

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: AB5594

<b>Project Name</b>	Improving Teacher Education
<b>Region</b>	LATIN AMERICA AND CARIBBEAN
<b>Sector</b>	Tertiary education (100%)
<b>Project ID</b>	P110018
<b>Borrower(s)</b>	GOVERNMENT OF GUYANA
	Ministry of Finance Guyana
<b>Implementing Agency</b>	
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1. Country and Sector Background

*Guyana's education system is recovering from years of underinvestment.* 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 (WDI, 2008) and has an estimated gross national income (per capita) of US\$1,460.

*Despite major progress made in access to education, the quality and 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 Assessment<sup>1</sup> (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,

<sup>1</sup> 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.

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, student learning outcomes are also low. In 2008 only 28 percent of the students that presented for the Caribbean Secondary Education Certificate (CSEC) obtained pass rates in English<sup>2</sup> and 31 percent did so in mathematics.

*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 considerably higher in the hinterland areas. For instance, in the school year 2007-2008 repetition rates averaged 9.9 percent for regions one, eight and nine (three of the four hinterland areas) whereas the national average was 1.4 (MoE Digest of Education Statistics 2007-2008). Secondary students in hinterland regions also underperform in most subjects (including Math, English, Science and Social Studies). For instance, in the school year 2006-2007 the CSEC average pass rate in mathematics for the hinterland was 16 percent while in the rest of the regions it was 23 percent. 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).

*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 2008 out of 8964 teachers nationwide at all levels of education, 40 percent remained untrained, (i.e., had no formal certification as educators) (see Table 1 for disaggregated data)<sup>3</sup>. In addition, many trained teachers continue to use traditional (teacher-centered) methodologies to deliver the curriculum which prevent 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.

**Table 1: Number of Teachers in Schools by Categories 2007-08**

School/level	Trained Graduates (Certificate and Bachelors)	Untrained Graduates (Bachelors only, no Certificate)	Trained teachers (Certificate)	Untrained teachers (No certificate)	Total
Nursery	122	3	865	767 (44%)	1757

<sup>2</sup> This indicator is for English A General Proficiency Exam from the May-June 2008 sitting.

<sup>3</sup> From the 2006-07 academic year to the 2007-08 academic year, the teaching force decreased in size by 3.4 percent, but the majority of teachers leaving were in the category of untrained teachers with a decrease of 9.1 percent.

Primary	246	2	2115	1611(40%)	<b>3974</b>
Secondary:					
Secondary Dept. of Primary Schools	21	1	153	243 (58%)	<b>418</b>
Community High Schools (CHS)	46	12	179	186 (44%)	<b>423</b>
General Secondary Schools (GSS)	362	155	1129	746 (31%)	<b>2392</b>
<b>Total</b>	<b>797</b>	<b>173</b>	<b>4441</b>	<b>3553 (40%)</b>	<b>8964</b>

Source: Guyana Digest of Education Statistics, 2007-08, Ministry of Education

*Students in the Hinterland and riverain regions have the highest levels of untrained teachers.* In 2007-2008 the student to trained teacher ratios (STRs) for primary schools in the hinterland were considerably higher (87:1) than for the national average (44:1) (MoE Digest of Education Statistics 2007-2008). In Region Eight, which presents the most difficult geographic challenges, the student to trained teacher ratios in primary schools was 130:1. In the 2007-2008 academic year, out of the 544 primary school teachers in the four regions comprising the hinterland area (One, Seven, Eight and Nine) 342 remained untrained and 149 of them were not qualified to enter training yet since they do not have the minimum academic requirements for entering.<sup>4</sup> (MoE Digest of Education Statistics 2007-2008). 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. Important challenges still remain.

*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<sup>5</sup>. The University offers a four year Bachelors 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 made some attempts to introduce Master's degree programs in Education<sup>6</sup>.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> In January 2008, UG launched a one-off Master of Education Program in partnership with Nova Southeastern University and supported by the Basic Education Access and Management Support (BEAMS) Program.

*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<sup>7</sup>. Although there is some overlap in the Certificate and Bachelors 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 by the University 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.

*The quality of teacher training is low.* Upgrading of teacher educators and filling vacancies at both the College and University is of paramount importance. 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 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 and the remaining 28 (there are 4 full-time and 24 part-time) 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 student teachers' independent learning.

