PACIFIC ALLIANCE EFE PROGRAM

Technical and Vocational Education and Training Intersectoral Forum: Best Practices and Policies from the Pacific Alliance and Canada

SUSTAINABLE DEVELOPMENT AND SKILLS FOR EMPLOYMENT IN THE EXTRACTIVE SECTOR OF THE PACIFIC ALLIANCE

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Foreword

THIRD THEMATIC FORUM OF THE EPE-AP PROGRAM "INTERSECTORAL FORUM ON TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING: BEST PRACTICES AND POLICIES IN THE PACIFIC ALLIANCE AND CANADA"

Technical and Vocational Education and Training (TVET) plays a key role in achieving the goals of the 2030 Agenda, as part of the Sustainable Development Goals (SDGs) to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (SDG 4). One of the focus areas of the Pacific Alliance's Strategic Vision for the Year 2030 geared toward making the Pacific Alliance "a better citizen" is to be a leader in vocational, higher technological, and dual education.

As a result, the education level of its citizens will always be a major factor when addressing the new market opening. We live in the information and communication age, where the global health crisis brought on by COVID-19 has accelerated our approach to training processes and the world of work. This should motivate us to be more creative in achieving greater competitiveness in the production of goods and services. The goal is for us to tackle not only health consequences, but also the economic and social consequences that will be with us over the next few years, in a way that allows us to improve people's lives, eradicate poverty, and take care of the planet.

In the face of this health and economic crisis, each country has responded by trying to maintain its training programs, while also considering new scenarios and most importantly, the necessary skills to ensure quality training. Add to this the demand for skills from a productive sector that is also pressed for quick solutions in order to relaunch. To do so, it needs workers who can react to those changes.

This was the background to the Pacific Alliance's Education for Employment (PA-EFE) Program's "Intersectoral Forum on Technical and Vocational Education and Training: Best Practices and Policies in the Pacific Alliance and Canada." The Pacific Alliance created the forum as a space for regional dialog with the goal of exchanging best practices and innovative policies and guidelines and sharing experiences among the four PA countries and Canada. This virtual edition of the forum has served to strengthen the capacities of national and regional players, and to draw in the productive sector, which is also a stakeholder in TVET's priority challenges. The forum was centered around three major topics: Inter-Level Articulation, Labor Market Analysis, and Learning Evaluation. It gave us the opportunity to review experiences that will inject new life into TVET in a post-COVID time that will require new skills and new programs to retrain, reskill, and reintegrate workers into the new activities, as well as focus areas that ensure inclusion and training of people as the foundation for development.

Provided by the Education Technical Group of the Pacific Alliance
Lima, December 15, 2020

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Initialisms and Acronyms

CCM	Consejo de Competencias Minero [Mining Skills Council] (Chile)
CICan	Colleges and Institutes Canada
CPC	Confederación de la Producción y del Comercio [Confederation of Production and Commerce] (Chile)
CUOC	Clasificación Única de Ocupaciones para Colombia [Unique Classification of Occupations for Colombia]
EFE	Education for Employment
ILO	International Labour Organization
ISCED	International Standard Classification of Education
LMI	Labour Market Information Program (MiHR-Canada)
MCTP	Marco de Cualificaciones Técnico Profesional [Technical Vocational Qualifications Framework] (Chile)
MiHR	Mining Industry Human Resources Council (Canada)
OECD	Organization for Economic Cooperation and Development
OSCL	Organismos Sectoriales de Competencias Laborales [Sectoral Agencies for Job Skills] (Chile)
PA	Pacific Alliance
PLAR	Prior Learning Assessment and Recognition
REMCAP	Qualifications Frameworks Specialists Network of the Pacific Alliance
RPL	Recognition of Prior Learning
SENA	Servicio Nacional de Aprendizaje [National Training Service] (Colombia)
SENCE	Servicio Nacional de Capacitación y Empleo de Chile [National Training and Employment Service of Chile] (Chile)
SERCOTEC	Servicio de Cooperación Técnica [Technical Cooperation Service] (Chile)
SNC	Sistema Nacional de Cualificaciones [National Qualifications System] (Colombia)
STEM	Science, technology, engineering, and mathematics study areas
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific, and Cultural Organization

Technical and Vocational Education and Training Intersectoral Forum

Practices and Policies from the Pacific Alliance and Canada

Introduction
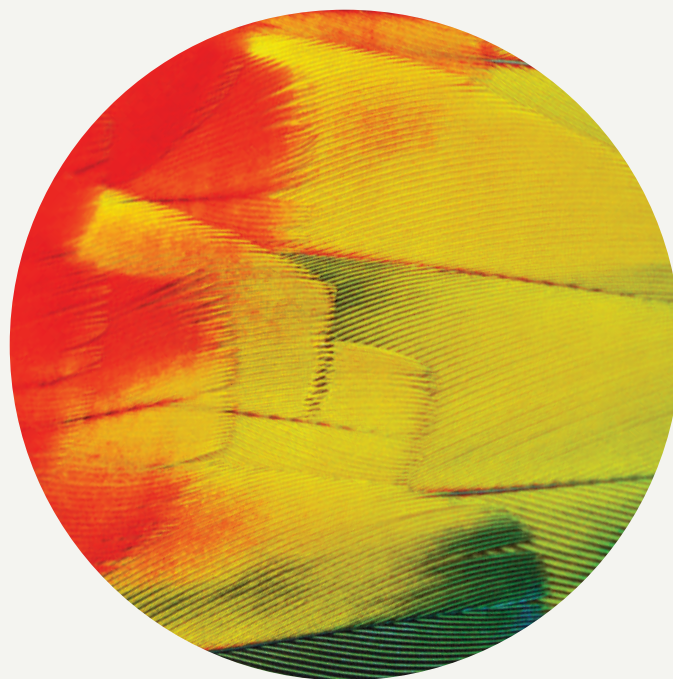
"**Networking, sharing and joining forces** are the key words of this forum, and they sum up the work of UNEVOC"

- Soo-Hyang Choi, Director of the International TVET Centre for UNESCO-UNEVOC.

A total of **3,368 people (**primarily from the 4 countries of the Pacific Alliance and Canada, as well from other countries) participated in the forum.

