by strengthening institutions in Guyana, are likely to have varying social impacts on stakeholders across different demographics. Carefully considered recommendations from the social assessment regarding social and gender factors in each activity will be taken into account during Project implementation.

Social Assessment

3. While no safeguard policies apply, a social assessment was carried out between April 2 and May 4, 2010 to analyze the potential social and gender impacts of the Project on relevant stakeholders and beneficiaries. The social assessment examined opportunities to enhance Project benefits for the teachers and for training institutions. More broadly, it intended to integrate social measures into Project implementation and monitoring where appropriate. The assessment was based on a literature review, a stakeholder analysis and extensive consultations with the two institutions that provide initial teacher education in Guyana: the Cyril Potter College of Education (CPCE) and its satellite centers, and the University of Guyana's School of Education and Humanities (UG) administrative staff along with teacher educators, student teachers and teachers. The study was carried out in two parts: a) a literature review based on existing information and data on teacher education and tertiary institutions that provide training; and on historical, legislative, institutional and regulatory information on teacher education in Guyana, and (b) consultations with stakeholders and beneficiaries on current teacher training practices, and how they can be improved at the local and institutional level. Both UG and CPCE along with the Ministry of Education (MOE) and the National Centre for Educational Resource Development (NCERD) widely participated in the Project design.

4. **Consultations:** The Minister of Education spearheaded efforts to bring both the College and University together to tackle the reform of the present teacher education offered in Guyana. A Task Force comprised of key officials from the College, UG's School of Education and Humanities, the NCERD and MOE was established in early 2009. They have produced a concept note for Reforming Teacher Education and Training in Guyana that pulls together a strategy from vision papers produced by both institutions that reflect on the way forward for collaboration and rationalization of a framework for teacher education. In November of 2009 a workshop organized by the Bank and the Task Force brought stakeholders from Guyana together to further develop the strategy by articulating the Government's vision, proposed policies, and activities necessary for reforming the delivery of teacher education. Working groups were formed to correspond to Project components. Focus group discussions and in-depth interviews were conducted with stakeholders mentioned above along with others for the social analysis. The social assessment provided recommendations and developed appropriate monitoring indicators based on these consultations.

5. The social assessment found that the Project is expected to bring positive impacts to teacher educators, teachers and students. Greater resources and increased institutional and human capacity at UG and CPCE will significantly enhance the quality of teacher education in Guyana and in turn will improve students' learning. The analysis highlighted key social factors related to improving teacher education such as, the lack of access to basic facilities and resources, inequity in teaching skills and the quality of education delivery, regional disparities in education, the need for improving institutional capacity, and sharp gender differences in labor participation in the sector. The main findings include:

- (a) **Strong Government Support.** Given the administration's commitment to education, it is projected that even if there were a change in Government that the Project activities will not be significantly impacted, given the country's aim of improving teacher quality. The Government has demonstrated its commitment to education through the satisfactory investment of the country's financial resources (7.8 percent in 2008.)
- (b) **Early Involvement of Key Actors.** The consensus building undertaken during the Project's development, particularly via the Task Force as well as with the regional and institutional actors involved, has created an awareness of the Project and built ownership within the MOE, UG, and CPCE.
- (c) **Consultations.** Relevant stakeholders and beneficiaries were involved in the Project preparation activities. The prior inclusion of quality participation and extensive consultations significantly contributes to the sustainability of the Project.
- (d) **Inequity.** Disparities exist in education service delivery and learning outcomes among student teachers and school-age students from different social and economic backgrounds. All measures of teacher education, in particular, and school performance, more generally, in Guyana underscore the need to support the development of effective and equitable schooling in remote and poverty stricken regions where the academic performance of students is consistently lower than pupils in the wealthier, more populated areas. The Project will support CPCE and UG to transition to dual mode delivery using distance education and face to face teacher education programs equal in scope and quality. This will ensure that teachers from remote regions have access to good quality teacher education.

