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# PRE-APPRENTICESHIP PROGRAMS (PaPs)

for Latin America and the Caribbean  
during and after the COVID-19 crisis



Michael Axmann and Katharina Jaik



**PRE-APPRENTICESHIP**  

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**PROGRAMS (PaPs)**  

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Michael Axmann and Katharina Jaik

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# Content

Acknowledgements .....	06
Executive Summary .....	07
Introduction .....	11
Chapter 1. ....	19
The background of the VET systems in Latin America before the Corona crisis and challenges for a new approach after the pandemic .....	21
Chapter 2. ....	25
What are we talking about? Definition of PaPs - What are they and what are they not? .....	27
Chapter 3. ....	35
Functions and Components of PaPs .....	37
3.1 Functions of PaPs .....	37
3.2 Basic Components of PaPs .....	39
Chapter 4. ....	47
Inspiring examples of PaPs .....	49
4.1 Netherlands .....	49
4.2 Bosnia and Herzegovina .....	49
4.3 Austria and Germany .....	50
4.4 United States of America .....	50
4.5 South Africa .....	50
4.6 Mexico .....	51
Chapter 5. ....	53
Recommendations for Latin America for PaP design and implementation – general approach and five country examples .....	55
5.1 Overall recommendations .....	55
5.2 Inclusive Professional Apprenticeship (API) – Towards a bridge to quality apprenticeships in Brazil (by Laura Abramo Díaz, ILO Brazil) .....	62
5.3 Potential implementation of pre-apprenticeship programs in Colombia (by Constanza Correa Sarmiento, BiBB) .....	65
5.4 Potential for pre-apprenticeship programs in Ecuador (by Juan Fernando Gutiérrez Córdoba, Corporación Formados) .....	70
5.5 Paving the way towards pre-apprenticeships in Panama (by Maaret Cañedo Lohikoski, ILO Panama) .....	71
5.6 Pre-apprenticeship in VET in Paraguay (by Natalia Beatriz Sosa Flores, Ministry of Labor, Employment and Social Security) .....	75
Chapter 6. ....	79
Concluding remarks .....	81
References .....	85
Appendix .....	93

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## Executive Summary

Currently, the whole world is suffering from a health and economic crisis caused by the outbreak of the COVID-19 pandemic in late 2019/early 2020. Latin America and the Caribbean (LAC) is a region hit hardest and already existing problems are exacerbating. Apart from getting the virus under control, it will be of utmost importance to reboot the economies to enable people to generate income and leave the temporary poverty caused by the current crisis. In addition, we should take this opportunity to create more relevant and successful vocational education and training (VET) systems and thereby also promote future growth.

Particularly young people have been affected by the current crisis. (Compulsory) schools closed for long periods and remote learning was not possible everywhere. Consequently, the already existing gaps between skills of compulsory school graduates and requirements of quality apprenticeships continue to widen even further. To avoid a lost generation of young people now, to enable and smoothen the school-to-work transitions and to prepare our people and economies for the future, we need to act now. One powerful approach to not only bridging the gap between compulsory education and VET but also to promoting quality apprenticeships, are pre-apprenticeship programs (PaPs).

Pre-apprenticeships are programs mainly focusing on preparing participants to meet the requirements of (quality) apprenticeships and being able to successfully start an apprenticeship after the program. In other words, pre-apprenticeships have a narrow focus on bridging the gap between compulsory education and apprenticeships, in case compulsory education did not prepare adequately. Consequently, PaPs do not aim at a direct labor market entry.

However, depending on the target group, PaPs may also have the function to make up deficits caused by having dropped out of school. Mandatory characteristics for successful PaPs are (but are not limited to) employer's engagement (in the extent to which possible), a structured learning plan/curriculum, on- and off-the-job training, a minimum duration of one year, alignment to target groups, and a strong monitoring and evaluation system in place. Regarding the content, to be relevant, pre-apprenticeships should contain the following 4 key components (for more details see Chapter 3.2): general education, theoretical vocational education, practical experiences in one occupational field/sector, transferrable skills.

Due to the COVID-19 pandemic and the subsequent school closings, the gap between what students learnt at compulsory school and what they need for successfully completing an apprenticeship has become wider and therefore the need for closing those gaps is more eminent than ever. This creates a clear momentum for introducing PaPs now, not least because stakeholders are in a spirit to make changes. All stakeholders had to get used to changes, because they had to adapt old practices to the new situation, and learnings from those changes and particularly from remote learning can now be used to design and include digital elements from the very beginning and make the new programs not only ready for now, but also for the future. But why do we need PaPs in the LAC region?

Besides closing existing gaps, offering (second) chances for school dropouts or other vulnerable groups, PaPs have the potential to be an answer to existing realities in the region like high youth

unemployment, low upper-secondary education completion rates, and skills gaps, but also to general trends like steadily growing requirements for the future of work. If we lose young people early on in the education systems, chances to re-enter and find a decent job in the future are low. In addition, on a macro level, PaPs can be an opportunity to restructure the education system as a whole, make it more relevant for the challenges of today's world, and also more flexible and more permeable and thereby also more attractive for young people. Furthermore, it can be a means to promote quality apprenticeships.

There is no “one size fits all” approach for PaPs. Therefore, we tried to outline very general steps that have to be considered when planning to introduce PaPs in a country. The 8 following steps to be taken are:

- 1) analysis of status quo and identification of need for PaP;
- 2) identification of promising pilot sector/s and target groups;
- 3) institutional mapping / identification of stakeholders and partners and their respective roles;
- 4) identification of place of delivery;
- 5) identification of localization in the education system;
- 6) identification of financial resources;
- 7) identification of personnel resources and further training needed and,
- 8) identification of content and duration of the program.

In addition, there are two transversal elements that guide the process from the beginning to the end:

- before starting the implementation, a proper and coherent communication strategy should be planned and;
- the whole process should be carefully monitored and evaluated, which includes ex-ante, during and ex-post data collection to be able to make evidence-based decisions.

However, the weight of the individual steps might as well differ from country to country.

In addition, also the content of the PaPs depends very much on the country context and on the requirements that students have to fulfil in quality apprenticeships which differ from country to country, e.g., due to different lengths of programs or different occupational profiles. Therefore, also the recommendations for the content of PaPs are very broad, but also provide some concrete examples. From experience and inspiring examples in chapter 4, we suggest covering the four basic components: general education, vocational sectoral (theoretical) profile, practical experience in a sector or occupational field and interdisciplinary competencies and transferrable skills.

To validate whether the concept of PaPs that we are proposing in this publication is indeed an option for the educational landscape in LAC, we invited five authors from Brazil, Colombia, Ecuador, Panama and Paraguay to share their thoughts on the potential of PaPs in their countries or already existing initiatives. Summarizing, the authors agree that PaPs can be a realistic, important and relevant option for their countries and they highlight social dialogue, engaging employers, the sectoral approach and the inclusion of vulnerable groups as key success factors for PaPs to make a meaningful contribution to better prepare young people for the requirements of the world of work.



The ambitious aim of this publication is to provide a starting point for a transformation process in the VET systems in LAC, to offer attractive educational solutions for different groups of young people and to lay a solid foundation for developing future skilled workforce that meets the requirements of the private sector translating into growing economies in the region.

### The five key messages of this publication are:

- Most importantly, pre-apprenticeships are the “feeder” of quality apprenticeships and “heal” shortcomings from compulsory schools to smoothen the transition to quality apprenticeships.
- Pre-apprenticeship programs should help to expand existing initiatives of quality apprenticeships in the region because they increase the pool of qualified candidates and, therefore, may lead to more interest on the side of the employers.
- Pre-apprenticeships have the potential to help tackling some of the existing problems in the region like skills gaps, low graduation rates from secondary education, low permeability in the education system, fewer chances for vulnerable groups, high drop-out rates in VET and child labor.
- The crisis caused by the COVID-19 pandemic is demanding for a new and innovative solution like PaPs and for acting now, because many of the problems mentioned have intensified in the crisis.
- The inspiring example from Mexico, as well as the reports from Brazil, Colombia, Ecuador, Panama, and Paraguay, illustrate and validate the concept of PaPs that we propose in this publication and confirm that PaPs might be the missing piece in the puzzle for VET in the region.





# Introduction







# Introduction

## The role of quality apprenticeships in the LAC region

Since 2012, the ILO is promoting the concept of quality apprenticeships<sup>1</sup> all over the world. Particularly in Latin America and the Caribbean (LAC), many initiatives that comply with the criteria of quality apprenticeships have already been started, either recently or even before the conceptualization of the ILO. Examples include, but are not limited to Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Mexico, Paraguay, etc.<sup>2</sup>

According to ILO/Cinterfor, the key features of quality apprenticeships are a tripartite governance, payment of a remuneration, a written agreement, social security coverage, a legal framework, a program of learning, a minimum duration, on-the-job and off-the-job learning components, a formal assessment process and a recognized qualification. The four building blocks of quality apprenticeships are: meaningful social dialogue, sound and robust regulatory framework, clear roles and responsibilities and shared financing (between public, private sector and apprentices) arrangements (Axmann 2019).

Access to the quality apprenticeship programs should in most cases be (very) selective, which implies that it is reserved for well-educated compulsory education graduates. The precondition to be able to scale-up the programs and satisfy the needs of employers offering quality apprenticeships is a sufficient supply of young people who meet the requirements for starting an apprenticeship. However-

1 The concept of “quality apprenticeships” was born in early 2012 by the ILO, first mentioned at the G20 Meeting of Labour and Employment Ministers concluded in Guadalajara, Mexico 2012 and the International Labour Conference (ILC) in the same year and further conceptualized and developed in ILO (2012a) and G20 Task Force on Employment (2012).

2 SENA / Colombia: <http://www.metalmecanica.com/temas/El-SENA-implementa-sistema-dual-de-aprendizaje-en-Colombia+98905>; INA / Costa Rica: <https://www.larepublica.net/noticia/ina-abrira-tres-programas-de-educacion-dual-en-area-de-hospitalidad-en-2020>; INSAFORP / El Salvador: <https://www.insaforp.org.sv/index.php/formacion-dual>; Paraguay: <https://www.ip.gov.py/ip/ministerio-de-trabajo-habilitara-nuevas-especialidades-bajo-la-modalidad-de-mopadual/>; dual VET program INFOTEP / Dominican Republic: <http://www.infotep.gob.do/index.php/noticias/item/1036-el-infotep-impulsa-expansion-y-fortalecimiento-de-la-formacion-dual>; AHK México / Mexican dual VET model: <https://mexiko.ahk.de/es/dual/formacion-dual-mexicana>; Ecuador / Formados: <https://www.formados.ec>. Further examples include Belize, Jamaica and Peru.

er, in reality, young people often lack the skills required because they are not foreseen in the curricula of compulsory education, simply not taught even if foreseen, or students completely dropped out of compulsory education.

Even though, in an ideal setting, compulsory education would prepare young people to take up a quality apprenticeship immediately after graduating, this does not seem to coincide with reality, even less so during the current COVID-19 crisis and after school closings. This is a reality we have to face to enable young people to get a quality education and decent jobs, to help companies to train and find the skilled staff they need to grow and ultimately to boost economies in the region. Therefore, we need to build bridges between compulsory education and quality apprenticeships and close the skills gap.

### Ensuring entry to quality apprenticeships: The role of pre-apprenticeship programs (PaPs)

One of the structured possibilities to build this bridge between compulsory education and quality apprenticeships are pre-apprenticeships. Cinterfor decided already before the COVID-19 crisis to work on this topic. To do so, we started to have a closer look at the potential of pre-apprenticeships for Latin America and the Caribbean (LAC) and beyond, and to develop some first ideas about how to plan, structure and implement those programs. Quality apprenticeships are an ideal type of vocational education and training (VET), but in many countries the establishment of quality apprenticeship systems has only started. The concept of quality apprenticeships cannot be regarded in isolation from other parts of the education system, i.e., preceding and following levels of education. To make sure that quality apprenticeship programs or systems can be brought in place and develop their whole potential, we need to make sure that there are also preceding steps available that enable young people to take up a quality apprenticeship and also that there are further education and training pos-

sibilities with good labor market prospects. Both steps that complete quality apprenticeships are important to make and keep the system attractive for youths and all other stakeholders.

With this paper, we complete the ILO's strategic work on quality apprenticeships by dedicating it to the "entry ticket" into quality apprenticeships, i.e., pre-apprenticeship programs (PaPs). Many conversations in the LAC region over the last years, as well as reactions to this topic during the ILO Massive Open Online Course (MOOC) on quality apprenticeships<sup>3</sup> in summer 2020 showed the relevance of and need for pre-apprenticeship programs in different contexts. They seem to be the missing piece in the puzzle for the successful implementation of quality apprenticeships. Although the focus of this paper is on the LAC region, it contains many structures and content that is globally applicable. This paper is the first to systematize the elements and content of pre-apprenticeships on a global level, to collect inspiring examples from all over the world, and to conduct very short case studies for selected countries in the region. PaPs are programs that should not be looked at and introduced in an isolated way. They should rather be regarded as one potential and well-preparing entry ticket into quality apprenticeships. In contexts where quality apprenticeships are not yet common, PaPs can be a good starting point to develop a quality apprenticeship system in parallel.

Even though, after the outbreak of COVID-19 and lockdowns in almost all countries of the world, it is unclear whether we are still in the middle of the crisis or already in the aftermaths of it, there is a big need to act now for the future of young people. Schools have been closed in most parts of the world and although many of them moved to digital or other forms of remote learning quite quickly, we have to assume that this will have caused even bigger gaps to be closed in the future. In addition, particularly vulnerable groups will suffer most from the con-

<sup>3</sup> See <https://ecampus.itcilo.org/enrol/index.php?id=1309>.

sequences of the COVID-19 crisis. We cannot wait to act and help young people. The situation will probably not go back to normal, but a “new normal” will have to be found.

Therefore, we have a unique opportunity to use this momentum of changing environments to design educational programs that close the gaps that evolved and enable young people to have a future. For employers, engaging in pre-apprenticeship programs can be a good opportunity to prepare their engagement in quality apprenticeships and to secure skilled workers needed for the future. They will have a competitive advantage to boost their productivity as soon as economic activity will start again. Also, for National Vocational Training Institutions (NVTIs) it is a great opportunity to bring in all the innovative approaches they developed during the COVID-19 crisis, to sharpen their profile and to keep playing a leading role in VET in the LAC region.

#### Pre-apprenticeship programs: Why and why now?

There are many reasons for why to generally think about pre-apprenticeship programs and also why to think about them now in a situation of crisis that did not only bring to light existing problems in the health sector, but also structural problems in the education systems and economies in the region. In the following, we will present the most important arguments from our point of view:

- ***Pre-apprenticeships can help to close existing skills gaps:*** there is still a big gap between the skills that are offered and demanded in the labor market in the LAC region. Employers report difficulties to fill their vacancies and those difficulties seem to be bigger than in other regions (ILO/Cinterfor 2017; ILO 2012a).
- ***Pre-apprenticeships as starting point in a world of rising requirements:*** The OECD (2018a) recently stated that in the future, graduating from upper-secondary education, i.e. graduating e.g. from a quality appren-

ticeship will not be enough to be successful on the labor market in the long-run. In addition, as ILO/Cinterfor (2017) state, technical, socioemotional and digital skills and competencies that are needed on the labor market are more complex than ever and VET systems need to be able to generate them. Pre-apprenticeship programs can contribute to that, because they can bring students who dropped-out at an earlier stage back on the learning track and provide the necessary skills for lifelong learning.

- ***Pre-apprenticeships as an essential element of a coherent and quality education system:*** To create permeable education systems without dead-end and to allow for lifelong learning, the introduction of new pre-apprenticeships might be a good opportunity to restructure the education system as a whole, better connect individual elements with each other and thereby create overall coherence.
- ***Pre-apprenticeships as an answer to realities:*** As already mentioned, in an ideal world, we would not need pre-apprenticeship programs, because compulsory education would fully prepare different groups of students (particularly including vulnerable groups) for the next step in their education. In reality, this is hardly the case in any country in the world and certainly not true for all groups of students. Countries with well-established apprenticeship systems like Germany and Switzerland have been using this instrument for many years to better prepare their youths for the high-quality apprenticeships<sup>4</sup>.