Profile of the participants

Type of stakeholder

Teachers	Civil Servants	Directors	Student	Employees	Other
1246	650	509	286	123	461

Area of work

- Education — 2931
- Labor — 103
- Internal Relations — 95
- Environment — 88
- Gender Equality — 64
- Mining/ Extractive industry — 51
- Communication — 35
- Other — 135
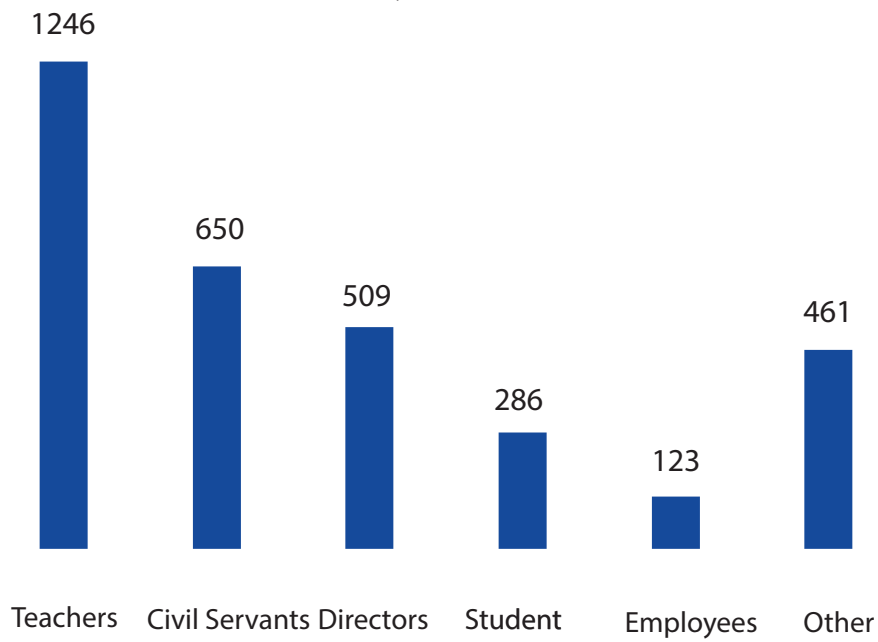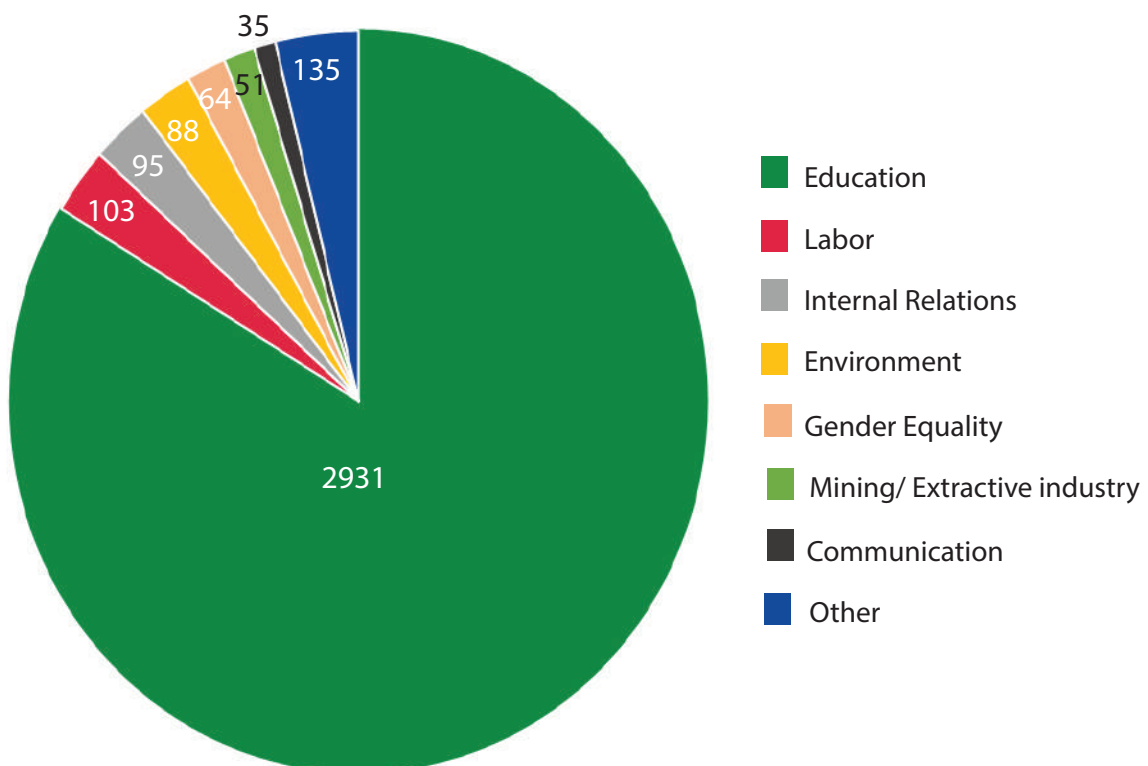
The Pacific Alliance Sustainable Development and Skills for Employment in the Extractive Sector Program, sponsored by the Government of Canada through World Affairs Canada, aims to increase socio-economic opportunities for men and women in a sustainable and inclusive extractive sector in the Pacific Alliance (PA) countries.

The Program recognizes two main development pillars. The first pillar concerns the establishment of institutional partnerships among the higher education institutions of CICan and the technical education institutions in the four PA countries. The main goal of these partnerships is to improve the quality and diversification of training programs. The final beneficiaries of institutional support are young people, men and women of the regional communities and training centres, and Indigenous communities where the extractive sector companies operate. These groups need to develop the skills that the labour market is seeking and will have access to training processes in the technical training institutions participating in the Program.

The second pillar of the Program is aimed at supporting good governance of the extractive sector through the establishment of opportunities to exchange experiences and best practices (legal, environmental, socio-economic, productive, ethno-community, gender equality, etc.) between representatives of the public and private sectors and civil society associated with the extractive sector in the four countries, by strengthening regional dialog and sharing best practices.

Therefore, one of the Program outcomes is the development of a series of five thematic forums, with two of their goals being opening spaces for regional dialog among the countries of the Pacific Alliance and Canada and strengthening the capacity of national and regional stakeholders to cope with the priority challenges of the extractive sector, such as gender equality, technical training, environmental sustainability, and articulation of training supply with labour market demand.

The first two thematic forums of the Program held in 2019, *Forum on Gender Equality in the Extractive Sector, and Forum on Indigenous Communities, Education for Employment, and Relations with the Extractive Sector,* were a success. These gatherings identified challenges and best practices in government policies and produced joint conclusions and recommendations on possible actions to take on these specific topics. All results were then summarized in the respective forum reports.

In this fourth year of Program implementation, CICan organized the third Program forum dedicated to best practices, policies, priorities, and challenges in Technical and Vocational Education and Training (TVET) in the Pacific Alliance and Canada. This document is the report from this meeting. It organizes the information and knowledge shared, in the hope that the Pacific Alliance countries will use it to continue strengthening their training systems and to further pursue regional dialog and connections.

An Organizing Committee was created in March 2020 to plan this forum. It was composed of representatives from Pacific Alliance ministries of education (members of the PA Education Technical Group and the relevant technical areas associated with higher education in technology), one representative from the Colombian ministry of Labour, and one representative from the Chilean national coordinating office. The four countries and the CICan team were represented in this committee. All the work on design, approach, methodology, and panelist selection was done jointly and collaboratively to ensure alignment and respond directly to the current and future priorities of the Pacific Alliance in the area of TVET.

The aim of the forum was to share best practices and innovative policies and guidelines, as well as knowledge and experiences, among the four PA countries and Canada, in order to create a dynamic and enriching regional dialog among the participating delegations. Another goal of the forum was to enhance the capacities of national and regional stakeholders to support the design and implementation of policies and best practices to face priority challenges related to TVET when developing skilled human resources for the extractive sector.

Due to the current international climate resulting from the COVID-19 pandemic, the forum took place online. This allowed for the participation of 3.368 people at the forum, a significant number that would not have been reached with an in-person format.