- (e) **Regional disproportion of unqualified teachers.** The rural coastal and hinterland areas have the greatest volume of unqualified teachers in the classroom. Enforcing the current entry requirement of five passes can actually mean that less people are trained. Given the migration situation in the country, this can have a negative impact on teacher shortage, at least in the short to medium term. This was taken into consideration by the Bank and the MOE. IDCE will provide a remedial course for candidates who have not met the minimum academic entry requirements.
- (f) **Access.** Limitations and obstacles on teachers both from a physical and an economic standpoint. Lack of access to basic facilities and resources may impact the level of participation and inclusion of some stakeholders within the Project. In 2009, approximately 30 percent of the regional allocation from the MOE went to the four hinterland regions of 1, 7, 8, and 9, and the remainder to the five coastal regions, Georgetown and Region 10. The Project will provide new resources and teaching materials to all Learning Resources Centers and CPCE satellite centers located in remote regions to mitigate inequalities.
- (g) **Incentives.** Many hinterland teachers after being trained do not return to their respective regions or remain in the teaching profession. Some initial issues highlighted are the high cost of living in hinterland areas, limited supporting infrastructure to execute tasks and limited possibility for career development. Current programs exist in Guyana to address these issues. For instance, the DE programs are now being offered where teachers live, and the EFA-FTI provides housing and a remote areas incentive (RAI) for teachers that live in hinterland areas.
- (h) **Inclusion.** Significant differences in the number of qualified teachers, training opportunities and resources throughout the country will continue to impact the quality of education learning outcomes. Hinterland communities tend to have lower quality education delivery due in part to difficult service delivery and higher levels of dropouts and repeater students than on the coast.
- (i) **Social Capital.** Substantial social capital is present in all the regions. The majority of schools have in place School Improvement Action Committees (SIACs) or Parent Teachers Associations (PTAs) operating in their schools. Communities play a role in operating schools.
- (j) **Governance.** Improving institutional capacity continues to be a key component to building human resources and improving teacher education.
- (k) **Gender.** Sharp differences in labor participation by gender are evident as females dominate the sector. In the hinterland it is particularly noticeable with mostly females being engaged in the profession as males generally pursue more lucrative employment in the form of gold and diamond mining, and logging operations.
- (l) **Resistance to Change.** It is well documented that stakeholders affected by education reforms could be resistant to change. To tackle this issue, the Project has been designed with local stakeholder's inputs.
- (m) **Communication.** Some communication strategies in the past have been too general and generic thus missing their intended targets
- (n) **Teacher Absenteeism.** Modifications to teacher learning programs will likely reduce teacher absenteeism. DE programs are offered in every region except for region 8, allowing teachers to stay in their home areas. Teacher absenteeism is problematic, averaging 16% system-wide. The combined impact of student/teacher absenteeism in some regions represents a loss of one-third to one-half of total instructional time.

6. Based on the findings of the social assessment which informed Project design, the following has been incorporated into Project components to ensure that benefits are delivered equitably and inclusively:

- (a) Promotion of activities and programs that recognize and respond to the economic and social realities of teachers in the coast and the hinterlands.
- (b) Tailoring of programs that incorporate the unique characteristics (ethnic, gender, social) of the stakeholders in the face to face and distance learning programs. For example, remedial programs will be developed for those who may not meet the entry requirements and classes will be conducted in afternoon at UG to accommodate student teachers.
- (c) Phasing programs in rather than following a rapid implementation. More established foundations tend to create minimum disturbances.
- (d) Continuing to carry out the consultations that involve diverse stakeholders during Project implementation. Encouraging the participation at various levels with relevant actors including the Guyana Teachers Union and Parent Teachers Associations.
- (e) Improving existing infrastructure and library resources and strengthening satellite centers in specific, targeted areas
- (f) Emphasizing the importance of building on the mutual strengths of UG and CPCE
- (g) Strengthening MOE's ability to provide strategic and technical direction to the entire sector, while increasing transparency in resource management.
- (h) Implementation of a strong communication program to ensure that messaging is clear and that information is accessible and understandable to relevant stakeholders and target audiences. Outreach and communication is essential to attracting good candidates into the new teacher programs and informing stakeholders of different policies that may affect them.
- (i) Developing best practices documentation, creating sustainable teaching resources and leading the development of professional learning communities tailored to the specific local contexts and draw upon the expertise that is available.
- (j) Ensuring that the Project's success is sustainable after Project completion. Considering medium to long-term strategies adapted to local specifics.

Gender

7. The Project will continue to pay special attention to the needs of both female and male teacher educators, teachers, and other stakeholders, making sure that they benefit from Project activities and promoting fair representation in teacher education. The social assessment found that gender disparity remains a main concern within the education system in Guyana. It is a well established in Guyana that males are more likely to pursue employment in the informal sector such as construction, mini-bus drivers or conductors, small scale mining, and agriculture. Persons in these sectors general fall outside the personal income tax regulatory framework due in large part to the inability to design an acceptable system to capture taxes mainly from the self-employed. As such, it is difficult to attract them to the teaching profession paying less, even with greater job security in the teaching profession. The Project is exploring appropriate mechanisms to attract more qualified males. Conversely, the economic slow-down in non agricultural and agricultural activities may also attract new male recruits to the profession. The reduction in number of years to complete a good quality ADE and B.Ed. would also be an incentive to males.

