

## TC ABSTRACT

### I. Basic Project Data

▪ Country/Region:	NICARAGUA/CID - Isthmus & DR
▪ TC Name:	Education and Socio-emotional support in Times of COVID-19
▪ TC Number:	NI-T1294
▪ Team Leader/Members:	NASLUND-HADLEY, EMMA INGRID (SCL/EDU) Team Leader; BLASCO, IVANA (SCL/EDU); CASTILLO, SANTIAGO ALEJANDRO (VPC/FMP); MONDRAGON MENDOZA, JORGE OSMIN (VPC/FMP); LOPEZ ARAGON, CARMEN CAROLINA (CID/CNI); SANMARTIN BAEZ, ALVARO LUIS (LEG/SGO)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	08 Jul 2020
▪ Beneficiary:	Nicaragua
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US\$364,353.00
▪ Local counterpart funding:	US\$0.00
▪ Disbursement period:	32 months
▪ Types of consultants:	Firms; Individuals
▪ 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 ; Gender equality

### II. Objective and Justification

- 2.1 The overall aim is to mitigate the negative effects that the social distancing measures can have on children's cognitive and socio-emotional development. Specifically, the TC seeks to develop an application for parents of young children to reduce negative impacts at the level of educational and emotional processes because of the current health emergency.
- 2.2 The literature shows that emergency situations, such as the current COVID-19 pandemic, have a negative impact on children's cognitive and socio-emotional development (Di Pietro, 2015). Prolonged home confinement during disease outbreaks can have negative impacts on children's physical and mental health. Children are less active, have irregular sleep patterns and less favorable diets, and on many occasions, they cannot interact with other children or benefit from outdoor activities (Norman, 2020; Wang, 2020). In terms of mental health, the psychological toll, that the fear of infection can have on parents, is often transmitted to children. Many children have parents who have lost their livelihoods. Many have lost a parent or grandparent. Domestic violence and substance abuse have increased worldwide. This dramatic change in lifestyle, together with psychological stress, can have detrimental long-lasting effects not only on learning, but also on children's physical and mental health (Gibbs, 2019; Sprang and Silman, 2013). The United Nations warn that mental health

consequences on an unprecedented scale among children and adolescents are looming.

- 2.3 In Nicaragua, although the entire school system has not closed in response to the pandemic, informal estimates suggests that more than half of parents practice social distancing, keeping their children out of school. As in other developing countries, caregivers have a dearth of tools as they face educational setbacks and socioemotional challenges caused by time out of school. Against this background, the Government of Nicaragua, with support from the IDB, wishes to swiftly respond to the needs of children and caregivers during this unprecedented emergency.
- 2.4 Internationally, NLP is successfully used as a therapy-assistance tool through text-based interaction, equivalent but not superior to face-to-face and telephone counseling (Hoermann, 2017). Although the use of NLP for curriculum content is more limited, the technology has been used as virtual teacher assistants and student tutors in several high-achieving education systems. However, the use of NLP to provide parental advice, on distance learning and socio-emotional support for children, is novel.
- 2.5 At an institutional level, the operation is aligned with the Bank's prioritization of learning and school attainment at the primary and secondary levels as laid out in the Strategy on Social Policy for Equity and Productivity (GN-2588-4); and the Country Strategy with Nicaragua 2012-2017 (GN-2683). The operation is also aligned with the IDB Group's Second Update of the Institutional Strategy (UIS) (AB-3190-2), which prioritizes social inclusion and equity.

### III. Description of Activities and Outputs

- 3.1 **Component I: NLP Application.** The aim of the component is to develop and pilot a natural language processing application to accompanying caregivers of children in pre- and primary school, providing a free remote counseling service on two main axes. First, educational-didactic support to caregivers with children who are out of school or in need of remedial education. Second, socio-emotional support to address mental health needs of children and teens, including gender-based and intra-family violence.
- 3.2 **Component II: Assessment of Attitudes, Practices, Learning and socioemotional Skills .** In close coordination with the Ministry of Education, the aim of the component is to assess the effectiveness of the education and socio-emotional support through an experimental evaluation, which contrasts any changes in learning of students in the treatment group (Group I) with students from a group of comparison schools (Group II).
- 3.3 **Component III: Dissemination.** TC resources will be used to finance the dissemination of the findings. Specifically, the dissemination will include a publication and a workshop. The half day workshop will take place once the evaluation of the pilot has been completed in 2022.

### IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
NLP Application	US\$159,353.00	US\$0.00	US\$159,353.00
Assessment of Attitudes, Practices, Learning and socioemotional Skills	US\$195,000.00	US\$0.00	US\$195,000.00
Dissemination	US\$10,000.00	US\$0.00	US\$10,000.00
<b>Total</b>	<b>US\$364,353.00</b>	<b>US\$0.00</b>	<b>US\$364,353.00</b>

### V. Executing Agency and Execution Structure

- 5.1 The TC will be executed by the IDB. The GNI has requested that the IDB execute the TC based on its long trajectory of experimental randomized control trials in the education sector in Latin America more broadly, and recent data education sector data-collection in Nicaragua (NI-T1278).
- 5.2 In line with Appendix 10 of the Operational Guidelines for Technical Cooperation Products (GN-2629-1), Bank execution of the TC is justified as contracting by the IDB enhances the independence of an experimental evaluation. Resources from Component I will be used to directly contract the Zamora Terán Foundation. The Zamora Terán Foundation is a Nicaraguan organization with a mission to help children develop twenty-first century skills through teacher training and access to laptops and sustainable connectivity infrastructure. The Zamora Terán Foundation promotes and implements the “One Laptop Per Child” (OLPC) Educational Program, originally created by MIT to create “educational opportunities for the world’s poorest children by providing each child with a rugged, low-cost, low-power, connected laptop with content and software designed for collaborative, joyful, self-empowered learning.”

## **VI. Project Risks and Issues**

- 6.1 The execution of a pilot based on an experimental design in a context such as Nicaragua presents logistical challenges. However, Fundación Zamora Terran and the IDB have many years of experience in working with schools in remote geographic areas, including the delivery of education technology programs in rural and urban marginalized schools.

## **VII. Environmental and Social Classification**

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