A total of four, day-long sessions were organized, on October 15, 22, and 29, and November 5, 2020. The first three days offered presentations from stakeholders in the training and productive system of the four PA countries: Chile, Colombia, Mexico, and Peru. There were also panels from Canada and Finland, which was a guest country. The forum also had talks from representatives of the ILO/Cinterfor and UNESCO-UNEVOC.

The first day of the forum covered inter-level articulation. More specifically, sessions dealt with qualification frameworks, job skills certification, transferability and recognition of prior learning, and **regional articulation**. The second day was devoted to making connections between **TVET and the productive sector**. In particular, groups conducted a diagnosis of the labour force, articulation mechanisms between the training sector and the world of work, enhancing TVET, and the use of technologies and simulators in the training process. The third day focused on **quality assurance**. Specifically, presentations discussed learning assessment and practice methods, such as dual education and distance education. Lastly, panelists and other key TVET players formed working groups by theme and by country on the fourth day. They organized into six thematic groups based on the key themes listed above, and one group for each of the four PA countries. At the end of each session, one representative from each group presented the challenges and recommendations that arose from their joint discussions.

The following report organizes the Forum results as follows: The three main chapters represent each of the first three days. This means that the events of the first day are reported in the first chapter, the events of the second day are reported in the second chapter, and the events of the third day are reported in the third chapter. Each chapter is composed of two subchapters that refer to the sections for each day, according to the agenda initially created by the Forum. Each subchapter is in turn composed of a synthesis of each presentation by the panelists in their respective sections.

For ease of access to useful information for Pacific Alliance countries, we include links to Web pages or official documents in PDF format in the body of the text whenever there is online information regarding items mentioned by the panelists.[1] Lastly, the recommendations of the panelists and other participants during the fourth day of the Forum are expressed within each subchapter. To facilitate distribution of the results from the third forum of the Sustainable Development and Skills Program for Employment in the Extractive Sector of the Pacific Alliance and Canada, we have placed links in the appendixes to access the video recordings of panel presentations and links to access the PowerPoint documents that were used.

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[1] Linked texts [mostly in Spanish] are in blue font, bold and underlined.

Technical and Vocational Education and Training Intersectoral Forum

Practices and Policies from the Pacific Alliance and Canada

Day 1: Inter-Level Articulation

Qualification Frameworks, Labour Competency
Certifications, Transferability, Prior Learning Recognition and
Regional Articulation

The first webinar focused Inter-Level Articulation and was attended by **781 participants**, mainly from the fields of **education**, labour, environment, international relations and the extractive sector.

According to the post-forum survey, one of the most relevant themes of this first webinar was that of the **Certification of Professional** Competencies, especially for those working in this field.

| Certificación de competencias laborales | Transferability and Prior Learning Recognition | Qualification Frameworks | Regional Articulation |
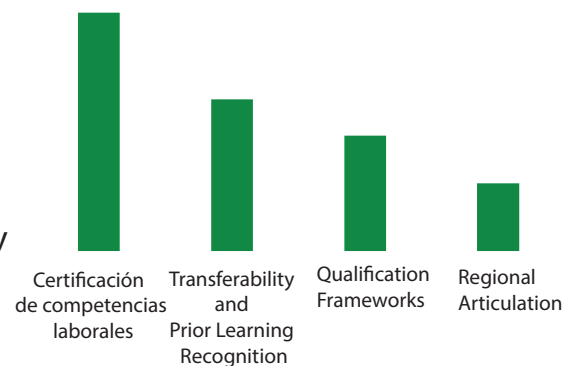
Data source: Post forum survey, 2019

64%

According to the post-forum survey, **64% of participants** think it is feasible to i**ncorporate best practices** shared during the forum into their work.

During the first day, participants discussed qualification frameworks, the role of these instruments in regional articulation, skills certification, and transferability. ,

The forum began with opening remarks by the **President and CEO of CICan, Denise Amyot**[2], who highlighted the presence of experts and participants from Canada, Chile, Colombia, Mexico and Peru as well as international guests. Denise Amyot also recognized the great efforts made in the organization of this event and the excellent collaboration offered by the PA partners that has allowed a successful implementation of the Program since its inception.

The Deputy Minister for International Economic Relations of the Chilean Ministry of Foreign Affairs, Rodrigo Yáñez Benítez[3], gave the welcome speech at the start of the meeting. The deputy minister stressed that "the main resource of our countries are its people, particularly the students in vocational technical training." He indicated that education occupies a strategic place in the Pacific Alliance, because one of its main foundational goals is to "drive greater growth, development, and competitiveness of the economies of its members, in order to achieve greater wellbeing, overcome socio-economic inequality, and foster social inclusion of its inhabitants." Hence, the Vision 2030 is to achieve a **more integrated, citizen-based, global, and connected Pacific Alliance.**

In the same vein, **Cinterfor specialist Fernando Vargas**[4] shared his reflections at the end of the day on the subtopics discussed. First, he outlined some of the features of what a qualification system should look like in the field of technical and vocational training and education. Specifically, it should have three-party management (State, workers, and companies), with the participation of sectoral agencies. These agencies should fulfill three key functions: detect demand, provide training, and certify and assess skills. Vargas explained that "This is a governing arrangement within the system where qualification frameworks operate. These are tools that help determine how qualifications are defined, how they are to be delivered, how they are evaluated, and how they are managed." According to Cinterfor, there are four key stages in a qualification system: its identification in the workplace, its standardization in an occupational profile in a qualification framework, curriculum design and dispensing of training, and certification assessment. In conclusion, Fernando Vargas announced the upcoming publication of **Marco Regional de Cualificaciones [Regional Qualifications Framework]** developed as part of Cinterfor's collaborative efforts.

Qualification Frameworks and Regional Articulation

The following section summarizes the presentations dealing with qualification frameworks and how they advance regional articulation, from both a training and a labour perspective. The panelists:

- **Mónica Brevis Saldaño**: Head of Division, Technical-Professional Education of the Ministry of Education (MINEDUC), Chile

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[2] Click here for the recording.
[3] Click here for the recording.
[4] Click here for the recording

- **Jahir Aguilar Fajardo**: Member of the National Qualification Framework Team, Directorate for the Promotion of Higher Education, Ministry of National Education), Colombia
- **Liliana González Mier**: Director of Incorporation and Revalidation of the General Directorate of Accreditation, Incorporation and Revalidation, Ministry of Public Education, Mexico
- **Paola Ibáñez Cantillana**: Member of the Vocational and Technical Higher Education Division of the Ministry of Education (MINEDUC), Chile

The best practices and policies presented during the panel are described below.

Qualifications Framework in Chile

Mónica Brevis Saldaño[5], **Head of Division, Technical-Professional Education of the Ministry of Education (MINEDUC), Chile**, presented the **Marco de Cualificaciones Técnico Profesional du Chili** (MCTP) **[Technical Vocational Qualifications Framework in Chile],** in operation since its publication in 2018.

The panelist explained that MCTP's main purpose is to facilitate the development of training and career paths for people. Specifically, they achieve this first by articulation between training levels: from technical vocational secondary education to technical vocational higher education. Second, there is articulation between formal education, informal or occupational education, and competency certification. Third, training and employment are articulated. The MCTP is a model, not a requirement, for private vocational and technical institutions of higher education[6] and contains five levels of complexity. The last level is equal to ISCED 6.

