

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	XXI Century Skills, Gender and Education in the Caribbean
▪ TC Number:	RG-T3491
▪ Team Leader/Members:	Hobbs, Cynthia Marie (SCL/EDU) Team Leader; Arias Ortiz, Elena (SCL/EDU) Alternate Team Leader; Beuermann Mendoza, Diether Wolfgang (CCB/CCB); Blasco, Ivana (SCL/EDU); Negret Garrido, Cesar Andres (LEG/SGO); Pavon, Fernando Yitzack (SCL/LMK); Rieble-Aubourg, Sabine (SCL/EDU); Scannone Chavez, Rodolfo Andres (SCL/EDU); Telson, Laurence (SCL/GDI)
▪ Taxonomy:	Research and Dissemination
▪ Operation Supported by the TC:	.
▪ Date of TC Abstract authorization:	11 Jun 2019.
▪ Beneficiary:	Barbados, The Bahamas, Jamaica, Guyana, Trinidad and Tobago
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC Strategic Development Program for Social Development(SOC)
▪ IDB Funding Requested:	US\$150,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	30 months
▪ Required start date:	1 December 2019
▪ Types of consultants:	Firms, individuals and non-consultancy services
▪ Prepared by Unit:	SCL/EDU-Education
▪ Unit of Disbursement Responsibility:	SCL-Social Sector
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Institutional capacity and rule of law; Gender equality

II. Objectives and Justification of the TC

- 2.1 The objective of this Technical Cooperation (TC) is to analyze and systematize data and information related to gender gaps in education and the promotion of socioemotional skills in the Caribbean in order to deepen our knowledge on how to create an inclusive learning environment and develop 21st century skills. The specific goals of this TC are to: (i) conduct a detailed diagnostic about boys' underperformance in the English-speaking Caribbean countries, and review effective programs to foster positive gender attitudes, building on existing studies and available data; (ii) explore potential causes of boys' underperformance by analyzing the existing curriculum and current teacher practices to identify potential gender biases and skills related to inclusion; and (iii) advance the quality of the education management information system (EMIS) in the Caribbean countries and create awareness about the importance of these systems to monitor gender gaps and other education outcomes. This greater knowledge about the current situation in the Caribbean regarding gender gaps will provide the Ministries of Education and other stakeholders with the necessary tools to develop well informed policies.

- 2.2 The Caribbean region has made considerable progress in providing access to education: it is close to achieving universal primary schooling and has high enrollment in secondary. Despite these advances, the quality of education and learning present mixed results, as illustrated by low pass rates for the Caribbean Secondary Education Certificate (CSEC) examination, conducted by the Caribbean Examinations Council (CXC) at the end of secondary schooling. The pass rate in Math was 51% in Trinidad and Tobago (2015), 62% in Barbados (2015) and 47% in Jamaica (2018), while the pass rate for English was 53% in Trinidad and Tobago (2015), 63% in Barbados (2015) and 69% in Jamaica (2018). Moreover, not all secondary school students sign up to take the CSEC exam. For example, in Barbados, about 23% of students who took the Barbados Secondary School Entrance Exam (BSSEE) in 2009 did not take the CSEC exam in 2015, thus leaving one in four students without a secondary education certificate (IDB own calculations). Although these students may complete secondary school, the lack of a certificate limits their options for good paying jobs and further education, as access to higher education institutions requires five CSEC passes, including English and math (CXC, 2019).
- 2.3 Besides modest learning outcomes, the region faces two additional challenges: (i) there are growing gaps between boys and girls in terms of academic achievement and enrollment; and (ii) Ministries of Education have limited capacity to monitor and manage the education sector using timely data.
- 2.4 **Gender gaps in academic achievement:** With respect to the gender challenge, there is a growing learning gap between boys and girls. CSEC pass rates in math in the Caribbean were 57% for girls and 56% for boys in 2015, while in English the pass rates were 64% for girls and 55% for boys. Girls are also more likely to sit the CSEC exam. The average PISA 2015 scores in Trinidad and Tobago showed a similar trend, with girls performing better than boys in each subject: 852 points (girls) versus 817 points (boys) for math; 869 (girls) versus 828 (boys) for science; and 904 (girls) versus 802 (boys) for language. A study by the Jamaica Teaching Council (2013) showed that girls in Jamaica consistently outperformed boys in the period 2003-2011 in Language and Math in 4th grade of primary education, and girl's enrollment almost doubled boys' in a sample of high schools taken. The study points to financial aspirations of boys (influenced by a "get rich quick" mentality where school is seen as a slow means to lucrative livelihoods) and a lack of male role models in school, at home, and in the community in general, as some of the causes for boys' underachievement.
- 2.5 Schools can perpetuate gender stereotypes and biases, both through the curriculum and pedagogical practices (Jha et al., 2009), influencing student performance. For instance, evidence indicates that teacher attitudes and expectations play a major role in children's performance, making negative teacher attitudes towards male students a potential factor in negatively influencing boys' academic behavior (USAID, 2016). The curriculum can also play a role in propagating gender biases or be used as an instrument of inclusion. Studies show that curriculum differentiation that reflects the multi-ethnic, multicultural, and multilingual characteristics of the Caribbean countries can promote greater engagement of boys (Naslund-Hadley, et al., 2013; UNICEF, 2014). Finally, differences in how schools and parents foster socioemotional skills in girls versus boys can also contribute to girl's over-performance in the education system (Bando et al. 2016).