<sup>4</sup> Even though this is true, there is also a debate on the growing sector of PaPs in both countries and on why compulsory education is not able to adequately prepare students for apprenticeships and what the most efficient way would be to solve evident problems in the education system. For this paper and under the current circumstances of the COVID-19 crisis, we take the approach of developing solutions to helping young people and employers immediately and concentrate on Cinterfor's mission and purpose to improve VET (and not other parts of education systems). We therefore propose to urgently start with PaPs and thereby improve VET systems in the long run. However, we also acknowledge that compulsory education has to be improved in the long run to better prepare students for their future. As public-school systems are typically not known for their dynamic adaptations to changing circumstances, we cannot wait to act until this may happen in an unknown future.

- ***Pre-apprenticeships as chance for vulnerable groups and to reduce inequality:*** vulnerable groups are not just hit hardest by the current COVID-19 crisis, they are also more likely to drop-out already from compulsory education for different reasons. Pre-apprenticeships are a possibility to re-integrate them back into the education system, offer them to make up for not having graduated from compulsory education and giving them a second chance. In the long run, if we do not already loose the vulnerable groups at very early points in the education system, pre-apprenticeship programs may even have the power to reduce inequality.

- ***Pre-apprenticeships complement quality apprenticeships and can boost their dissemination and attractiveness:*** Quality apprenticeships are a means to boost the productivity in LAC. However, if this model stays an exceptional case for few people, or if companies cannot fill their positions because they do not find qualified graduates from compulsory school, the initiatives will stay without impact (concluded from ILO/Cinterfor 2017). Therefore, pre-apprenticeships are a necessary precondition if quality apprenticeships are to become a widespread model in the LAC region. In addition, pre-apprenticeships may contribute to the attractiveness of quality apprenticeships by re-opening this possibility and making it available for groups who would not have had access without their existence.

- ***Pre-apprenticeships to facilitate vocational choice and to prevent drop-out in quality apprenticeships:*** Choosing or finding an occupation that fits to one's preferences and intellectual capacities is a complex and difficult task. The better this choice is prepared and accompanied, the lower the probability that the individual will drop out of an apprenticeship, high drop-out rates from apprenticeships being a serious problem all over the world. With a corresponding focus on vocational orientation and career guidance within the pre-apprenticeship program, this can be prevented.

- ***Pre-apprenticeships to prevent child labor:*** Child labor is still a prevailing problem in some parts of the LAC region<sup>5</sup>. To further prevent this, pre-apprenticeship programs may be a means, because young people do not enter the labor market before they reach a minimum age (ILO 2012b).

After the identification of so many positive contributions that pre-apprenticeship programs can make, we need to think about *how* those programs can be successfully implemented in the LAC region. Therefore, Chapter 1 will explain the background of VET systems in the region and analyze current challenges. Chapter 2 will then provide a definition and Chapter 3 elaborate on the functions and components of PaPs. Chapter 4 picks some useful characteristics of PaPs from all over the world and points out what we can learn from them. In Chapter 5, the general approach with comprehensive steps on how to implement PaPs will be outlined and complemented by five country case studies from Brazil, Colombia, Ecuador, Panama and Paraguay. Chapter 6 concludes.

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5 In Brazil for example, this is a fundamental point.









# # 1

The background of the VET systems in Latin America before the Corona crisis and challenges for a new approach after the pandemic





## The background of the VET systems in Latin America before the Corona crisis and challenges for a new approach after the pandemic

To underpin why we think that pre-apprenticeship programs can be a good means to improve VET in the LAC region, we start by looking at some characteristics and challenges in the current education systems in the region to then derive some ideas of how pre-apprenticeship programs can help overcome at least some of the issues and also connect to the current COVID-19 crisis.

Compared to other regions like Europe and North America (see ILO 2012a) who have between 10 and 44 apprentices per 1000 employees, the LAC region has far less apprentices per 1000 employees (ILO/Cinterfor 2017). Even though concepts of apprenticeships differ from country to country and are hardly comparable with each other, most countries in the LAC region have 1 or less apprentices per 1000 employees<sup>6</sup>. Even though those numbers clearly show that apprentices seem to be less important in the LAC region compared to other regions, this share as such might in addition to comparability issues be a bit difficult to interpret. When we additionally look at the share of students of an age cohort who choose VET (between 3 and 49 %) and the share of apprentices in VET (between 0 and 9 %) (ILO/Cinterfor 2017), those numbers point into the direction of two conclusions: First, the focus in education systems in the LAC region is still in most of the countries on academic and not on vocational education.

Second, within vocational education, the predominant avenue is learning full-time at VET schools or Vocational Training Institutes and not in companies.

Connected to the issues analyzed in the previous paragraph and shifting the focus to companies, i.e., the organizations that should employ the VET graduates, we can observe three main points that are connected to each other: First, the traditional model of VET in the region—with training in specialized Vocational Training Institutes with few connections to companies—seems to challenge the labor market relevance of the programs and the countries' economic growth. Second, there is a serious mismatch between labor demand and supply. Employers report quantitative and qualitative difficulties in filling vacancies. Third, and following from the first two points, even though the level of schooling grew over the last years in the region, there is still a substantial number of students who drop out and do not finish secondary education, and transitions from school to work typically take long (ILO/Cinterfor 2017).

<sup>6</sup> One notable exception in the region is Colombia, counting with 17 apprentices per 1 000 employees.

All issues mentioned in the previous two paragraphs allow the conclusion that VET students do not seem to be adequately prepared for the transition into the labor market. On the one hand, this speaks in favor of promoting and expanding quality apprenticeships in the LAC region, as they have the potential to smoothen the transition. On the other hand, however, this is not enough to solve the problems at hand, as the analysis in the following paragraph will show.

For a more profound analysis of the VET systems in LAC, we also have to look at the previous step in the education system or “the feeder” of those VET systems which are compulsory schools. There are at least four main issues that create mismatches between what VET systems need in terms of requirements and what compulsory schools deliver or that keep young people from entering the VET system.

First, the graduation rate of students on upper-secondary level is quite low compared to other regions. This is not only a problem because having graduated from upper-secondary education is often a requirement for quality apprenticeships, but also because requirements in general will rise in the future (ILO/Cinterfor 2017) and the OECD (2018a) even claims that having a degree on upper-secondary level will not be enough in the future to stay employable.

Second, the latest results of the Programme for International Student Assessment (PISA) and other student assessment tests conducted in the region raise doubts that students at the end of compulsory school are sufficiently prepared for taking up a quality apprenticeship (ILO/Cinterfor 2017).

Third, access to education is still not equal for everybody and depends—among other factors—a lot on family income, status, and place of residence (urban vs. rural).

And fourth, the COVID-19 crisis weakened compulsory education in particular, because the

earlier students drop out from school, the less likely it is to bring them back into the education system. All four issues hit vulnerable groups who in any case have most difficulties to stay in the education system, hardest.

The result of the four issues mentioned in the preceding paragraph (in combination with other factors) is a high youth unemployment rate in the region of almost 18 % in 2019, that has been growing since the end of the 1990s and in particular since the financial crisis in 2009. In addition to almost one out of five youths being unemployed, a majority (more than 60 %) is also informally employed (ILO 2020b, 2019). The current COVID-19 crisis exacerbates this already unfavorable development tremendously and unemployment rates have reached historically high numbers (ILO 2020a). In addition to rising unemployment rates, school closures during the lockdown in most of the countries in the region will negatively affect the chances of students in compulsory school, particularly those who were to graduate this academic year. In the worst case they have missed several months of school and are even worse prepared for the transition than earlier cohorts.

To support those students immediately and avoid them becoming a lost generation, it is time to act now. One approach to solve the problems that already existed before the COVID-19 pandemic started, are pre-apprenticeships. They are not only a powerful tool to bridge the gap between compulsory education and VET but can also serve in promoting quality apprenticeships and to assure quality in education.

Even though the current developments due to the COVID-19 pandemic appear quite discouraging, there are also reasons for hope and signs that it is a momentum to initiate new and future-oriented processes such as pre-apprenticeship programs. Why is there room for hope?

First, almost every country in the LAC region has a National Vocational Training Institution

(NVTI), which have a relatively long history in some of the countries in LAC. Some go back to 50 years or more and very often they are organized in tri-partite structures, with stakes from Government ministries, such as Education and/or Labor, and representatives from employers and workers organizations in the tri-partite boards for the NVTIs.

Many of these NVTIs are members of a network of institutions in Cinterfor. Currently 70 of those institutions from 29 countries form the Cinterfor network and regularly exchange on important topics. This exchange has even intensified during the COVID-19 crisis and many member organizations have shown how fast and flexible they were acting to adapt to the new circumstances in a series of webinars organized and moderated by Cinterfor (for the documentation of the videoconferences see Cinterfor 2020).

Even though the organizational forms of Cinterfor's members are very different, they appear to



be good candidates for being pioneers and taking the lead in designing and implementing PaPs, not only because they have demonstrated during the COVID-19 pandemic how fast and effective they can adapt, but also because many of them are also involved in apprenticeship training.







# # 2

What are we talking about?

Definition of PaPs

What are they and what are they not?



 # 2

What are we talking about?

Definition of PaPs

What are they and what are they not?

In this chapter, we will in a first step give a brief overview on different existing definitions of pre-apprenticeships from different contexts and regions. In a second step we will then identify the elements that best fit for the context in Latin America and the Caribbean and complement it with elements missing in the existing programs so far from our point of view.

All over the world there is a variety of programs preparing young people for entering apprenticeship programs and the world of work with different terminologies like pre-apprenticeships, pre-vocational programs, traineeship, vocational preparation, bridging courses, etc. For the scope of this paper, we will refer to the programs as PRE-apprenticeships to emphasize their role of being a bridge to apprenticeship programs— quality apprenticeship programs in the ideal case.

According to the OECD (2013), the main purpose of pre-apprenticeships (or pre-vocational programs as they call it) is to familiarize participants with the world of work and enable them to start an apprenticeship or qualifying vocational education. A minimum of one quarter of the content of pre-apprenticeship programs should focus on technical or vocational skills. Those programs do typically not yet grant a vocational qualification for entering the labor market.

The IDB (Fazio, Fernández-Coto, and Ripani

2016) describes pre-apprenticeship programs as “feeder of full apprenticeship programs”. Called pre-apprenticeship in the U.S. or traineeship in the UK, those programs are typically taking place in a classroom or lab-setting and focus on the development of soft skills and occupation or industry specific skills. These programs are aimed at various target groups with the purpose of facilitating the transition to a full apprenticeship program.

Based on the ILO (2012a), Fazio et al. (2016) line out the following characteristics for pre-apprenticeship programs: while a structured learning plan is the only mandatory criteria, paying a wage, having an on-the-job training component, receiving an industry-recognized certification and having a curriculum that has been jointly developed with the private sector are optional. Characteristics that are typically not part of a pre-apprenticeship program according to the authors are: having a bilateral contract, a legal framework, being based at the workplace (contrary to school), including off-the-job training

or a formal assessment after the program. The minimum duration is 3 months, and the target population are young or adult job seekers who do not yet fulfil the requirements for entering a full apprenticeship program.

While we agree with many points outlined in the previous paragraph, we would like to ex-

plain the points that we do not agree with, further develop on points that we agree with and add some other components which are important from our point of view. The following table summarizes the most important characteristics of pre-apprenticeship programs that we would like to propose for Latin America and the Caribbean.

Table 1: Framework Characteristics for Pre-Apprenticeship Programs in the LAC region (illustration inspired by and extended from Fazio, Fernández-Coto, and Ripani 2016; ILO 2012a)

FRAMEWORK CHARACTERISTICS <sup>7</sup>	
Contract or formalized agreement.	Contract between NVTI/training provider and students, if necessary and typical for other kinds of programs. Contract or formalized (written) agreement between training provider, student and employer for the on-the-job training where necessary. Occupational safety and health measures have to be taken for the practical training phases.
Curriculum / Structured Learning Plan, established together with private sector at industry level.	Having either a curriculum or at least a structured learning plan is mandatory, and it should contain the four basic components described in subchapter 3.2. In addition, curricula should be centrally registered to avoid uncontrolled implementation of programs with similar content. Furthermore, they should be oriented towards existing apprenticeship occupations / profiles.
Duration.	We believe that a minimum duration of 3 months is not enough to adequately prepare students for an apprenticeship and make up for deficits from compulsory education. We therefore propose a minimum duration of 1 year and maximum duration of 3 years. This does not only depend on the target group (compulsory education graduates, compulsory education dropouts, other vulnerable groups) and their specific needs, aims and prior knowledge and experiences, but also on the needs of the industry that might differ, and also on academic years. The programs should be designed in a way that students can start an apprenticeship without a big (time) gap between graduating and starting the apprenticeship. Compared to the duration and content of active labor market policy measures, those programs are also very different, because they follow a clear goal to start an apprenticeship in a specific sector and they are more customized to the needs of the target population. In addition, several studies conducted in the LAC region show that active labor market policies (short-term programs) often do not have the desired effects on employability. <sup>8</sup>

FRAMEWORK CHARACTERISTICS <sup>7</sup>	
Formal assessment / Certification, recognized by the industry (connected to legal framework).	It is important that potential employers who offer apprenticeships know what they can expect when employing a graduate of a PaP as apprentice. Therefore, issuing an official and industry-recognized certificate in combination with a formal assessment of skills and competencies would be useful. This is also a means of quality assurance.
Legal framework or official guideline.	To emphasize the importance of pre-apprenticeship programs, the state should emphasize this importance by issuing guidelines on pre-apprenticeships or even regulating the principles of pre-apprenticeships in a law or by-law. For the pilot phase, this may not yet be necessary, but it should be kept in mind for the long-term planning and scale up. However, depending on the system, it may be fundamental for recognition in the formal education and training system.
Main place of delivery.	Compared to apprenticeships, where the majority of the learning is taking place at the workplace, the main place of delivery is the NVTI/training provider.
Monitoring and Evaluation.	Long-term monitoring and evaluation of the pre-apprenticeship program is mandatory to ensure that the programs reach their goals and enable students to successfully start and finish apprenticeships. Particularly in the pilot phase, different programs should be tested against each other and evaluated with rigorous methods to identify causal effects and to fine-tune each program to target group and context, as well as fast-changing needs <sup>9</sup> .
On-the-job training / Employers Engagement.	Employers' engagement is key to ensure relevance of the program. To not overstrain the employers, models to reach this engagement can be very flexible as described in chapters 3.2 and 4.
Off-the-job training.	If on-the-job training is not possible or only to a limited extent, it can partly be substituted. Off-the-job training in workshops at the NVTI/training provider may also be a good means to prepare students for the on-the-job-training at the employers or to offer them the opportunity to look into different occupations in a specific sector.

<sup>7</sup> This list follows an alphabetical order and is not a prioritization. The reason is that the prioritization of the characteristics may depend very much on the specific country context.

<sup>8</sup> For more details see Fazio, Fernández-Coto, and Ripani (2016).

<sup>9</sup> For further explanations on the necessity of impact evaluations see Novella and Pérez-Dávila (2017).

FRAMEWORK CHARACTERISTICS <sup>7</sup>	
Registration / certification of program at/by responsible authority.	<p><b>Phase 1:</b> Pilot Phase ⇨ Laying the ground and thinking about structures and authorities involved for later registration / certification process.</p> <p><b>Phase 2:</b> Full implementation phase ⇨ Mandatory to avoid chaos and redundancies and allow every stakeholder to keep the overview on existing programs. Different pre-apprenticeship programs for one sector may create inefficiencies in the long run but have to be tested.</p>
Target population.	<p>Students who did or did not graduate from compulsory education would in general be eligible for an apprenticeship but do not yet fulfil one or more of the requirements to find an apprenticeship, and also students who do for any other reasons not have access to apprenticeships. The focus should not be laid on adults here, because the needs they have to fill skills gaps might be very different to those of young people without work experience.</p>
Wage / Remuneration.	<p>No remuneration mandatory, but stipend for transportation or meals desirable (either from employer or state). What is important to keep in mind here is that one of the objectives of the pre-apprenticeship programs is that also vulnerable groups get ultimately access to apprenticeship programs. Often, particularly vulnerable groups will not be able to substitute earning money or providing childcare by a full-time pre-apprenticeship program. Smart incentive schemes for different vulnerable groups need to be developed, tested, evaluated, and further developed to motivate students to successfully finish the pre-apprenticeship and get access to apprenticeships.</p>



Resulting from the preceding explanations and references, we summarize and propose the following definition for pre-apprenticeships:

Pre-apprenticeships are programs mainly focusing on preparing participants to meet the requirements of (quality) apprenticeships and being able to successfully start an apprenticeship after the program. In other words, pre-apprenticeships have a narrow focus on bridging the gap between compulsory education and apprenticeships in case compulsory education did not prepare adequately. Consequently, PaPs do not aim at a direct labor market entry. However, depending on the target group, PaPs may also have the function to make up deficits caused by having dropped out of school. Mandatory characteristics for successful PaPs are (but are not limited to) employer's engagement (in the extent to which possible), a structured learning plan/curriculum, on- and off-the-job training, a minimum duration of one year, alignment to target groups, and a strong monitoring and evaluation system in place. Regarding the content, to be relevant, pre-apprenticeships should contain the following 4 key components (for more details see Chapter 3.2):

- 1) general education,
- 2) theoretical vocational education,
- 3) practical experiences in one occupational field/sector,
- 4) transferable skills.