One best practice that Mónica Brevis described involved ChileValora, the agency in charge of certifying job skills. It has an agreement with technical vocational higher training institutions[7] for recognizing certifications and making it easier for people to join vocational and technical higher education programs.

The MCTP is also a tool that seeks to build bridges between the needs of workplace and the training supply, particularly as regards its relevance. To do so, it works on populating the sectors of the MCTP, which is carried out by the Competency Councils[8] The goal is to gradually populate all sectors of the economy, thereby helping to improve the quality and relevance of TVET, create greater permeability in the training system, and facilitate retraining—a fundamental step in these times marked by fast-paced change.

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[5] Click here to get a copy of the presentation and here to access the recording.
[6] Educational institutions in Chile that have been licensed (by the National Education Council) may define their rules and standards independently.
[7] In fact, ChileValora has agreements with State Technical Training Centers.
[8] The first council created in Chile was the Mining Skills Council. The Production and Trade Corporation (Spanish initials, CPC) recently created the Maintenance Skills Council 4.0, which populated multiple sectors in the cross-section of maintenance. This section includes the energy, mining, construction, and agricultural sectors. The sectors of logistics, tourism, and information and communication technologies have also been populated. Lastly, the Ministry of Energy is working on populating the energy sector, while the Chilean Construction Chamber is populating the construction sector.

Qualifications Framework in Colombia

Jahir Aguilar Fajardo[9], **from the Colombian Ministry of Education**, described the design of the qualifications system in his country, and the progress made to date in implementing it.

As the speaker explained it, Colombia has been working on the "structuring and implementation of the National Qualifications Framework" since 2010. The current government created the **Sistema Nacional de Cualificaciones** (SNC) [**National Qualifications System**], as a set of institutional instruments, policies, and arrangements that will favour recognition of people's lifelong learning. The system contains six components: (1) the National Qualifications Framework, (2) the Educational and Training Mobility Program, (3) the Quality Assurance Subsystem, (4) the SNC Information Platform, (5) the Skills Standardization Subsystem, and (6) the Skills Assessment and Certification Subsystem. The first two components are headed by the Ministry of Education, and the other four components are headed by the Ministry of Labour.

The speaker discussed the progress made in building Colombia's National Qualifications Framework, which has six basic features: it is a national effort, it covers all sectors of the economy, it links all levels of education and training, it is a reference point for designing educational offerings, it includes all occupations, and it offers eight levels of qualification.

Colombia has made advances in designing a **national qualifications catalog**, which organizes the qualifications that meet the quality criteria defined. Eight catalogs have been designed to date, which contain 175 qualifications in 11 sectors: electricity and electronics, transportation and logistics, agriculture and livestock, aeronautics, mining, culture, information and communication technologies, education, and health.

According to the presenter, the Qualifications Framework seeks two complementary goals: First, to reduce the gaps in people's skills by continuous improvement of the relevance of training offerings. Second, the Qualifications Framework also seeks to favour people's educational and labour mobility. It does so by articulating existing levels and types of training and doing a better job of connecting education and training with the workplace. Thus, the framework should facilitate educational, training, and labour progression, making articulation possible among the various paths to qualification.

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[9] Click here to get a copy of the presentation and here to access the recording.

Qualifications Framework in Mexico

Liliana González Mier[10], Director of Incorporation and Revalidation of the General Directorate of Accreditation, Incorporation and Revalidation of the Mexican Ministry of Public Education, discussed the work done to date in developing a Qualifications Framework for Mexico, as well as the progress made in recognition of foreign certificates.

Mexico currently does not have a Qualifications Framework; however, on September 15 of this year, the Ministry of Public Education issued a regulation granting the Division of Accreditation, Integration, and Retraining full authorization to develop and propose to the head of the Ministry of Education the development of a National Qualifications Framework for Mexico.

Progress has been made in connection with the basic elements of designing this tool. First, a definition was agreed on, which is similar to the definition from the Organization for Economic Cooperation and Development (OECD): "Instrument for the development and recognition of lifelong skills, knowledge, and competencies." Its goal is to "facilitate access to continuous learning, helping to improve quality, accessibility, and connection between education types and levels." The group agreed to nine levels, including creation of a transferable credits system.

In her talk, Liliana González Mier underscored the **importance of national qualification frameworks for regional articulation**, especially in the Pacific Alliance countries. One of the positive effects identified in building this instrument is that it helps international mobility. Mexico has made significant improvements in this area so far. For example, "Translation is open, the 'apostille' is no longer required, and when comparing programs of study, a 70%-80% [curriculum compatibility] is no longer required. Now it is 40%." Despite the above, a qualifications framework must be established to move forward in regional articulation and to optimize the foreign certificate recognition process.

Regional Articulation

Paola Ibáñez Cantillana[11], from the Vocational and Technical Higher Education Division of the Chilean Ministry of Education (MINEDUC), gave a presentation on advances in educational and labour mobility in Pacific Alliance countries due to the qualifications frameworks.

According to the panelist, Pacific Alliance countries are seeking to make progress in establishing training standards, occupational profiles, and certifications based on common skills, or those that are mutually recognized, in order to "improve the labour mobility of people [between countries] and tackle shortcomings in adaptation throughout the region." Institutions such as the United Nations Educational, Scientific, and Cultural Organization (UNESCO), specifically in the 2030 Agenda, the International Labour Organization (ILO), and the OECD have recommended the use of qualifications frameworks as tools that provide mobility within countries and between countries.

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[10] Click here to get a copy of the presentation and here to access the recording.
[11] Click here to get a copy of the presentation and here to access the recording.

This cross-sectional interest can be seen in the **2018 Puerto Vallarta** statement, which created the **Qualifications Frameworks Specialists Network of the Pacific Alliance (Spanish initials, REMCAP)**, which developed a working plan to generate synergies among the qualifications frameworks of the four countries, specifically by setting up a Regional Qualifications Framework. In connection with this action, Canada began providing technical support in 2019 through the Pacific Alliance Education for Employment Program. Through this program, Canada supports REMCAP in order to "develop training equivalency mechanisms by sharing National Qualifications Frameworks, creating recognition systems, and applying best practices for guaranteeing quality in TVET."

Recommendations

Below is a summary of the panelists' recommendations, specifically concerning qualifications frameworks and regional articulation.

- First, they recommend making advances in the **institutional environment and management of qualification systems** in the respective countries. Specifically, they recommend creating an organization in charge of the operation and sustainability of the national qualifications framework. This means defining functions, identifying participants, outlining responsibilities and participation mechanisms in the various processes, among other tasks.

- A second recommendation is to work on **correspondence between qualification levels of the appropriate national frameworks and training offerings**, at both the formal and informal education levels and in certification.

- A third recommendation is to establish a **common understanding for all stakeholders involved of the terminology and concepts that are basic to qualifications frameworks**. Here, the purpose is to facilitate their gradual incorporation in the education sector and in the labour market. On the latter point, a panelist also pointed out that "it has been a great challenge to call on stakeholders in the productive world to understand this tool, which is highly technical. How to explain the uses and benefits of the MCTP. Webinars and other organizations have been a great help with that, including this organization."