B. Environmental Safeguards

8. Works under the Project are not envisaged other than minor rehabilitation of the library to introduce a research room, and computer laboratories at the CPCE and UG Turkeyen campuses. This would consist of items such as installation of an air conditioning unit(s), a partition wall, and security bars for the library and labs, and additional electrical outlets. The estimated cost is expected to be well under US\$100,000 per contract. The Operational Manual will include environmental guidelines for small works.

Annex 11: Project Preparation and Supervision
GUYANA: Improving Teacher Education

	Planned	Actual
PCN review	12/18/2009	12/18/2009
Initial PID to PIC	12/22/2009	12/18/2009
Initial ISDS to PIC	12/22/2009	01/06/2010
Quality Enhancement Review	03/29/2010	03/29/2010
Decision Meeting	04/21/2010	04/21/2010
Appraisal	04/26/2010	04/26/2010
Negotiations	06/01/2010	08/04-05/2010
Board approval	09/28/2010	
Planned date of effectiveness	01/31/2011	
Planned date of mid-term review	03/15/2013	
Planned closing date	07/31/2015	

Key institutions responsible for preparation of the Project:

Ministry of Education
 26 Brickdam, Stabroek
 Georgetown, Guyana
 Tel. No. 011-592-226-3094
 Fax No. 011-592-225-5570

Contact: Hon. Shaik Baksh, Minister of Education

Bank staff and consultants who worked on the Project included:

Name	Title	Unit
Angela Demas	Sr. Education Specialist, Task Team Leader	LCSHE
Abril Ibarra Castañeda	Education Specialist, Consultant	LCSHE
Aglaia Zafeirakou	Senior Education Specialist, Consultant	LCSHE
Alexandra Gonzalez Rubio	Economist, Consultant	LCSHE
Erik Bloom	Senior Economist	LCSHE
Kevval Andrea Hanna	Research Analyst	LCSSO
Robert J. Hawkins	Senior Operations Officer	CITPO
Karen Dhani-Coonjah	Country Officer	LCCGY
Miguel-Santiago Oliveira	Finance Officer	CTRFC
Jose Janeiro	Sr. Finance Officer	CTRFC
Mozammal Hoque	Sr. Financial Management Specialist	LCSFM

Emmanuel Njomo	Sr. Financial Management, Consultant	LCSFM
Yingwei Wu	Sr. Procurement Specialist	LCSPT
Judith Morroy	Procurement Specialist (Consultant)	LCSPT
Reynaldo Pastor	Chief Counsel	LEGLA
Edith Mwenda	Sr. Counsel	LEGAF
Jimena Garrote	Counsel	LEGLA
Carlos Escudero	Lead Counsel, Consultant	LEGLA
Mary A. Dowling	Program Assistant	LCSHE
Maria Elena Paz-Gutzalenko	Program Assistant	LCSHE

Bank funds spent to date on Project preparation:

1. Bank resources: US\$243,861
2. Trust funds: US\$10,818
3. Total: US\$254,680

Estimated Approval and Supervision costs:

1. Remaining costs to approval: US\$20,000
2. Estimated annual supervision cost: US\$84,000

Annex 12: Documents in the Project File
GUYANA: Improving Teacher Education

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Annex 13: Statement of Loans and Credits
GUYANA: Improving Teacher Education

Project ID	FY	Purpose	Original Amount in US\$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P088030	2006	GY (CRL) Water Sector Consolidation Proj	0.00	11.30	0.00	0.00	0.00	0.45	0.18	0.00
P103539	2008	Conservancy Adaptation Project	0.00	0.00	0.00	3.80	0/00	3.11	0.00	0.00
Total:			0.00	11.30	0.00	3.80	0.00	3.55	0.18	0.00

GUYANA
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

FY Approval	Company	Committed				Disbursed			
		IFC				IFC			
		Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
1998	Guyam Bank	0.00	1.00	0.00	0.00	0.00	0.50	0.00	0.00
2006	Guyana Goldfield	0.00	4.75	0.00	0.00	0.00	4.75	0.00	0.00
Total portfolio:		0.00	5.75	0.00	0.00	0.00	5.25	0.00	0.00

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
Total pending commitment:		0.00	0.00	0.00	0.00