The framework characteristics of PaPs described in Table 1, as well as the basic components of PaPs that will be described in subchapter 3.2, have to be guided by the following four principles:

**1) Process orientation: Aspect of “healing and strengthening”.**

All framework characteristics should be guided by the principle, that the PaPs are programs to “heal” what happened or more precisely did not happen before. The PaPs should make up for what was missing in compulsory school and enable graduates to start an apprenticeship with no disadvantage compared to those students who immediately start an apprenticeship after compulsory education.

**2) Demand orientation: Aspect of employability and productivity.**

In order to make the pre-apprenticeship programs relevant, a permanent dialogue with employers is necessary. Not only a qualitative (design of the programs), but also a quantitative coordination (expected number of apprenticeships to be offered in a specific occupation) with the employers is mandatory to ultimately reach a higher transition of PaP graduates into apprenticeships. The second pillar to ensure de-



mand orientation is the permanent and detailed evaluation of the programs, also to be able to adapt programs to fast changing needs.

**3) Sector specificity: Aspect of relevance.**

To make the PaPs relevant, prepare students adequately for an apprenticeship and also to make the PaP attractive and understandable for employers as well as potential students, they should set a sectoral focus. This is to neither be too general nor too specific.

**4) Flexibility: Aspect of “No one fits all”.**

The flexibility aspect refers to all framework characteristics and should allow to adapt the PaPs to the different needs in a country, but also to different needs in a sector or different needs of different target groups and participating companies. In some contexts, employers’ engagement might be difficult, then other creative solutions have to be found to ensure relevance. In some sectors employers may be more traditional and offer on-the-job learning at the

workplace, while in other sectors, remote learning is more common. Some might prefer being involved in the whole design, others only in the on-the-job part which might consist of short full-time internships. There are many different design options and PaPs should be flexible enough to meet the needs of all stakeholders. As long as the PaP is able to close the gaps of students and smoothen their transition to apprenticeships, different design options should be promoted and can be enriching.

PaPs are ideally embedded in well-functioning systems of vocational education and training (VET). The design of such well-functioning VET and also education systems and how PaPs can logically fit into those systems is a complex task that has to be fulfilled by governments in consultation with social partners. For this publication we have to limit ourselves to developing ideas and structures for PaPs, but we also would like to emphasize that PaPs should not be introduced detached from the rest of the VET system.









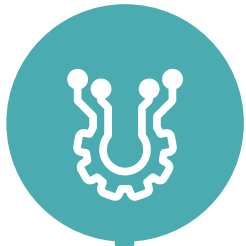


# # 3

Functions and Components of PaPs







# # 3

## Functions and Components of PaPs

### 3.1 Functions of PaPs

From the (mainly German speaking) research literature on the topic, we can derive three different functions of PaPs (Sacchi and Meyer 2016; Amos et al. 2003) for young people and/or the state:

#### 1) Compensation

The compensation function mainly refers to the compensation of individual deficits to enable students who graduated from compulsory education to find an apprenticeship position. Individual deficits might comprise poor language skills or gaps in what should have been learnt during compulsory education or soft skills as e.g. punctuality or knowledge on how to write a CV and motivation letter and how to behave during a job interview (Sacchi and Meyer 2016).

In contexts where compulsory education systems suffer from quality and/or relevance problems, the reasons for individual deficits or a stronger need for orientation and career guidance may not lay in the individual, but in deficits in the institutional setup and therefore structural, because, e.g., relevant skills are simply not taught, or orientation and career guidance are not part of the curriculum. This may lead to an even stronger institutional importance of PaPs for a functioning education system.

Another aspect that could also be subsumed under the compensation function is the compensation of missing graduation from compulsory education. This is particularly relevant in contexts where drop-out rates during compulsory education are high and a graduation certificate is at the same time (one of the) requirement(s) for entering apprenticeships. This is an important point for the LAC region, as completion rates at lower and upper-secondary level are quite low with 79 respectively 59 % (UNESCO 2017). These low completion rates and therefore very different levels of knowledge of students require flexible regimes for PaPs if they are also to (at least indirectly) contribute to higher graduation rates on upper-secondary education level.

#### 2) Orientation and career guidance

Regarding the orientation and career guidance function, PaPs should enable students to make an informed choice about their future occupation or at least find out what potential options are (Sacchi and Meyer 2016). Whereas in Swit-

zerland, e.g., career counselling and vocational orientation are mandatory already at compulsory school and done quite extensively (in terms of content and length), other countries do not know this concept or do it at a later stage in the education system. This function is crucial for the individual in PaPs, particularly if this topic was not part of the curriculum in compulsory education. The design of the PaPs should be such that they are still broad enough to be prepared for different apprenticeship occupations in a specific sector.

### 3) Systemic buffer

This function refers to the attempt to balance supply and demand on the apprenticeship market in situations where the demand for apprenticeship positions is higher than the supply (Sacchi and Meyer 2016). Even though this function might get more relevant in times of crisis like the current COVID-19 pandemic, the use of measures to resolve this imbalance has to be analyzed and observed carefully and oriented towards future expected demand of the business sector. In particular quantitative, occupational and regional imbalances have to be observed and analyzed in terms of potential (e.g. it might be better and more efficient to convince a young person to not stick to his/her dream occupation, but to also consider other occupations where positions are available, see also Jaik and Wolter, 2019).

Looking at PaPs from the perspective of employers and taking as a basis the approach that we will suggest in the next subchapter, PaPs can also have at least two functions from the perspective of employers<sup>10</sup>:

#### I) Screening of potential apprentices (permanent)

When companies participate in the provision of

the practical part of PaPs in any manner, they may use this opportunity to screen potential candidates for apprenticeship positions. The advantage over a single interview or assessment center is that they can observe the young person in a real work setting and over a longer period of time which most probably gives a better indication, if the young person is a good fit for the apprenticeship occupation and also for the company's culture and work environment (e.g., future colleagues).

#### II) Preparation for a stronger engagement of companies in quality apprenticeships (transition phase)

The engagement of companies in quality apprenticeships is a complex long-term commitment, and in many contexts, it is difficult to convince companies to engage in quality apprenticeships, particularly Small and Medium enterprises (SMEs)<sup>11</sup>. This is even more so in contexts where there is no quality apprenticeship system in place or when efforts to introduce quality apprenticeships have just started. Particularly for those companies that are not yet fully convinced to engage in quality apprenticeships for different reasons or those who are interested but do not yet have experiences with training apprentices, starting with an engagement in PaPs might be a good starting point. By engaging in PaPs, companies are not in the "driving seat" compared to quality apprenticeships and their engagement is less time-consuming because the practical part of PaPs is shorter, but they can right out from the beginning participate in the development of curricula of PaPs and also try out how much effort it requires to work with a young person during the practical phase of the PaP. This engagement may also facilitate the decision to offer full apprenticeship positions.

From a more general point of view, there are two functions that PaPs can fulfill. A PaP either ena-

<sup>10</sup> Given that we propose this model for the LAC region for the first time in this paper, those two functions are only assumptions and have not been subject to empirical investigations.

<sup>11</sup> For a list of arguments to convince the business sector to engage in VET, see the DC dVET Working Tool on how to engage the Business Sector in VET, Euler (2018).

bles participants to fulfill the requirements of a quality apprenticeship (which may include graduating from compulsory education for dropouts) or it enables participants to meet the requirements of a quality apprenticeship position with higher academic requirements<sup>12</sup> than the ones the candidate is prepared for.

## 3.2 Basic Components of PaPs<sup>13</sup>

This chapter describes the four basic components of pre-apprenticeship programs, i.e., the contents that should be covered in the program to make it relevant and to successfully bridge the gap between skills of the specific target group and requirements of quality apprenticeships. Those four basic components should serve as an overall framework to think about the content of pre-apprenticeship programs. The detailed content has to be adapted to the requirements of the specific country context but should follow the framework characteristics and guiding principles mentioned in Chapter 2.

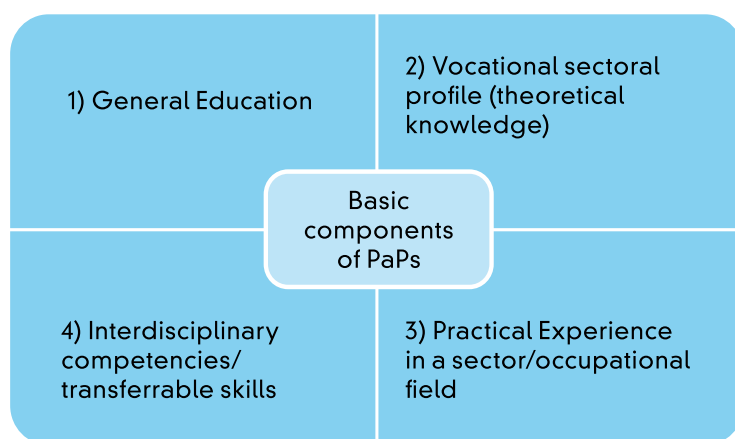
Figure 1: The 4 basic components of pre-apprenticeships

The four basic components described in detail:

### 1) General Education

The component “General Education” is mainly integrated to close gaps from compulsory education in very basic competencies as literacy and numeracy—but also beyond—which are necessary to be successful on the labor market, but also to enable students to pursue further education after an apprenticeship. The most important subjects are mother tongue, foreign languages, mathematics, applied informatics/digital competencies, but depending on the sector the PaP is designed for also other general subjects as chemistry, biology, sociology, sports, etc. Those subjects are most probably taught in a classroom setting by teachers. Depending on the aim of the program, the possibilities of the implementing institution and the freedom that should be given to students, some of those subjects might be declared as mandatory and others as electives.

To show students why they have to learn those basic subjects (again) and also to make the subjects more relevant for the overall setting of the PaP, it might be advisable to teach them in an applied and practical way. E.g., technical mathematics with real world applications from different occupations in a simplified way according to the knowledge of the students of writing business letters in the mother tongue or in the foreign language classes. This way of teaching will not only make content more interesting for students, but also more relevant for the work context.



Source: Own illustration, based on Axmann (2008) and Tenberg and Bergmann (2018).

<sup>12</sup> Different occupations have different academic requirements or levels of intellectual demands in different fields. E.g., in Switzerland two different measures have been developed to make those differences visible (see Stalder 2011 and [www.anforderungsprofile.ch](http://www.anforderungsprofile.ch)). According to the latter measure, the most demanding apprenticeship occupation on a scale from 1 to 100 is laboratory technician in physics (with 63.19 points) and the least demanding occupation is shoe repairer (with 13.89 points). These huge differences also emphasize the differences in the requirements to start different apprenticeship occupations.

<sup>13</sup> The structure of this chapter is inspired by Axmann (2008) and the explanations and reflections about pre-apprenticeship programs in Germany in Tenberg and Bergmann (2018).

## 2) Vocational sectoral profile (theoretical knowledge)

In contrast to the component “General education”, the component “Vocational sectoral profile” contains knowledge transfer in fields that have a stronger connection to the occupational field or sector that the PaP is situated in. In comparison to component 1, component 2 will be something new that students do probably not yet know from compulsory education. This component contains basic technical competencies that prepare students for finding an apprenticeship position in one sector or occupational field. Examples are basic knowledge in agriculture, health care, production, renewable energies, or administrative processes in companies. The set-up of this component has to be broad enough to prepare for different occupations in a sector/occupational field to not restrict the possibilities of PaP graduates too strongly.

How those vocational sectoral profiles look like, depends very much on the specific country context and specificities within the different sectors. To illustrate how it might look like in two very different contexts, we will briefly elaborate on examples from Yemen and Germany:

- In a feasibility study for a Vocational Training Centre in Marib, Yemen (Axmann 2008), a shortage of skilled workers/technicians in the health care sector was identified. This defines already a quite specific occupational field. The proposal concluded that a one-year pre-apprenticeship should include subjects as, e.g., working with medical equipment, food processing technologies for hospitals, as well as stone cutting, chiseling and masonry<sup>14</sup> on a basic level to prepare and qualify PaP graduates for different apprenticeship occupations like Medical Technology Technician or Assistant Technician.

14 These three were taken because they represented by far the occupations with the highest chance of employment in the local labour market.

- In Germany, most pre-apprenticeship programs (even though they have other names) take place in vocational schools where also apprentices undergo the theoretical part of their dual apprenticeship. Compared to Yemen, the pre-apprenticeship courses are much broader from the general design and typically take place in one of the following thirteen fields: Business and administration; metal technology; electrical engineering; construction technology; wood technology; textile technology and clothing; chemistry, physics and biology; printing technology; color technology and interior design; personal hygiene; health; nutrition and home economics; and agriculture<sup>15</sup>. Within some of the fields, further specializations are possible as e.g. in the field business and administration, the focus can be set on informatics.

Most probably, this component will also be taught in a classroom setting but contain more practical applications than component 1. Wherever possible, teachers should draw lines between theoretical knowledge about the sector/occupational field and practical applications. This will require in an ideal case that teachers do not only have a background in pedagogy and their respective subject, but also some practical work experience to make the connections<sup>16</sup>.

## 3) Practical experience in a sector / occupational field / occupation

This component is key to build the bridge to employers and provide students with practical experiences. For employers, this means that they can screen potential apprentices/employees and, if not yet involved in quality apprenticeships, they can find out if it would be doable for them to take apprentices in the long run.

15 <http://www.wirtschaftslexikon24.com/d/berufsgrundbildungsjahr/berufsgrundbildungsjahr.htm>

16 To ensure that this knowledge transfer from theory to practice and back is possible, the EU Commission (2020) proposes e.g. the concept of a «hybrid teacher» who works part time in a vocational school and part time in a company. This concept already works very successfully in Switzerland for many years now.



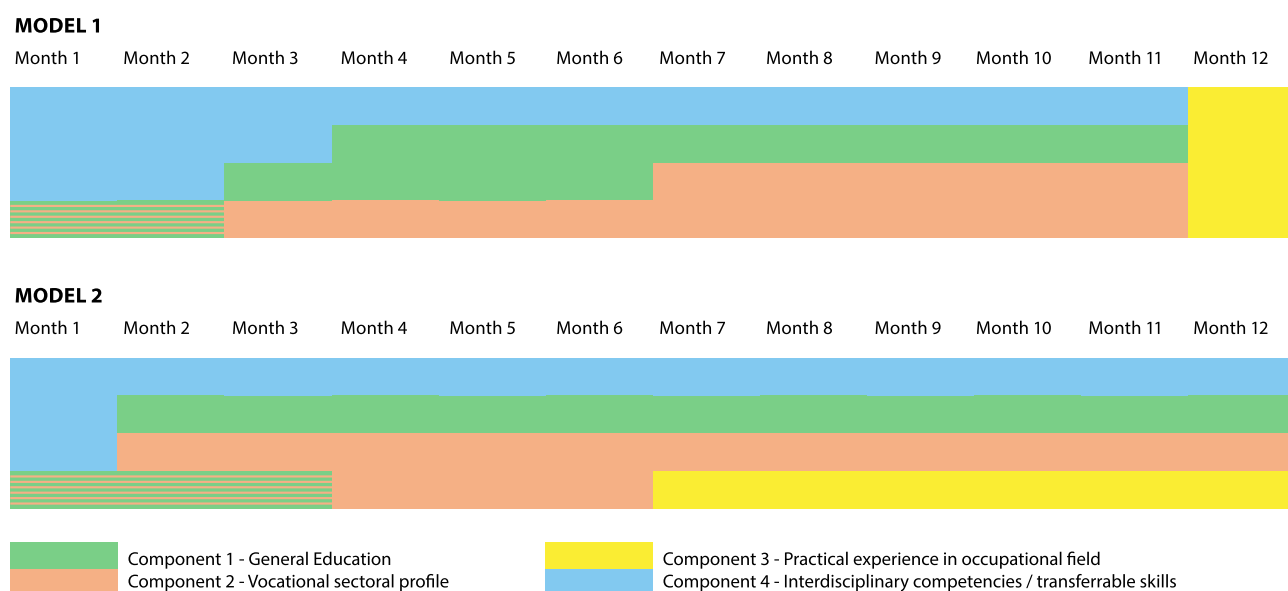
Through the practical work in the companies, students will realize that what they are learning in the PaP is relevant for their later career which will boost their motivation to learn.