*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 system<sup>8</sup> 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<sup>9</sup>. 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 (MOE) is also receiving support under the Education for All Fast Track Initiative (EFA-FTI) to

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<sup>7</sup> 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. From this year onwards the MoE is evaluating the possibility of ceasing the requirement of two years of teaching before completing the B.Ed.

<sup>8</sup> In Guyana, only about two percent of schools are privately funded and the remaining 98 percent are part of the public education system.

<sup>9</sup> In Guyana 4,838 teachers have been trained over the past five years and 1,818 more [0]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.

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**

*One of the main goals of the Government's Education Strategic Plan 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."

*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.

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.

As a result of these efforts, the following priorities have been identified for reforming the delivery of teacher education in 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 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 to strengthen their abilities to become true dual mode institutions and integrate ICT into the teaching and learning process.
- e) Expanding library services and improving research capacity.

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.

## 2. Objectives

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

The following indicators will be used to measure the project development objective:

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.
2. By the end of the project 90 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.
3. The percentage of student teachers scoring above X percent on their practicum performance assessments.
4. The percentage of teacher educators scoring above X percent on their performance evaluations which includes classroom observation.

Expected results 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), and (iii) better use of resources and improved management of teacher education programs.

The CAS 2009-2012 objective is to support the Government of Guyana 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, 2008-2013 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.

## 3. Rationale for Bank Involvement

*Improving education quality is one of the main strategic areas of support identified by the Country Assistance Strategy (CAS) to assist the Government with its Poverty Reduction Strategic*

*Plan*<sup>10</sup> (PRSP). The potential project to improve the delivery of teacher education will be formulated in the context of Guyana's Education Strategic Plan (ESP) 2008-2013 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.

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 the reform of the delivery of teacher education would be complementary to the handful of other donor interventions including the Bank managed Education for All – Fast Track Initiative which focuses on access to and the completion of a quality primary education. It will also build on newly completed analytical work in Guyana.

#### 4. Description

The project will be comprised of three components:

**Component 1. Improving the quality and efficiency of teacher education delivery.** This component will help the Government to upgrade the initial teacher training program from a Teaching Certificate to an Associate's Degree and implement the newly articulated Associate's Degree (ADE) and Bachelor's of Education (2 + 2 model)<sup>11</sup> in the following ways: (a) technical assistance to develop new TORs for faculty/lecturer/tutor positions and evaluate them based on the new TORs that are aligned with the 2+2 model; (b) 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) support to begin the process of applying for regional accreditation of the new Associate's Degree in line with CARICOM standards; (d) integration of ICT in the teaching and learning process and support transition to a dual mode delivery of the initial teacher training programs.

*1A. Development of new TORs for faculty/lecturer 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 to 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

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<sup>10</sup> The PRSP centers on sustaining and accelerating economic growth through enhanced competitiveness and social development.

<sup>11</sup> The rationalization, harmonization and articulation of the initial teacher education programs between the Cyril Potter College of Education and the University of Guyana's School of Education and Humanities will be supported through a consultancy under the EPDF (see Annex 1) prior to project implementation.

skill mix, identify weaknesses and strengths, and move forward to recruit new staff with the right skills and/or target current staff with potential to upgrade their skills to meet the requirements.

This subcomponent would also support the creation of a multi-discipline evaluation committee who under the assistance of outside impartial advisors would evaluate the qualifications and performance of existing staff/lecturers/tutors/UG faculty using the newly designed TORs. It would support the evaluation process, including observations of teaching practice at the various campuses and satellite centers, as well as desk review, deliberations, and stipends for meetings. A formalized evaluation and reporting process would be clearly articulated and followed.

*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 both 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 diagnose the current delivery, identify weaknesses, design realistic solutions, and the necessary funding to execute those solutions. This may include: (i) training for supervisors at CPCE and UG, (ii) training and stipend for mentor teachers at school placement sites, (iii) improvement of assessment tools and feedback loops, (iv) setting standards and stipends for supervision visits to cover travel costs, and (v) formalizing requirements for completion of the induction year.