- A fourth recommendation is to have a **regional qualifications framework** where the various countries can work on and improve mobility in the Pacific Alliance.

- Lastly, it was recommended to **properly link the qualifications frameworks and the certification systems for work skills**. This means achieving collaboration and a definition of classifications to accelerate and scale these qualifications.

Certification and Transferability

The following section reviews the presentations on job skills certification systems and transferability. The panelists:

- **Luis Hiraoka Mejía**: Director General of Standardisation, Training for Employment, and Certification of Labour Skills at the Ministry of Labour and Employment Promotion, Peru.
- **Pabla Ávila**: Head of Centers and Evaluators, and Technical Vocational Articulation at ChileValora, Chile.
- **Mario Rincón Triana**: Coordinator of the Group for Evaluation and Certification of Labour Skills, National System for Work Training Directorate (Spanish initials, SENA), Colombia.
- **Gabriela Kongkham-Fernandez**: Pathways Coordinator at the Centre for Academic Excellence, Fanshawe College, Canada.

The best practices and policies presented during the panel are described below.

Certifying job skills in Peru

Luis Hiraoka Mejía[12], **from the Ministry of Labour and Employment Promotion**, spoke on the job skills certification system in Peru, specifically about the Trabaja Perú Program.

According to the speaker, 63% of workers in Peru have a secondary school education or lower. Therefore, Job Skills Certification is particularly relevant.[13]

Luis Hiraoka Mejía then referred to the **[Programa Trabaja Perú](#)**,[14] [Peru Works Program] which has generated over half-a-million jobs since it began. The program focuses on female employment, which led to an increase in the number of women in the construction sector. On this point, there is an emphasis on **the need to break away from gender prejudices and stereotypes in certain occupations**, such as the masculinization of the construction field.

On a final note, Peru does not have a qualifications framework, but under the Ministry of Labour, the so-called "paths to employability" have been designed. Their goal is to "strengthen and develop the skills to improve employability, based on the premise that a person can acquire skills as a result of lifelong training and work."

Luis Hiraoka Mejía spoke generally about the importance of promoting the certifications system, within the public sector and within companies, due to its positive impact on employability.

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[12]Click [here](#) to get a copy of the presentation and [here](#) to access the recording.

[13]The certification system in Peru currently has 33,896 certified people, 46 certification centres, 736 assessors, 17 productive sectors, and 147 occupational profiles, which are developed according to a three-part logic.

[14] A program that finances civil works where previously unemployed people aged 18-64 can work. Jobs will also be created using the same model in cleaning, maintenance, and conditioning. For this year, the aim is to create 220,000 jobs through 446 construction projects and 4,771 immediate intervention activities.

Pabla Ávila[15], Head of **ChileValora** Centers and Evaluators, introduced Chile's National Job Skills Certification System,[16] created by law in 2008.

The panelist discussed the elements that are considered to be key to the Chilean system, two of which are its three-part structure[17] and its connection with the formal and informal education system. **[ChileValora](#)**'s stated goals are as follows: "Formally recognize people's skills, regardless of how they acquired them; promote ongoing learning opportunities for people and recognize and assess them; and make the information generated available to job training and formal education systems."

The system is also noted for its influence in the labour market. The speaker said there are two mechanisms by which certification is required in the labour market. The first is direct certification or licensing, where the person must be certified to perform an occupation. This applies, for example, in the fields of electricity, gas, and recycling. In the second mechanism, a certain percentage of workers in the company must be certified.

According to Pabla Ávila, **"One of the strategies in the past few years has been to link the certification system to technical vocational education and training."** One of the main action areas has been ChileValora's participation in the design and management of the Technical Vocational Qualifications Framework. ChileValora has also established direct links with higher education institutions, aligning itself via the Qualifications Framework. In concrete terms, the idea is to have people with a certificate be able to approach a training institution, and the latter will recognize the certificate, thereby reducing their academic load and/or the length of the degree program.

Transferability in Colombia

Mario Rincón[18], Coordinator of the Group for Evaluation and Certification of Labour Skills of the **[Servicio Nacional de Aprendizaje](#)** (SENA) (National System for Work Training Directorate), explained the operation of Colombia's Job Skills Certification and Assessment service, which is part of SENA.

He stated that certification is social recognition of a person who demonstrates skills in a specific productive activity.

The focus is on education and job mobility, in addition to closing skills gaps.

The panelist underscored the integration of assessment and certification processes with training processes. The certification process enables the objective identification of a person's skills gaps, thereby establishing training modules so the person can acquire the necessary skills to acquire a qualification. Another tie between the certification system and

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[15] Click here to get a copy of the presentation and here to access the recording.
[16] The system consists of three parts. First are the Sectoral Agencies for Job Skills (OSCL in Spanish). These detect gaps, draw up profiles, and construct training and labour paths. Next are the Assessment and Certification Centers, which, as their name indicates, assess people's skills and certify them when they meet standards. Lastly is ChileValora, the unit that coordinates the certification system. The certification system is currently working in 21 productive sectors and has 994 occupational profiles and 54 OSCLs.
[17] The system consists of a three-party board (State, companies, and workers), with equal representation and decision-making power. It operates through an Executive Office of the Secretary.
[18] Click here to get a copy of the presentation and here to access the recording.

the training system is the approval of job skills certification in training programs. In other words, if a person's certifications are part of a training program, they get preference in entering those programs and receive automatic approval so that they train only in the skills they are lacking. This is a way to optimize time and resources.

Recently, the current government looked into **recognition of prior learning (RPL) as the third path to qualification.** This is a major achievement, because it recognizes that RPL skills "can be at the same level as qualifications obtained through formal education. We are in the same situation as the other qualification channels."

There is a job line with the goal of creating national or international alliances to create joint certifications. The first project was developed jointly with Microsoft, where the person received a SENA certificate and another certificate from Microsoft.

Certification plays a key role in the processes of integrating the migrant population. Colombia has the second-largest migrant population in the world after Turkey. Consequently, approval of job skills certification was established within the Pacific Alliance. SENA also works on knowledge transfer projects with Guatemala, Peru, the Dominican Republic, and Uruguay.

Transferability at Fanshawe College, Canada

Gabriela Kongkham-Fernandez[19], representative of the Fanshawe College training institute, explained how the **Prior Learning Assessment and Recognition (PLAR)** program was implemented.

PLAR's[20] goal is to connect with potential students who do not come directly from high school and who are already in the labour market. The program includes recognition of learning acquired outside the post-secondary education system, for example, the labour market, in military service, or in cultural transmission of Indigenous knowledge. During PLAR, the person being assessed must demonstrate, in some cases, that he or she has the skills.

One of the initiatives mentioned was the creation of an information system for decision-making. A system was designed that allows for systematizing data and providing access to various indicators of interest, such as the success rate of applicants. Within this same framework, two tools were created to ensure access to information for employees and students. This was a freely accessible online platform where students can access "learning objectives" and everything related to PLAR for each subject. A student guide was also written that provides all the information for a student to be able to decide whether or not to apply for PLAR for a course.

Recommendations

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[19] Click here to get a copy of the presentation and here to access the recording.