This component is probably the most flexible and open regarding the design. It should ensure that students benefit from their experience and, on the other side, be flexible enough to be interesting for employers. In practice, that means that this practical experience can take different organizational forms. It may either be a short-term internship of some weeks or months or a continuous and longer-term collaboration where students stay for 1-2 days per week in the

company. In addition, it can provide work experience in one occupation only or, depending also on the size, possibilities and preferences of the companies, in different occupations. One learning from an investigation in Germany was that it is easier to reach a consistency for students and employers when students worked in the company for 2 days per week over a longer period of time (half a year in this case), compared to an internship of e.g. 3 weeks (Tenberg and Bergmann 2018). This may however depend very much on the specific circumstances, the occupation, and also the preferences of employers.

Figure 2 illustrates two potential models for the design of PaPs including all four basic components following the descriptions of Tenberg and Bergmann (2018). However, we would like to emphasize that those are only two out of many different possibilities how PaPs can be designed. Countries interested in introducing PaPs have to find the design that best fits to their realities and requirements.

Figure 2: Two examples for different designs for two-year PaPs including all four basic components



Source: author's own illustration.

In some cases, it might not be feasible that employers strongly engage in PaPs. In this case, creative solutions have to be found to provide the students with practical experiences under real-world conditions and prepare them adequately for the world of work. There are several options to organize this part. One possibility, if the companies fear that students will come without any prior sector-specific knowledge, is to teach them some practical skills at available workshops at school / the implementing organization in the first part of the PaP and then send them to the cooperating companies in the second part of the PaP with some prior skills. Another possibility is to convince companies to offer very short internships of 3-5 days to at least offer some connection to the world of work to the students or to offer the simulation of job interviews or CV checks (The Learning and Work Institute, 2019).

If none of those options is feasible, a real-world practical environment has to be simulated at the school / implementing organization. One example are the simulated companies that will be further described in Chapter 4. Another example are the use of virtual reality glasses or other technological innovations to get an idea of different occupations. Those technologies are getting more and more common in different apprenticeship occupations in some countries and might therefore be a good preparation for an apprenticeship and additionally a response to the current COVID-19 crisis where learning at the workplace is a challenge. For practical examples, see the work of the Leading House Dual-T, e.g., on Augmented Reality tools for carpenters to learn about statics<sup>17</sup> or for gardeners and florists<sup>18</sup>. Originally those tools are thought to expand the learning in dual VET programs, but they might also be used for getting a basic understanding of what the occupation is about.

Apart from being the most flexible component of the PaPs, it is also the trickiest one to implement. On the one hand, it requires a lot of flexibility from the main implementing institution, but also from the companies that participate. Companies might have no experience in working with young people if they do not have apprentices. Therefore, at least a briefing or short training of the employees who will work with the young people in the company on the part of the main implementing organization might be necessary to ensure a high-quality implementation of the whole PaP. In the ideal case, this short training easily connects with training of trainers programs for in-company trainers of apprentices.

#### 4) Interdisciplinary competencies / transferable skills

This component is the most diverse of the four components, because it is an umbrella component covering very different topics. First, PaP students have to be enabled to make a well-informed choice on their professional future. Therefore, intensive career counseling from the beginning of the program and mentoring is very important. Career counseling does not only contain pure information about different options and occupations that are available, but also about finding out which options fit to preferences and talents. In addition, more general topics like learning how to write a proper application and how to act in an interview should be part of career counseling. It might also contain an (optional) module on entrepreneurship to inform students about this option already at this stage of their career. Particularly in contexts where jobs are scarce, this might be an important element.

However, career counselling is not enough to find an apprenticeship or job. In many surveys, employers state that it is not mainly the technical skills that applicants are missing, but soft skills like punctuality, customer-orientation, presentation skills and being able to

<sup>17</sup> <https://www.epfl.ch/labs/chili/dualt/completed-projects/carpenters-statics/>.

<sup>18</sup> <https://www.epfl.ch/labs/chili/dualt/current-projects/boundary-online-services-expanding-experience-in-vet/>.

work in a group. Therefore, the development of different kinds of soft skills should be a key element in PaPs. Even though those skills can best be learnt at the workplace / during an apprenticeship, some of them can also be practiced in a school setting.

In case the knowledge and competencies to teach the things that are required in this component are not available within the main implementing institution, external career counselors have to be contracted and/or a collaboration with public employment services has to be established.

Components 1 and 4 might be very similar for PaPs in different sectors; what distinguishes the PaPs is the content of components 2 and 3. Sometimes, the transitions between the basic components of PaPs are flowing and the concept presented here is mainly for systematization. Due to digitalization, IT or problem-solving skills are, e.g., nowadays an integral part of general education in many countries but are at the same time transferrable skills and can be used in different fields. General education subjects ideally also contain applications of what will be needed in the apprenticeship in a respective sector later. E.g., to teach basic math skills for the health sector, students understand and can calculate the BMI or in the mother tongue or foreign language classes students learn how to write an appropriate business letter or email message.

Teaching methods should also be adapted to what is expected from students in the labor market. In all the four components, methods like working in groups and working in individual or group projects over a longer period of time can be useful. This may require adaptations in vocational teacher-training as well, as, e.g., short internships for vocational teachers to better understand the reality in companies. Even though this is an important point, it is even more decisive for the next step, i.e., quality apprenticeships. In addi-

tion, it would go beyond the scope of this paper. Therefore, we would like to refer to ILO (2015) for a detailed overview, guideline and tools on how to develop high-quality training for vocational teachers and trainers.

The OECD (2013) defines that PaPs should at least have 25 % of the content being related to vocational or technical skills. Given that in the model we designed in this paper the heart of the programs are components 2 and 3, to ensure relevancy for the transition to apprenticeships, we would even go beyond this recommendation and suggest a range between one third and one half of the program being related to an occupational field. This will prevent the programs of being too general to be relevant for a specific apprenticeship position.

One essential question for countries that want to design pre-apprenticeship programs, particularly against the background of COVID-19, is which of the four components of PaPs would be suited for online learning and to what extent<sup>19</sup>. Whereas it might be easy to teach general education like languages or mathematics and also digital competencies, as well as more theoretical vocational contents online, this seems to be more complex for the practical experiences-component. However, this also depends strongly on the occupational field of the pre-apprenticeship program.

In the information and communication technology (ICT) sector it is not only possible, but also reasonable to have most of the program online, but, e.g., in the health sector real practical experience is key for learning and is more difficult to simulate online. In addition, more students might be able to benefit from more experiences if components of the PaPs are offered online, because it is easier to organize for companies. The disadvantage may

<sup>19</sup> Thanks to our colleagues from SECAP Ecuador for emphasizing this point.

be that online interaction is less personal which is, however, crucial for an apprenticeship recruiting process. In addition, particularly vulnerable groups might not only have problems with accessing those offers but might also not be used enough to remote learning to benefit from it.

Another factor that has to be kept in mind when planning for online vs. face-to-face teaching is the pre-training of teachers and tutors. If they are not able to use new technologies, they will not be able to teach them. Also, students might not be familiar with new technologies and not have the necessary devices. One possibility to tackle this is to start with a face-to-face teaching of digital skills and providing students with the necessary hard- and software to enable them in the next step to switch to more remote learning.









# 4

Inspiring examples of PaPs









# # 4

## Inspiring examples of PaPs

For this chapter, we picked six pre-apprenticeship programs from different countries and regions, including the LAC region, that contain valuable and innovative practice elements that might serve as inspiration for the design of pre-apprenticeship programs in LAC and will in part serve as inspiration for the pilot design of the country cases in Chapter 5.

### 4.1 Netherlands<sup>20</sup>

The ATB (*Aantrekkelijk Technisch Beroeps-sonderwijs*) program in the Netherlands was created because companies in ICT had problems to find apprentices and drop-out rates from the apprenticeships were high. With the help of innovative learning methods focusing on a stronger use of modern learning technologies and the establishment of good relationships with SMEs, this pilot project was converted into an established PaP. Resulting from the pilot activities, the SMEs now have strong relationships with VET schools and a mutual learning process has been established.

### 4.2 Bosnia and Herzegovina<sup>21</sup>

In Bosnia/Herzegovina (BiH), the VET system is not sufficiently linked to the needs of the private sector. This manifests among others in the

absence of communication structures between VET institutions, vocational schools and the private sector and occupational profiles with little or no relevance for the labor market. However, many companies in key sectors of the economy with growth potential in BiH need well-designed training programs for their workforce and this is why the GIZ (German Society for International Cooperation) started supporting promising sectors with growth potential like metal, wood and textile. The project objective in this was that VET providers in BiH respond to qualifications needed in the selected sectors in industry and services with growth potential for employment and self-employment. The driving force in the project design were the companies rather than the schools.

At a later step, the project will focus on enterprise-based training phases, provision of internships, alternating learning places, the further assessment of key qualifications, turning qualifications needed into skills and competencies, and designing short modules for pre-appren-

<sup>20</sup> See Axmann (2018b).

<sup>21</sup> See Axmann (2018b).

ticeship programs. In addition, a framework of collaboration with partner schools in Germany will be set up that have similar pre-apprenticeship programs in the metal, wood and textile industry and the collaboration with the sectors involved; the implementation of enterprise-based training programs will be intensified.

The approach chosen in BiH to work on PaPs and apprenticeships almost at the same time seems to be promising, because the important relationships established with companies can be used for both educational programs. In addition, the PaPs designed in BiH concentrated on specific sectors (textile, wood) to prepare students for occupations related to those sectors.

### 4.3 Austria and Germany<sup>22</sup>

In Austria and Germany an approach called “simulated company” is used in some types of PaPs. In those “simulated companies”, students take the role of an owner of a small company or of the supervisor and solve complex and real-world tasks that a small company is typically dealing with. All this happens under the supervision of a teacher who has been trained before for this supervision task. There are several positive effects of learning in those “simulated companies”. In addition to technical skills that are highly relevant for the labor market, students also learn what it means to be an entrepreneur and be responsible, to work with other people in a team and to adapt to different and difficult situations. Particularly the latter skills are also highly relevant for the labor market.

This approach has not only been used in the home countries Austria and Germany, but also in development cooperation projects of those two countries, particularly in Eastern Europe and the Western Balkans. This shows that this approach might also be suitable for other countries, particularly in a first step when it is hard to convince companies to offer internships.

22 See Axmann (2018b) and Axmann, Tadesse, and Wallace (1990).

## 4.4 United States of America

The outstanding element in the US on PaPs is their clear regulation (U.S. Department of Labor 2012). The Employment and Training Notice 13-12 defines in a very comprehensive and precise way the purpose of pre-apprenticeships, what is needed for fulfilling the quality requirements and where to find further information for organizations that would like to offer pre-apprenticeship programs. It is not just an important guideline for those organizations but the simple fact of having such a Note also underlines the importance of pre-apprenticeships as bridge to apprenticeship programs.

In addition, there has to be a direct connection to at least one registered apprenticeship program, an approved curriculum according to industry standards, a strategy for long-term success, access to appropriate support services, promotion of greater use of apprenticeships, meaningful training not replacing skilled workers and prospects on transitioning to a registered apprenticeship program. The comprehensiveness and clarity of this document does not only help the organizations that would like to offer pre-apprenticeships but also young people, parents, and other stakeholders in understanding what a pre-apprenticeship is and what it is not. In addition, this form of regulation shows that it does not have to be a law or legal act, but that also guiding notes are very useful for the different stakeholders.

### 4.5 South Africa<sup>23</sup>

In South Africa, there is a national bridging program being implemented across the public Technical and Vocational Education and Training (TVET) college system that is in essence a pre-apprenticeship program. It is called Pre-vocational Learning Program (PLP) and fully

23 See <http://www.ehlanzenicollege.co.za/career-guidance/pre-vocational-learning-programme-plp/> and <https://www.engineeringafrica.co.za/article/pre-vocational-learning-programme-plp-pilot-project-a-success-2019-10-29> and information from Dr. Florus Prinsloo during ILO MOOC on Quality Apprenticeships June-August 2020.

funded by the national government. The duration of the program is one year, and it includes the four subjects of Mathematics, Science, English and a Life Orientation/Workplace Preparation/Digital Skills and Vocation introduction subjects. The aim of the program is to prepare students for an apprenticeship or a program at VET colleges. A very interesting aspect is that the PLP started out as a pilot “Trade Preparation Programme (TPP)” of the National Auto Dealers Association and TVET Colleges in 2013 and slowly developed into what is now a fully-fledged national program. It is a good example of how industry and the TVET Colleges can work together with collaborative, committed leadership.

## 4.6 Mexico<sup>24</sup>

Since 2013 the Mexican-German Chamber of Commerce and Industry (CAMEXA/AHK Mexico) supports companies in training after the dual principle<sup>25</sup>. In 2017, CAMEXA together with the educational institutions CONALEP and CECYTEC and respective authorities, piloted a pre-apprenticeship program called “Pre-Dual” in Coahuila and Guanajuato, where dual apprenticeship programs were already in place. The target group of the program were students right before starting a dual apprenticeship. The aim was to make up for potential deficits and facilitate and smoothen the start into the dual apprenticeship. In addition, Pre-Dual was used to promote dual VET as high-quality educational option throughout the whole country.

The most important elements of the program (with occupational focus) were socio emotional skills, applications of mathematics, introduction to organization, manual skills in metal mechanics, mechanical representation, production

processes, comprehension and development of texts, and technological knowledge. The program also included a one-week course for teachers of the participating institutions CONALEP and CECYTE according to German standards, however with a focus on practical and applied contents.

Another important component of the pilot project was the extensive monitoring and evaluation of this program. Besides the before and after assessment of competences of students and in-company trainers, the design of the program was carefully focused on what the contents of the dual apprenticeship the young people were about to start would be about and what employers would expect from them. Ultimately, all participating entities and individuals were satisfied with the outcomes of Pre-Dual and participants showed measurable improvement of knowledge and were well prepared for starting their dual apprenticeship in the companies.

<sup>24</sup> Information from Rafael Hernández, Project Manager, CAMEXA and internal unpublished documents of CAMEXA. The project was carried out in the framework of VETnet (<https://www.berufsbildung-international.de/de/projekte-und-kooperationslaender-strategieprojekte-vetnet.html>), supported by the German Ministry of Education and Research (BMBF).

<sup>25</sup> <https://mexiko.ahk.de/es/dual/formacion-dual-mexicana>.





# # 5

Recommendations for Latin America  
for PaP design and implementation  
– general approach and five country  
examples



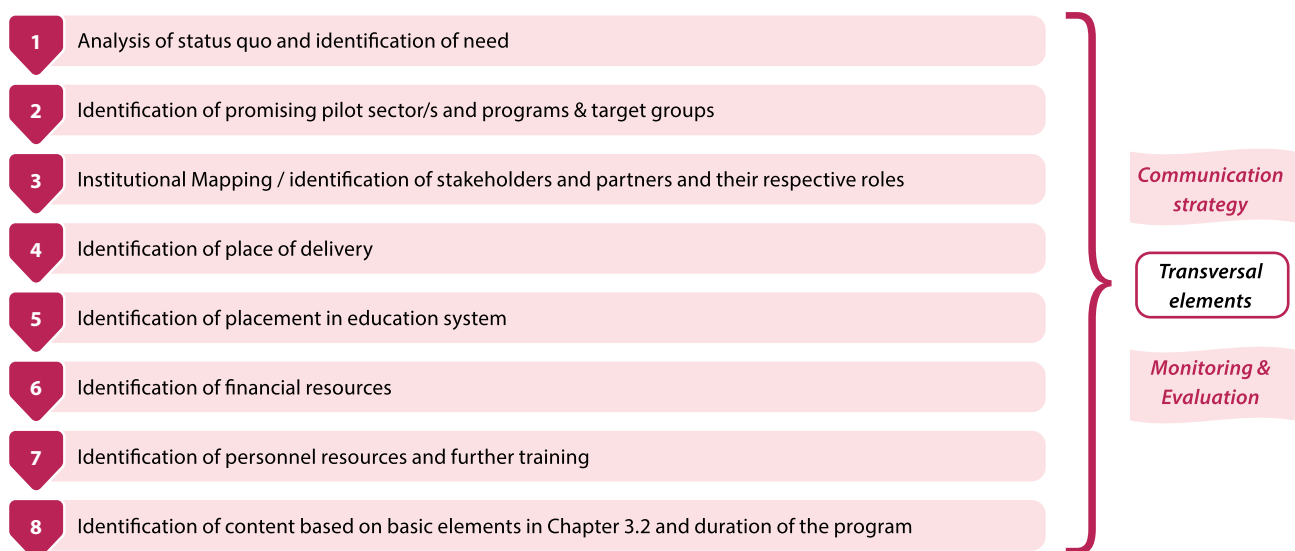
# # 5

## Recommendations for Latin America for PaP design and implementation – general approach and five country examples

### 5.1 Overall recommendations<sup>26</sup>

We recommend starting the development of pre-apprenticeship programs with a pilot program, prepared, and monitored with the help of researchers to identify the causal effects of the program tested. As explained by Novella and Pérez-Dávila (2017), this is the only way to make sure that the effects are not due to any other factors than the program itself. If possible, useful, and not associated with too many risks, alternative approaches should be tested against each other. The following list of steps (additionally illustrated and summarized in Figure 3) accompanied by some guiding questions may serve as a guideline on how to plan the process of designing pre-apprenticeship programs in LAC, but also beyond<sup>27</sup>.