- 2.6 The IDB's recent Policy Dialogue on "Masculinity in the Caribbean" (SCL/GDI) identified similar gaps in performance but emphasized that data about the underlying reasons are very limited, small scale, and qualitative in nature (Policy Meeting Proceedings, April 2019). Filling this data gap is essential, given that the factors that determine boys' educational achievement are complex, multi-dimensional, and most importantly, context specific (De Lisle, n.d.). Although a gender gap in academic performance has long been identified in the Caribbean, as evidenced by assessment results (see above), more information is needed to better understand the underlying reasons for boys' underperformance and higher drop-out rates.
- 2.7 Inefficient management of the education sector to monitor gender gaps and other education outcomes: Ministries of Education aim to improve education outcomes, such as student performance and gender gaps, but an inefficient management system and lack of timely data can hinder them from achieving their expected goals. In order to monitor and analyze student performance and other outcomes internally, a systematized repository of student data is required. This allows for a variety of analyses including, but not limited to, assessments on the gender gap in student performance. However, education management information systems in the LAC region generally lack this characteristic: only 23% have a complete digital student registry with information on student trajectory, personal information (such as gender and date of birth), student performance, repetition, attendance, etc., used for management decisions (Arias Ortiz et al. 2019).
- 2.8 The IDB is supporting a regional initiative "Strengthening Management and Educational Information Systems for a better performance of the education system" (RG-T3008), that looks at the strengths and weaknesses of EMIS (SIGED for its Spanish acronym) in 18 case studies across LAC, including Jamaica. The preliminary results in Jamaica show that although many processes have been digitalized, the systems are not integrated and therefore efficiencies are lost (SIGED, 2019, not published). In the other Caribbean countries, systematic evidence has not been collected about the specific challenges ministries face in terms of education management and information systems. Although there has been an improvement in data availability and quality (in both household surveys and regional and national assessments), it is important to have specific recommendations on how countries can improve the management of the education sector and generate the appropriate data for policy making.
- 2.9 The proposed TC builds on Bank initiatives in the two proposed areas, as described above and the results will help to identify factors that contribute to the gender gaps in student learning and will influence future curriculum design and teacher training. The information collected through the planned activities will be shared with the Ministries of Education of the Bank's member CARICOM countries, namely Barbados, The Bahamas, Guyana, Jamaica and Trinidad & Tobago, as well as with NGOs, researchers and other stakeholders to provide necessary data to develop cohesive policies and programs, based on each country's context.
- 2.10 **Alignment.** This TC is consistent with the Update to the Institutional Strategy 2010-2020 and is aligned with the development challenges of social inclusion and equality, and with the cross-cutting themes of gender equality and diversity, and institutional capacity and rule of law by: (i) seeking information to improve learning opportunities for boys and girls, and (ii) strengthening the Ministry's capacity to monitor the sector. The operation is also aligned with the Sector Strategy Institutions for Growth and Social Welfare (GN-2587-2) which recognizes the need for strengthening the

institutional capacity of countries in the region as well as with the Strategy on Social Policy for Equity and Productivity (GN-2588-4), which highlights interventions that increase human capital as key factors for economic growth and development. It is also consistent with the Education and Early Childhood Development Sector Framework Document (GN-2708-5), which establishes the need to guarantee equal opportunities to learn and acquire the skills to be successful in the labor market and contribute productively to society. The objectives of the TC are also aligned with those of the OC Strategic Development Program for Social Development (SOC) (GN-2819-1) as it seeks to improve the efficacy and efficiency of education in the region. They are also aligned with IDB Group Country Strategies in all countries (Barbados, The Bahamas, Guyana, Jamaica, Trinidad and Tobago) as they identify closing the gender gap (or fostering gender equality) and fostering human capital development as key priority areas.

