

Digital and STEM skills for girls at a glance:

Latin America
and the Caribbean



unicef 
for every child

Digital and STEM skills for girls at a glance: Latin America and the Caribbean

Supervision:

Ivonne Urriola Pérez, Gender and Development Officer, and María José Velasquez Flores, Digital Education Specialist at the UNICEF Latin America and Caribbean Regional Office.

Author:

June Pomposo Angulo, Gender Consultant.

Technical collaboration and content development (in alphabetical order):

Lina Beltrán, Head of Education at the Bolivia Country Office; Ileana Cofino, Education Specialist at the Guatemala Country Office, Luisa Martínez Cornejo, Gender and Development Officer at the Peru Country Office; Gabriela Mora, Youth and Adolescent Development Officer and Gender Focal Point at the Brazil Country Office, Inti Tonatiuh Rioja Guzman, UNV for Youth Skills, Employability and Innovation at the Bolivia Country Office; Vincenzo Placco, Deputy Representative at the Guatemala Country Office.

Translation from Spanish to English by Yvonne Fisher.

Creative Design by María Paz Gonzales and Franco Rucabado.

The contents of this document represent the views of the authors and do not necessarily reflect the policies or views of UNICEF. Any reference to a website other than UNICEF does not imply that UNICEF guarantees the accuracy of the information contained therein or that it agrees with the views expressed therein.

UNICEF does not support any company, brand, product or service.

Full reproduction of the contents of this document is permitted only for research, advocacy and education purposes, provided that it is not altered and appropriate appropriations are allocated (UNICEF). This publication cannot be reproduced for other purposes without prior written permission from UNICEF. Requests for permission must be addressed to the Communication Unit, comlac@unicef.org

Suggested citation: United Nations Children's Fund, Digital and STEM skills for girls at a glance: Latin America and the Caribbean, UNICEF, Panama City, 2023.

© United Nations Children's Funds (UNICEF)
March 2023

Latin America and the Caribbean Regional Office
Building 102, Alberto Tejada St.
City of knowledge
Panama City, Republic of Panama
PO Box 0843-03045
Phone: + 507 301 7400
www.unicef.org/lac

Contents

- 4** Introduction
- 5** Background and context
- 6** Educational challenges for girls and adolescent girls in Latin America and the Caribbean
- 7** Girls' potential
- 8** UNICEF's response: The Skills4Girls programme in the Latin America and the Caribbean region
- 12** Bolivia
- 13** Brazil
- 14** Guatemala
- 15** Peru
- 20** An opportunity to invest in girls
- 21** Outcomes so far
- 22** Proposals for the Future
- 23** Key resources
- 25** Bibliography

Introduction

UNICEF's global programme Skills4Girls was launched in 2020 with the aim of providing girls and adolescents girls with skills and competencies so they can access opportunities at present and in the future, and preparing them for the socioeconomic challenges of the 21st century. Activities within the Skills4Girls programme focus on STEM (science, technology, engineering and math) education, digital literacy, social entrepreneurship and life skills.

Skills4Girls is active in 22 countries, with the support of public-private partners, including companies such as Chloé, Clé de Peau Beauté, Dove, Gucci and Pandora that have funded and sponsored ongoing programmes. As at 2022, it is estimated that the programme has had a direct impact on approximately 40,000 girls and adolescents girls.

The core approach enabling to bring about gender transformative outcomes that improve the lives of girls in a tangible way, is based on a significant commitment with girls as the leading players to design and implement solutions to meet their needs and interests. The programme aims at bridging the gap between the skills girls need to become a part of the future workforce and those they have traditionally accessed.

As one of the five specific priorities for girls' empowerment within the UNICEF Gender Action Plan 2022-2025, investments in girls' education and skills are a critical pathway to decent work and empowerment.

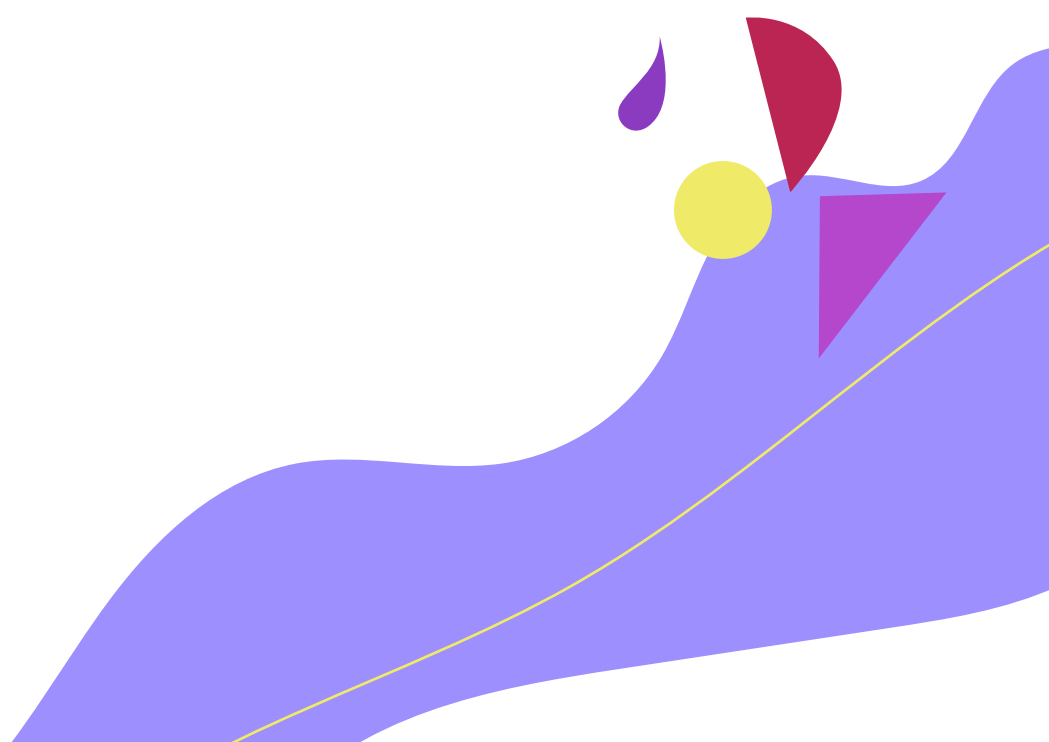
In addition, the new strategy of the adolescents girls' programme 2022-2025¹ describes how UNICEF mainstreams gender equality in all operations and in its programmatic work, committing through this and other programmes to develop transformative actions that foster, inter alia, adolescent girls learning and skills with the aim of promoting their rights and meeting their many and diverse needs.