Figure 3: Overview of steps for the planning and implementation of PaPs



Source: Own illustration

<sup>26</sup> Some of the questions and reflections in steps 1, 3 and 6 are inspired by the guiding questions in ILO (2012b). Other points in this chapter were inspired by Benavides Rojas (2019).

<sup>27</sup> Depending on the country context, there may be additional steps to be taken into account and the order of the steps might also differ.



## Steps:

### 1) Analysis of status quo and identification of need:

The first and most important step is to carefully analyze whether there is a real need for setting up pre-apprenticeship programs in the country. Not having quality apprenticeships in the country in place so far is not per se a criterium to not start thinking about pre-apprenticeship programs. Pre-apprenticeships should enable students to take up an apprenticeship and, depending on the context and quality of compulsory education, it might be a necessary first step to start with developing pre-apprenticeship programs before having quality apprenticeships in place. To identify whether there is a gap between what requirements existing apprenticeships or full-time vocational schooling options have and which skills students are provided with from compulsory education, a thorough analysis on transitions and reasons for dropouts at this stage, as well as an analysis of the relevance of existing apprenticeships and/or full-time schooling options is required. In this case, pre-apprenticeships could be used as a means to get employers on board for a preceding step of quality apprenticeships and in this way also promote the idea of quality apprenticeships in the country in the long run and make VET more relevant.



## Questions:

- Are there programs that contain one or more of the basic components of pre-apprenticeships described in Chapter 3.2 or are there programs that are different in content but have the same purpose of bridging the gap between compulsory education and apprenticeship? Could those programs be extended and/or adapted for more relevance?
- Is vocational orientation included in compulsory education curricula or done by external entities during compulsory education? Do students in compulsory education receive enough information about possibilities and requirements of vocational education?
- Is there a need for the (further) development of such a pre-apprenticeship program because many students who graduate from compulsory education are not (well-enough) prepared for starting an apprenticeship? OR, if this is not the case,
- Is there a need for the development of pre-apprenticeship programs as a starting point to initiate and promote the idea of quality apprenticeships?

### 2) Identification of promising pilot sector/s and programs & target groups<sup>28</sup>

A valuable starting point for pre-apprenticeship pilot programs may be sectors where there is a high demand for skilled workers and quality apprenticeship programs already exist, but companies have difficulties to fill positions offered because candidates do not meet the requirements. To find out in which sectors this is the case, a good source might be sectoral employers or business member organizations, statistical offices or other governmental entities that have an overview on supply of and demand for skilled workers in different sectors, research institu-

<sup>28</sup> For a systematization on how to identify promising sectors see e.g. Rihová (2016).



tions collecting such data or unions. In the ideal case, the selection of pilot activities is linked to the countries' strategy for economic transformation.

### Questions:

- Which sectors in the country are in high need of skilled workers but face difficulties to fill their positions?
- Which sectors in the country offer (quality) apprenticeships but face difficulties to fill their positions?
- How stable have those sectors been in times of crisis (e.g., financial crisis 2009, COVID-19) and which future developments are expected, i.e., are the prospects for the future of this sector promising despite the changing world of work?
- Are companies in the sectors with high needs interested in engaging in pre-apprenticeship or apprenticeship programs or could they be convinced with good arguments?
- What are the country's most promising sectors? How can the pilot activities be linked to the country's overall economic development strategy?

### 3) Institutional Mapping / identification of stakeholders and partners and their respective roles<sup>29</sup>

To ensure that the pre-apprenticeship programs are successful and relevant and indeed lead to more and better prepared students taking up and completing apprenticeships, it is important that all relevant stakeholders are involved in the planning and implementation process. To make sure that this is the case, starting with an institutional mapping might

<sup>29</sup> For an example of a visualization of an institutional mapping see Appendix 1.

be useful. Even though employers should play a crucial role in contributing to the content, their role will not be as strong/involved as it is the case in quality apprenticeships, where they have the lead. This means that most likely a public authority will have a lead in the planning and implementation and be responsible for the institutional mapping and identification of stakeholders and partners. Depending on the practices in the country, relevant parties could be invited for either face-to-face or written consultations.

### Questions:

- Which institution can take the lead in the process?<sup>30</sup>
- Who are the stakeholders that need to be involved into planning and implementation of pre-apprenticeship programs?
- Is it sufficient to have the social partners (government including NVTIs, employers' organizations and unions) on board or are there other organizations to be involved, like VET schools or colleges, business associations, employment services, universities or other research institutions, youth organizations, parents' organizations, community groups, Nongovernmental Organizations (NGOs), etc.?
- What are the roles and responsibilities that each stakeholder and partner can/has to play and fulfil? Who regulates those responsibilities and where?

<sup>30</sup> In some countries in the region, e.g., Brazil, it can be observed that different NGOs run small programs for youths, most at need, which are often similar to PaPs in their structure, even though often with the aim to give direct access to the labor market. Relying too much on NGOs to provide PaPs or even put them in the lead is for several reasons not advisable in the long run (at least for the LAC region, with very few countries classified as low-income countries). NGOs often have very limited financial, logistical and personnel resources. To run state- or countrywide programs, those resources will not be enough, and a sustainable implementation is therefore questionable. However, local NGOs often have a very good knowledge about specific contexts and should therefore be invited to participate in the planning and clarify to what extent they can support.

## The role of social dialogue in PaPs

One of the four pillars of quality apprenticeships is social dialogue (Axmann 2019), which emphasizes its importance. If quality apprenticeships are already in place in a country, it is advisable to use existing mechanisms for or bodies of social dialogue to discuss and jointly put into place PaPs. If quality apprenticeships are not yet widespread in a country, PaPs are a good starting point to establish a well-functioning social dialogue in a first step and broaden it to the establishment of quality apprenticeships in a second step. To achieve that PaPs are supported by the public and can successfully be implemented, effective social dialogue is important.

### 4) Identification of place of delivery

The identification of the place of delivery is crucial, because it will have a big impact on quality and relevance of the pre-apprenticeship program. Unlike for quality apprenticeships, where most of the training happens at the workplace / within the company, the practical share in pre-apprenticeship programs will be much smaller and the schooling part most important. Therefore, Vocational Training Institutes seem to be a promising candidate, but there might be others as well and also collaborations between different institutions can be an option. This all depends very much on the country and local context.

#### Questions:

- Which institution has the logistical, organizational and personnel capacities to take the lead in planning and implementing pre-apprenticeship programs?
- Would a collaboration of different institutions be more effective and efficient?
- Local, regional and/or national level? Are there different needs in the regions connected to the sectors present?

- Which of the basic components will be delivered where?

### 5) Identification of placement in the education system

It is very important to have in mind from the very beginning whether, and if so where to place the programs in the education system. It may be important to place it in the education system to emphasize its importance, relevancy and foster visibility and make it a meaningful and attractive option for young people. A second point connected to that is the question if there is a necessity to classify the pre-apprenticeship program within the National Qualification Framework (NQF), if existing. Both classifications will be demanding and require a political discussion, but might also be an opportunity to give apprenticeships, as subsequent step to pre-apprenticeships, more visibility and meaning. E.g., Switzerland took a very pragmatic approach for its pre-apprenticeship programs by making them visible in the overview of their education system and, thereby, acknowledging their meaning without however classifying them as official part of the education system<sup>31</sup>. Given our definition, pre-apprenticeships are the preceding step to

<sup>31</sup> See «Transitional options» in <https://www.sbfi.admin.ch/sbfi/en/home/bildung/swiss-education-area/das-duale-system.html>.

apprenticeships, and there are no overlaps between those two. Pre-apprenticeships are however not a strict requirement for taking up an apprenticeship as there might be alternative ways to get there (A-levels, sufficient skills from compulsory education).

#### Questions:

- Are apprenticeships part of the official education system or an outside option (as, e.g., in the Anglo-Saxon countries)?
- Does the entire structure of the education system need to be changed to integrate pre-apprenticeship programs or is it a step that was anyways missing and can therefore easily be integrated?
- Is a new legal anchoring required for introducing pre-apprenticeships or can existing laws be changed, augmented or specified by by-laws, ordinances or regulations?
- Is it clear for all stakeholders and in particular for the young people who should start the program, what it contains, what the aim is, what they can expect and what their possibilities are after graduating from the pre-apprenticeship program?

#### 6) Identification of financial resources

As for most initiatives—not only in the field of VET or education in general—financing is crucial. If there are no or not enough financial resources to finance the new pre-apprenticeship programs, the program will either not be implemented or with poor quality. In addition, setting up something new is always very costly, so it might be advisable to shift money from other sources or find creative ways for financing. Universities for example are in most cases interested in collaboration when they can use the data collected for their research, generate research output and publish it. Universities typically have their own funds that

they can use if the research topic is interesting enough for them and they are seen as a partner on eye level with freedom/scope for design. Contribution with their own funds (e.g. salary of researchers, etc.) ultimately saves money for the state, because they pay the salaries of the researchers at public universities, in any case, and otherwise external researchers would have to be contracted.

#### Questions:

- What are the expected costs for establishing pre-apprenticeship programs?
- Who will bear the costs of the pre-apprenticeship programs?
- Are there any public funds that could be shifted from other educational programs?
- Are there any public or donor funds available for innovations that could be used to pilot pre-apprenticeship programs and measure their impact?
- How can a long-term and sustainable financing of pre-apprenticeship programs be ensured?
- Is there any possibility to establish a public-private-partnership regarding financing without discouraging employers from participation, as benefits may be less visible directly for them compared to quality apprenticeships?
- Is there a nationwide/regional/sectoral training fund or something similar with excess funds or funds foreseen for innovative projects?
- Are there any institutions like (public) universities or other research institutions that could have an intrinsic motivation (scientific publications, visibility) to contribute to the establishment of pre-apprenticeship pro-

grams and any thereby indirectly contribute to financing?

### 7) Identification of personnel resources and further training

Independent of the pre-apprenticeship programs replacing other programs or being created in addition, either staff that is planning or implementing the pre-apprenticeship program needs further training or additional staff is needed. This is not only true for the institution(s) where the pre-apprenticeship takes place, but also in the administrations in charge of planning, monitoring, and supervision.

#### Questions:

- Can the pre-apprenticeship program be planned and implemented with existing staff? If yes, how much, and what kind of further training do they need to fulfil their new tasks? (This question has to be answered for all parties involved, e.g., employees in the ministries, in the NVTIs and also staff in the companies that host students for the practical part, even if students only stay in the company for a short period)
- If additional staff in any of the institutions involved is needed, what profile do they need and does this have any implications for e.g. (future) changing requirements in teacher education at university?

### 8) Identification of content based on basic components in Chapter 3.2 and duration of the program

Ideally, all stakeholders are involved in creating the content—in particular employers—to ensure that the content enables students to meet the requirements of taking up an apprenticeship after successful completion of the pre-apprenticeship program. This means that, besides NVTIs, employers have to play a crucial role in defining the content or it has to be very clear what the re-

quirements of apprenticeships are that students who graduate from compulsory education currently do not fulfil. This could also be done by just surveying employers who offer (quality) apprenticeships. The length of the program should be a compromise between only containing the minimum of what is needed to reach its goals and fitting to academic calendars. The duration should however not be artificially prolonged, because this could be wasted time and money for all parties involved. In addition, the duration should be short enough and content interesting enough to attract youths that have outside options like taking up a job without specific skill requirements (unskilled work) where they are paid in comparison to the pre-apprenticeship program.

#### Questions:

- Does the design of the program fit to the requirements of quality apprenticeships in the same sector?
- Are responsibilities for the different basic components clear?
- Is communication between the different stakeholders involved ensured so that the different components fit to each other and do not diverge?
- How long does the program have to be to contain everything that is necessary to fulfil the requirements of a quality apprenticeship and to be attractive enough for compulsory school graduates?
- Particularly against the background of COVID-19: How much of the content of the pre-apprenticeship program can be planned as virtual learning?

Two transversal elements that have to be followed throughout all 8 steps of the design process for pre-apprenticeship programs are communication and research support and guidance.

In the following, those two transversal elements will be described in detail:

### Implementation, promotion, and communication of the pre-apprenticeship pilot

To make the pre-apprenticeship program attractive for young people as well as for participating employers, a transparent and clear communication strategy needs to be in place already for a pilot of the PaP. This is key for the success of the pilot project, as well as a potential upscaling of the project.

#### Questions:

- Is there a clear implementation/project plan in place with concrete and detailed milestones, alternative options in case of necessary adaptations and clearly defined roles for all parties involved?
- Is there a communication strategy in place on how to promote the pre-apprenticeship program in public to make sure that there are enough young people who would like to participate and that enough companies are on board?<sup>32</sup>
- Is it clear for young people what they can expect from the program, where it is situated in the education system and what their possibilities will be after successful completion?
- Is it clear for young people that this is a pilot program (“test”) that naturally comes with some risks compared to long-established programs, but also that this is a big chance and that they are part of an innovative program?

### Research support and guidance / Monitoring and evaluation

A transversal element that should be included in all steps is research (Tenberg and Bergmann 2018; OECD 2018b). From the very beginning of this planning process outlined in the 8 steps previously established, as well as during and after the implementation, it is essential to monitor the development of the pre-apprenticeship program(s) carefully to be able to identify the impact of the pilot program(s) and to make a well-informed decision on whether and, if so, how the pre-apprenticeship program should be scaled up. Ideally, the research teams would consist of educators who can reflect on the specific content of the programs as well as economists/experimentalists or other researchers who have the methodological background to identify the causal effects of the intervention for individuals, i.e., do students who finished the pre-apprenticeship program have better chances to find an apprenticeship position compared to students who did not take part in the program?

In the longer run, it would also be interesting to compare the success/drop-out rates of students who took part in the pre-apprenticeship program and those who took alternative pathways leading them into the apprenticeship programs, and also how students who did the pre-apprenticeship program perform in terms of further education, earnings and probability to find a job after the apprenticeship. In addition, it is important to find out which skills predict the success in (quality) apprenticeship programs. How this can be done methodologically and what the results for Germany are can be found in Jansen and Pfeifer (2017). The collaboration with Universities in this field might also strengthen own research capacities in the field of VET in the NVTIs and both institutions might mutually benefit.

We are aware that this process is quite extensive, but this investment will pay off in the long run because it is the only way to find out what the most relevant approach for relevant pre-ap-

<sup>32</sup> In an ideal scenario for research there is more demand from young people that would like to take part in the PaP than places that are offered to make a lottery possible (see Novella and Pérez-Dávila 2017). Being able to draw participants from a lottery solves selection issues, which is important to identify causal results.

prenticeship programs in a specific country might be. The content of pre-apprenticeship programs might not only differ by country, but also by sector within the country and therefore a certain flexibility for the design of pre-apprenticeship programs is required.

In the following subchapters, authors from Brazil, Colombia, Ecuador, Panama, and Paraguay

will either describe already existing cases of pre-apprenticeship programs that are similar to the structure developed in this publication or, if not existing so far, try to imagine how potential PaPs in their respective countries could look like and what role they could play<sup>33</sup>.