[20] To provide context, the speaker explained that in Canada, the higher training system is decentralized. Each province has relative autonomy. In Ontario, all public technical and vocational training schools must offer PLAR to their candidates. The provincial government provides guidelines on best practices for this. It also performs provincial audits that include proper fulfillment of PLAR. At Fanshawe College, 67% of students do not come from secondary school but are "mature" students who have labour experience.

Below is a summary of the panelists' recommendations, specifically concerning qualifications frameworks and regional articulation:

- First, various panelists referenced the importance of **key actors participating in certification and transferability**. For example, Pabla Ávila, representing ChileValor on the panel, made two recommendations based on the experience of Chile's job skills certification system in its 10 years of existence. According to the panelist, the system was gradually installed in two major stages; each stage had different objectives. First, the system was created with the participation of employers, workers, and representatives from at least three ministries. Within this context, **the methodology of social dialog was a founding principle of the system, which generated trust and legitimacy—critical aspects for sustainability.** In stage two, the job skills certification system had another key feature: **connecting with networks of stakeholders**, including international organizations, and with public policy makers. Among those cited by Pabla Ávila were Cinterfor, CICan, the work completed jointly by the Ministry of Education and the Ministry of Labour and Social Security, and others.

  In connection with the above point, the Fanshawe College representative, Gabriela Kongkham-Fernandez, also recommended making sure to work with key players. Specifically, the panelist stated that a particularly important element in recognition of prior learning is to consider the interests of various participants. To do so, the institution created a **multidisciplinary work group** that ensured the representation of the various academic areas.

- The second recommendation was to **improve the financing systems for assessing and certifying skills**. Two panelists mentioned the difficulty of scaling-up the financing of this system. While there is recognition of its relevance for employability and transferability within the training system, the cost is significant. So, scaling-up is hard to achieve without improvements in this aspect.

- Thirdly, the goal of public policy should be that **certification becomes part of the hiring mechanisms and personnel selection in companies**. That is, certification should be considered a requirement, or a value added in the profiles sought on the labour market.

- Lastly, one public policy goal should be that **skills certification is valued by society**. In the case of the province of Ontario in Canada, for example, there is a prejudice against PLAR because it is considered to be an "easy" way to get academic credit. This negative connotation is contrary to PLAR's goal: to grant official approval and have the approval be socially recognized. A similar situation was noted in skills certification in Peru, where workers "see it as something connected to unemployment," as the panelist explained.

Technical and Vocational Education and Training Intersectoral Forum

Practices and Policies from the Pacific Alliance and Canada

Day 2: TVET and PrivateSector Articulation

Labour Market Analysis, Articulation Mechanisms, Recognizing and Promoting TVET and the Use of Technology

The second webinar of the forum that focused on TVET and its linkage with the productive sector was the most popular, with **1,274 participants** representing a bit less than one third of the total forum attendance.

According to the participants, the session on the **use of technology and simulators** was the most relevant to the work that they do.

Use of Technologies and Simulators	Labour Market Analysis	Articulation Mechanisms	Recognizing and Promoting TVET
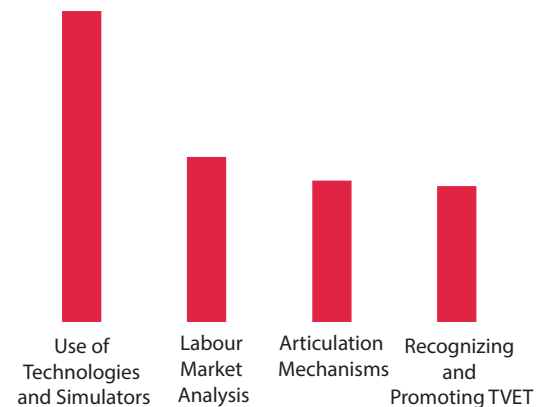
Data source: Post forum survey, 2019

70% According to the post-forum survey, **70% of participants** said that the second webinar contributed to their **professional and development.**

The second day explored the link between TVET and the world of work, specifically, looking at future possibilities in the labour market, articulation mechanisms, enhancing TVET, and the use of technology in the training and assessment process.

This second day's session was opened with welcoming remarks by **Marie-Josée Fortin[21], Director Latin America and Francophone/Lusophone Africa of the International Department of CICan and the PA-EFE Program**. Marie-Josée Fortin highlighted the quality of the presentations of the first webinar on Inter-Level Articulation between levels, thanking all of the panelists and the 800 participants who connected online that day. She also mentioned that the Program, in the course of its activities, addresses in a transversal way the Sustainable Development Goals of the UN and especially the following goals: Number 4 *Quality Education*, Number 5 *Gender Equality*, Number 8 *Decent Work and Economic Growth,* Number 10 *Reduced Inequalities* and Number 13 *Climate Action.*

At the start of the meeting, **the Vice-Minister of Higher Education of the Colombian Ministry of Education, Luis Fernando Pérez Pérez[22]**, described the work done so far to improve articulation between the training system and the workplace. He referred specifically to the Qualifications Framework, skills certification, and recognition of prior learning. He said there are three key aspects to this articulation. One, having adequate diagnostics on the connection needs between training and employment, for example, regarding the difficulties of youth employability.

Two, articulation between the training sector and the productive sector on labour force needs and the room for opportunities that opens up. Three, enhancing the value and standing of TVET. Luis Fernando Pérez Pérez also spoke about **CoLab,** "the innovation lab in higher education that will allow us to have a great deal of power among all the national institutions to make progress in academic innovation topics."

At the end of the panel, **the Deputy Minister of Employment and Pensions of the Colombian Ministry of Labour, Andrés Felipe Uribe Medina[23]**, gave the closing remarks of the second day. He said that Colombia has begun a strong effort to bolster TVET by setting up the qualifications system. "Our aim is to guarantee learning outcomes," he explained. This can be achieved only if stakeholders in the labour market take part in the training system. "There must be a dialog between the productive sector and the training sector," he stressed. He went on to say that he felt the lack of dialog, of shared work between both sectors, is one of the main causes of unemployment, informal jobs, and the lack of productivity. Regarding the current economic crisis, while today "we are all dealing with the economic effects of the pandemic, this is a structural theme that we were working on before that, and these are the themes we need to think about over the long term," he emphasized. Lastly, the deputy minister discussed **the wish to make progress on creating an education space among the Pacific Alliance countries**. In this matter, Colombia has worked on creating qualifications catalogs, which is a fundamental step in facilitating the international movement of people. In this sense, "We hope to continue working, not only to share spaces for discussion, but also to share the tools themselves to strengthen TVET, and thereby improve mobility among our countries," he concluded.

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[21] Click here for the recording.
[22] Click here for the recording.
[23] Click here for the recording.

Labour Market Analysis and Articulation Mechanisms

The next section covers the presentations on the future potential of the labour market and the articulation mechanisms between companies and training institutions. The panelists:

- **Verónica Fincheira:** Manager of Mining Skills Council, Chile.
- **Oscar Riomaña**: Deputy Director for Analysis, Prospective and Monitoring of the Employment Directorate, Ministry of Labour, Colombia.
- **Ryan Montpellier**: Executive Director of the Mining Industry Human Resources Council (MiHR), Canada.
- **Raúl Martínez Flores:** Head of the Program Operation Department of the Ministry of Labour, Mexico.
- **Juan Esteban Dulcic**: Head of Human Resources, Nestlé, Chile**.**

The best practices and policies presented during the panel are described below.

