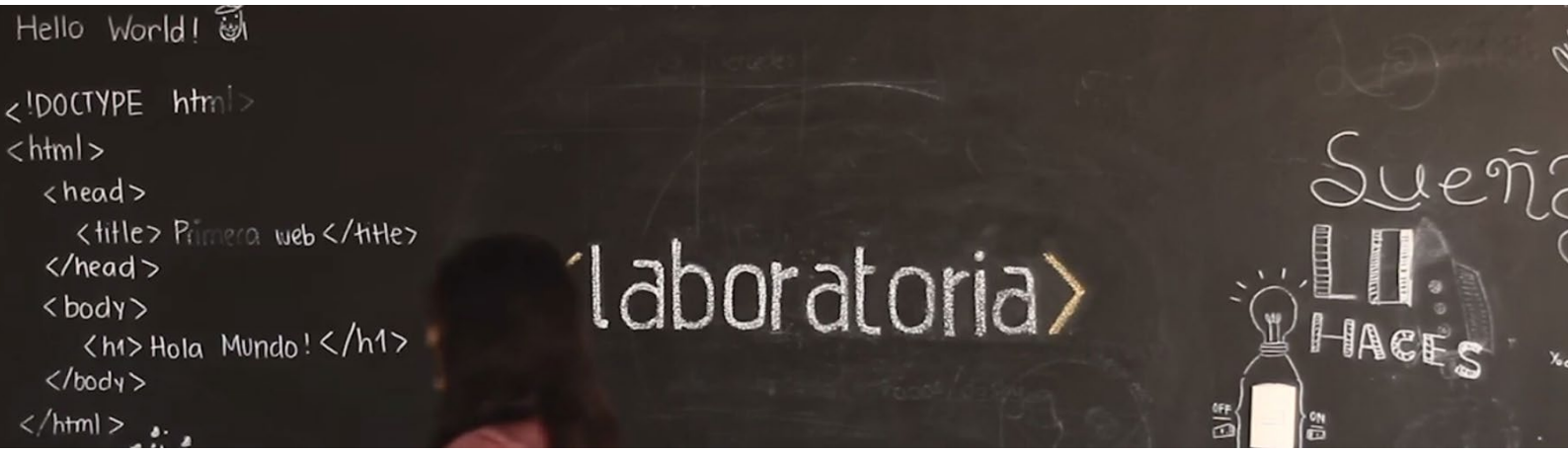
United Nations Educational, Scientific and Cultural Organization

UNEVOC International Centre for Technical and Vocational Education and Training

UNESCO-UNEVOC Promising Practices



UNESCO-UNEVOC PROMISING PRACTICES

Laboratoria

Transforming lives through code training

2017

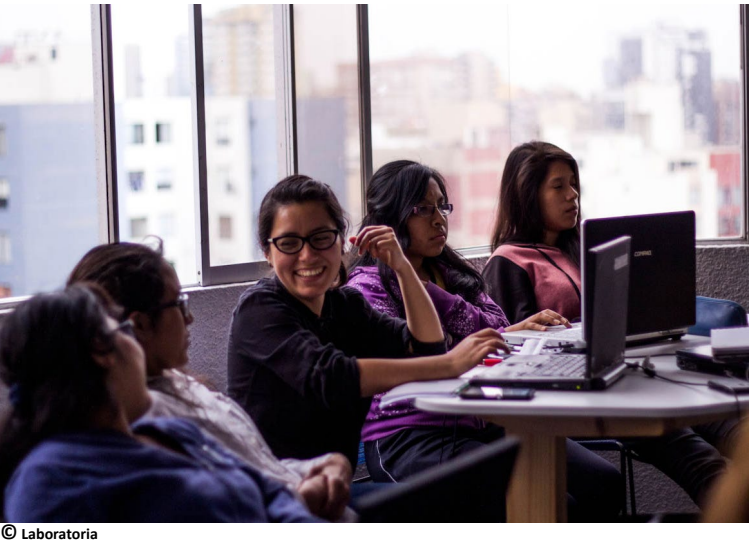
Laboratoria

Context

In Latin America, the unemployment rate among 15 to 24 year olds stands at 11 per cent, three times higher than for people aged between 30 and 64 (OECD, CAF and ECLAC, 2016). The unemployment rate for disadvantaged youth is even higher. While unemployment among youth from high income backgrounds is below 10 per cent, it exceeds 25 per cent for those from low income backgrounds (ILO, 2014). Those who do find work are often employed in the informal sector, which is marked by low wages and few opportunities for socio-economic advancement (OECD, CAF and ECLAC, 2016).

For young women, social expectations regarding gender roles reduce their prospects for professional development and, therefore, employment. Although female participation in the labour market in Latin America has improved greatly over the past two decades, women from disadvantaged backgrounds, more often than their more privileged counterparts, tend to remain confined to responsibilities in the household, and face more restrictions in their access to the labour market (ECLAC and ILO, 2015).

Meanwhile, the fast-growing information and communications technology (ICT) sector in Latin America increasingly demands skilled workers, of which there are hundreds of thousands too few in supply (CISCO, 2016). Women are underrepresented in tech occupations across the Latin America region (ILO, 2014), and fewer than 7 per cent of web developers in Peru are female (Mozila Peru, 2016).



Overview

Implemented by:	Laboratoria
Where:	Peru, since 2014. Expanded to Chile and Mexico in 2015 and 2016
Themes:	Youth employment Gender Equity
Funding:	Donor funding. Prospective self-sustainability.
Status:	As of January 2017, 4 centres in Peru, Chile and Mexico.