*1C. Regional accreditation of the new Associate's Degree in line with CARICOM standards.* This subcomponent would assist the Government to begin a process to seek regional accreditation of the new Associate's Degree program. It would support only an initial application process and assist the institution to begin to implement recommendations from a regionally recognized Accreditation Body for achieving accreditation (this could be Guyana's Accreditation Council). Accreditation is generally a long-term process. This project will only support the first step.

*1D. Integration of ICT in the teaching and learning process and support transition to a dual mode delivery<sup>12</sup> 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.

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<sup>12</sup> 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 e-learning and other materials that could be more adequate for supporting student teachers (e.g. the use of videos for micro-teaching experiences, etc).



*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 employ e-learning and strengthening their ability to convert or newly develop course materials for e-learning. The training will also 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. It will finance the production or purchase of multi-media teaching aides (eg. instructional videos) for both distance and face-to-face sessions.

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.

**Component 2. Building 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). 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.

*This component will assist the Government to:* (a) strengthen the management of the CPCE and UG; (b) strengthen the teacher educators at CPCE and UG; (c) improve the teaching of math, science and technology by finding the right recruits for teaching and addressing urgent needs; and (d) establish career pathways in the teaching profession that show clear growth and linkage to rewards for good performance.

*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 filled 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. In addition, the Principal and Vice Principal will benefit from a twenty (20) days' attachment to Regional Educational Institution that currently conducts a 2+2 Associate Degree and B.Ed. programs (e.g. Erdiston College at Barbados). One or two experienced specialists in leadership will also be contracted for six months during which they will conduct other upgrading teacher-educator courses/workshops/seminars for CPCE and UG staff members and other relevant stakeholders. These activities would give the managers at teacher training institutions the needed hands-on, in-situ guidance for executing the implementation of the new Associate Degree (face-to face and DE) program at CPCE and the B.Ed. at UG.

*2B. Strengthen the teacher educators at CPCE and UG.* With the introduction of the Associate's Degree, there would be an immediate need for strengthening teacher educators at CPCE 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 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 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, 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.

*2C. Improving the teaching of math, science and technology by finding the right recruits for teaching and addressing urgent needs.* This subcomponent will include support for three activities.

(i) *Finding the right recruits.* There is great difficulty in attracting and retaining top secondary graduates to enter the teaching profession and qualified staff at CPCE and the University of Guyana. Better salary options for other careers are a major contributor to this problem. Other contributors include low entry requirements to teaching, lack of prestige in teaching, and little understanding of potential professional growth in the profession. The problem of attracting math and science teachers is even more pronounced because only a few persons graduate each year in mathematics, biology, chemistry, physics, agri-science, and Information Technology, and most of these graduates do not go into teaching. This subcomponent will assist the Government to attract top performers from secondary school by focusing on those who want to pursue a Bachelor's degree in mathematics or science into the teaching profession by offering a double major in mathematics or science and education. Double majors in Education have already been implemented in regional universities such as the University of West Indies at Jamaica, Barbados and Trinidad. This subcomponent will finance scholarships 50-50 with the Government to cover the candidate's undergraduate degree in math or science and education and expenses with the agreement that the student will enter the teaching profession upon graduation. By the end of the project the Government would have budgeted for the full expense of the scholarships. These scholarship recipients will pursue a math or science lead teacher career path that provides monetary incentives, skill development in mentoring other teachers, and professional growth and research opportunities. The subcomponent would also provide technical assistance to support the University in developing the incentives system for these recruits.

(ii) Improve the teaching of science for non-science teachers. This subcomponent will also make a small investment in an urgently needed area, support to the University to design and deliver a short-course in teaching integrated science for non-science teachers. In many cases, teachers who have not been trained as science teachers are required to teach science subjects in secondary departments of primary schools and other secondary schools. Given the urgency of tackling this issue this subcomponent will help UG design and deliver a short course on science content and science pedagogy specifically for teachers under these circumstances. Ideally this course would be designed as an e-learning course with a face-to-face component.

(iii) Improve Learning Resource Centers (LRCs) and main campus ability to teach science through replacement of targeted equipment and laboratory upgrades. Improving the entire infrastructure for laboratories is beyond the scope of the project, however, specific, targeted improvements will be supported. This would include: (i) procurement of science laboratory goods, science microkits and laboratory simulation software for LRCs and main campuses; (ii) minor rehabilitation of CPCE and UG School of Education and Humanities science laboratories; and (iii) training for science teachers and distance education tutors in the use of the new science materials and teaching tools.

