

# Education at a Crossroads:

## Costa Rica's New Approach to Technical Education and Workforce Readiness

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### Tags

Education Policy; Ethics, Equity, and Social Justice; Primary and Secondary Education; Program Assessment; Technology

### Setting

Historically, Costa Rica has been considered an anomaly in Latin America, due to its stable democracy, commitment to environmental sustainability, and investment in human capital through education. Costa Rica is a country in which primary education has been both compulsory and tuition-free since 1869. Long recognized internationally for its commitment to universal education and its high rate of literacy (98 percent), today Costa Rica faces declining educational outcomes, growing inequality, and a stalling economy, factors that have brought it to an inflection point. Recent data paints a stark picture of an educational system in crisis, challenging the country's ability to continue to develop and remain a leader in the international education landscape.

The gravity of Costa Rica's educational crisis is confirmed by international assessments. The World Economic Forum's Global Competitiveness Report ranked Costa Rica 102 out of 141 countries regarding skill levels of its secondary school graduates. Moreover, the 2022 Programme for International Student Assessment (PISA) results further highlight the country's educational deficiencies, with Costa Rica's average scores among the lowest ever measured by PISA across all three subjects—mathematics, science, and reading. These results

have sparked national debate and influenced policy decisions, pushing education reform to the forefront of the political agenda.

The statistics are alarming: today, only 10 percent of first graders in the country will go on to earn a high school diploma, and just 40 percent of the nation's current labor force has completed secondary school. Moreover, only a quarter of adults between the ages of 24 and 35 hold high school diplomas. These figures stand in sharp contrast to Costa Rica's past achievements in education and its aspirations to compete in the global knowledge economy.

## Case

In response to these challenges and influenced by global education trends, the Ministry of Public Education approved a new initiative in 2023 that introduces a new nationwide form of vocational educational training. The National Technological Training Program (PNFT) ("Programa Nacional de Formación Tecnológica") was designed to better prepare learners in the areas of digital literacy and twenty-first century skills. This initiative is moving forward despite significant annual budget cuts to public education every year since 2017.

Unlike traditional vocational programs that often operate parallel to academic tracks, the PNFT seeks to embed technological and vocational training within the core curriculum throughout all educational levels of the public system, making it accessible to students, regardless of their academic trajectory, location, or grade level. This novel approach is particularly significant given that a large share of Costa Rica's working-age population has low educational attainment (below secondary education) and could benefit from vocational skills training.

The PNFT is based on three pillars: developing computational thinking for problem-solving; creating ethical digital citizens; and encouraging entrepreneurial and innovative thinkers. Through these pillars, the initiative aims not only to address the immediate need to increase technological skills but also to cultivate future generations of principled, innovative, and technologically-skilled citizens.

This initiative aligns with several Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities). By focusing on technological skills and digital citizenship, the PNFT aims to address SDG targets related to relevant skills for employment and entrepreneurship, as well as the promotion of sustainable development.

One tenet of the PNFT is its inclusivity and accessibility to all students in the public education system, regardless of background or prior exposure to technology, which aligns with SDG 10. Moreover, the PNFT is designed to be implemented across all levels of education, throughout primary, elementary, and secondary school, ensuring continuous and progressive development of technological competencies.

Now, with initial implementation ahead, the PNFT is facing challenges. There are concerns about equitable access to technological resources, particularly for students in rural areas or from low-income backgrounds. The digital divide, both in terms of infrastructure and skills, remains a significant obstacle throughout the country, especially outside of San Jose, the capital. Additionally, changing long-held perceptions about the value of technical education compared to traditional academic pathways, especially for girls, presents a cultural challenge. Many of the country's technical high schools emphasize STEM-related fields, domains where girls and women tend to have lower representation than their male counterparts. Finally, the program was slated to

launch in 2024, but as of November 2024, it has yet to begin implementation. The funding cuts to public education may have delayed its launch.

If implemented and successful, the PNFT could have far-reaching implications for Costa Rica's alignment with international standards and achievement of the SDGs. By equipping students with critical technological skills, fostering innovation, and promoting ethical, digital citizenship, the program has the potential to improve educational outcomes, drive economic growth, and position Costa Rica as a leader in technological education in Latin America.

## Discussion Questions

As you consider this case, discuss:

- On the precipice of implementation, what factors are still unknown about how the implementation of this new policy in Costa Rica will play out? How can educators move forward amidst ambiguity?
- What strategies could be employed to bridge the digital divide and ensure equitable access to the resources needed for this new type of technical training?
- How might educators balance the focus on technological skills with the need for a well-rounded education that includes humanities and social sciences?
- How could international partnerships help to further national policy goals in implementing programs such as the PNFT?
- What could other national education systems learn from Costa Rica's new approach to technical education, and what could Costa Rica learn from other countries' technical education systems?
- How can the Costa Rican government measure the impact of this new program on both educational outcomes and broader economic development, particularly in relation to SDG targets?
- How might the emphasis on education surrounding digital citizenship and ethics contribute to addressing broader societal challenges?