TC ABSTRACT

I. Basic project data

- **Country/regional:** Regional
- **TC Name:** Improving Education through Broadband: Best Practices for Policy Design
- **TC Number:** RG-T2337
- **Associated Loan/Guarantee Name:** N/A
- **Associated Loan/Guarantee Number:** N/A
- **Team Leader/Members:** Julian Cristia (RES/RES), Team Leader; Elena Arias Ortiz (SCL/EDU), Alternate Team Leader; Diether Beuermann (OVE/OVE); Myriam Escobar Genes (RES/RES); Antonio García Zaballos (IFD/CTI)
- **Donors providing funding:** TBD
- **Beneficiary:** Regional
- **Executing Agency and** contact name: Bank-executed (contact name: Julian Cristia)
- **IDB Funding Requested:** US$300,000
- **Local counterpart funding:** US$0
- **Execution period:** 15 months /**Disbursement period:** 18 months
- **Required start date:** 1-Aug-2013
- **Types of consultants:** Firms and individual consultants
- **Prepared by Unit:** RES/RES, SCL/EDU
- **Unit of Disbursement Responsibility:** RES/RES
- **TC Included in Country Strategy:** No. TC included in CPD: No.
- **GCI-9 Sector Priority:** Social Policy for Equity and Productivity

II. Objective and Justification

Latin American countries fare poorly in international comparisons of learning assessments (Berlinski et al., 2011). Weak performance on these tests has been clearly linked to poor economic performance (Hanushek and Woessman, 2009). Consequently, many countries are actively seeking ways to improve children's educational outcomes. Recently, there has been substantial public investment in increasing students' access to computers and internet. Emerging evidence suggests that merely providing access to these resources may produce limited learning gains. Governments lack clear models on how to use these technological resources effectively in education; in spite of that, a tendency exists to make renewed investments in this area. Hence, there could be large returns in guiding governments on how to make use of the opportunities opened up by technology for educational purposes.

This TC aims to provide solid evidence on how to take advantage of broadband access to improve educational outcomes. There are several potential pedagogical models about which little is known. First, computers connected to internet can provide high-quality, attractive content to students in their homes. This is the basis for the "flipped-classroom model", an educational initiative that is attracting significant attention worldwide and is being promoted by the NGO Khan Academy. Under this model, students watch videos of high-quality lectures at home and devote class time to analyzing practical problems, and discussing and reviewing concepts. Second, connected computers can act as aids to teachers, e.g., solving math problems and giving automatic, personalized feedback. Third, connected computers can be used for working in groups and developing projects. In addition, these three models can be combined in different ways. This TC intends to identify and disseminate best practices on how broadband is used in education.

The TC will directly support the Bank's Broadband Program by focusing on the development of sound public policies and capacity building for governments in the region (action lines 1 and 3 in the Program). The TC is also aligned with the Bank's Strategy on Social Policy for Equity and Productivity, which establishes improving school quality as one of the priority areas for analytical work. The TC will fund

activities directed at summarizing the evidence in this area and review in-depth successful programs and promising initiatives implemented in the region. It will also produce policy recommendations and implementation guidelines to ensure a successful application of the different components involved in a technology-based education program. These products will be combined in a complete toolkit to promote the role of evidence and best practices in the development of a strong public policy in educational technology in LAC.

III. Description of activities

Component 1. Review of the research evidence and successful programs (US$150,000). The objective of this component is to identify, assess, and synthesize the existing evidence and best practices on the use of broadband access for educational purposes. This component will fund the review and synthesis of the existing quantitative evidence and the documentation of successful programs and promising initiatives. Additionally, it will fund a thorough analysis of the main challenges related to infrastructure, content and pedagogical support and propose potential solutions to ensure a successful application of these resources.

Component 2. Production of best-practices toolkit (US$150,000). This component will summarize the quantitative and qualitative evidence collected in Component 1 to generate a clear toolkit tailored to the challenges faced by policy makers in LAC. This toolkit will contain general policy recommendations and implementation guidelines based on emerging evidence and it will promote evidence-based public policy on the use of technology in education. In particular, it will describe programs in technology in education promising to generate learning gains in LAC. In addition, it will fund workshops with specialists and policymakers in the area to collect expert-based knowledge and receive feedback on arising lessons.

The products developed in this Technical Cooperation could be used as inputs for the development of specific broadband-based educational interventions in a second stage. This would provide the basic content for the design of tailored dissemination and training activities to strengthen local capacity for the implementation of technology in education programs.

IV. Budget

Indicative Budget

Component/Activity	IDB/Fund Funding	Counterpart Funding	Total Funding
Component 1	**$150,000**	**$0**	**$150,000**
Activity 1: Summarize the quantitative evidence	$20,000	-	$20,000
Activity 2: Identify and document successful programs	$60,000	-	$60,000
Activity 3: Analyze challenges and solutions of specific inputs	$60,000	-	$60,000
Component 2	**$150,000**	**$0**	**$150,000**
Activity 1: Conduct workshops	$35,000	-	$35,000
Activity 2: Produce toolkit	$115,000	-	$115,000
Total:	**$300,000**	**$0**	**$300,000**

V. Executing agency and execution structure

The TC will be Bank executed. In the last few years, the Bank has executed several TCs in the area of technology in education including RG-T1968, which funded the evaluation of the One Laptop per Child program in Peru. Since 2011, the Bank has also been financing a range of activities aimed at understanding how to use technology in education effectively (ESW RG-K1217). The Bank has thus developed a competitive advantage in this area. As such, there will be a significant benefit in terms of knowledge sharing with and capacity building for, the counterparts if the Bank executes the project.

The Bank will procure the goods, services, and consulting services required by the Project in accordance with Bank policies contained in documents GN-2349-9 and GN-2350-9, respectively.

VI. Project risks and issues

Implementation risks are considered to be low. Because the TC will fund analytical and dissemination activities, no major operational risks are envisioned in the implementation process. Since the two components need to be executed sequentially, the team will focus on ensuring that all products are delivered on time and on avoiding delays in completing the TC.

VII. Environmental and Social Classification

The ESG classification for this TC is "C". There will be no potentially negative environmental and/or social impacts associated with this TC.