

TC Document

I. Basic Information for TC

▪ Country/Region:	JAMAICA
▪ TC Name:	Digital Transformation for Teaching and Learning
▪ TC Number:	JA-T1207
▪ Team Leader/Members:	Hobbs, Cynthia Marie (SCL/EDU) Team Leader; Arias Ortiz, Elena (SCL/EDU) Alternate Team Leader; Alejandra Forero Perez (SCL/EDU); Blasco, Ivana (SCL/EDU); Emilio Laguillo (SCL/EDU); Gabriela Gambi (SCL/EDU); Jimenez Mosquera, Javier I. (LEG/SGO); Thailinger, Agustina (SCL/EDU)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	
▪ Date of TC Abstract authorization:	05 May 2022
▪ Beneficiary:	Ministry of Education and Youth (MOEY)
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	OC SDP Window 2 - Social Development(W2E)
▪ IDB Funding Requested:	US\$300,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	30 months
▪ Required start date:	01 September 2022
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	SCL/EDU-Education
▪ Unit of Disbursement Responsibility:	CCB/CJA-Country Office Jamaica
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation

II. Objectives and Justification of the TC

2.1 The general objective of this TC is to support Jamaica's Ministry of Education and Youth (MOEY) in rolling out activities to advance the Ministry's national digital transformation roadmap for education. The roadmap includes four policy goals: (1) Transforming the Teaching and Learning Process; (2) Learning Opportunities for all; (3) Efficient Management and Administration of the Education System; and (4) Promoting the Development of ICT Innovations. The focus of this TC would be on goals 1 and 4. The specific objectives are to support: (i) the development of teachers' digital skills and (ii) the use of high-quality programs for early learners.

2.2 Due to the pandemic, schools in Jamaica closed from March 2020 until November 2021. The MOEY conducted pilots on reopening with a small number of schools; all schools opened on March 7, 2022. From March 2020 to March 2022, face-to-face classes were replaced by online teaching and learning, which made digital tools and online evaluation imperative. However, the provision of education via on-line or

distance modalities faced important challenges related to lack of connectivity, limited provision of learning devices and digital resources, and insufficient teacher preparation to use technology effectively. According to PISA data for 2018¹, in Latin America and the Caribbean only 33 percent of schools had enough internet bandwidth for effective teaching and learning, and computing power of digital devices and availability of suitable software was limited in the region. Furthermore, only 54 percent of students in the region were enrolled in schools whose teachers had the technical and pedagogical skills necessary to integrate digital devices in instruction, as reported by school principals (in comparison with the OECD average of 65 percent and Mexico, the highest, with 76 percent). Although Jamaica does not participate in PISA, these findings are congruent with the results of a comprehensive IDB-financed study on Jamaica's Education Management Information Systems (EMIS) carried out in 2019². According to this study, most Jamaican schools have some connectivity and digital resource packages, but the country's education system requires better digital conditions in terms of digital platforms, central digital content warehouse and virtual tutoring. Furthermore, among those schools surveyed, only 53% reported sufficient bandwidth for streaming and other online internet access.

- 2.3 Even before the pandemic, the Fourth Industrial Revolution introduced the demand for new occupations and 21st century skills, such as digital, socio-emotional and lifelong learning skills. The speed of the digital transformation of teaching and learning forced by the pandemic has made these demands an imperative for countries in order to remain competitive and better participate in the global economy. In this regard, delivering quality education and fostering 21st century skills have become crucial elements for countries' human capital development and sustainable growth.
- 2.4 An online survey carried out by the IDB in Jamaica as part of a regional teaching training program (RG-T3929) showed that of a total of 1,535 primary school teachers, 82 percent considered the use of technological resources and digital skills as a key area of interest for professional development for online education, while 70 percent considered it as an important area for professional development for in-person classes. Jamaica's MOEY confirmed that training in digital knowledge and skills for teaching and learning is a top priority for the education sector.
- 2.5 IDB's team has been working on adapting and translating a digital competence self-assessment tool for the evaluation of teachers' digital knowledge and skills developed in Brazil called *Guía Edutec* in collaboration with the Innovation Center for Brazilian Education (CIEB)³. In this assessments tool, teachers self-assess their readiness level to efficiently use technology and new pedagogies in their daily practices and receive immediate feedback on the type of skills they need to further develop, as well as

