



## STEM FOR ALL!

ROTARY CLUB : CARTAGO PEDRO MORALES PINO  
CITY: CARTAGO

### OBJECTIVES OF THE PROJECT:

Empower teachers from educational institutions and final year secondary school students in a marginalized area of the city and population with hearing disabilities, through education in Science, Technology, Engineering and Mathematics (STEM)

### DESCRIPTION OF THE PROJECT:

The project will implement a training program at the Universidad del Valle, Cartago Campus, and will use digital tools such as robotics, programming, astronomy, peace and coexistence training kits, and practical science and technology activities. It will also include training modules for teachers in sign language to cover the hearing impaired population and promote inclusion, scientific curiosity through technological experiments, and the teaching of basic concepts of electronics, programming, robotics, and astronomy.

### PLEASE DESCRIBE WHAT NEEDS YOU IDENTIFIED? HOW WILL THE PROJECT ADDRESS THESE NEEDS? WHO WILL BENEFICIARY OF THIS PROJECT? PLEASE CITE AN ESTIMATED NUMBER OF BENEFICIARIES. (15 lines maximum)

In marginalized areas of the city, several educational needs related to STEM (Science, Technology, Engineering and Mathematics) have been identified and are part of the curriculum.

1. Lack of educational resources such as development cards, 3D printers and astronomy equipment, which limits effective STEM education and teachers who lack the training and resources necessary to adequately teach STEM.

2. Students do not have access to practical learning opportunities in science and technology and a significant educational inequality in STEM between students from marginalized areas and other more advantaged areas.

3. Hearing impaired population with a great opportunity to balance their competitiveness with people without disabilities.

The project will address these needs by implementing practical learning programs, and fostering interest in STEM as well as inclusion by preparing teachers in sign languages, through motivating activities. It is expected to serve 10 educational institutions, their STEM teachers and about 2,500 students.

### To ensure the sustainability of the project once the financial contribution is finished, the following will be carried out:

1. Continuous Training of Teachers. The University of Valle, Cartago campus, will continue to operate as a training center for teachers of educational institutions, on an annual basis, ensuring that STEM education remains an integral part of the school curriculum.

2. Establishment of Science and Technology Clubs. Forming science and technology clubs within schools allows students to continue exploring and learning about STEM in an extracurricular manner. These STEM clubs will be created by the teachers trained in the project and will use the technological equipment provided by the project.

3. Coordination with the Secretary of Education of Cartago. Coordination will be made with the Secretary of Education so that teachers can attend the training periods during their work hours and be responsible for completing the entire STEM training process.

### IS THE COMMUNITY INVOLVED? DESCRIBE THE ROLE OF THE LOCAL COMMUNITY IN PROJECT IMPLEMENTATION AND CONTINUITY.

Local actors in the local community	Role
Young students from marginalized areas	They are vulnerable youth from educational institutions; youth from other LE with better education are at a disadvantage.
Teachers of the area	They are teachers from educational institutions who delve into STEM subjects to train and guide young people, including the hearing impaired population.
Secretary of Health	Entity in charge of the teachers of the I.E of Cartago
University of Valle, Cartago Campus	University with advanced STEM training programs, where the project will be implemented, and which will train teachers and groups of final-year students.
Deaf Association of Cartago	Association of deaf people that brings together the largest population of this type of disability and their interpreters who will be part of the STEM training process.

Categoría	Cant	Descripción	Costo Total	Costo Total Dolares
Computador All-in-ONE	15	PC AMD Ryzen 5 RAM 16 GB 12GB	\$ 36.000.000	\$ 8.845
Escritorios	15	Escritorio Tipo L de Oficina	\$ 6.000.000	\$ 1.474
Sillas	15	Silla Manta Ejecutiva	\$ 7.500.000	\$ 1.843
Tablero digital	1	Tablero Digital interactivo 65pulg	\$ 12.000.000	\$ 2.948
Video Beam	1	Projector Viewsonic	\$ 2.800.000	\$ 688
Puntos electricos	25	Punto con Cabierra	\$ 1.250.000	\$ 307
Cableado	1	Cable #14	\$ 2.000.000	\$ 491
Enfriadores de aire	4	Enfriador de Aire 10 ltrs	\$ 2.080.000	\$ 511
P. Pared 1.8X1.8m	1	Pantalla Pared 1.80 X 1.80m	\$ 240.000	\$ 59
Lego	2	Lego Mindstorm E3J Core.	\$ 18.000.000	\$ 4.423
Kit de Astronomia	1	Telescopio	\$ 8.000.000	\$ 1.966
Impresora 3D	2	Gran Formato Impresora 3D	\$ 6.000.000	\$ 1.474
Microrbt	10	Firenova Super Starter Kit Para Bbc Micro Bit (v2 Incluido)	\$ 8.000.000	\$ 1.966
Cap. en R. conflictos y la paz P	60	Horas de Capacitación	\$ 2.940.000	\$ 722
Capacitaciones lenguaje de señas	60	Horas de Capacitación	\$ 2.940.000	\$ 722
Capacitación en H blandas	30	Horas de Capacitación	\$ 1.470.000	\$ 361
Capacitación Design thinking	30	Horas de Capacitación	\$ 1.470.000	\$ 361
Acompañamiento psicológicos	100	Horas de Capacitación	\$ 4.900.000	\$ 1.204
Capacitación en Electrónica	100	Horas de Capacitación	\$ 4.900.000	\$ 1.204
Programación de Comput.	100	Horas de Capacitación	\$ 4.900.000	\$ 1.204
Capacitación en Astronomia	60	Horas de Capacitación	\$ 2.940.000	\$ 722

Imagen publica	1	Página Web y Hosting Anual	\$ 3.000.000	\$ 737
Imagen publica	1	Gorras, petos, pendones	\$ 5.000.000	\$ 1.229
Administración del proyecto	1	Contabilidad, declaración de renta y otros impuestos	\$ 6.285.000	\$ 1.544
Imprevistos	1	Cambio de tasa de cambio, cambio de proveedores	\$ 6.285.000	\$ 1.544
Total			\$ 156.900.000	\$ 38.550

CONCEPT	VALUE IN PESOS	VALUE IN DOLLARS
Cost of the project	COP\$156.900.000	US\$ 38.550
Local Club	COP\$10.000.000	US\$ 2457
District 4281	COP\$	US\$
International Club/s	COP\$	US\$
International District/s	COP\$	US\$
The Rotary Foundation	COP\$	US\$
PENDING FINANCING	COP\$146.000.000	US\$35.872

**Thanks to your support, our club will help the community by solving its most important needs. We appreciate the analysis of this project. For more information, contact:**

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