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<sup>33</sup> The terminology in the following subchapters might differ from the terminology used throughout the publication. The external authors used the terminology that most fits to their national context.

## 5.2 Inclusive Professional Apprenticeship (API) – Towards a bridge to quality apprenticeships in Brazil (by Laura Abramo Díaz, ILO Brazil)<sup>34</sup>

The Apprenticeship Law<sup>35</sup> determines that medium and large companies, public and private, must hire apprentices between 14 and 24 years old, for up to two years, representing 5 % of the employees whose functions require professional training. During this period, the young people must be trained simultaneously in a training institution and in the company, combining theoretical and practical training. Companies are responsible for financing the employment contracts, paying the minimum hourly wage, i.e., for the reduced working hours<sup>36</sup>, in addition to guaranteeing labor rights and social security benefits.

Unlike what happens in countries with a tradition in this area, the vast majority of companies in Brazil do not see professional learning as an opportunity to invest in a qualified workforce to carry out the productive activities they offer to society, achieving even greater competitiveness in the market and reaching higher levels of sustainability. Scarcer than apprenticeship vacancies are the possibilities of access to this type of contract by adolescents and young people in vulnerable situations.

With this in mind, the ILO Office in Brazil, together with the Public Ministry of Labor and the Ministry of Economy (which, since 2019, includes the Secretariats of Labor Inspection and

Public Policies of Employment), developed the proposal of an Inclusive Professional Learning (API), within the current legal framework. This proposal was designed in a consensual manner among all the segments involved and includes a theoretical module that aims at contributing to the reduction of the training gap present in the vulnerable public. As shown in Figure 4, the API is distinguished from “traditional learning” by the “inclusive module”. This additional module is aimed at target groups that have deficits, especially in the socio-emotional area. Therefore, the API is an interesting model that combines a preparation module, which can be called part of a pre-apprenticeship, with traditional learning.

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<sup>34</sup> For more information on the program see [https://www.ilo.org/brasilia/noticias/WCMS\\_731516/lang-pt/index.htm](https://www.ilo.org/brasilia/noticias/WCMS_731516/lang-pt/index.htm) and [https://www.ipea.gov.br/portal/images/stories/PDFs/mercadodetrabalho/191101\\_bmt\\_67\\_pf\\_aprendizagem\\_pro.pdf](https://www.ipea.gov.br/portal/images/stories/PDFs/mercadodetrabalho/191101_bmt_67_pf_aprendizagem_pro.pdf).

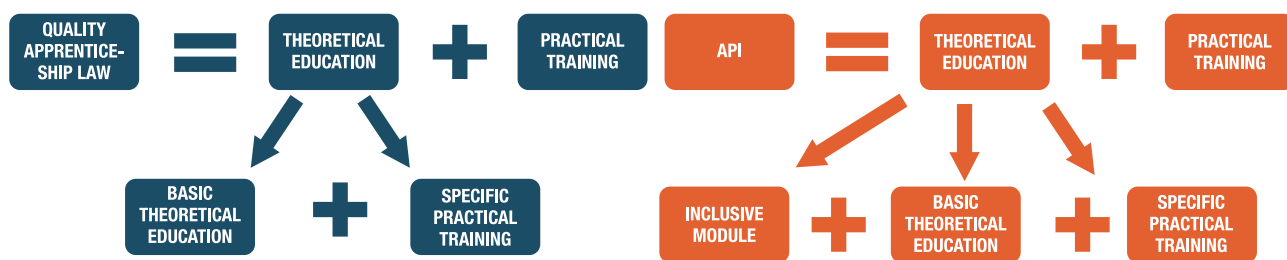
<sup>35</sup> Law No. 10,097 of December 19, 2000.

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<sup>36</sup> The reduced workday can be between 4 to 6 hours a day and apprentices must check their enrollment and school attendance until they complete their basic education (which in Brazil goes all the way to high school). This requirement of the Apprenticeship Law has the virtue of preventing early school leaving.



Figure 4: Apprenticeship according to apprenticeship law (left) and API with additional inclusive module (right)



The first experience of the API program was made in Cristalina-GO, together with SENAC (Serviço Nacional de Aprendizagem Comercial). For a possible extension of the program to other regions, other sectors and other target groups, the “inclusive module” can be adapted in terms of duration depending on the program and the needs of the target audience and the companies offering the program. The first API course started to be effectively implemented in December 2019, with 13 companies from the commercial sector and 22 apprentices. As a fundamental and transversal element, a monitoring and evaluation plan has been developed and implemented, comprising the five elements that support the program: the apprentices, the families, the training entity, the enterprises and the institutional partners. In spite of the obstacles normally observed in the implementation of the Apprenticeship Law in Brazil, significantly aggravated by the difficulties imposed by the COVID-19 pandemic, it has been possible to continue the initiative and it is hoped that it will soon be possible to open new courses in other sectors. At the end of the project, a report is expected to be published on the development of the proposed methodology, identifying the best strategies for the replication of the API model in other municipalities and paving the way for the expansion of quality learning and its strengthening as an instrument for the prevention and eradication of child labor and the promotion of decent and protected work for adolescents and youth.



Based on the 8 steps described in chapter 3.2, the process is presented below as was done for the API and could be done for other projects in this area in the future:

**(1) Status quo analysis and identification of need:** the need to build a “bridge” for access to learning opportunities for vulnerable audiences was a long-standing demand among stakeholders.

**(2) Identification of stakeholders and partners and their respective roles:** Initially, the Core Working Group was formed (ILO, MPT, SPPE, SIT) to develop the idea of the API, how to implement it, etc. The other stakeholders were identified and added to as the project progressed. For example, only after the identification of the pilot municipalities could the training entities and local enterprises be added.



**(3 and 4) Identification of positioning in the education system / Identification of financial resources:** The conclusion of the Base Working Group was that the API should be an integral part of what already exists in the Apprenticeship Law in terms of positioning in the education system and financing.

**(5) Identification of promising pilot sectors and programs and identification of target groups:** It was known from the beginning that the project should be developed in the State of Goiás due to the context of the cooperation agreement that encompasses the project. However, it was necessary to specifically choose which municipality and economic sector. Based on a diagnosis of the economic, social and labor market context, and on criteria such as the number of companies that must meet the minimum apprenticeship quota, the effective percentage of hiring and the labor absorption capacity, the

municipality of Cristalina (State of Goiás) was selected to implement the pilot project. In addition, the greater relative willingness of the employers' association to hire the API's target audience pointed to the commercial sector as the most favorable for testing this innovative concept.

**(6) Identification of Human Resources and additional training needs:** To meet the challenge of closing the social-emotional gap of vulnerable apprentices, it was fundamental to train not only future apprentices, but also educators in the "Social Technologies" used in the inclusive module for the development of competencies. For this purpose, the Office of Social Technology Transfer was created in the municipality, with the presence of 12 educators, including the SENAC professor who would be in charge of the course.



**(7) Identification of contents based on the basic components of Chapter 3.2 and duration of the program:** After selecting the municipality, this step was done in close articulation with the training entities and enterprises. Apart from the inclusive module, the API project also organized an adapted selection process, in consensus with the API participating enterprises, for the adolescents/youth identified by the Municipal Secretary of Social Assistance interested in being hired as apprentices. The proposed methodology consisted of two workshops: the first, to help the adolescents/youth prepare their applications (preparation of CVs, advice on how to behave at the time of the interview, among others) and the second, to prepare those responsible in the enterprises with regard to the most appropriate ways to receive the apprentices with the objective profile of the API and to guarantee a good working relationship throughout the program.

**(8) Identification of delivery location:** SENAC was the training entity selected for the first API course at Cristalina. However, the institution does not have a physical structure in Cristalina. Thanks to the cooperation of the Municipality, it was possible to make use of a classroom in the local public school.

### 5.3 Potential implementation of pre-apprenticeship programs in Colombia (by Constanza Correa Sarmiento, BiBB)

Colombia is a country that has identified for decades the importance of education as a solution to structural problems, e.g., unemployment, poverty, low productivity of the economy, and the lack of opportunities for young people. But little progress has been made towards relevant and quality education. The education system has evolved significantly, although the current system cannot be described as an inclusive system where young people receive a qualification according to the needs that the world demands today. By “inclusive system” I mean a system that provides the same oppor-



tunities to all young people, regardless of economic, social, regional, ethnic status, or gender, etc., highlighting diversity as an enriching and innovative value.

In Colombia, formal education is made up of 5 levels: initial, preschool, basic, middle, and higher education. Higher education comprises intermediate professional training, technological training, university education and advanced or post-graduate training. To access this level, it is necessary to have a high school diploma, which is obtained by passing secondary education. Parallel to this, there is non-formal education or education for work and human development, which is usually called VET<sup>37</sup>.

Secondary education is marked by high dropout rates. For example, in Bogotá, the gap between public and private schools is evident, since the dropout rate in public schools is three times higher than in private institutions. Public education is considered irrelevant to social realities. When young people are asked why they dropped out of school, a very frequent response is that the school does not provide them with the skills they need. In addition, serious social problems cannot be ignored<sup>38</sup>. This leads us to deduce that young people who attend secondary school are not prepared with the skills required to continue with an apprenticeship / VET. Education must be more contextualized to the reality of the student and what he or she intends to do in the future.

An important aspect to guide youth people in their professional decision-making process is the professional orientation, which dates back to the year 1932 (Betancourth 2016) and has already been included several decades ago within the national education regulations. Different educational institutions, as e.g., some universities and colleges, are taking action in the field



37 For an illustration of the Colombian Education system see Annex 2, Figure A2.

38 <https://www.elespectador.com/noticias/bogota/desercion-estolar-un-tema-social-y-economico/>.

of career guidance for higher education. Private institutes offer professional orientation for choosing university careers at different costs. Although professional and vocational orientation is legally regulated, it is not integrated into the transition phase between high school education and VET, where it would be necessary. This orientation is a concomitant process that supports the determination of the student's future and his or her professional choice. As vocational guidance hardly exists within the education system, a high dropout rate in tertiary education is the consequence. This is another bottleneck in the Colombian education system. This year 2020 the SENA (National Training Service) started a process to establish vocational orientation to reduce early drop-out of apprentices.

Within the educational system, there is a lack of measures to facilitate the transition from the educational system to the world of work. The OECD states that in Colombia there is “an absence of clear paths and qualifications” (OECD 2016, p. 13).

The ILO report “World Employment and Social Prospects” states that young people under 25 are less likely to work than adults. In Colombia, the youth unemployment rate is more than 26 % for the first semester of 2020. 86 % of vulnerable young people have precarious working conditions according to a study presented by the Government of Canada and the NGO Cuso International<sup>39</sup>. The study mentions that different factors influence to get out of the level of precariousness of the work as, for example, a degree of technologist or technician that increases almost by the factor of 3 the possibilities of having a non-precarious work for a young person of low strata. The document highlights the need to address this problem that puts nearly 7 million young people in a vulnerable position to “remain in poverty for life, denying them the right to development and a decent life.” The study recommends that the National Government

should promote initiatives that will allow “the expansion of the educational level and training of young people in situations of poverty.”

Also, young people who neither study nor work (NEET=neither in employment nor in education and training)<sup>40</sup>, which is the case for about 33 % of young people between 14 and 28, face obstacles that in the current crisis have worsened. Problems have been exacerbated in the pandemic, among them youth and female unemployment due to the gender division of labor and gender stereotypes, women making up almost 70 % of the NEET population. As I mentioned earlier, the currently high rate of youth unemployment and the loss of around five million jobs in recent months by the COVID 19 crisis have opened a wider gap in social inequalities and opportunities. In Colombia, Sustainable Development Goal (SDG) number 8 sets a target of reducing the percentage of young NEET to 15 % by 2030. Achieving this goal means responding in a differentiated manner to a highly complex social and economic reality and addressing the various barriers to access that exist in the labor market and educational system.

Faced with such a discouraging panorama in terms of employment and educational opportunities, we must think about improving the connection between educational supply and labor demand, ensuring quality, and facilitating the transitions between the different levels of education and training. The transitions from basic secondary and middle education to higher or university education and especially to VET and the world of work and employment need to be smoothed and enabled.

The biggest problem in Colombia is the low quality of the educational system and this is a structural problem. There is a lack of a holistic approach that coherently structures the transition from formal education to vocational training processes, the transition of a student from

39 <https://www.elespectador.com/noticias/economia/el-86-de-jovenes-en-estratos-1-y-2-tienen-condiciones-laborales-precarias/>.

40 <https://www.elespectador.com/noticias/economia/quienes-son-los-ninis-y-por-que-han-sido-tan-afectados-por-la-pandemia/>.



a system with little autonomy to one that demands a high level of autonomy and personal, social, technical, and soft skills.

Although there are different initiatives and programs to bring the world of education closer to the world of work, they typically have a short duration (approximately 3 months) and have not been scaled up throughout the country due to the regional inequality in educational infrastructure. Governments do not define state policies, but when governments change, the education policy and the programs or initiatives launched by the previous government generally change as well.

Enabling a program such as the one described in this pre-apprenticeship study that strengthens students with the basic components of general and technical knowledge, practical experience in a sector or occupational field, and basic competencies before entering VET / an apprenticeship would be a strategy providing a solution to many of the problems mentioned above.

Some of the potential sectors for pre-apprenticeship programs are information technologies, renewable energies, medical technologies, environmental technologies (e.g., waste management, recycling), agriculture, construction, commercial and service occupations, and tourism.

The Ministry of Education is responsible for regulations to facilitate transitions within the educational system and would therefore be the ministry that coordinates regulations for pre-apprenticeship programs in close cooperation with the Ministry of Labor in charge of regulating business practices and internships. The Ministry of Education should also make it possible for schools in grades 10 and 11 to start with vocational guidance and measures such as project weeks to get to know companies, professional occupations, materials (metal, wood, rubber, plastic, etc.), a kind of open door in companies for young students as part of vocational guidance.

It is necessary to involve state agencies, associations, unions and institutions to achieve a broad base of coordination. I will name a few here that would not exclude the participation of others that are considered important. Other ministries or state entities that should be involved are the ministries of trade, industry and tourism, health, and the National Planning Directorate. Representatives of employers such as the National Association of Employers of Colombia (ANDI) and the National Federation of Merchants of Colombia (FENALCO), chambers of commerce such as the Colombian Confederation of Chambers of Commerce (Confecámaras), and from the different productive sectors for which the pre-apprenticeship programs are offered. Trade unions, as well as parent and youth organizations, and NGOs should also be included in the process.

SENA is the public institution of the national order that offers free integral professional training to millions of Colombians who benefit from technical, technological and complementary programs and that could pilot the pre-apprenticeship programs, since it has more than 116 centers throughout the country. In addition, it could certainly provide resources such as classrooms and teachers. Teachers would have to be trained to plan and deliver the basic components of the pre-apprenticeship programs.

Currently, in Colombia, the National Qualifications Framework (NQF) is being developed. Since there are no pre-apprenticeship programs so far, they should be classified within the NQF in the medium run, after having collected first experiences.

Public funding for these programs is currently very limited due to the pandemic. To ensure funding, shared funding could be coordinated with some public resources and with funding from multilateral organizations or through international cooperation projects. The possibility of financing through institutions as e.g., Colciencias or SENNOVA (National System of



Research, Technological Development and Innovation of the SENA) should be verified.

In order to define the content and requirements that students who graduate from compulsory school do not currently meet, exchanges could be organized in the frame of the already existing sectoral round tables managed by SENA with the private sector, where employers participate to identify business needs in the area of VET. The duration of the courses would depend on the content defined and the national context. The course would currently have to be delivered as an e-learning course.

A communication or dissemination strategy on how to promote the pre-apprenticeship program in public should be conceived. It would also be important to plan the sensitization of the different target groups on the importance of having an induction before the start of the vocational training. To organize a scientific accompaniment, it is necessary to consult, e.g., with the Ministries of Education and Labor, with Colciencias and with the Occupational Observatory of SENA to get an overview on the possibilities, perhaps also through the monitoring of a university.

It is necessary to elaborate a holistic concept about the pre-apprenticeship programs, contents, design, necessary resources, financing, advertising campaign, etc., but also their recognition in the formal education system. The strengthening of competences, general and practical knowledge, the lack of weakness of which hinders the access of young people to education and VET and to the labor market, is fundamental to create real educational and work opportunities for young people. The development of a national strategy to ensure quality and coherence in the educational system and consolidate it through programs that respond to the needs and opportunities of the private sector such as these pre-apprenticeship programs is essential to ensure a sustainable and promising educational landscape.



