

### Basic Information

<b>Approval Year</b>	: 2019	<b>Region</b>	: CAN
<b>Team Leader</b>	: Elacqua, Gregory Michael	<b>Country</b>	: Ecuador
<b>Taxonomy</b>	: Client Support	<b>Department</b>	: SCL
<b>Fund</b>	: ORC-SOC,SOC	<b>Sector</b>	: ED - Secondary Education
<b>Approval Number</b>	: ATN/OC-17520-EC	<b>Sub Sector</b>	: SEC
<b>Execution Agency</b>	: US-IDB		
<b>Execution Status</b>	: Closed		
<b>Operation Objective</b>	: The objective of this TC is to provide support to the Government of Ecuador to improve quick response to inclusion of migrants and vulnerable populations in the school system. Specifically, this TC will finance: (i) increase efficiency of assignment of students, especially migrants and vulnerable populations, (ii) increase access to schooling in vulnerable areas with significant concentration of migrants (iii) evaluation and dissemination of the results.		

### Financial Information

#### EC-T1433

ATN/OC-17520-EC:ORC	Original	Current	% of Current Amount Financed
<b>Amount Financed</b>	\$500,000.00	\$499,128.46	
<b>Disbursed Amount</b>	N/A	\$499,128.46	100.00 %
<b>Commitments not yet disbursed Amount</b>	N/A	-	0.00 %
<b>Available Amount</b>	N/A	-	0.00 %
<b>Final Disbursement Date</b>	Dec 9, 2022		

### Status Update

This operation has three main components. We provide a summary on the relevant events of each one: 1. Increase of efficiency of student assignment, especially migrants and vulnerable populations In 2022, progress was made to scale up the pilot of the new school assignment system. All the technical work prepared the government of Ecuador for a progressive scaling up of the school assignment system. The scale-up is planned to begin in 2023 but planning and preparations started this year. The system includes features that facilitate the inclusion of vulnerable populations, especially migrants. The system will also expand the educational offer for entry into the public education system. 2. Component II. Increase access to schooling, especially in vulnerable areas with concentration of migrants In 2021, we finalized the report of Enseña Ecuador consultancy to include migrants in the Ecuadorian school system. 3. Component III – Evaluation and dissemination In 2022, we report two impact evaluations of the effectiveness of matching algorithms, AI, and nudges in improving equity and efficiency in assigning students to schools. Also, we prepared a toolkit already published in the IDB repository to help governments implement centralized school assignment systems. Finally, in 2021 the school assignment project won the IDB innovation award. In 2022, we have made dissemination campaigns of the papers in traditional media and social networks.

### Advance in the Achievement of Outcome and Outputs

## Advance in the Achievement of Outcome

## 1 . Increase inclusion of vulnerable children – principally migrants - in the education system

We documented that when compared to the previous distance mechanism used by the government, the DA algorithm increases the percentage of applicants assigned to a preferred school from 49.96% to 78.44%, while the percentage of applicants assigned to their first preference rises from 42.42% to 69.76%. Our primary outcome has relatively large welfare benefits because it includes the entire community in the education system transparently and without discrimination.

## Advances in Execution

## 1. Increase efficiency of assignment of students, especially migrants and vulnerable populations

**Component Cost: \$220,000**

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.1 <sup>s</sup> Diagnostics and assessments completed	Report describing current student allocation system and propose new allocation algorithm (back-end) (SOC)	Diagnostics (#)	0	2019	Diagnostic report complemented	Education	Physical			
							2019	0	0	0
							2020	1	1	1
							2021	0	0	0
							2022		0	
							EOP 2022	1	1	1
							Financial			
							2019	50000	50000	28632
							2020	10000	31368	34766.97
							2021	0	0	
							2022			
							EOP 2022	60000	63398.97	63398.97

**Advances In Execution:** A survey was conducted in Ecuador to analyze the current student allocation system, and with this input, the analysis report of the public school allocation system in Ecuador was finalized. The report diagnoses the problems and generates recommendations for a new allocation system that allows the full inclusion of migrant students.