¹ United Nations Children's Fund, *Adolescent Girls Programme Strategy*, UNICEF, October 2022

The programme contributes to UNICEF's overall approach to facilitate gender equality and the empowerment of adolescent girls, especially in the transition towards equal participation in the workforce, contributing to the outcome of the Strategic Plan (SP) and the Gender Action Plan (GAP) of "reaching out to 6.5 million girls with programmes on skills for employability, learning, personal empowerment and/or active citizenship".

Throughout this document, an analysis is carried out of the impact that the Skills4Girls programme has had on the reality faced by adolescents girls in Latin America and the Caribbean, especially in the four countries in which the programme is currently in force (Bolivia, Brazil, Guatemala and Peru) and in other countries such as Mexico and Colombia that are currently conducting skills development activities specifically for girls. Likewise, it explores the opportunities that the programme offers adolescent girls to develop their full potential and access better future employment and social opportunities, providing successful examples of STEM skills acquisition, entrepreneurship, life skills and advocacy initiatives to challenge and do away with gender roles and stereotypes.

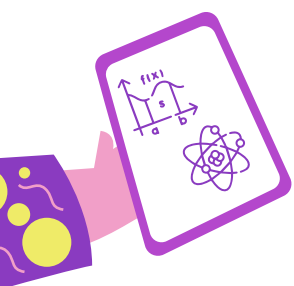
Finally, it delves into the benefits of investing in the training of adolescent girls as a key element to overcome the challenges and barriers of gender inequality and discrimination experienced by girls in our region.



Background and context

For millions of girls and adolescent girls, gender inequality combined with poverty and other disadvantageous conditions limit their freedom of choice and access to resources for a decent life. In a girl's development through to adulthood, there are many education, sexuality, participatory and social environmental barriers. In addition, cultural and social expectations, child marriage, the risk of pregnancy, violence, and lack of access to resources determine the opportunities girls may have. Promoting and enhancing their empowerment and leadership is a part of UNICEF's mandate to counter inequalities and pave the way for girls and adolescent girls to prosper.

In this regard, it is essential to recognize that the gender gap in skills, especially related to STEM, is linked to historically rooted cultural aspects, in which stereotypes, models and prejudices tend to pigeonhole women and girls in certain roles and occupations. Thus, structural inequalities and gender biases can restrict girls' choices when deciding on the careers they want to study and the types of jobs they aspire to hold or have access to. In Latin America and the Caribbean, girls and boys are guided to choose areas of study in a segregated manner traditionally considered "female" or "male". Girls are guided to value and prioritize household chores and family care, as well as to choose highly feminized professions linked especially to the health, education or services sectors and/or to low-paying professions on the labour market. Boys, on the other hand, are expected to be the providers and main economic support of their families in the future, so they are directed towards more physically demanding professions and/or with greater workloads.





Overcoming gender inequality in STEM or digital skills can only be achieved by also transforming discriminatory cultural patterns.²

This has negative effects on employment opportunities and girls' choice of technical specializations to adequately train for today's economic landscape that increasingly values and requires STEM and digital skills. It is important to highlight that we live in an increasingly digitized world, in which many of the daily activities such as employment, socialization and participation in socioeconomic aspects call for digital skills and access to technological tools.

Despite this growing social-labour demand with digital qualifications and skills, there is a significant shortage of equal opportunities for women to be trained in these skills, which will lead technologies to be designed, produced and managed predominantly by men in the future.

So as to promote the inclusion of more women in technology-related training and careers, it is essential to foster an ecosystem to arouse the interest, presence and participation of girls and youth in STEM and digital fields from an early age and promote inclusive educational activities with special emphasis on secondary education and vocational technical training.

² Economic Commission for Latin America and the Caribbean, *The care society. A horizon for sustainable recovery with gender equality*, ECLAC Chile, November 2022.

³ Ibid.

Educational challenges for girls in Latin America and the Caribbean

Latin America and the Caribbean is one of the youngest regions in the world, 30 percent of the region's total population is under 18 years old.⁴ This generation has the opportunity to contribute positively to change and promote future scenarios that are innovative, inclusive and respectful of the environment and people.

Education is a key lever to bring about great benefits for the economy, human well-being and the environment. Investing in the human capital of this young generation in Latin America and the Caribbean would result in great benefits for the region and for the future of its societies. Greater attention and investment in today's girls, boys and adolescents is required to ensure a prosperous region in the future.⁵

Unfortunately, secondary school drop-outs among adolescents continues to be a great pending matter across the region, and it is estimated that four out of every 10 students drop out of secondary education⁶ because of a series of factors, such as the lack of economic resources and other factors affecting girls and adolescent girls to a greater extent, such as child marriage and early unions as well as child pregnancy and early motherhood. At present, in Latin America, between 10% and 25% of women have become mothers before the age of 18, and 22% of women between the ages of 20 and 24 in the region were married or had a stable union

⁴ United Nations Children's Fund, *Children in Latin America and the Caribbean: 2020 Overview*, UNICEF Latin America and the Caribbean, October 2020.

⁵ United Nations Children's Fund, *Reimagining education "Reimaginar la educación y el desarrollo de habilidades para niños, niñas y adolescentes en América Latina y el Caribe*, December 2021.

⁶ Information center for the improvement of learning.

before they turned 18.⁷ Among available data from 14 countries in the region⁸ nearly 50% of pregnant girls and adolescents or under 14-year-old mothers drop out of school, and between 67 and 89% of adolescent mothers do not attend school (CLADEM, 2016).

On the other hand, in recent years, especially as a result of the pandemic, technological changes have accelerated, and digital transformation is a phenomenon that will continue to spread across the different walks of life, thus becoming a necessary condition not only to ensure the right to education, even in emergency settings but also for the jobs of the future. This has provided opportunities although new paths have also been drawn up that deepen inequalities, particularly concerning barriers to access, use and ownership of new technologies.