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## 5.4 Potential for pre-apprenticeship programs in Ecuador (by Juan Fernando Gutiérrez Córdoba, Corporación Formados)

The experience that we have developed throughout these years working in VET at technical and technological level in the dual mode, where we have linked representatives of the private productive sectors at national level, with different Educational Institutions, with the clear objective of improving labor productivity, competitiveness, youth unemployment and promote the development of Ecuadorians by offering them an opportunity to get trained and access to quality work. We have realized that the system works only if companies are empowered to train young people and for this to happen, they must see results in the short and medium term. For this reason, the approach we have taken in the Corporación Formados<sup>41</sup> is to work closely with companies and business organizations such as chambers and industry associations. This work methodology has allowed us to identify some shortcomings and opportunities for improvement so that the results of the training generate more benefits for the students, the companies and the country.

We are sure that to improve the results we seek, working with young people before they enter the various training programs that we promote as Corporación Formados will bring many benefits in the short term. In our case, we have thought of implementing a system of Vocational Guidance in order to support and guide young people to choose a career based on their interests and personal skills. With this same process we seek

to identify the young people with the best skills for each training program and this will allow us to bring the best talent to the training companies. The Vocational Guidance program becomes fundamental as a previous selection process that will allow us to decrease the percentage of student dropouts. At the same time, we will have students with the right talent in each career and this will generate a greater sense of relevance by the students to their professional training.

On the other hand, in our case, we see that young people at the age of 18 are mostly not mature enough to adapt to work, so a pre-apprenticeship program will help correct this weakness

41 The Corporation Formados (<https://www.formados.ec>) is an umbrella organization of different sectoral private sector organizations like chambers of commerce active in the field of dual VET. Formados articulates the ecosystem of dual formation to encourage more actors in Ecuador to adopt this alternative educational methodology rooted in German quality standards. Their main goal is to transform the educational culture in Ecuador by promoting, implementing and consolidating the methodology of dual VET which ultimately will have an impact on the productivity and competitiveness of the private sector and the social and economic development of Ecuadorian youth.

of young people. In this sense, an early link to practical training will help them to know the reality of the companies and the work they would do in the company. This process will mainly serve to prepare young people for work, which will help us to ensure that young people already start their careers with knowledge of the companies, the area of work and the working environment, so that they can make an informed choice about their future occupation.

Finally, pre-apprenticeship programs can also help us to level out young people in general

terms of certain important knowledge when it comes to training, such as basic subjects like oral and written communication, basic mathematics, office automation, among others that will allow them to adapt to work more quickly and efficiently.

At Corporación Formados we are convinced that pre-apprenticeship programs can become a fundamental tool to achieve the objectives set, improve the training of students, help them to have a better link with the company and the working environment.

## 5.5 Paving the way towards pre-apprenticeships in Panama (by Maaret Cañedo Lohikoski, ILO Panama)

### *The effects of the COVID-19 pandemic*

The COVID-19 pandemic, as is the case in other countries, has hit the thriving Panamanian economy hard. Panama, with a mean GDP growth of 4.6 % over the past 5 years until 2019, is now facing a projected decrease of -6.5 % of the GDP according to ECLAC<sup>42</sup>. However, regardless of the challenges brought about by the pandemic, Panama has already been facing strong challenges in terms of employment and human capital: despite its solid macroeconomic policies, the country has been experiencing an ever growing duality between a solid sector of marketable goods and services that is highly productive and that generates a limited quantity of jobs, and a sector that is characterized by its low productivity, such as agriculture, services and manufacturing industry, that in turn gathers the majority of subsistence jobs and informal workers.

Already before the pandemic, Panama's unemployment rates had been steadily growing, from 4.2 per cent in 2012 to 7.1 per cent in 2019. The heterogeneous nature of unemployment in the country is already an indicator of the adversities that different population groups face in terms of finding decent work. Women still face higher levels of unemployment rates than men (8.8 per cent among women versus 5.8 per cent among men in 2019). Young people in the age group 15-24, in turn, registered an unemployment rate of 18.1 per cent against that of 4.5 per cent that people 25 or older face. The pandemic is expected to deepen this already

alarming gap, dwarfing even further opportunities for younger people to find employment<sup>43</sup>.

Traditionally, Panama's growth has been fuelled by a modern exportable service sector, logistics and communication facilities, business services, wholesale, and retail trade, in addition to a high-capacity international flight hub. These elements, in turn, boosted important large public infrastructure investments such as the expansion of the Canal and of the International Tocumen Airport, the development of the Panama Metro system, road expansions, among others. Before the pandemic, the slowing down of the

42 ECLAC (2020).

43 ILO (2020d).



economic activity affected the country but Panama was expected to remain strong<sup>44</sup>. However, the sharp decline in government revenue and increased expenditure in health and social protection programmes in 2020 are expected to cause significant effects on the economy. In addition, although poverty has been steadily declining, it only decreased marginally in 2019. The inequity of disparities take place within most vulnerable groups such as indigenous people and afro descendants, young rural women and people with disabilities<sup>45</sup>.

Panama's current Strategic Government Plan 2019-24 (SGP) includes five strategic pillars, namely: (1) Good Governance; (2) Rule of Law; (3) Competitive Economy that generates employment; (4) Fight against Poverty and Inequality; and (5) Education, Science, Technology and Culture. Among the actions under the third pillar, the SGP underlines the need to reduce skills gaps and ensure matching of skills demand and supply. Considering the current situation, it remains of crucial importance to ensure coordinated, gender oriented and inclusive policies based on social dialogue vis-à-vis the economic reactivation and recuperation, in addition to ensuring smooth school-to-work transition mechanisms and supporting reskilling and upskilling initiatives to ensure productive and competitive human talent.

### *Education and vocational training*

Panama still faces strong challenges in terms of education. PISA tests in 2018 ranked Panama in the position 71 out of 79. The tests indicate that only 35 per cent of evaluated students achieve basic competencies in reading skills, while 19 per cent achieved basic competencies in arithmetic skills and 29 % in sciences. While Panama achieved 365 points in the tests, OECD countries achieve an average of 489 points<sup>46</sup>. The long-term impacts of the COVID-19 pandemic

on education remain to be seen in the current setting, given that there is a generalized lack of equipment for students to participate in education or to take part in distance education coupled with a body of teachers not equipped to teach remotely.

Technical education is partly supplied by technical vocational training institutes under the Ministry of Education. The National Vocational Training Institute for Human Development (INADEH, in Spanish) offers a range of programmes and short courses covering 15 per cent of young people between 15 and 24 years of age (ILO, 2017). In terms of enrolments in technical and vocational education and training, INADEH accounts for nearly 61 per cent of total enrolments in all the technical education and vocational training programme available<sup>47</sup>.

Notwithstanding, in 2017, only 3 per cent of young people were apprentices. Despite its law on apprenticeships (Law Decree No. 4 of 7 January 1997 through which the dual skills development system is regulated), the dual training system is scantily developed, mainly as a result of a lack of social partnership agreement between key stakeholders that would enhance the acquisition of skills through on-the-job-training. The High Commission on Employment Public Policy for Technical and Vocational Occupations, established in 2014, relaunched dual training. Nevertheless, dual training has been timidly implemented, whether through special agreements or focused programmes.

It is worth considering that Panama still faces challenges in terms of skills certification processes or in promoting a competency-based approach. However, although social expectation continues to give priority to university education, perceptions on technical and vocational education and training have been evolving. Nevertheless, there is still a need for a regulatory mechanism for the recognition of learning

44 Hausmann, R., Santos, M.A. & Obach, J. (2017).

45 World Bank (2020).

46 MEDUCA, OECD (2018).

47 ILO (2020c).



obtained through work experience, especially in dynamic or growing sectors such as construction, tourism and agriculture<sup>48</sup>.

To bridge the gap between the lack of skills acquired through basic education and the transferrable skills needed to ensure successful vocational training, INADEH has ensured, occasionally, levelling, or preparatory courses for its participants, particularly when entering a dual training scheme. The duration of the preparatory courses may extend to a few weeks at a time, but kept rather short in nature considering that, for many participants, these trainings entail an additional step in already a pathway that requires additional economic arrangements and, in the case of women, ensuring childcare that may not be easily available.

A lack of a systemic approach towards quality apprenticeships, coupled with a lack of enforcement of the National Law on Apprenticeships, have propitiated subjective notions of what is an apprenticeship, this concept oftentimes gravitating towards internships of a 3-to-6-month duration. Participants, many a time, have to make considerable economic adjustments to get through a training. Therefore, fast track training agreements with the private sector have become an attractive arrangement and a practice that is the norm rather than the exception.

### *The role of civil society*

The Private Sector Board for Educational Assistance (COSPAE, in Spanish) of Panama is an entity dedicated to support human capital development efforts at the national level, providing opportunities for young people in terms of education, skills development, training and integration into the labour market. It works in collaboration with government institutions and the private sector catering with tailored training in soft skills as well as in technical skills to a young audience. COSPAE works in a variety

of initiatives involving actions for education and skills improvement with the aim of integrating young people in the labour market with competitive skills, in order to ensure retention by employers.

As an example of the above, in 2017-2018 COSPAE played an integral role in the pilot to promote dual training or quality apprenticeships carried out by the National Vocational Training Institution. In close collaboration, both entities provided an integral service aiming at introducing employers to the concept of apprenticeships in line with the main points stated in the National Apprenticeship Law and participants to an innovative opportunity to acquire skills while working.

The collaboration of INADEH and COSPAE incorporated elements such as levelling or preparatory courses provided to the participants, in addition to COSPAE acting as a broker to follow up on the integration of the participant in the dual training setting. Against this background, the pilot did manage retention of skilled workforce and was received positively by both employers and participants, underlining the importance of cross-sectoral collaboration to reach new spaces and opportunities.

Although some key elements that constitute a quality apprenticeship were missing of this collaboration, such as a tripartite approach to the acquired competencies or ensuring a financing scheme to help the participants effectively conclude their programme, initiatives such as this one corroborates an existing and tangible interest by key actors in ensuring apprenticeship schemes. This important indication of the country to advance towards more coordinated efforts to ensure a smooth school-to-work transition for many opens the way to exploring further the role of pre-apprenticeships as an opportunity to learn fundamental skills as an entry-level training that can provide a pathway to an industry of choice by the apprentice.

48 48 ILO (2020c).

### *Preparing for the future*

The already high levels of youth unemployment already exacerbated because of the economic and job crisis, make a trenchant point of the acute need of the country to ensure effective and consistent policies to address this particular group. In this sense, it is essential for Panama to explore further school-to-work transition mechanisms that are inclusive at the policy level, pre-apprenticeships and apprenticeships schemes being an essential part of this process, as well as approaching upskilling and reskilling as a strategic response to face shortcoming in the labour market.

The role of civil society, in this regard, has been crucial at the national level. However, social dialogue mechanisms need to be strengthened so policies in place can be operationalized and ensure a coordinated follow-up of technical and vocational education and training systems.

Efforts also should be inclusive in terms of leaving no one behind: Women are, many a time, excluded from education, training and lifelong learning due to family and care roles that are traditionally shouldered by them, perpetuated by a lack of childcare facilities to offload care responsibilities from their shoulders and enter education, training, or work life. Ethnic groups, rural populations, people with disabilities also face constraints that extend to technical education and vocational training and require to be addressed.

The adaptation of TVET to provide future skills for future jobs also entails a process of adaptation to which pre-apprenticeships in Panama could provide a window, allowing the participant to see what are the elements that make them more appealing to future employers and enabling a more receptive environment for apprenticeships at the national level.



## 5.6 Pre-apprenticeship in VET in Paraguay (by Natalia Beatriz Sosa Flores, Ministry of Labor, Employment and Social Security)

This article seeks to support the proposal of pre-apprenticeships understood as protected programs of labor training for adolescents within VET. This has to be understood against the background that VET has had a dynamic impact on the development of technical education in Paraguay, and that it has been evolving through temporary processes with the incorporation of models that adapt to both the labor market and the sectors to which it is directed.

Adolescents in Paraguay are a population group that can make a significant contribution to the country's development, but they are not very visible. Currently, according to the study "Paraguay Joven: Informe sobre la juventud"<sup>49</sup>, 56 % of the population is under 30 years of age. The opportunity presented, considering the demographic bonus, must be seized by properly training adolescents and youth, recognizing the important productive life cycle, and preparing human capital for both inclusive and sustainable development.

Analyzing the country's population<sup>50</sup>, in the year 2020, 7,252,672, of which 2,096,464 are children and adolescents within the basic school education, included in nine school years and taught to children from 6 to 14 years of age, with guidance support could promote the link with the private sector. Within education, adolescents should be considered to link them to job training appropriate to their age and to generate early opportunities for labor market insertion, an essential task of the State that would be linking both employment and child protection policies, considering that they can already work.

Even though Paraguayan legislation allows employment from the age of 14, it also regulates the number of hours allowed as well as certain activities that are prohibited for minors under 18, because they are considered dangerous child labor. Like the requirements for hiring adolescents and for the registration of adolescent workers, data that can be used to promote

training are recorded in the adolescent worker registry.

However, it is necessary to keep in mind among the challenges of vocational orientation that the minimum age for admission to employment means the entry into the world of work for adolescents and must be protected with constant monitors. Although vocational training, within the Paraguayan educational system, is also included in secondary education, the Ministry of Labor, Employment and Security, through the National Service for Professional Promotion and the National System for Work Training and Education, collaborates with the Ministry of Education and Science<sup>51</sup>, within the framework of non-formal education.

Given that the National Service for Professional Promotion (SNPP) was created in 1971<sup>52</sup> to provide free professional training for workers as well as the training of instructors and middle managers, empowered by the legal framework to coordinate actions and cooperate with adult literacy programs throughout the country, work training practices have been provided to minors under 18 years of age since its inception.

Similarly, the amendments have expanded the attributions, empowering the formulation of vocational training plans such as granting operating licenses to private institutions for vocational training and the inclusion of students between

51 Law No. 5749 of 2017, established in the "Carta Orgánica" of the ministry of Education and Science as consultative organ to the National Board of Education and Work.

52 Law No. 253 of 1971 and modified by laws No. 1265 of 1987, 1405/1999, 1652/2000 and 2199/2003.

49 UNFPA/Secretaría Nacional de la Juventud, Paraguay (2016).

50 Proyecciones de Población Paraguay año 2020, DGEEC.

15 and 18 years of age to apply for apprenticeship programs.

The process of building the professional qualification system was achieved in the year 2000 with the National System of Labor Education and Training (SINAFOCAL)<sup>53</sup>, designed as the guiding force for national policies on professional education and training in its various modalities, with the proposal of increasing the qualification of the beneficiaries required by the country at all occupational levels and that the supply of goods and services be competitive and appropriate to a process of modernization and economic restructuring of the State.

In accordance with international labor standards, and within the structure given by the Governing Body, a tripartite body that, together with the Technical Secretary, the departmental and municipal governments, and public and private institutions, which carry out vocational training and education activities in the country, draws up guidelines based on the dynamics of the market and the beneficiaries.

The National System of Labor Training and Qualification (SINAFOCAL) is supported with 1 % of the worker-employer contribution that was initially destined to the National Service of Professional Promotion (SNPP), which with the legal modification has remained 30 % for the National System of Labor Training and Qualification and 70 % for the National Service for Professional Promotion. Although the joint work of public institutions linked to professional technical education has been permanently established, the practice of discussion forums with actors on the specific issue is quite recent and has been installed mainly to resolve issues arising from the overlapping of legal powers.

In this regard, the Administrative Authority for Labor, through the National Service for Professional Promotion, has implemented the

Protected Labor Training Program<sup>54</sup>, within the framework of protected adolescent work and professional training, with adolescents between the ages of 15 and 17, with the objective of strengthening skills and contributing to the development of social and labor competencies, also promoting the insertion into jobs, or promoting self-employment for them.

Since the beginning of the initiative in 2015, designed for children under 18 at risk of child labor at working age, it has had a rapid acceptance as more than two thousand young people and adolescents have been registered only in the first year of implementation of the pilot, meeting the requirements for the practice and with the collaboration of the business sector, being more focused on the urban and peri-urban sector.

The program is divided into modules: initially Social Skills Development, framing contents of human relations, teamwork, leadership, self-esteem, basic mathematics and communication. Immediately after that, the graduates of the first module carry out the Development of Generic Skills, including the contents of customer service, basic notions of accounting, effective management of own expenses, social culture, public speaking and notions of quality. Since 2018, the module of Basic Management Skills Development in Commerce and Services has been incorporated, which includes, e.g., cash control knowledge or marketing techniques.