III. Description of activities/components and budget

- 3.1 **Component 1. Bridging the gender gap in education in the Caribbean (US\$45,000).** This component will contribute to the development of a regional report about gender and education. The main activity will be the systematization and analysis of available data in order to quantify the gender gaps in terms of learning and school attainment, integrate the lessons learned from the analysis of gender-neutral approaches in the curriculum and teacher practices, and review international evidence about effective programs that could decrease gender differences in the education system. To this end, TC resources will be used for technical assistance to analyze the available databases for the Caribbean countries (including household surveys, surveys of living conditions data, CXC examinations results and data from Component 2). The available data will be complemented by existing studies and a collection of descriptive information, mostly qualitative, on teacher and student aspirations, expectations, and background information to gain a better understanding of the perceived gender gaps in educational performance.
- 3.2 The Bank's Gender and Diversity Division (GDI) and Labor Market Division (LMK) will complement this analysis of education data with an analysis of youth outcomes, including crime, risk behaviors and labor market outcomes, under a separate TC to be processed in 2020. The goal will be to develop a joint report about gender education and youth outcomes for all the Caribbean countries carried out by the Education, Gender and Labor Market Divisions in collaboration with CCB, merging the inputs from the two TCs and working collaboratively between the divisions. The report will be distributed amongst all divisions and authorities of the countries involved in the studies.
- 3.3 **Expected output** from Component 1 will be the inputs about the education sector to build the CCB regional report on gender gaps in education and youth outcomes in the Caribbean. The intellectual property rights of this report will be the property of IDB.
- 3.4 **Component 2. Curriculum, teacher and school diagnosis for gender-neutral approaches and 21st century skills (US\$ 75,000).** This component explores potential factors in the education system that can contribute to boys' underperformance. These factors include teacher gender biases (both implicit and explicit) and biases in the curriculum and learning materials. Indeed, evidence suggest that curriculum and teacher practices have been found as explanatory factors of girls' underperformance in Math in other countries (Carlana, 2018). In addition, the analysis

will analyze differences between boys and girls in the development of socioemotional skills portrayed in the curriculum and promoted by teachers. 21st century skills include socioemotional skills, such as perseverance, communication and teamwork, and are increasingly recognized as being critical for learning and for other life outcomes (IDB, 2017). The activities of this component will include:

- (i) *Curriculum assessment*: review the official curriculum and learning materials at the secondary school level to assess using existing learning materials and curricular contents to assess whether they are gender neutral, and whether they are geared towards the development of socioemotional skills; and, suggest areas of improvement.
- (ii) *Diagnosis of teacher pedagogical practices*: document gender biases present in pedagogical practices, and teacher capacity and training to develop socioemotional skills using secondary data. If not enough information on this dimension is available, the TC will conduct some classroom observation of teachers and/or focus groups to assess teaching practices in one or two countries to be selected based on the needs for additional information.

3.5 **Expected outputs** for Component 2 include two reports summarizing the main findings in areas of curriculum and teacher capacity. These reports will be used as inputs for the regional report in Component 1. The intellectual property rights of such products will be the property of IDB.

3.6 **Component 3: Digital transformation of education management (US\$30,000)** In spite of the investments made in EMIS over the past years, some countries in the region still face serious challenges, in particular in the use of data to improve policy making (Arias Ortiz et al. 2019). Effectively monitoring gender gaps and other educational outcomes requires having a system that collects and stores information in a unique digital registry. This component will support the following activities:

- (i) *Diagnostic of the Educational Management and Information System*: A diagnostic will take place in The Bahamas using the methodology developed by the IDB (SIGED study) to look at the current use of technology, integration of databases, infrastructure, among other indicators to determine how the system can use these resources to improve educational services. Among the three countries included under this TC, Jamaica has undergone the initial analysis of its EMIS system with the support of the IDB, and Barbados successfully implemented the Open EMIS system in 2018 using their own resources. Therefore, this component will support The Bahamas to analyze their EMIS. This will be done by hiring the firm that conducted the diagnostic in Jamaica and Suriname, Community Systems Foundations, using a single source contract given their knowledge and experience using the instrument developed by the IDB. The intellectual property rights of the SIGED Assessment will be the property of IDB.
- (ii) *Regional Workshop*: a regional workshop with the selected Caribbean countries will be organized to present the results of the SIGED analysis, exchange best practices, share the lessons learned from the broader LAC regional study (carried out in 15 countries/states) and discuss next steps to achieve the digital transformation of education management in the Caribbean.