Inclusive digitization must be a means to achieve sustainable development and gender equality, so it is important to assess the possibility of transforming educational systems to adapt them to digital demands, and make them more flexible, inclusive and innovative, reaching out to all the Region's girls, boys and adolescents.⁹

⁷ Economic Commission for Latin America and the Caribbean, *The care society. A horizon for sustainable recovery with gender equality*, ECLAC Chile, November 2022.

⁸ Argentina, the Pluri-national State of Bolivia, Brazil, Colombia, Dominican Republic, El Salvador, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, and Uruguay.

⁹ ECLAC, *The care society*

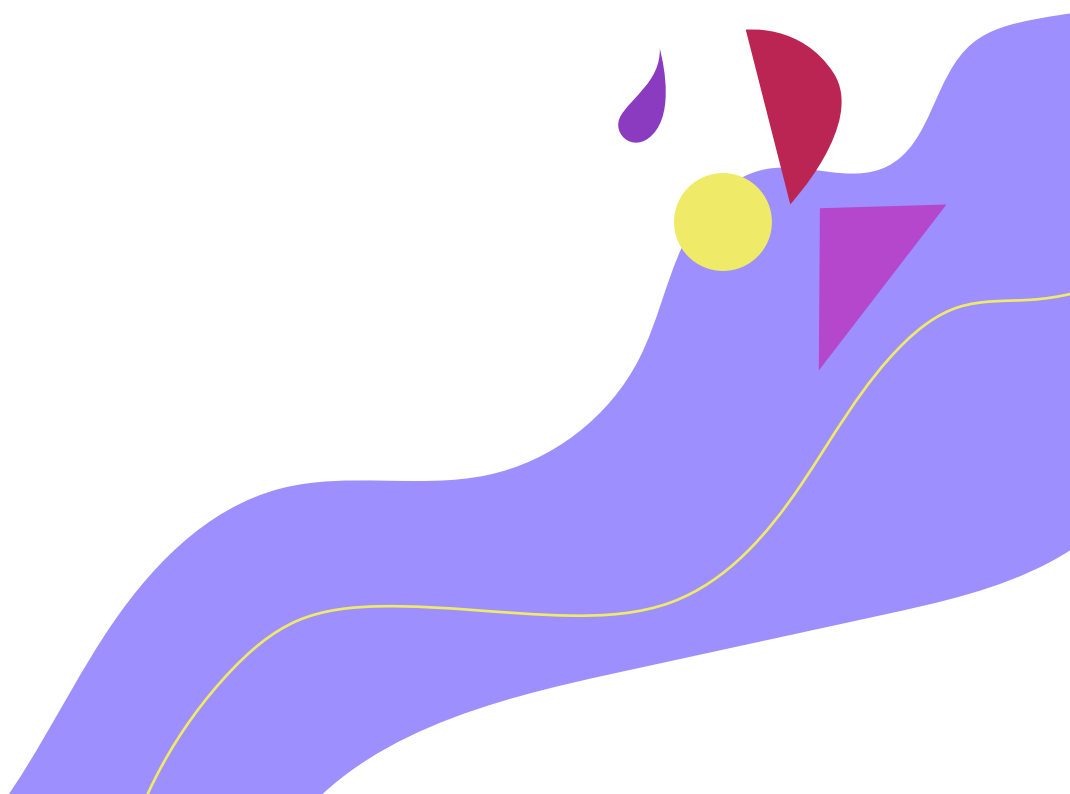
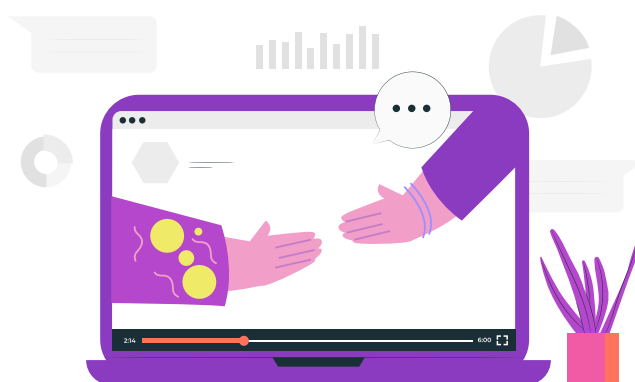
In this regard, the region is one of the most unequal in the world, in which thousands of girls and boys do not yet have access to the Internet or to technological devices, especially those who live in rural areas or indigenous communities. Data shows that 51% of students (over 32 million) between the ages of three and 17 in the region do not have an Internet connection at home (UNICEF, 2020). Despite the fact that many governments provided distance learning opportunities in 2020 - 2021 during the COVID-19 pandemic, the digital divide left behind girls, boys and adolescents from rural areas, indigenous and migrant communities, as well as persons with disabilities. It is estimated that 40% of students did not have access to distance education and,¹therefore, had fewer chances of digital learning and a higher risk of dropping out of school. (UNICEF 2022).

COVID-19 exacerbated these obstacles, many girls and boys lagged behind in their studies and others abandoned them. At the end of 2020, UNICEF estimated that 3.1 million girls, boys and adolescents in the region were at risk of dropping out of school due to the pandemic¹⁰. Especially girls, who continued to undertake the high burdens of care and household chores, became pregnant or entered into early marriages and were among those mainly affected by economic constraints.

The overload of care tasks that girls undertake affects their access to opportunities and the exercise of fundamental rights such as quality studies, decent jobs, enjoyment of leisure time, promotion of health and well-being, among others. This situation affects the development of girls by reducing the time available to carry out various physical, social, cognitive and emotional activities that contribute to their comprehensive development and the exercise of their autonomy. (ECLAC 2022)

¹⁰ United Nations Children's Fund, EDUCATION ON HOLD A generation of children in Latin America and the Caribbean are missing out on schooling because of COVID-19, UNICEF Latin America and the Caribbean, December 2020.