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
1.2 <sup>s</sup> Methodologies designed/strengthened	Technical support to develop and pilot the interface of the student allocation system (front-end) (SOC)	Methodologies (#)	0	2019	Methodologies report completed	Education	Physical			
							2019	0	0	0
							2020	1	1	1
							2021	1	1	1
							2022			
							EOP 2022	2	2	2
							Financial			
							2019	0	0	0
							2020	100000	100000	38055
							2021	60000	118546.03	104698
							2022		13848.03	13848.03
							EOP 2022	160000	156601.03	156601.03

**Advances In Execution:** We worked with the Ministry of Education to define an appropriate methodology and strategy for scaling up the new school assignment system. We generated some technical reports focusing on the back end and front end as inputs to determine the characteristics of the new school assignment pilot.

**2. Increase access to schooling, especially in vulnerable areas with concentration of migrants**

**Component Cost: \$200,000**

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.1 <sup>s</sup> Training workshops delivered	Initial training workshop for teachers delivered (SOC)	Workshops (#)	0	2019	Training report completed	Education	Physical			
							2019	1	1	1
							2020	0	0	0
							2021	0	0	0
							2022		0	
							EOP 2022	1	1	1
							Financial			
							2019	30000	30000	30000
							2020	0	0	0
							2021	0	0	
							2022			
							EOP 2022	30000	30000	30000

**Advances In Execution:** This TC funded training workshops to educate government officials on the implementation and execution of the Deferred Acceptance algorithmic sorting code. This crucial step in the centralization of the assignment of students to schools was previously outsourced to firms but is now intended to be used in-house by the Ecuadorian government. We executed this training, providing material to prepare for an interactive session with an expert and recorded the session for future asynchronous training efforts. The materials generated in this task also served as inputs to develop a public good to educate the public on executing the DA algorithm, providing the baseline code and general guidelines.

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
2.2 <sup>s</sup> Supervision reports completed	Supervision report underlining progress in access to education (SOC)	Reports (#)	0	2019	Supervision reports completed	Education	Physical			
							2019	0	0	0
							2020	2	2	2
							2021	2	2	1
							2022			
							EOP 2022	4	4	3
							Financial			
							2019	0	0	40000
							2020	100000	65000	40000
							2021	70000	90000	90000
							2022		0	
							EOP 2022	170000	170000	170000

**Advances In Execution:** In 2021, Enseña Ecuador delivered the final report of the consultancy to include migrants in the Ecuadorian school system.

**3. Evaluation and dissemination**

**Component Cost:** \$80,000

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
3.1 <sup>s</sup> Quasi-experimental impact evaluation (ex-ante or ex-post) performed	Impact evaluation of nudges and allocation mechanisms (SOC)	Evaluation Final Report (#)	0	2019	Evaluation completed	Education	Physical			
							2019	0	0	0
							2020	0	0	0
							2021	1	1	0
							2022		1	1
							EOP 2022	1	1	1
							Financial			
							2019	0	0	0
							2020	50000	50000	0
							2021	0	50000	
							2022			49128.46
							EOP 2022	50000	50000	49128.46

**Advances In Execution:** In November 2022, we conducted two research papers on the impact evaluation of the pilot project that introduced a digital centralized student assignment system. In the first paper, titled "The Welfare Effects of including Household Preferences in School Assignment Systems: Evidence from Ecuador", shows that coordinated school choice and assignment systems can have significant welfare effects in Ecuador. Meanwhile, in the second paper, "Can Information on School Attributes and Placement Probabilities Direct Search and Choice? Evidence from Choice Platforms in Ecuador and Peru", we report experimental evidence that applicants who received information about placement risk and a suggestion of new schools added more schools to their applications and were more likely to include recommended schools than other available alternatives.

Output Indicator	Indicator Detail	Unit Of Measure	Baseline	Baseline Year	Means Of Verification	Theme	Year	P	P(A)	A
3.2 * Seminars organized	National seminars and regional seminars to disseminate results (SOC)	Seminars (#)	0	2019	Seminars completed	Education	Physical			
							2019	1	1	1
							2020	1	1	0
							2021	0	1	0
							2022		1	1
							EOP 2022	2	2	2
							Financial			
							2019	20000	20000	18520
							2020	10000	11480	0
							2021	0	11480	6364
							2022		5116	5116
							EOP 2022	30000	30000	30000
Advances In Execution: We have presented the work from the pilots and the experimental evaluations in multiple international venues. We have also disseminated the work in traditional and social media.										