3.7 **Expected outputs** for Component 3 include: (i) a Country Report on Digital Transformation of Education Management and Information Systems for The Bahamas,

with a roadmap and costing of activities; (i) a presentation for the Regional Workshop with results from the three countries that have carried out the SIGED analysis (Jamaica, Bahamas, Suriname).

- 3.8 The total cost of the TC, needed to achieve the expected outputs, is US\$150,000, to be financed by the OC Strategic Development Program for Social Development (SOC). There is no local counterpart funding. The indicative budget is shown in the table below.

Indicative Budget (US\$)

Activity/ Component	Description	IDB/SOC	Total Funding
Component 1	Bridging the gender gap in education in the Caribbean	45,000	45,000
Component 2	Curriculum, teacher and school diagnosis for gender-neutral approaches and 21 st century skills	75,000	75,000
Component 3	Digital transformation of education management	30,000	30,000
			150,000

- 3.9 **Supervision, monitoring and evaluation.** The Education Division (SCL/EDU) of the Bank and specifically the sector specialists responsible for the execution of the TC, will be responsible for the supervision and oversight, in coordination with the Ministries of Education of the five beneficiary countries. Prior to carrying out any data collection, a written authorization will be requested to the Ministry of the corresponding country. The monitoring of the execution of the TC program will be carried out through semiannual progress reports that will be registered in the IDB systems, based on the outputs and results expected from the Results Matrix included as Annex I. An initial work plan will be defined, and quarterly follow-up meetings will be held with the Ministries. The Bank will work closely with the Ministries and with technicians appointed as liaisons for each component, to ensure direct dialogue and involvement of key Ministries, authorities and stakeholders. Given that most of the activities concern desk reviews, the supervision costs are expected to be limited. The team members from SCL/EDU are the sector specialists working in each of the member countries and will monitor any specific activity in the country during their supervision missions.

IV. Executing agency and execution structure

- 4.1 The program will be executed by the Education Division (SCL/EDU) of the Bank given the Bank's expertise in conducting rigorous research in the Caribbean (and throughout the region) and considering that the TC is for R&D purposes. Furthermore, the activities require strong coordination and collaboration with the Ministries of Education in each country. The Bank will capitalize on the solid relationships with education authorities to ensure successful completion of the TC activities. Finally, given that Caribbean countries face similar challenges in the areas studied under this TC, a regional perspective is a powerful instrument to identify synergies between countries and lessons learned. Yet there is no regional entity in the Caribbean with expertise in this area.

- 4.2 If, in order to fully complete components 2 and 3 of the TC, the team identifies that a physical presence of consultants is required, non-objection letters from the Bank's official liaison entity in each of the beneficiary countries will be requested prior to any field work.
- 4.3 **Procurement.** The TC will be implemented over a period of 30 months. All activities to be executed under this TC have been included in the Procurement Plan (see Annex IV) and will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-1 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature and; (c) GN-2303-20 for logistics and other related services.

V. Major issues

- 5.1 The risks associated with the execution of the TC should be low, given that it principally will fund consultancies and technical assistance, and the Bank has ample experience implementing activities like those proposed in this TC.

VI. Exceptions to Bank policy

- 6.1 None

VII. Environmental and Social Strategy

- 7.1 The TC is not anticipated to have direct environmental or social impacts and has been classified as "C" according to the Safeguard Classification tool (see [Safeguard Policy Filter Report](#) and [Safeguard Screening Form](#)) and the Bank's Environment and Safeguard Compliance Policy (OP-703). No environmental impact is foreseen as the initiative is limited to consultancies. No Bank resources will be used to finance investments in infrastructure or large-scale equipment.

Required Annexes:

[Results Matrix_90875.pdf](#)

[Terms of Reference_97274.pdf](#)