Therefore, the cultural patterns that link women and girls to care activities, and the lack of flexible programmes promoting their education, have an impact on their life choices and access to opportunities for their comprehensive development. According to ECLAC 2019 data, only 34.6% of STEM graduates in the region were women, who also have to face gender-based beliefs and expectations at school and at the workplace that limit adolescent girls' aspirations and influence their participation, performance and progression in STEM-related fields. This ends up being a clear limitation for their access to highly-demanded quality jobs in the future and their ability to adapt to ongoing changes and technological advances at work.




Girls' potential

Girls are the global example of strength and resilience, they have the ability to drive progress and positively transform their families, schools and communities. If adequate resources are invested in the development of their skills and competencies, they will have the opportunity to generate positive changes in society now and in the future and become the leaders governing the world.

Digital skills and social entrepreneurship are a critical path towards decent work that results in economic independence, and professional and personal empowerment for girls.

Twenty-first century employment focuses on new technologies in science, technology, engineering, mathematics and entrepreneurship (STEM), since 90% of jobs around the world require digital skills.



When girls study STEM-related subjects, they are prepared to solve global problems and challenge gender stereotypes, they gain confidence, agency and skills to face everyday challenges. For girls to have the opportunity to learn and succeed in science, technology, and engineering solutions, we need to reinvent educational systems.

Through the Skills4Girls programme, UNICEF aims to do away with gender stereotypes, boost their employability and socioeconomic insertion, contribute to building educational public policies and help reduce the digital gender divide and the STEM gap.

UNICEF's response: The Skills4Girls programme in the Latin America and the Caribbean region

The Skills4Girls initiative, which has been led by UNICEF since 2020, contributes to developing the skills and empowering girls, preparing them so that in the future they can face the challenges of the 21st century, facilitating their transition to the labour market and exercising their active citizenship.



Secondary education, learning and skills for girls, including STEM skills, are among the outcomes of the Gender Action Plan that UNICEF prioritizes to address the challenges faced by girls.

Investing in education and skills development for girls can transform the vulnerabilities they face regarding their current and future opportunities, with ripple effects for their families, other girls, and future generations.

The programme is currently operational in 22 countries, with an approach focused on girls to help develop their skills through innovative initiatives and methodologies, carry out advocacy activities to do away with stereotypes and provide visibility to the successful experiences of girls, as well as generate evidence through studies and consultations that show the importance of investing and continuing to work on developing girls' skills.

The programme intentionally focuses on girls' education based on two strategies:

a) Advancing girls' education and learning, particularly in STEM (science, technology, engineering and mathematics), and developing digital skills, including digital literacy and safety and security.

b) Overcoming gender stereotypes in learning, access to learning opportunities, participation, empowerment through girl-centered approaches, transferable skills, problem solving, entrepreneurship, networking and mentoring.

It adopts a methodology that compiles successful approaches and models to promote girls' abilities through empowerment, flexible and meaningful learning, targeted to girls and adapted to their realities and contexts.

The objectives of the programme focus on:

- 1.** Placing girls and adolescent girls at the center through their meaningful participation in design, implementation, monitoring and learning.
- 2.** Promoting and developing skills that enable them to participate on equal grounds and transition towards employment, including STEM skills, social entrepreneurship and transferable skills.
- 3.** Tailoring approaches to their needs: flexible learning, safe spaces, mentoring, internships, access to technology, soft skills development, and leadership.
- 4.** Sharing successful learning cases and encouraging networking to expand global dialogue and collective impact

The Skills4Girls programme's advocacy and public-private partnerships strategy has focused on investing in the development of girls' skills and on working collaboratively to disseminate messages and raise awareness concerning the power of girls as change agents and leaders in proposing solutions to current challenges.

In forthcoming months, the idea is to continue expanding and replicating the programme in other communities and countries across the region, based on the example of successful experiences as a precedent to scale up the programme. In addition, through communication and advocacy campaigns, UNICEF aims at providing ongoing visibility to and disseminating the programme's success and progress that will lead to opening new spaces for dialogue and collaboration with decision makers. Finally, the short-term purpose is to continue strengthening the partnerships established with the public and private sectors to continue moving forward and generating positive outcomes.

Where is it implemented?

At present, the Skills4Girls programme is operational in four countries in Latin America and the Caribbean, namely, Bolivia, Brazil, Guatemala and Peru, with the support of the following private donors: Chloé, Pandora, Shiseido and Dove, and partnerships with the private and public sector of the countries in which the programme is being implemented.

Other countries in the region conduct activities to promote girls' skills in the different fields of education, adolescence and gender and may be proposed to become a part of the S4G programme in the future, as is the case of Mexico and Colombia (characteristics of their programmes are described below).



Note: This map is stylized, and it is not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.



Eduardo Ruiz, UNICEF Bolivia. 2021.

Bolivia



Programme quick facts

- ▶ Target audiences: 7 to 18-year-old girls and adolescent girls
- ▶ Current scope: 6,690 girls and adolescent girls have developed their robotics, digital and computer skills.
- ▶ Programme interventions: technology contest Technovation, Training programme Bootcamp Chicas Waskiris, RoboTICas robot creation programme (name includes the Spanish acronym for ICT), science camps, communication campaigns
- ▶ Skills component: scientific and technological skills



Programme

Since 2019, UNICEF Bolivia has been conducting multilevel interventions to reduce the gender gap in STEM-related areas, ensuring that girls can develop the skills they need for the future. UNICEF Bolivia works in partnership with different public and private sectors to reduce the gender gap in STEM. The programmatic efforts of the country office aim at carrying out (i) Activities to develop innovative capacities for girls, such as Technovation, a technological entrepreneurship contest to solve social problems in their communities by developing a mobile application or a digital project, the Chicas Waikiris Bootcamp training programme to promote development of scientific and technological skills, and the RoboTICas programme for building robot prototypes; among others (ii) Advocacy activities to break down stereotypes and provide visibility to the successful experiences of girls in high-level events, thematic conversations and communication campaigns; (iii) Advocacy activities, setting up partnerships with key institutions and stakeholders and carrying out research to determine the causes and magnitude of the gender gap in access to technology in the country.