Annex 14: Country at a Glance

Guyana at a glance

2/25/10

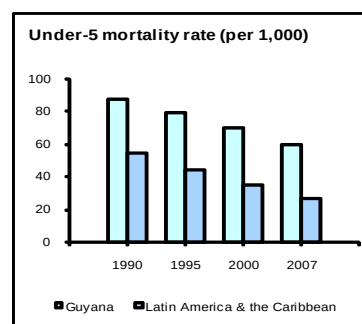
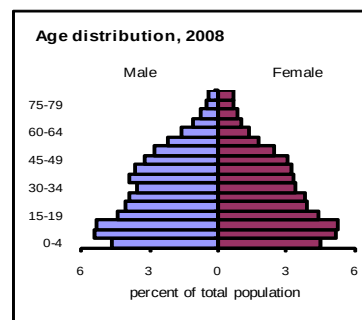
Key Development Indicators

(2008)

	Guyana	Latin America & Carib.	Lower middle income
Population, mid-year (millions)	0.76	565	3,702
Surface area (thousand sq. km)	215	20,421	32,309
Population growth (%)	-0.1	11	12
Urban population (% of total population)	28	79	41
GNI (Atlas method, US\$ billions)	11	3,833	7,692
GNI per capita (Atlas method, US\$)	1,450	6,780	2,078
GNI per capita (PPP, international \$)	2,510	10,309	4,592
GDP growth (%)	3.0	4.4	7.6
GDP per capita growth (%)	3.1	3.2	6.3

(most recent estimate, 2003–2008)

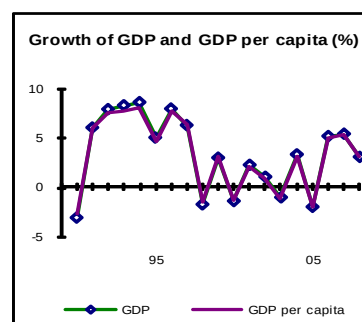
Poverty headcount ratio at \$1.25 a day (PPP, %)	8 ^a	8	..
Poverty headcount ratio at \$2.00 a day (PPP, %)	17 ^a	17	..
Life expectancy at birth (years)	67	73	68
Infant mortality (per 1000 live births)	45	22	46
Child malnutrition (% of children under 5)	..	5	26
Adult literacy, male (% of ages 15 and older)	..	92	88
Adult literacy, female (% of ages 15 and older)	..	90	77
Gross primary enrollment, male (% of age group)	113	119	112
Gross primary enrollment, female (% of age group)	111	115	106
Access to an improved water source (% of population)	93	91	86
Access to improved sanitation facilities (% of population)	81	78	52



Net Aid Flows	1980	1990	2000	2008 ^b
(US\$ millions)				
Net ODA and official aid	42	168	116	124
Top 3 donors (in 2007):				
United States	5	-17	8	21
European Commission	3	29	7	17
Canada	4	16	4	7
Aid (% of GNI)	7.4	612	17.5	11.9
Aid per capita (US\$)	54	225	153	162

Long-Term Economic Trends

Consumer prices (annual % change)	..	63.6	6.1	..
GDP implicit deflator (annual % change)	11.8	56.4	6.6	5.3
Exchange rate (annual average, local per US\$)	2.5	39.5	182.4	204.3
Terms of trade index (2000 = 100)	..	130	100	95



Population, mid-year (millions)	0.8	0.7	0.8	0.8
GDP (US\$ millions)	603	397	713	1,155
	(% of GDP)			
Agriculture	23.4	38.1	31.1	28.1
Industry	35.8	24.9	29.0	21.7
Manufacturing	12.1	10.3	8.2	3.4
Services	40.9	37.0	39.9	50.2
Household final consumption expenditure	55.4	72.4	66.2	68.8
General gov't final consumption expenditure	24.2	13.6	24.7	25.6
Gross capital formation	32.8	31.1	23.8	39.7
Exports of goods and services	81.3	62.7	96.1	68.3
Imports of goods and services	93.6	79.9	110.7	102.4
Gross savings	13.3	..	10.5	32.8

1980–90 1990–2000 2000–08
(average annual growth %)

-0.4	0.1	0.1
-3.1	5.4	1.9
-0.7	5.3	-0.7
-6.2	8.2	0.1
-8.0	9.9	1.2
-1.7	3.7	4.3
-3.5	5.8	..
-0.4	6.0	..
-8.4	1.8	..
-4.8	5.8	..
-6.2	4.8	..

Note: Figures in italics are for years other than those specified. 2008 data are preliminary. .. indicates data are not available.

a. Country poverty estimate is for earlier period. b. Aid data are for 2007.

Development Economics, Development Data Group (DECDG).