In 2014, Laboratoria, a Lima-based web development company became aware of the lack of female software developers in Peru and decided to set up a six-month training course for women, called Code Academy.

The course is offered exclusively to young women from low-income backgrounds. Trainees' families are actively involved throughout the programme, ensuring the trainees are supported, which has resulted in a high retention rate.

The demand-driven curriculum ensures that the skills taught in the course match the needs of the labour market. Over two thirds (80 per cent) of the course graduates find employment within three months of completing the programme, and the relatively high salaries of web developers has seen a tripling of the incomes of many graduates.

As of 2017, the programme is funded by donors, but Laboratoria has established a tuition repayment system that should enable the programme to become financially self-sustaining.

> *"We want to become a movement that inspires thousands of young women. Our students have become role models that prove that there is a place for women in tech."*
>
> *- Marina Costa*
> *Executive Director, Laboratoria*

The initiative and its impact

Recognizing the skilled labour shortage and, in particular, the lack of women with tech skills, Laboratoria, a web development company located in Peru, launched a training programme called 'Code Academy'. The programme is open to women aged between 18 and 33 who, due to limited economic means, have not been able to pursue tertiary education.

Laboratoria hopes its graduates will develop lasting professional careers in the tech sector. Code Academy provides young women with the skills suited to jobs in this sector, with the ultimate goal of empowering them to transform their lives. Over a period of six months, the trainees develop theoretical and practical knowledge as well as employability skills. In addition to providing training, Laboratoria makes an effort to kick-start graduates' careers by connecting them with prospective employers.

Post-training surveys found that 80 per cent of the graduates of 2016 had found employment or had improved their previous employment situation within three months of leaving the programme. These graduates also saw their previous income levels triple. The employment rates of graduates from 2016 were an improvement on those of 2015, and are expected to continue to improve each year.

Insights

Supporting trainees by engaging their families

The programme's intensive workload demands strong commitment from the trainees. For that reason, Laboratoria looks for candidates who are hardworking and resilient. However, selecting resilient trainees is not enough to guarantee they will complete the programme, because for the duration of the course trainees forego income-generating activities. They must depend on their relatives for financial and moral support. It is therefore essential that families endorse the career move taken by the trainees.

Support is rallied through families' involvement in three events. First, before classes start, family members attend a session that outlines the programme, so they understand the type of commitment expected from the trainees during training and beyond. Second, at a family day midway through the programme trainees demonstrate what they are learning, and families are urged to motivate the trainees for the remainder of the course. Third, families are invited to the graduation ceremony, and share in the celebrations. Engaging the families has contributed to attaining a dropout rate of under 10 per cent.

Providing transferable hard and soft skills

Trainees attend full-time classes, 9 to 5, Monday through Friday, and most of the class material is available online, which offers students the flexibility to access materials in the evenings and on the weekend. The intensive course enables students to gain a strong understanding of popular programming languages, such as Javascript, within the short time frame of six months.

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Training consists of both theoretical exercises and practical real-life projects. Accordingly, graduates leave Code Academy with a portfolio of work, which can give them an edge in the labour market over university graduates, who tend to lack practical experience.

In addition to technical training, Code Academy provides training that builds key life skills, with 30 per cent of course time allocated to this. Weekly group tutoring sessions build confidence and leadership skills and improve self-esteem. Code Academy also organizes workshops in CV writing and in interview skills.

Creating a sustainable system without high student debt

The programme costs around 2,500 United States dollars (USD) per trainee. This includes expenses for infrastructure, teaching, operations and monitoring and evaluation. As of early 2017, trainees only pay a fee of USD 10 per month for the duration of the programme, as a symbolic representation of their commitment to their education; thus, the programme costs are largely borne by donors.

With the goal of making the programme self-sustaining in the long term, Laboratoria has established a repayment system. This involves graduates repaying their tuition fees gradually, as a percentage of their salaries, once they are successfully employed. As low-interest loans are very hard to come by, Laboratoria's system relieves the burden of up-front tuition payment. Graduates who fail to secure employment as developers one year after graduation are exempt from repayment.

Monitoring the impacts

Baseline data are collected at the time of trainees' initial contact with Laboratoria. These data include employment status, level of income, access to basic services and financial self-management. In the first year post-graduation, Laboratoria conducts regular follow-up surveys with graduates, taking new measurements of the socio-economic indicators, and also surveys the employers. Furthermore, the performance of the trainees is tracked throughout the course.

The results of this monitoring show how much the trainees have benefited, socially and financially, from Code Academy, while also providing information on the skills that are in demand in the workplace, and which elements of the curriculum should be improved. Additionally, the monitoring data indicate whether trainees require further services from Laboratoria, such as more training or coaching.

Laboratoria has partnered with an external organization to track graduates' personal development in the long term. The study will assess how an individual's network, aspirations and social skills evolve following their participation in the Code Academy training, with the expectation that Laboratoria's approach to youth skills development will compare favourably to other alternatives.

Looking forward

As of early 2017, Laboratoria's Code Academy has trained 400 young women in Peru, Chile and Mexico as web developers, and plans to train over 10,000 young women across the Latin America region by 2021.

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Learn more about Laboratoria

Ms. Mariana Costa — co-founder and executive director of Laboratoria — helped us compile this document. She may answer your questions at mariana@laboratoria.la

You will also find more references on the initiative in our webiste at: http://www.unevoc.unesco.org/go.php?q=PP_Laboratoria

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