Manuela Cavadas, UNICEF Brasil, 2019

Brazil



Programme quick facts

- ▶ Target audience: 13 to 19-year-old adolescents
- ▶ Current scope: 49,938 adolescents use the chatbot (60% girls, 37% boys, 3% non-binary)¹¹
- ▶ Programme interventions: TOPITY Chatbot
- ▶ Skills component: mental health through technological tools (social media)



Programme

Since 2019, in partnership with Dove -a company that makes personal care products-, UNICEF Brazil has been strengthening the empowerment of adolescents by developing, disseminating and managing a chatbot script on body confidence and self-esteem. The project consists of reinforcing the self-esteem and confidence of adolescents regarding their bodies, with online conversations through a chatbot on the Facebook Messenger platform. Over 2,000 adolescents have participated in workshops for developing and validating the chatbot script, sharing their opinions and the concerns affecting Brazilian youth about self-esteem and body image. To date, over two million adolescents have interacted with the chatbot, acquiring skills related to positive management of their emotions and generating greater self-confidence and self-esteem, particularly for adolescent girls.

¹¹Total number of adolescents who have downloaded and used the Topity chatbot.



UNICEF Guatemala/2022/ Rodrigo Mussapp

Guatemala



Programme quick facts

- ▶ Target audiences: 15 to 19-year-old adolescents from the rural mountainous area of the country.
- ▶ Current scope: 1,494 adolescent girls from rural and indigenous areas¹²
- ▶ Programme interventions: DreamCatcher
- ▶ Skills component: secondary education through a flexible and innovative methodology (includes ICT and life skills)



Programme

Through the initiative Dreamcatcher (atrapasueños), UNICEF Guatemala with funds from the jewelry company Pandora, aims to empower adolescent girls from rural and indigenous areas so that they become innovators and social entrepreneurs.

The initiative is targeted to adolescents between the ages of 15 and 19 who live in the mountainous region of the country, whose families depend on agriculture for their livelihood and where employment opportunities are especially limited.

UNICEF Guatemala actions aim at offering alternative and flexible education programmes to thus reduce the risk of absenteeism and school dropout. With a view to promoting educational continuity, the programme includes activities to develop skills and abilities with innovative, alternative educational methodologies to meet the individual needs and contexts of adolescents. These include ICT skills, psychosocial support, recreational and artistic activities, the promotion of healthy habits and lifestyles, leadership training and citizen participation to address community problems as well as dispute settlement and resilience.

Advocacy activities together with the Ministry of Education, and communication campaigns within the communities are providing good outcomes in motivating families to enroll their sons and daughters in the flexible education programme, and in combating school dropout.

¹² Number of girls who have directly participated in programme activities such as training sessions and workshops since it started up in 2021.



UNICEF Guatemala/2022/ Rodrigo Mussapp

Peru



Programme quick facts

- ▶ Target audiences: adolescent girls between the ages of 15 and 19 who have experienced early motherhood, and vulnerable adolescents who are interested in professional careers related to STEM.
- ▶ Current scope: 935 adolescent girls¹³
- ▶ Programme interventions: Bootcamp, Hackaton, +CHICASTEC and communication campaigns
- ▶ Skills component: Skills for programming and web design and social-emotional and employability-related skills



Programme

With the support of the Japanese cosmetics multinational, Shiseido, UNICEF Peru has been implementing a programme to empower girls in digital skills and STEM since January 2021. The programme's objective is to strengthen and promote a set of educational policies with and for adolescent girls aged 16 to 17 who have experienced early motherhood, and for vulnerable adolescents who are interested in professional careers related to STEM to improve their current and future social-labour inclusion.

In partnership with Laboratoria, a center for technological studies, UNICEF developed and implemented a training programme in STEM and digital skills, new technologies and life skills. This training programme is a part of an expanded offer of the Technical-Productive Education Centers of Peru's Ministry of Education (CETPRO). Digital skills include programming and software development, as well as the bootcamp programme that teaches adolescent girls JavaScript. So far, 935 adolescent girls have benefited from the programme.

¹³ Number of adolescent girls who have directly participated in programme activities (Bootcamp, Hackaton, +Chicastec) since it started up in 2020.

An opportunity to invest in girls

If the conditions and means are created for girls to explore and make the most of their talent, they will be given the opportunity to make their dreams come true and live a full life as an active part of society.

Investing in girls and adolescents has a ripple effect that benefits their families, their communities and society. There is no limit to what girls can achieve if they are given the chance to develop their inherent skills and if the discrimination and inequality that stands in their way can be ended. They have proven to take leadership in many fields to bring about great changes that have had a positive impact at all levels: social, environmental, cultural and also in sports and technology, etc.

UNICEF thus works to transform the lives of girls and adolescents together with them, listening to their needs and demands, investing in their education, supporting them in their transition to the labour market, promoting and developing their inherent skills, providing visibility to their leadership and giving them the opportunity to participate and voice their opinions.

Outcomes so far

Since the S4G programme started up in Bolivia, Brazil, Guatemala and Peru, it has brought about progress and has provided new opportunities, especially for girls and adolescents in vulnerable situations, disadvantageous socioeconomic contexts, for those from rural and indigenous areas, who have dropped out of school, and for those who are pregnant or who have become mothers:

1. Development of skills for girls:

- ▶ Specific skills have been developed among girls through innovative initiatives in fields such as science, technology, engineering, mathematics, robotics and digitization. (See: Statements in the next section)
- ▶ But also, life skills with an inter-cultural approach, boosting their skills for solving complex problems through creativity and innovation, leadership and participation, self-esteem, resilience, healthy habits and lifestyles, decision making and entrepreneurship.
- ▶ Training programmes were developed using flexible and innovative learning methodologies adapted to the specific educational needs of girls, respecting their pace, their social and cultural context and their specific characteristics.
- ▶ Collaboration took place with young professional women who work in STEM-related fields who provided guidance and mentoring, and served as inspiration and motivation for girls and adolescents.
- ▶ Teachers were trained in innovative educational methodologies and in the use of digital and technological tools, as well as being sensitized about how important it is to have education free of stereotypes and gender violence.
- ▶ Technological tools and platforms were also provided so that both girls and teachers were able to continue learning online.
- ▶ Platforms were designed and developed in collaboration with girls so that they can communicate and share information in a safe and accessible manner. Through these platforms they have been able to gain greater self-esteem, confidence in their bodies and, moreover, an emotional support network.

