

TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	BELIZE/CID - Isthmus & DR
▪ TC Name:	Support for the Implementation of Education Quality Improvement Program II (EQIP II)
▪ TC Number:	BL-T1116
▪ Team Leader/Members:	NASLUND-HADLEY, EMMA INGRID (SCL/EDU) Team Leader; PRADA PATINO, MARIA FERNANDA (SCL/EDU) Alternate Team Leader; SALAZAR, ASTRID DANIELLE (CID/CBL); SCANNONE CHAVEZ, RODOLFO ANDRES (SCL/EDU); MINOJA, LIVIA (INE/INE); PAYEN, PATRICIA YAMILEE (VPC/FMP); WATSON, BRODRICK RAYLANDO (VPC/FMP); SANMARTIN BAEZ, ALVARO LUIS (LEG/SGO)
▪ Taxonomy:	Operational Support
▪ Number and name of operation supported by the TC:	Education Quality Improvement Program (EQIP) II-BL-L1030 - 2.Support for Evaluation
▪ Date of TC Abstract:	05 Mar 2019
▪ Beneficiary:	Belize
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	\$ 150,000.00
▪ Local counterpart funding:	\$ 0.00
▪ Disbursement period:	30 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	Education
▪ Unit of Disbursement Responsibility:	Social Sector
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality

II. Objective and Justification

- 2.1 The general objective of the proposed TC is to provide technical assistance to the MoEYSC in the evaluation of EQIP II, including technical support in the design of sampling, evaluation instruments and data cleaning and analysis. The resources from the TC will complement resources from the lending operation (see BL-L1030 M&E Plan).
- 2.2 Between 2014 and 2018, the Ministry of Education Youth Sports and Culture (MoEYSC) and the IDB tested an Inquiry- and Problem-based Pedagogical (IPP) approach focusing on in-service training and technical assistance to 50 percent of Belize's primary school teachers. The IPP approach was implemented within the framework of the Education Quality Improvement Program (EQIP, BL-L1018). An experimental evaluation of EQIP found that IPP improved students test scores by 0.18 and 0.25 standard deviations in mathematics and science respectively (Bando, Naslund-Hadley & Gertler, 2018).
- 2.3 Based on the positive results of EQIP, the Government of Belize (GoB) and the Inter-American Development Bank (IDB) are developing an investment operation (EQIP II, BL-L1030) that seeks to improve the quality of education at the primary and secondary levels, with a special focus on innovation in Science Technology Engineering Arts and

Mathematics (STEAM) education. This general objective of EQIP II will be pursued by training primary and secondary school teachers in IPP and gender-sensitive STEAM teaching. At the secondary level, a Belize STEAM Laboratory School will be created as a training ground for teachers. The proposed technical cooperation (TC) seeks to support the MoEYSC in the evaluation of EQIP II at the secondary level of education.

III. Description of Activities and Outputs

- 3.1 The TC sets out to help answer two sets of evaluation questions related to EQIP II. First, at the level of outcomes: (i) Will the creation of a Belize STEAM laboratory school, and teacher training at the secondary level, lead to better pedagogical practices by teachers?; and (ii) Will the creation of a STEAM laboratory school and teacher training at the secondary level lead to more gender sensitive pedagogical practices by teachers? Second, at the impact level, the TC sets out to help answer the following questions: (i) Will improved pedagogical practices at the secondary level lead to student learning in STEAM? and (ii) Will improved pedagogical practices to promote gender inclusion lead to changes in students' attitudes on STEAM subjects?
- 3.2 To answer these questions, funds from the TC will finance a Randomized Control Trial (RCT) to assess its effect of investments in STEAM. Funds from the TC will finance an RCT of STEAM teachers in Belize's secondary schools to assess the effect on their teaching practices. Belize's approximately 300 secondary school STEAM teachers will be randomized into either a treatment or control group. TC resources will finance data collection on content knowledge and pedagogical content knowledge, as well as a video study of classroom practices to measure four dimensions – emotional support, classroom organization, instructional support and student engagement – including indicators from the Classroom Assessment Scoring System (CLASS) and the Trends in International Mathematics and Science (TIMSS) Video Study Instrument.
- 3.3 **Component I: Evaluation of Training of STEAM Highschool Teachers.** The TC will finance an experimental evaluation of training of high school teachers. The Project Team will place half of Belize's high school STEAM teachers in a treatment group that will receive training in the use of inquiry and problem-based learning compared with a control group. The other half of Belize's high school STEAM teachers will serve as a control group.

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Evaluation of Training of STEAM Highschool Teachers	\$ 150,000.00	\$ 0.00	\$ 150,000.00

V. Executing Agency and Execution Structure

- 5.1 This operation will be executed by the Bank's Social Sector Department (SCL/EDU). The TC will have a disbursement period of 30 months. Standard Bank procurement policies will be followed.
- 5.2 The IDB led the evaluation of the impact evaluation of EQIP I (Bando, Näslund-Hadley & Gertler, 2018). To ensure linkages with the EQIP I impact evaluation, and in accordance with a request from the Ministry of Finance (EZSHARE#), the TC will be executed by the IDB.

VI. Project Risks and Issues

- 6.1 Both teachers, students and school administrators may be apprehensive about surveys, learning tests and video recordings. Teachers and school administrators may feel that they are being scrutinized and therefore be uncomfortable with enumerators in the school and in the classroom. However, experiences from similar evaluation designs across Latin America and the Caribbean (LAC), as well as at the elementary education level in Belize, show that this apprehension can be overcome through clear communication. Moreover, the execution of a pilot based on an experimental design in developing countries presents logistical challenges, particularly in rural. However, the SCL/EDU has many years of experience in the execution of such evaluation designs in schools throughout LAC, including remote areas of Belize.

VII. Environmental and Social Classification

- 7.1 The ESG classification for this operation is "undefined".