Future Outlook for Mining Work in Chile

Verónica Fincheira[24], Manager of the Mining Skills Council, Chile, presented the results of the latest Labour Force Study[25] for the sector carried out by the council.

The speaker presented the study results and identified the **sector's challenges in the field of personnel training:** (1) diversify training methods since, according to the study, training continues to be very traditional (i.e., in a classroom, no use of virtual tools), (2) make apprenticeship programs more effective, (3) improve skills standardization in hiring and selection processes, and (4) improve retention ininternships.

She pointed out that the study shows that **the participation of women in the industry has increased**. **In fact, many companies have established goals for female participation and policies to increase this percentage.**

Continuing with training themes, the panelist stated that a lack of graduates in the area of maintenance has been identified compared to the projected jobs on the demand side. This information is key for training offerings and the design of public policies that incentivize enrolling in these disciplines. She also referenced the purchase of equipment and technologies for the training institutions, particularly simulators, which allow students and teachers to approximate how to work on tasks. This point is especially important when considering the difficulty due to altitude and permits required by the authority.

Regarding the connection between the Mining Skills Council and the training sector, the panelist explained that, "This year we formalized a connection with the **Programa Eleva** [Rise Program], which is a program for implementing the Technical Vocational Qualifications

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[24] Click here to get a copy of the presentation and here to access the recording.

[25] The study is a projection of labour demand in the mining sector up to 2028. Thirteen mining companies and 17 supplier companies, representing 141,000 workers, took part in the study. The study includes the major areas of the sector: extraction, extraction maintenance, processing and processing maintenance, plus administration and other areas. The results show that the sector grew by 7% compared to the 2017 study, which equals 7,000 more workers. In addition, training hours have decreased, but total investment in this item has gone up, which means that the training is more technical.

Framework that is no longer in the pilot phase, but MCTP is now being implemented and updated for the mining sector in Chile's seven mining regions."

Labour Outlook in Colombia

Oscar Riomaña[26], from the Colombian Ministry of Labour, described the information system[27] created as part of the **National Qualifications System**.

The panelist presented the quantitative and qualitative methods used. Of note was the work done on identifying and measuring gaps in human capital. The methodology was based on the quantitative and qualitative analysis of the labour supply, labour demand, and educational and training programs available to identify the mismatch in skills in terms of gaps in quantity, quality, and relevance. The study was an "input for the creation of qualifications catalogs and other initiatives focused on closing gaps in human capital." The speaker also talked about what is being done in the field of qualitative future prospects in employment. They used a methodology developed with the help of Cinterfor. The goal was to identify future needs for human talent according to technological or organizational trends that will impact the development of an economic sector. This is also one of the "inputs for creating qualifications catalogs from the National Ministry of Education."

Lastly, Oscar Riomaña explained that there is another series of initiatives: "We are working on an information platform as a tool to provide and offer information for decision-making," mainly about employment and training.

The questions that they hope to answer with the platform: What are the current and future needs for human skills? What training is available? What are the gaps between the two? What is the quality level of the programs? **In the case of the extractive sector, some key issues refer to new technologies and the adoption of so-called green trends**.

Lastly, we should mention current efforts being made jointly with the National Department of Statistics and the National Training Service to create the Clasificación Única de Ocupaciones para Colombia (CUOC) [Unique Classification of Occupations for Colombia]. Some 657 occupations have been standardized to date.

Labour Outlook for Mining Industry in Canada

Ryan Montpellier[28], of the Mining Industry Human Resources Council (MiHR), Canada, described the council's information system: methods, products, services, and audiences.

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[26] Click here to get a copy of the presentation and here to access the recording.
[27] The Analysis, Prospective, and Monitoring section of the Employment Directorate has tools for exploring the future potential of the labour force. The results these tools have generated for the extractive sector in 2019 indicate that to date, there are 194,000 workers in the mining sector. The figure comes from the Large Integrated Household Survey. Of these, 56% were formally employed. Their geographic distribution showed a concentration of workers in certain regions, such as Antioquia and Boyacá. The study also identified the occupational profiles in highest demand, such as dredging assistant. In addition, the study analyzed the trend in the occupation from 2015 to 2019, noting volatility and major drops in 2016 and 2017 due to oil price fluctuations. A gender analysis showed the trend from 2015 to 2019, with no favourable variation for greater participation of women. The study also applied a historical analysis of formal work.
[28] Click here to get a copy of the presentation and here to access the recording.

First, the speaker explained that the MiHR Council is an independent, non-profit organization whose mandate is to help identify, understand, and address the challenges and trends of the mining sector labour market. He stated, "We work closely with all major mining companies in Canada." The MiHR also works with training institutions, such as colleges, universities, and private trainingcenters. It also interacts with organizations from other mining-related industries, and with Indigenous communities.

The council has four strategic pillars: (1) labour market information, (2) inclusion, diversity, and career development, (3) national occupational standards, and workforce development, and (4) strategic engagements and partnerships.

He underlined the systemic nature of the organization's work, reflected in the **Labour Market Information Program (LMI)**, which it relies on to be the most reliable, suitable, and "reactive" organization on the mining labour market. A suite of tools is developed from the data produced. First, the prospective tools, for both demand and supply of human capital. Second, the labour market analysis tools. These analyze demand, supply, the workforce, and occupations, and provide a geospatial analysis. The tools create analysis areas, such as occupational profiles, employment projections, industry exit projections (due to retirement and other), hiring requirement projections, workforce profiles, heat maps for the labour market, and more. These areas are used to create products such as a national report, regional reports, studies of specialized topics, and the LMI Dashboard, a tool for job-seekers. According to the speaker, the MiHR interacts with its stakeholders of interest, i.e., governments, trainers, employers, job-seekers, students, and social organizations, through the use of these products.

Articulation Mechanisms in Mexico

Raúl Martínez Flores[29], **Head of the Program Operations Department of the Ministry of Labour, Mexico**, described the work done, the importance of articulation between the world of work and the training sector, and the features of the extractive sector labour market.

He explained that, "It is essential to have close collaboration between academia and industry" (both companies and trade unions), and that, "the ministry is interested in promoting partnerships between these sectors so they can take advantage of the benefits resulting from their collaboration." He indicated that educational institutions should get related companies involved with their academic programs. These connections can be made through social service programs, professional practices, dual education, technical visits, and more. In addition, companies can help institutions with updating and innovation of their study programs; promoting professor-in-residence programs within companies; holding workshops, conferences, forums, and seminars; and contributing in general so that content meets the needs of the labour market.

The ministry especially supports the relationship between both sectors by encouraging internships and meetings known as **"Foros de Concertación Escuela-Empresa"** [School-Business Round Tables], where the goal is to "enhance interaction in order to produce opportunity zones and form alliances."

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[29] Click here to get a copy of the presentation and here to access the recording.

