DIGITAL INTERACTIVE CLASSROOMS IN PANAMÁ

2022-23 Programs of Scale Finalist

Strategic goal

The Digital Interactive Classrooms program aims to improve the quality of education in selected public primary schools in Panamá by introducing technology in 230 classrooms and training teachers to use it to improve instruction. The program seeks to provide technology and instill more advanced and innovative teaching methods that will engage and motivate students, leading to better learning outcomes.

The issue

About 88% of Panamá's students receive a public education. Panamá consistently scores near the bottom on an international student assessment from the Organization for Economic Cooperation and Development that measures how well 15-year-olds can use their reading, mathematics, and science knowledge and skills to meet real-life challenges. Additionally, a study by the Educational Research Center of Panamá found that 7 out of 10 children in the public schools don't have access to computers at home and 4 out of 10 don't have access to the internet. A lack of digital competency among teachers compounds the problem. Teachers sometimes take part in training about how to use technology, but they may not be taught how to use that technology creatively to teach the national curriculum. Where technology is provided, there is rarely a system in place to maintain, replace or update equipment when necessary.

Program background

Rotary clubs have worked with rural schools in Panamá for more than 10 years. Since 2017, the Rotary Club of Panamá Norte has been establishing digital classrooms in rural public schools, obtaining the support of external partners and local Rotary clubs as the program expands. In 2022, Panamá passed a law to provide the public education system with digital infrastructure and, through technological transformation, increase the use of creative and innovative methods that make it easier for students to acquire digital skills. Rotary clubs in Panamá want to use the Digital Interactive Classrooms program to put this law into practice, serving as a model for how to train teachers to use the technology and support school communities in maintaining the equipment.

Seven Rotary clubs will take part in developing, implementing, monitoring, and evaluating the program. Each club maintains close contact with local Ministry of Education officials and other partners to ensure that the program becomes firmly established in their respective provinces and will continue beyond Rotary financing.

Sponsor

Rotary Club of Panamá Norte, Panamá (District 4240)

Rotary Club of Panamá Norte will work with several Panamá clubs including the Rotary Clubs of Chitre, Cristobal Colón, David, La Chorrera, Playa Coronado and Santiago.

Implementing partners

Ministry of Education
Technological University of Panamá
Juan Demóstenes Arosemena Normal School
World Possible

The intervention

The Digital Interactive Classrooms program will provide access to technology in places where internet and digital devices are not readily available and will not be available soon. The program proposes four interventions:

1. Establish digital interactive classrooms (both mobile and fixed location) in 8 of 10 provinces in Panamá.

2. Train teachers and student teachers in digital competencies.

3. Provide a model for mainstream digitalization in the nation's education system, including training teachers and equipment maintenance and replacement.

4. Develop a center to provide continued training in digital competencies for teachers and students and be a repository of digital educational material for teachers to use.

This program will establish fixed-location digital interactive classrooms at 60 schools and provide Remote Area Community Hotspot for Education and Learning (RACHEL) devices to 170 mobile technology classrooms.

RACHEL technology provides schools in areas that don't have internet with pre-programmed educational content through small, portable devices that can be used almost anywhere. Current teachers and students training to be teachers will learn to use collaborative technology to develop more interactive and innovative classes that engage and motivate students.

Teacher training will focus on how they can use the equipment, develop interactive teaching skills, and apply the technology to teach the curriculum. The program will work closely with the Technological University of Panamá to develop systems to ensure that the equipment in public schools will be maintained and replaced when needed.

Key measurable result

Outcome: Improved performance on national, regional and international comparative tests that measure learning results. This will be achieved by increasing access to technology in 230 remote and rural schools and training 3,000 teachers to use that technology to teach the national curriculum.

Why was this program a finalist?

Panamá's new law that aims to transform the use of technology in public schools provides an opportunity for Rotary members and our partners to use the interest and engagement of the government to create a model for systemic change. Bringing technology to schools in rural Panamá is crucial, but this program also establishes the necessary systems to train teachers both in how to use technology in general and how to use it to teach the national curriculum. The Digital Interactive Classrooms program can also serve as an example for Rotary members in similar contexts who want to expand education technology efforts in their own areas.

"The Digital Interactive Classroom program has united Rotarians in Panama in an effort to bring technology, connectivity, and teacher training to classrooms in Panama schools. The program encourages teachers to use technology creatively to develop classes that motivate primary school children--especially in the rural areas of the country," says Enedelsy Escobar-King, member of the sponsor Rotary Club Panamá Norte.

Contact

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