¹ Rieble-Aubourg & Viteri (2020). See: <https://publications.iadb.org/publications/english/document/CIMA-Brief-20-COVID-19-Are-We-Prepared-for-Online-Learning.pdf/>.

² Chapelet, P. (forthcoming). Analysis of the Education Management and Information System of Jamaica. Washington: IDB.

³ In 2016, CIEB launched the Edutec Guide, a platform that offers content, methodologies, and tools to teachers digital skills for the Brazilian context.

recommended training resources. Under this TC, the recommended resources will be curated and compiled for skills development in line with Jamaica's needs and priorities. The plan is to develop this special version of Guia Edutec for Jamaica and make it available to teachers by early 2023. This aligns with the MOEY's promotion of self-directed learning and continuous improvement of teachers' professional practice.

- 2.6 The tool also allows supervisors to aggregate the results by school and district level, allowing to better assess the country's education sector training needs and develop specific training or courses to address those needs. Moreover, the MOEY has been working on some solutions for teacher appraisal, such as developing an online platform for performance appraisal of teachers. Post-application of the self-assessment tool will help the MOEY to gauge whether teachers' skills are improving over time.
- 2.7 Teacher training in the use of online and other resources, such as television, is also necessary for teachers of early learners. Jamaica was one of the countries that benefited from a regional IDB-financed project with Sesame Workshop in 2020 whereby distribution of approximately 120 hours of content were made available to broadcasting partners across Latin America and the Caribbean, reaching an estimated 20,085,000 children in the region in 2020. Although this initiative was built with the aim of bringing educational television content to children while schools were closed, the tool could also prove to be useful as an additional source of learning for children returning to face-to-face classes, considering the high-quality content developed by Sesame Workshop for young children, especially in areas like socioemotional wellbeing and healthy habits. In 2020, teacher training was not offered in Jamaica to help teachers take full advantage of the programs. In the current context, training could be provided to teachers on how to link Sesame Street episodes with curricular content in order to use the programs as a teaching tool.
- 2.8 This TC aligns with Jamaica's Digital Transformation Roadmap for education which focuses on four areas: (i) adequate preparation for change, (ii) empowerment of stakeholders through change, (iii) sustainable conditions of support for change, and (iv) institutional innovativeness. The implementation of a self-assessment questionnaire that highlights teachers' needs in terms of digital knowledge and skills, will inform their professional development in strategic areas. The development of quality and adequate professional development training in digital transformation, curriculum development and 21st century skills will contribute to the empowerment of teachers and teacher trainers and the improvement of their teaching process. Moreover, uploading the questionnaire into an open-access platform will provide the MOEY with the possibility of continuous monitoring, creating a sustainable tool. The innovativeness of the proposal is centered on the fact that, based on the questionnaire answers, teachers will receive personalized feedback with access to resources specifically selected to fit their professional development needs.
- 2.9 This TC aligns with IDB's Vision 2025's medium term goals of promoting social progress and strengthening good governance and institutions. It is consistent with IDB's Second Update of the Institutional Strategy (UIS) (AB-3190-2) and is aligned