With all this, girls with fewer opportunities were able to go back to school to continue and complete their studies, specialize in professional areas and discover new vocations.

2. Advocacy for the elimination of gender stereotypes

Communication campaigns

Commemoration of the Day of Girl in Science

Partnerships with national media

Advocacy activities carried out to eliminate stereotypes and provide visibility to successful experiences allowed girls and adolescents to express their interests, demands and achievements. Social organizations, civil society, public and private institutions, and the media have become involved, allowing for a greater impact and media coverage. (See: *Delivery of Tecnovation awards. Bolivia and Webinar in collaboration with the newspaper El Comercio. Peru.*)

In addition, activities were carried out with teachers and families to raise awareness of the power of girls as agents of change and provide visibility to their leadership in proposing solutions to current challenges.

3. Evidence generation:

- ▶ Studies and consultations with the population were conducted to find out the status of the gender-based digital divide, its causes and consequences. (See: *Exploratory study on the gender-based digital divide among adolescents in Peru and U-Report Brazil on self-esteem*)
- ▶ Data obtained through consultations were analyzed to reach relevant conclusions to have an impact on different scenarios and on several key stakeholders.
- ▶ The outcomes and findings of the studies and consultations for sensitization and awareness-raising on the gender-based digital divide were disseminated in the media and on communication platforms. They also served to maintain dialogues with key stakeholders that position the topic on public agendas and give rise to government entities' commitments to action. (See: *Press release on access to technologies. Bolivia*)

- ▶ Partnerships were set up with public institutions to advocate for their policies, design learning methodologies adapted to girls and adolescents to ensure the scalability and sustainability of educational programmes.

Number of people reached since 2020

Country	Girls and adolescent girls		Teachers, families and/or communities	
	Direct	Indirect*	Direct	Indirect*
Bolivia	4,458	36,500	77	877,092
Brazil	29,962 ¹⁴		19,976	
Guatemala	1,494	4,482	2,521	3,481
Peru	935			

*Achieved through advertising, communication campaigns, social media posts



¹⁴ Mainly users of the app Topity.



Girls' voices



MIRANDA

7 años, Bolivia

I would like to tell other girls around the world that they are very strong and could do much greater things than other people think. May they never give up.



© UNICEF Bolivia/2022/Paz Soldán



MARTA

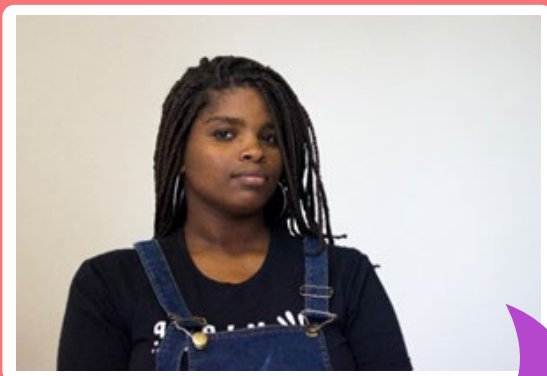
15 años, Guatemala

Thanks to the programme I will be able to finish studying and work as a teacher in my community.

I encourage other young women to study because learning has changed my life.



Martha Juarez Cua, Guatemala. @unicef-UPANA



GABRIELLE



18 años, Brasil

I felt very well participating in this experience, very real issues that matter to young people were discussed, now we must be multipliers of this experience to reach out to more people.

© UNICEF Brazil/Gabriele Ippolito

FERNANDA



15 años, Perú

I was doubtful about what I wanted to do in the future, now, thanks to the Bootcamp for girls, I know that I want to become a web developer.



Proposals for the future

To advance the S4G portfolio in the region, it will be important to continue working at different levels and based on several strategies:

a) Managing information and internal knowledge

- ▶ Provide visibility to the programme's strengths and benefits through internal UNICEF communication platforms to publicize the actions carried out in other countries of the region to replicate the activities elsewhere and maximize the outcomes for the region's girls and adolescents.

Exchange experiences between countries of the region and between regions

- ▶ through audiovisual dissemination activities (webinars, blogs, podcasts, infographics) with a view to sharing good practices, challenges and lessons learned.
- ▶ Explore and map strategies and programmes that are being developed at the global level on the acquisition of STEM skills, entrepreneurship and life skills for girls and adolescents that can be used as an example to design new activities.
Use the platforms created to record information and use data obtained to
- ▶ analyze the needs and perceptions of youth to guide UNICEF's next steps.

b) Raise girls' voices

- ▶ Listen to and consider the demands and priorities of girls in the design and execution of programmes, promoting their participation in consultations and conversations with UNICEF programme teams and their partners. This will enable adapting the activities to give an adequate and effective response to the girls' needs.
- ▶ Generate spaces (online and in-person) to provide visibility to and disseminate the voices of girls, emphasizing their achievements and positioning them as role models.

- ▶ Promote and strengthen partnerships between national and regional organizations of girls and adolescents focused on STEM to join forces, generate spaces for exchanging information, provide mentoring and good practices.

c) Raise awareness of societies and families

- ▶ Provide visibility to the strengths and benefits to raise awareness on the importance of the programme for the development and well-being of girls and, consequently, for the socioeconomic development of society.
- ▶ Continue publicly advocating about the importance of girls' education and their access to the professional labour market.

d) Promote partnership with private and public institutions

- ▶ Set up partnerships with the public sector, especially the education sector, to design flexible and innovative educational plans and increase the allocation of financial and human resources to ensure the programme's scaling up and sustainability.
- ▶ Continue investing in generating evidence to present to government institutions to propose public policies targeted to reducing the gender-based digital divide.
- ▶ Publish and widely disseminate the outcomes of the studies and show data on the return on investment in girls to attract new private funders.
- ▶ Set up partnerships with technology companies to invest in infrastructure and provide accessible and free wireless connection to the most remote places and to the people living there, enabling everyone to have access.
- ▶ Continue working in collaboration with public and private institutions to promote competitions for technological ideas and research projects, financing transformation and innovation-based ideas that have a social impact. (Support to female youth entrepreneurship)
- ▶ Promote partnerships with prestigious technology companies to promote mentoring and internship programmes for young professional women.
- ▶ Establish collaboration with private companies to develop professional skills for accessing the labour market (professional career mentoring, curriculum