*2D. Establish career pathways in the teaching profession that show clear growth and linkage to rewards for good performance.* The lack of perceived professional development opportunities and career paths for educators paints teaching as a lackluster job. There is a need to develop clear career paths for all educators to attract top graduates into the teaching profession. The project will assist the Government to outline and communicate the entry and professional development requirements for all careers in the education sector and set a clear policy including providing the necessary scope and support for educators to readily access professional development opportunities.

### **Component 3. Project Management and Communications**

*3A. Improving the main library, satellite, and Learning Resource Centers to support independent learning and the professional development teacher educators, student teachers, and teachers.* The existing library services and related services at the College and University fall short of that what is expected of a tertiary level institution. This subcomponent will support 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. An inventory and identification of needs would be necessary to prioritize essential resources.

*3B. 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, employ and regularly maintain a website, and conduct communications outreach and ownership of the reforms to delivery of teacher education.

*3C. Project Management.* This subcomponent would assist the Ministry of Education with administration and oversight of project implementation at the central and regional levels for the improvement of delivery of teacher education at both CPCE and UG. It will also finance training in fiduciary aspects of project management.

## **5. Financing**

Source:

(\$m.)

BORROWER/RECIPIENT		1
International Development Association (IDA)		5
	Total	6

## 6. Implementation

The three institutions that will be involved in project implementation are the Ministry of Education, CPCE and UG's School of Education and Humanities. The Ministry of Education is responsible for setting, enforcing, and providing resources for the implementation of education policy. A Task Force made up of representatives from the three institutions guides the strategy for improving the quality of delivery of teacher education programs. A decision will need to be taken if the Task Force remains to serve as the steering committee for the project. The activities proposed under the project will be considered as part of the everyday work of the CPCE and UG. They will be responsible for the technical aspects of the project as well as monitoring of the project development indicators.

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. It is recommended that due to the nature of project execution involving three institutions, a Project Coordinator be hired to be responsible for all reporting on project outcomes, planning, and implementation monitoring.

Implementation arrangements will be developed in detail with the assistance of a consultant in starting in April who will document the arrangements for the Operational Manual.

## 7. Sustainability

The Task Force for teacher education reform 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 Bachelors Degree. This framework is recognized and supported by both the College and the University. CPCE and UG are 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).

Within the project design special attention was placed to finance non recurrent costs. At early stages of the project some recurrent costs will be supported by the project while gradually engaging implementing agencies in assuming the responsibility by the end of the life of the project. For instance, the project will provide resources for building human resources capacity while assuring that by the end of the project, CPCE will be able to undertake recurrent costs for sustaining the quality of human resources. The project will also use declining financing so that

by project-end, maintenance of the ICT infrastructure for main campuses and distance centers are incorporated into MOE or institutional budgets.

## 8. Lessons Learned from Past Operations in the Country/Sector

*Building consensus is essential for institutional reform.* Teacher education reform is far from a linear, technical exercise but rather 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 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 continue to be utilized to influence the right mix of incentives and design structure.

*Selecting top achievers into teaching can produce better students' academic achievement.* High academic entry requirements for teacher training 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<sup>13</sup>. 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 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. It will also introduce incentives to top performers at secondary school to enter teacher education programs (scholarships) and define and reward career pathways in teaching to retain them.

*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 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) and will help introduce a policy to phase out the recruitment of untrained teachers. 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).

*Induction courses<sup>14</sup> can significantly reduce teacher attrition in the first working years.* There is wide consensus that teacher training experiences in classrooms often lead to a 'sink or swim'

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

<sup>14</sup> Structured mentoring in the first year of classroom teaching.

situations. 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 teachers' mentors 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.

*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 introduce and plan a strategy to implement career paths in the teaching profession.

*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 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.

*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.

*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.