with the development challenge of productivity and innovation by emphasizing the use of technology to increase and strengthen digital skills of teachers and helping the MOEY to identify teacher training needs. This TC is aligned to the social inclusion and equality development challenge by improving teachers' use of technology and digital tools across the education system, in particular, those that need it the most. This contributes to improving teaching practices of all teachers and not only those that teach in better-off schools, thereby offering more equitable access to quality teaching and learning for all students. This TC aligns with the OC Strategic Development Program for Social Development contained in the document GN-2819-14 by focusing on strengthening the MOEY's national digital transformation roadmap as it relates to transforming teaching and learning and promoting ICT innovations. It also is aligned with the objectives stated in GN-2819-14, specifically with Priority Area 5 Inclusive Social Development (W2E), since it promotes equality and social inclusion. The operation is aligned with IDB Group's Country Strategy with Jamaica 2016-2021, under the strategic area of reinforcing human capital protection and development, by improving the access and quality of education and skills development, in this case for lead teachers and teacher trainers. Finally, it aligns with the Education Division's Skills Development Sector Framework Document, approved in 2020, under three lines of action: (i) ensuring access to relevant and high-quality learning opportunities throughout life, to be achieved with the training; (ii) leveraging the use of technology to increase equitable access to skills development opportunities and improving the efficiency of skill development systems, in this case through the analysis of results of the diagnostic self-assessment tool; and (iii) actively promoting the generation and use of evidence-based decision making, in this case to determine teacher training needs.

III. Description of activities/components and budget

3.1 Outcome statement. Support Jamaica's MOEY in rolling out activities to advance their national digital transformation roadmap for education.

3.2 Component I: Teacher professional development. This component will provide support for the development of quality teacher training in digital skills. The MOEY has highlighted the need to develop a behavior change campaign to encourage teachers to use digital skills in face-to-face and hybrid classes. All teachers will have the opportunity to identify their strengths and needs for further skills development through the digital self-assessment tool described above in ¶ 2.5 (*Guía Edutec*). The self-assessment will then provide teachers with curated resources for their advancement in digital knowledge and skills, specifically selected for the Jamaican context. The International Society for Technology in Education (ISTE) was identified as the provider for the execution of this activity because of their unique vision for integration of technology in curriculum and teaching. They also will support the design and delivery of tailored training for a small group of lead teachers and teacher trainers who will become the main trainers for other teachers in Jamaica in the use of digital tools. TC resources will be used to contract technical assistance for: (i) the design for the behavior change campaign; (ii) the analysis of results of the diagnostic self-

assessment tool; (iii) the curation of resources for the self-assessment tool; and (iv) teacher training. There are four expected outputs for this component: (i) a behavior change campaign strategy; (ii) an analysis of the results of the digital competence self-assessment tool; (iii) curated resources for the self-assessment tool; and (iv) training of teacher trainers and lead teachers.

3.3 Component II: Televised learning for young children. This component will support the use of high-quality programs for early learners, specifically through the continuation of Sesame Street televised learning for children, as described in ¶ 2.7, and materials to assist teachers to use the programs as a teaching tool. It will finance: (i) a direct contract with Sesame Street to broadcast episodes, including content on healthy habits, socioemotional well-being, and academic skills; and (ii) a consultancy to develop activities linking the episodes with the Jamaican curriculum. The expected outputs are: (i) a supervision report on the televised broadcasting, that includes information on the signing of Distribution Agreements, distribution of episodes, and emission dates and ratings; and (ii) training modules and materials developed for relevant teacher training.

3.4 The total cost of the TC, needed to achieve the expected outcomes and outputs, is US\$300,000, to be financed by the OC SDP Window 2 – Social Development. There is no local counterpart funding anticipated. The indicative budget is shown in the table below.

Indicative Budget (US\$)			
Activity/Component	Description	IDB/Fund Funding	Total Funding
Component 1. Teacher professional development	(i) Behavior change campaign;	20,000	255,000
	(ii) Analysis of assessment results;	20,000	
	(iii) Curation of resources;	50,000	
	(iv) Training	165,000	
Component 2. Televised learning for young children	(i) Broadcasting of Sesame Street episodes;	25,000	US\$45,000
	(ii) Content for teacher training	20,000	
Total		300,000.00	US\$300,000

3.5 Supervision, monitoring, and evaluation. The monitoring of the execution of the TC program will be carried out through the definition of an initial work plan and monthly follow-up meetings with the MOEY. The Bank and the Ministry's appointed team will work closely together to ensure direct dialogue and involvement of relevant

government authorities and stakeholders and will carry out regular progress checks based on the outputs and expected results shown in the Results Matrix (see Annex II).