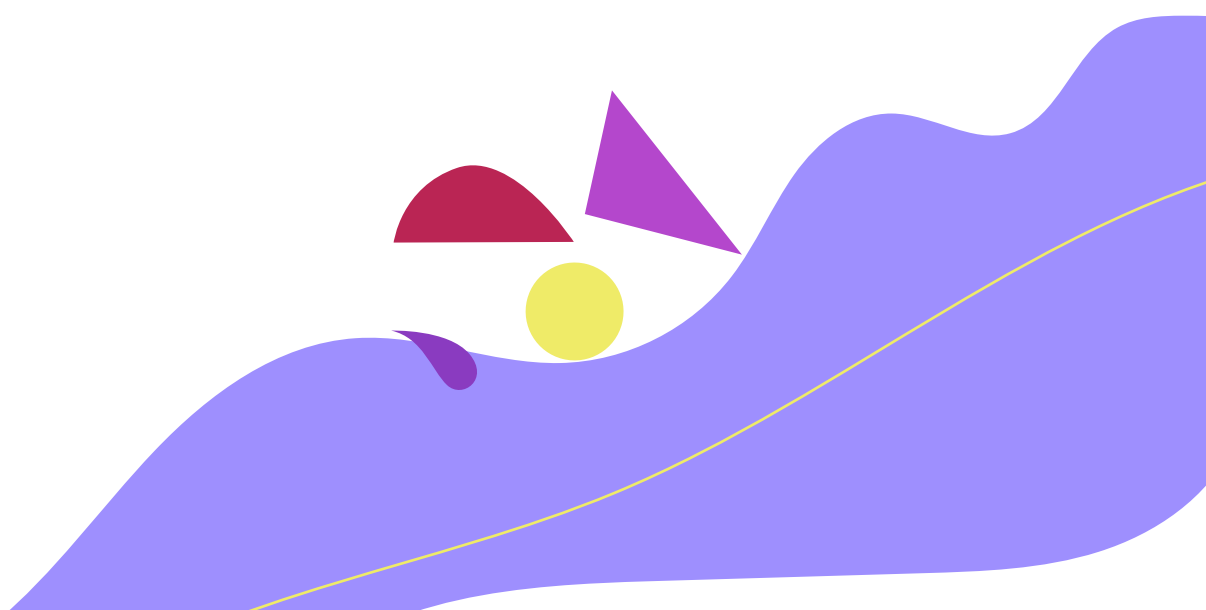
development, skills training to overcome selection processes, access to exclusive employment channels).

e) Build on digital media work

- ▶ Establish partnerships with digital media and social media influencers to design and publish creative and innovative communication campaigns that challenge gender stereotypes, make girls' agency and leadership visible, and promote their access to STEM-related professions.
- ▶ Due to the boom in the use of social media and technological platforms, especially among youth audiences, harness these spaces to transmit relevant information of interest to youth and generate safe, accessible, violence-free and psycho-emotional support spaces for exchanges.

f) Strengthen capacities of teachers and schools

- ▶ Invest in training professionals in the education sector to raise awareness on gender stereotypes and the gender-based digital divide.
- ▶ Promote non-formal education workshops for girls on STEM and digital-related topics at schools.
- ▶ Through UNICEF's GIGA programme, continue working so that all state-run schools in the region have access to the Internet and digital tools.



Key resources

Global

- ▶ UNICEF website: Skills4Girls Girl-centered solutions for unlocking the potential of adolescent girls
https://wcmprod.unicef.org/gender-equality/skills4girls?auHash=EkfOwj016t6hHzpyg3B1ZS9iG_Sfp-07wQeFkQDLwQU
- ▶ Brief document: Skills4Girls Portfolio Girl-Centered, Generational Impact:
<https://www.unicef.org/documents/skills4girls-portfolio-girl-centered-generational-impact-brief>
- ▶ UNICEF Internal sharepoint: Skills4Girls Portfolio
<https://unicef.sharepoint.com/sites/PD-Gender/SitePages/Copy-Skills-for-girls.aspx>
- ▶ ESAR Sharepoint: Skills4Girls Portfolio in ESAR
<https://unicef.sharepoint.com/teams/ESAR-Education/SitePages/Skills4Girls.aspx>
- ▶ EAPR Sharepoint: Skills4Girls Portfolio in EAPR
<https://unicef.sharepoint.com/sites/PD-Gender/SitePages/East-Asia-and-Pacific.aspx>

Regional



Initiatives for the development of STEM skills of adolescent girls in the LAC region. UNICEF Regional Office for Latin America and the Caribbean and UNICEF Argentina

[Link](#)

Peru



Exploratory study on digital gender gaps in adolescent population in Peru. February 2022 (only available in Spanish)

[Link](#)



Virtual contest: Laboratoria Talent Fest powered by UNICEF - Demo Night (only available in Spanish)

[Link](#)



MAS CHICAS TECH virtual webinar in collaboration with the newspaper El Comercio.

[Link](#)

- ▶ News: Fernanda and the "yes" of girls to the technological world (only available in Spanish)
<https://www.unicef.org/peru/historias/fernanda-y-el-si-de-las-chicas-al-mundo-tecnologico>
- ▶ News: Women can be great web programmers (only available in Spanish)
<https://www.unicef.org/peru/historias/las-mujeres-podemos-ser-grandes-programadoras-web>

Colombia



Video of the programme in Quibdó (Chocó) (only available in Spanish)

[Link](#)

Guatemala



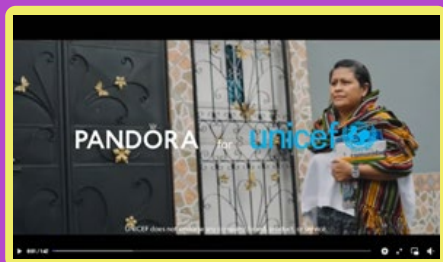
Press release: Pandora launches new charm to support UNICEF's work and provide educational opportunities for adolescent girls in Guatemala (only available in Spanish)

[Link](#)



Video: Life story of Telma Castro (only available in Spanish)

[Link](#)



Video: #CharmsforChange of Pandora (English subtitles)

[Link](#)

Bolivia

- ▶ Press Release: International Day of the Girl Child 2019 states that the strength of girls is surprising and unstoppable (only available in Spanish).