## 9. Safeguard Policies (including public consultation)

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

<b>Safeguard Policies Triggered by the Project</b>	Yes	No
<a href="#">Environmental Assessment (OP/BP 4.01)</a>	[ ]	X
Natural Habitats ( <a href="#">OP/BP 4.04</a> )	[ ]	X
Pest Management ( <a href="#">OP 4.09</a> )	[ ]	X
Indigenous Peoples ( <a href="#">OP/BP 4.10</a> )	[ ]	X
Physical Cultural Resources ( <a href="#">OP/BP 4.11</a> )	[ ]	X
Involuntary Resettlement ( <a href="#">OP/BP 4.12</a> )	[ ]	X
Forests ( <a href="#">OP/BP 4.36</a> )	[ ]	X
Safety of Dams ( <a href="#">OP/BP 4.37</a> )	[ ]	X
Projects on International Waterways ( <a href="#">OP/BP 7.50</a> )	[ ]	X

## 10. List of Factual Technical Documents

Consortium for Policy Research in Education. November 2009. *Strategic Management of Human Capital. Taking Human Capital Seriously: Talented Teachers in Every Classroom, Talented Principals in Every School.*

CXC. 2008. Caribbean Secondary Education Certification (CSEC) 2008 Results. Caribbean Examination Council (CXC). Unpublished.

Demas, A and Sanchez A. Fast Track Initiative Catalytic Fund. Guyana: Summary documentation. Reference No. CFC/Paris/2008-1. Paris, France. September 17, 2008.

Fernandez, J.M. June 2004. *Higher Education and Teacher training in Guyana.* Paper submitted at the Second Sub-regional Meeting on Higher Education in the Caribbean. June 18-19.

Guyana Ministry of Education. July 2008. *Education Strategic Plan 2008-2013.*

\_\_\_\_ November 2009. CPCE/UG Collaboration, (draft) Position Paper.

\_\_\_\_ November 2009. Reforming Teacher Education and Training in Guyana, (draft) Concept Paper.

Henevald, W. and H. Craig. 1996. *Schools Count: World Bank Project Designs and the Quality of Education in Sub-Saharan Africa.* World Bank Technical Paper #303.

Ibarra, A. and Demas, A. October 2009. *Teacher Education Reform in the Caribbean: A Comparative Analysis of Jamaica, Barbados and Trinidad and Tobago.* (finalization forthcoming)

Jennings-Craig, Z. 2009. *Hard Road to Travel: The Challenges of Initial Teacher Training in Guyana.* Educación Superior y Sociedad, Vol. 14, p. 83-108.

\_\_\_\_. 2008. Jennings-Craig, Z. February, 2008. Blueprint and criteria for certification for a Distance Education Secondary Academic Program.

\_\_\_\_. January 9-11, 2006. Report on Regional Strategy formulation workshop in teacher education. The School of Education and Humanities, University of Guyana in collaboration with the Organization of American States (OAS).

Leu, E. 2004. *Developing a Positive Environment for Teacher Quality.* EQUIP1 Study of School Based Teacher In-service Programs and Clustering of Schools, Working Paper 3, USAID.

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

Leu, E. 2005. *The Role of Teachers, Schools and Communities in Quality Education: A review of the Literature*, Academy for Educational Development, Global Education Center, Working Paper Series, 2005/No.1.

RTI International. September 2009. *Guyana: Early Grade Reading Assessment, October 2008 Results*.

Shotland, M. 2008. *Brain drain: teacher training and student outcomes*. Second Year Policy Analysis (SYPA) Advisor: Professor Rohini Pande, Section Advisor: Professor Matt Andrews. UNICEF, Guyana and the Ministry of Education, Republic of Guyana.

Stuart, J.S. and M.T. Tatto. 2000. *Designs for initial teacher preparation programs: an international view*. International Journal of Educational Research, Vol. 33, p. 493-514.

UNDP. 2009. *Human Development Report. Overcoming barriers: Human mobility and development*. Retrieved from:  
[http://hdrstats.undp.org/en/countries/country\\_fact\\_sheets/cty\\_fs\\_GUY.html](http://hdrstats.undp.org/en/countries/country_fact_sheets/cty_fs_GUY.html)

UNESCO. 2005. *Global Monitoring Report. Education for All: The Quality Imperative*, UNESCO.

University of Guyana. November 05, 2009. University of Guyana-School of Education and Humanities. Needs Analysis UG/CPCE Collaboration (draft) paper.

World Bank. April 15, 2009. International Development Association Country Assistance Strategy for Guyana for the Period FY 2009-2012 (Report #47983-GY) discussed by the Executive Directors on May 26, 2009.

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