IV. Executing agency and execution structure

- 4.1 This TC will be executed by the Bank through the Education Division (SCL/EDU) per the request of the Government of Jamaica. In the absence of any Bank's project loans with the MOEY, there is currently no Project Management Unit, hampering the institutional capacity of the Ministry to manage these funds. The lack of institutional capacity is congruent with the justification for Bank execution according to document OP-619-4, Annex II. Further, the Bank has extensive experience in the areas of focus, including the prior application and analysis of the afore-mentioned teacher survey. Finally, Bank execution could capitalize on other programs financed and executed by the Bank, including the ongoing development of the self-assessment tool as a regional public good (RG-T4069), and curation of resources for similar training programs.
- 4.2 **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 (Annex IV) and will be contracted in accordance with Bank policies as follows: (a) AM-650 for Individual consultants; (b) GN-2765-4 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (c) GN-2303-28 for logistics and other related services. The UDR will be in the Country Office in Jamaica.
- 4.3 **Single Source Selection.** For the curation of resources and training of lead teachers and teacher trainers in Component I, activities (iii) and (iv), we will be working with the ISTE as a provider. ISTE is a non-profit organization specialized in working with teachers in the use of technology to transform teaching and learning and accelerate innovation in education. ISTE's work focuses on three main activities: (i) development of ISTE standards about how to effectively use technology in education⁴; (ii) development and delivery of materials, training and certification for teachers in the use of technology; and (iii) management of the largest membership association for educators focused on educational technology. For this reason, ISTE is the unique provider in terms of expertise and experience to carry out the curation of training resources for the Edutec Guide in English consistent with ISTE standards. In addition, lead teachers and trainers will receive the full training provided by ISTE in order for them to become an ISTE certified instructor creating a pool of local experts in technology. That experience of exceptional worth presents a clear advantage over competition, as required in policy GN-2765-4. For the broadcasting of Sesame Street episodes in Component II, activity (i), we will enter into a direct contract with Sesame Workshop, the sole provider of the material. This is the continuation of a COVID-related activity financed by the IDB that proved successful in the region and in Jamaica.

⁴ ISTE standards are used globally, including by leading education systems in the use of technology like plan CEIBAL in Uruguay.

V. Major issues

5.1 One potential challenge to this operation is related to teachers' possible hesitation regarding the use of the digital competence self-assessment tool and their self-discipline to use the recommended curated resources and complete the training courses. The behavior change campaign in Component I will be crucial to mitigate this risk since it will motivate teachers to use digital tools in the classroom as part of their daily pedagogy. Also, the monitoring of teachers' improvements in digital skills and use of digital tools in their teaching practice through the MOEY's teacher appraisal system, as well as recognition of coursework by the Jamaica Teaching Council, will encourage teachers to use the opportunity to take the courses for professional development.

5.2 Another potential issue relates to the availability of devices and proper connectivity for teachers to access the assessment tools and related resources. The aforementioned EMIS study found that most schools have computers and internet connection, although connectivity has been a challenge, especially for remote schools. The MOEY has partnered with the private sector to make devices available for teachers and students, and the Government is working on expanding digital infrastructure in the aftermath of the pandemic. For this reason, this issue would be considered a low risk.

VI. Exceptions to Bank policy

6.1 There are no known exceptions to Bank policy.

VII. Environmental and Social Strategy

7.1 This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (ESPF).

Required Annexes:

- [Request from the client](#)
- [Results Matrix](#)
- [Terms of Reference for activities/components to be procured](#)
- [Procurement Plan](#)
- [Gender and Diversity Checklist](#)