<https://www.unicef.org/bolivia/comunicados-prensa/el-d%C3%ADa-internacional-de-la-ni%C3%B1a-2019-afirma-que-la-fuerza-de-las-ni%C3%B1as-es>

- ▶ Press release: Technology education should include girls and adolescent girls (only available in Spanish).

<https://www.unicef.org/bolivia/comunicados-prensa/la-educaci%C3%B3n-en-tecnolog%C3%ADa-debe-incluir-las-ni%C3%B1as-y-adolescentes-mujeres>

- ▶ News: UNICEF and AGETIC launch robotics course with scholarships for 800 girls (only available in Spanish).

<https://www.unicef.org/bolivia/comunicados-prensa/unicef-y-agetit-lanzan-curso-de-rob%C3%B3tica-con-becas-para-800-ni%C3%B1as-y-adolescentes>

- ▶ Memory VII CONVERSATORIO. Designing the future: science and technology in the hands of girls. June 4, 2019 Cochabamba, Bolivia.

<https://docplayer.es/169170340-Memoria-vii-conversatorio-disenando-el-futuro-la-ciencia-y-la-tecnologia-en-manos-de-las-ninas-4-de-junio-de-2019-cochabamba-bolivia.html>



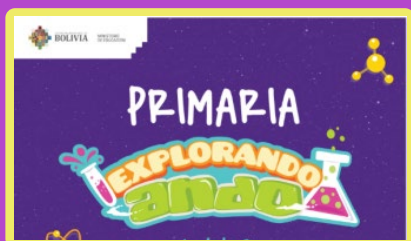
Executive summary: Mapping and analysis of the ecosiSTEM of girls in STEM in Bolivia (internal document, only available in Spanish)

[Link](#)



Concept note: Empowering girls in STEM (internal document, only available in Spanish)

[Link](#)



Textbook for primary education: Exploring. The world of science (internal document, only available in Spanish)

[Link](#)



Website: Technovation - Innovation Bootcamp (only available in Spanish)

[Link](#)



Video Chicas Waskiris – 2020 (only available in Spanish)

[Link](#)



Video: VII Talk #niñez360: Designing the future: science and technology in the hands of girls - 2019 (in Spanish)

[Link](#)



Video: Talk of girls in STEM with the vice president of Bolivia - 2019 (only available in Spanish)

[Link](#)



Video: Technovation Awards, ChicasTech – 2019 (only available in Spanish)

[Link](#)



Life story: Teresa - Bootcamp Programming 2022 (only available in Spanish)

[Link](#)



Life story: Miranda – RoboTICas 2022 (only available in Spanish)

[Link](#)



Life story: Yessica: she created a prototype to monitor irrigation of crops in their community – 2022 (only available in Spanish)

[Link](#)

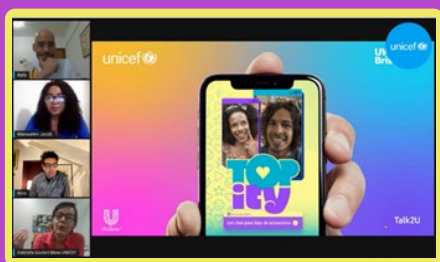
Brasil

- ▶ Press release Topity 2022: Topity +: UNICEF launches guide to empower the use of Topity with adolescents and young people (only available in Portuguese)
<https://www.unicef.org/brazil/comunicados-de-imprensa/unicef-lanca-guia-para-potencializar-o-uso-do-topity-com-adolescentes-e-jovens>
- ▶ Press release salud mental y Topity 2022: UNICEF supports mental health of more than 50,000 adolescents and young people with Pode Falar and Topity (only available in Portuguese)
<https://www.unicef.org/brazil/comunicados-de-imprensa/unicef-apoia-saude-mental-de-mais-de-50-mil-adolescentes-e-jovens>
- ▶ Website with Topity Materials (only available in Portuguese)
<https://www.unicef.org/brazil/topity-um-chatbot-para-melhorar-sua-autoestima>



Topity Guide– 2022 (only available in Portuguese)

[Link](#)



Webinar "How to develop self-esteem and self-confidence" – 2021 (only available in Portuguese)

[Link](#)



Leaflets distributed to teachers and adolescents presenting UNICEF mental health content. (only available in Portuguese)

[Link](#)

Bibliography

The Latin American and Caribbean Committee for the Defense of Women's Rights, ***Niñas Madres. Embarazo y maternidad infantil forzada en América Latina y el Caribe***, CLADEM, Asunción, February de 2016.

Economic Commission for Latin America and the Caribbean, ***The care society. A horizon for sustainable recovery with gender equality***, ECLAC, Santiago Chile, November 2022.

Economic Commission for Latin America and the Caribbean, Opportunities and challenges for women's autonomy in the future work scenario, ECLAC, Santiago de Chile, 2019.

United Nations Children's Fund, ***Adolescent Girls Programme Strategy, UNICEF***, New York, October 2022.

United Nations Children's Fund, ***EDUCATION ON HOLD: A generation of children in Latin America and the Caribbean are missing out on schooling because of COVID-19***, UNICEF, Panama City, December 2020.

United Nations Children's Fund, ***Children in Latin America and the Caribbean: 2020 Overview***, UNICEF, Panama City, October 2020.

United Nations Children's Fund, ***Reimaginar la educación y el desarrollo de habilidades para niños, niñas y adolescentes en América Latina y el Caribe***, UNICEF, Panama City, December 2021.

United Nations Children's Fund, ***Reimagining care: Voices and demands of adolescents and young people in the region***, UNICEF, Panama City, October 2022.



© United Nations Children's Funds (UNICEF)
March 2023

Latin America and the Caribbean Regional Office
Building 102, Alberto Tejada
City of Knowledge
Panama City, Republic of Panama
PO Box 0843-03045
Phone: + 507 301 7400
www.unicef.org/lac