The courses are carried out within the company by tutors, allowing teenagers to receive training for two hours a day and school reinforcement in subjects that need assistance, to be subsequently evaluated for content. The training is complemented by four hours of practice per day. Generally, the beneficiaries need school support in mathematics and Spanish, given that Paraguay is bilingual and the Guarani language, the official language along with Spanish, is widely used

53 Law N° 1.652/2000.

54 Program established by Resolution MTESS No. 1600/19.

and has a different grammar, so they receive assistance from their instructors.

Currently, the program lasts 3 years, one module per year, and has instructors from the National Service for Professional Promotion who teach the training courses and accompany the process of the course of Social Skills, Generic Skills and Development of Basic Management Skills in Trade and Services. Once they have graduated, they are linked to the General Directorate of Employment for their employment through the ParaEmpleo system of MTESS<sup>55</sup>.

Consequently, the program is increasing, the amount demanded as well, and the requirements for the companies, so that it will be considered a good practice for the protection of adolescent work.

Both the competent public authority and the companies and social partners should be aware that the framework of international labor standards and national legislation on labor training links the right to work with the right to training, and that the adolescent has the right to a protected job, subject to prior professional training.

In Paraguay, considering the available data, 1 out of 10 working adolescents did not finish primary school. Finding that the labor market has a high economic participation of this age group, the orientation of programs and promotion of pre-apprenticeship programs is necessary to comply with the constitutional premise that the *State shall promote professional training through technical education, to train the human resources required for national development*<sup>56</sup>.

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55 <https://paraempleo.mtess.gov.py/es/>

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56 Art. 78, CN.

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# 6

Concluding remarks







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6

## Concluding remarks

Starting from an analytical description of the background of the current system of vocational education and training in Latin America, the aim of this publication was to elaborate on the necessity of pre-apprenticeship programs for the LAC region.

The argument made in the publication is that against the background of the current crisis, there is an excellent time to revisit the current system(s) of full-time vocational training programs with public and private providers of VET in Latin America and to see how it may be possible to improve the system and the various offers currently available in LAC.

The paper argues that this should and could be done through pre-apprenticeship programs, which would serve as the basis for quality apprenticeship programs<sup>57</sup>. In a way, pre-apprenticeships come in a package with quality apprenticeships and are the foundation for the latter.

The paper argues on three dimensions for pre-apprenticeships:

**(1) on the analytical side, where it gives the 4 components of the approach:**

- 1) general education,
- 2) theoretical vocational education,
- 3) practical experiences in one occupational field/sector,

- 4) transferable skills.

Furthermore, it argues for the logic of the approach from a sectoral focus, from an employment aspect, and from the aspect of building sustainable structures in public and private vocational training institutions in easing the transition from (vocational) schools into local, regional, sectoral, and national labor markets, and

**(2) on the planning and implementation side**, where it outlines 8 steps on how to implement pre-apprenticeships programs and lays out basic steps for carrying out pilot programs in Latin America and the Caribbean, and/or improve similar programs already in place, and thirdly

**(3) on improving structures or initial programs**, which are already in place in countries like Brazil, Colombia, Ecuador, Mexico, Panama, and Paraguay and recommending necessary changes to implement more strongly and clearly define pre-apprenticeship programs and make them go hand in hand with quality apprenticeship programs on this continent.

<sup>57</sup> As defined by ILO Cinterfor in <https://www.oitcinterfor.org/en/node/7627>.

The paper stays short of the political dimension, in which countries, based on this logic for pre-apprenticeships as a foundation for quality apprenticeships would decide to plan, implement and improve their system of vocational education and training. It would yet have to be seen how this approach could be implemented and more research during and after the COVID-19 pandemic would be needed to identify, in which sectors they could focus on first, based on skills demand and responses to structural changes in labor markets during and after COVID-19 in Latin America and the Caribbean.

It comes as no surprise that this is a paper produced by ILO Cinterfor, which as a think-tank institution for vocational education and training in Latin America, if this political demand was articulated clearly among the VET community in Latin America, would be more than ready to assist in providing more information on the composition of these programs in Latin America through online workshops and seminars and hopefully through the practical assistance with technical cooperation, assuming that at one point in 2021, we will be able to get out of the online mode at least partly back into the real life mode.

For the time being, and for what can be found in the paper, it should be said that ILO Cinterfor has defined the context for PaPs, outlined most important framework characteristics and elaborated functions and components of PaPs.

To enable readers to start working on the introduction of PaPs immediately, we additionally provided a structure on how the planning and introduction process of PaPs could look like in reality in a practical way with the help of guiding questions.

This is complemented by six examples from countries that either already have forms of pre-apprenticeships or who are potential candidates to introduce PaPs. In the latter case, the authors made some thought experiments on

how such programs could look like in their concrete contexts and why they could be useful. The country cases were key to validate the concepts we propose and to make the reality check on how useful, relevant and practicable PaPs can potentially be for the LAC region.

The country examples clearly show that there is a need for PaPs in the region and that the programs we suggest can have the power to make a difference and contribute to solving existing problems in the VET systems and the labor markets in the region in the long run. They are a means to give different groups of the youth population access to quality education or to give them a second chance. This is now in times of crisis more important than ever to avoid transforming today's young people into a lost generation in the future. Even though the current crisis limits what we can do in some ways, there is much room and opportunity for working on the future now and innovative concepts probably even have a better chance to be implemented. A stronger orientation towards the labor market will be key for the success of the VET systems and economies in the future.

In our concluding remarks we would once again like to state two important general points that we would like to emphasize and consider for the implementation of PaPs.

First, there is no one-size-fits-all approach to pre-apprenticeship programs. They need to be tailored to specific country or regional needs and adapted to country realities. Therefore, we argued for very flexible approaches, but at the same time provided some minimum elements and framework characteristics to secure the quality of the PaPs to ensure offering a valuable and attractive option for young people, but also to gain the interest of employers to contribute in one way or the other to the relevancy of those programs.

Secondly, and connected to the first point, under the assumption that countries start to im-

plement PaPs, it is important to avoid an uncontrolled and unregulated growth of PaPs which requires governance and coordination by a central unit. This is also important for enabling all stakeholders to keep the overview and to make it an attractive, relevant, and high-quality educational option embedded in the overall VET and education system.

In the ideal case, governments should feel responsible for establishing PaPs nationwide and link them very strongly to already existing quality apprenticeship programs or yet to be developed ones. This can be that pre-apprenticeship programs follow and are somewhat a by-product of quality apprenticeship programs. It can also be the other way round, that pre-apprenticeship programs will emerge first and will then lead into sector or occupation-specific quality apprenticeship programs.

For different reasons, this might not always and everywhere be possible. A pragmatic approach that National Vocational Training Institutions (NVTIs) in the region could take (in collaboration with state entities) is to think about different strategies to work much more closely with the private sector to make their training offer more relevant and to expand the pool of qualified candidates for companies that offer or could offer quality apprenticeships.

NVTIs need to think about what they can contribute to PaPs and could be the driver behind implementing them. This will not only serve young people, but also economic growth in the country and region and at the end of the day it will also improve the working conditions of future workers and enable them to enter the labor markets with higher skills sets and be better equipped for more sophisticated skills requirements and merit higher salaries and wages.

With all these concluding remarks, we come to the point where we hand over the responsibilities of self-learning to you, as a reader of this document!

Now, it is your turn: The steps to take in Chapter 5.1, the country examples in Subchapters 5.2 to 5.6, but also the framework characteristics to consider in Chapter 2 and the basic elements in Chapter 3.2 provide very tangible starting points for going from theory to planning the implementation.

Let us start towards a better future together now and introduce pre-apprenticeship programs as part of a package into the portfolio of high-quality vocational training programs in Latin America and the Caribbean!







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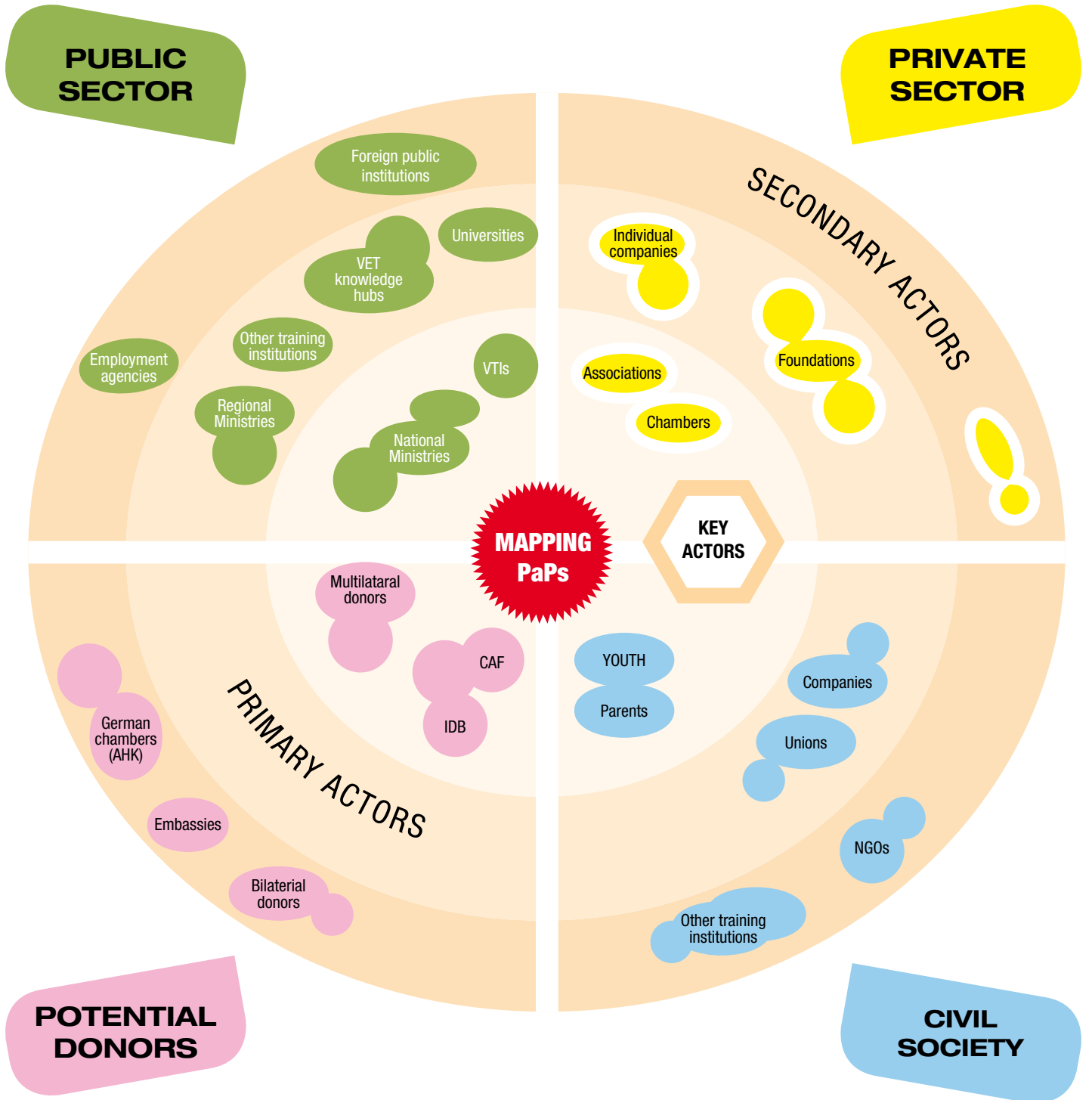
# Appendix





# Appendix 1

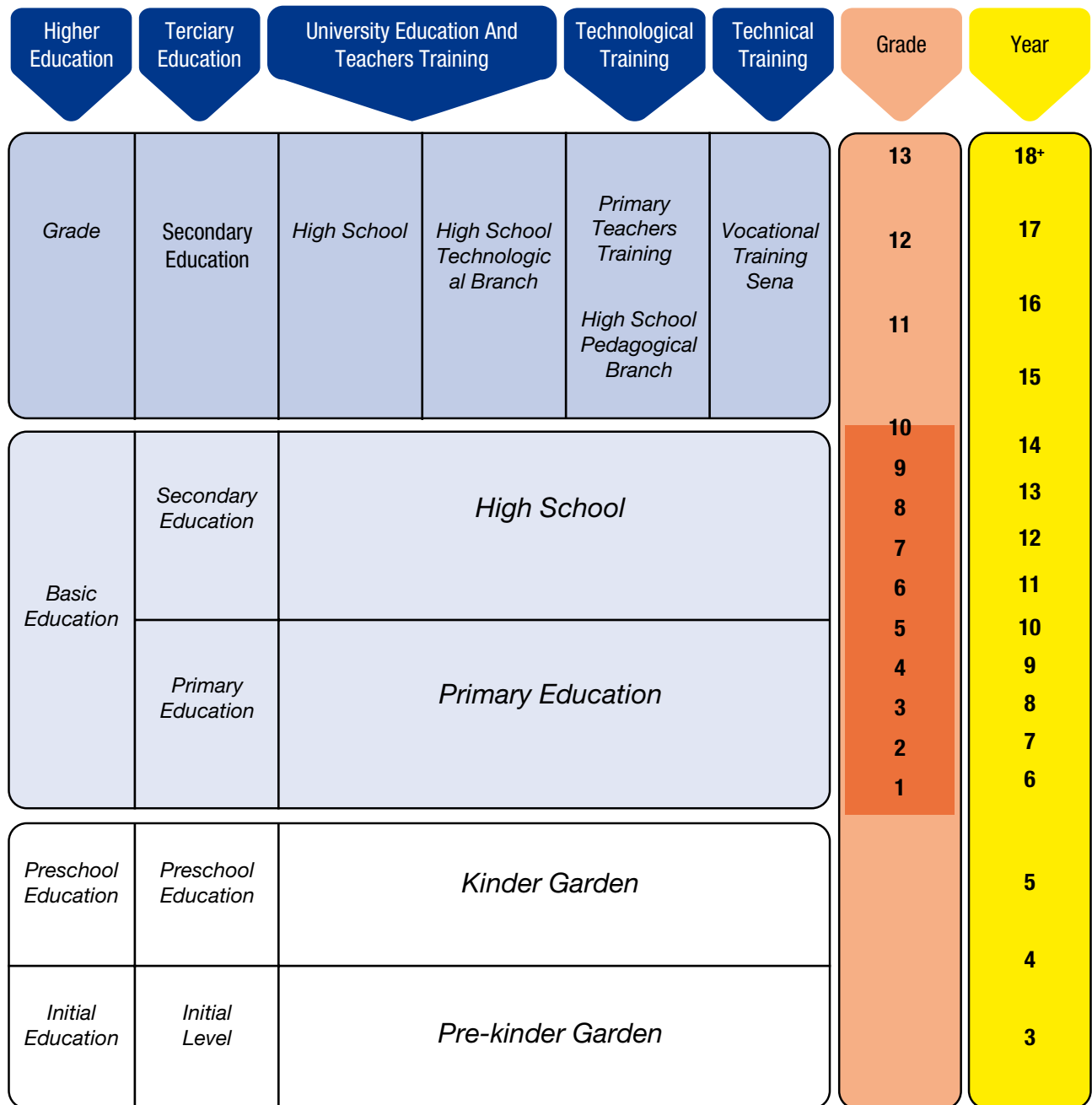
Figure A1: Example for Institutional Mapping for the establishment of PaPs



Source: own illustration



Figure A2: Synthesis of compulsory education system in Colombia



Source: Own illustration (Peters, Bauer 2018), based on Mora, 2015, p. 172.







The whole world is experiencing a health and economic crisis. The outbreak of the COVID-19 pandemic hit the Latin American and Caribbean region hardest, deepening existing problems.

Apart from getting the virus under control, it will be of utmost importance to reboot the economies to enable people to generate income and leave the temporary poverty caused by the current crisis.

Among those most affected by this adverse scenario are especially young people, as educational institutions were closed for long periods and distance education was not possible everywhere.

In this context, the value of pre-apprenticeship programmes (PPPs) as a powerful tool to promote quality learning becomes more important. Pre-apprenticeships programmes have a narrow focus on bridging the gap between compulsory education and apprenticeships, in case compulsory education did not prepare adequately. Consequently, PaPs do not aim at a direct labor market entry. However, depending on the target group, may also have the function to make up deficits caused by having dropped out of school.



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