The speaker then explained that the **Consejo Nacional de Normalización y Certificación de Competencias Laborales** [National Job Skills Standardisation and Certification Council], has been operating in Mexico for over a decade. The council has created 10 competency standards for mining sector occupations.

Articulation Mechanisms in Chile

Juan Esteban Dulcic[30], Head of Human Resources, Nestlé, Chile, described initiatives to connect Nestlé in Chile with educational and vocational-technical training institutions.

According to the speaker, Nestlé's goal is to "improve the quality of life and contribute to a healthier future for people and families, communities, and the planet, guided by a culture of respect." Ultimately, the articulation initiatives are directly related to the company's goal. More specifically, youth unemployment is one of the key issues that Nestlé has observed in the countries where it operates. Youth unemployment in Chile is at 29%, and youth participation in the workforce is 45%. Figures are similar in other Latin American countries. In Switzerland, however, which is Nestlé's home country, youth unemployment is 3.4%, and their workforce participation is 79%. These figures for Switzerland are possible in part due to dual education: Young people study in training institutions while being trained at the same time in the workforce.

Therefore, Nestlé created the **Programa Iniciativa por los Jóvenes** [Nestlé needs Youth], and committed to offering 10 million opportunities, mainly on-the-job learning, to youth worldwide, as part of the United Nations Sustainable Development Goal. To accomplish this, it created an alliance with multinational companies, which was inaugurated at the World Economic Forum in Davos in 2019. Regionally, Nestlé joined with the Pacific Alliance to create a youth meet-up organized first in Lima, then Chile, Colombia, and finally, Mexico. A virtual meeting will be held this year with the four participating countries.

The panelist presented **the company as a learning space**, which is why two job options are being developed at Nestlé, Chile. First: Dual training for young people in the last two years of technical vocational secondary school with curriculum maps directly related to the company's activities. Second: Professional practices for young people who have completed their secondary education, with the possibility of hiring and emphasis on digital skills. Nestlé's practices include having an advisor in the company.

According to the speaker, the Chilean Minister of Labour launched the **Ley de Estatuto Joven** [Youth Statute Act] at Nestlé's facilities in 2019. This statute allows for working and studying at the same time. "Before this act," he explained, "the rules were very rigid, making it hard to do both activities at the same time." Nestlé currently has seven young people who have gone through dual education during their secondary education and now have a Youth Statute contract allowing them to study a higher-level technical career, financed by Nestlé.

Juan Esteban Dulcic stated that the link between the technical schools and the companies is essential. In general, he added, "They are very different worlds that are not familiar with each other. Many times, there are prejudices, yet it is fundamental for them to connect. As a result, Nestlé has developed training programs in teaching skills and leadership for our head teachers."

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[30] Click here to get a copy of the presentation and here to access the recording.

Lastly, Nestlé, Chile has developed Online Work Readiness Workshops to improve student insertion into dual training. In light of COVID-19, Nestlé has also organized Virtual Meeting Workshops between dual students and head teachers. They have also developed virtual learning modules so that head teachers can deliver content to remote students. Lastly, virtual work groups are held with the Ministry of Education.

Recommendations

Below is a summary of the panelists' recommendations, specifically concerning workforce diagnostics and articulation mechanisms.

- According to Verónica Fincheira, the Mining Skills Council had strong ties with the private sector and the public from the beginning. However, she also recommended creating **ties from the start between organizations from the world of work and training institutions**.

- Juan Esteban Dulcic made three recommendations for achieving sustainability and scale in the work-linked training initiatives. The first is **commitment from the company's senior management.** "If senior management does not commit, it is very difficult to move forward; and I think something similar can occur in non-business organizations," he explained. Second, parties must maintain a solid **narrative about the content, the history, that you want to communicate, the value that work-linked training has for the various stakeholders**: value for the business (such as productivity, improved learning curve, and more) and value for society (youth employability). Third, **networks of "ambassadors" or "promoters"** must be formed of people who are convinced of the importance of the programs and who can support their implementation. In other words, these are key people for spreading the word and gaining participants.

- As a third step, he recommended **articulation between various public policy institutions**—even those that may be subordinate to different ministries—in order to continue strengthening TVET. One participant from Mexico explained that "One of the challenges we have is that we are somewhat disconnected," which would have a negative impact on the performance of these very institutions.[31]

Promoting Training and Technology

The following section looks at the talks on promoting TVET and the use of technology in training and assessment processes. The panelists:

- **Cristhian Pacheco**: General Director of the Directorate of Technical-Productive and Higher Technology and Artistic Education, Peru.
- **Andrés Beaujanot and Carolina García**: Vice-Rector of Environment and Innovation Linkage at INACAP, Chile, and Human Capital Agenda Director for the

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[31]On one side is the Ministry of Labour, which regulates the training that companies must offer pursuant to labour law. On the other is the Office of Employment Training Centers, an agency that works under the Public Education Ministry and is in charge of creating supply for those who need work. Then there is the National Job Skills Standardization and Certification Council. "These divisions sometimes put us in a tight spot," stated the speaker.

Confederation of Production and Commerce (Spanish initials, CPC), Chile, respectively.

- **Traci Ellis**: Director of Marketing and Corporate Initiatives at Durham College, Canada.
- **Guadalupe González:** Coordinator for Master's in Development and Innovation Management at the University of Guadalajara, Mexico.

The best practices and policies presented during the panel are described below.

Promoting Programs in Peru

Cristhian Pacheco[32], **General Director of the Directorate of Technical-Productive and Higher Technological and Artistic Education, Peru**, described Peru's challenges in the areas of quality, relevance, and access to education, and the current proposal for improvement.

According to the panelist, Peru has half-a-million students in technology training, a figure that is "much lower than university education, which is more attractive." Despite this, the figures presented show that the demand for work appears to be more focused on the profiles for technology careers. This difference can be explained, at least in part, by the low value assigned to this type of education today.

As the speaker explained, **the low opinion of technical vocational education is due mainly to problems of quality and relevance in training programs.** "Our companies have a very negative perception of the education received by students in our institutions, particularly concerning quality," he stated. In fact, there has been no quality assurance system for technology institutes until now. Consequently, two years ago, the country piloted the institutional licensing process. The Ministry of Education projects that the process will take four more years to reach all institutions in the country. This implies closing the institutions that do not meet minimum quality standards. After the licensing phase, the ministry will also seek to gradually advance toward accreditation levels. All of this is always done "with promotional activities from the State," and ongoing oversight to ensure compliance with the new regulations.

In addition to boosting TVET, Peru faces other problems that the recently approved Vocational Higher Education Policy seeks to address, mainly in terms of access: Only 30% of secondary education graduates go on to higher education. Among the lowest quintiles of the population, that figure is only one in five. According to Cristhian Pacheco, the consequences of these three problems above are high levels of underemployment, low labour productivity, low technological development, and loss of State and corporate competitiveness.

Due to the pandemic, "Not only do we have a problem of underemployment, but we have unemployment, which represents a major challenge," the speaker added. In general, various challenges exist, such as restructuring professional profiles to face the changes in the labour market, the need to ensure studies continue virtually, preventing training institutions from shutting down, and preventing dropouts and student getting behind.

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[32] Click here to get a copy of the presentation and here to access the recording.

Promoting Programs at INACAP, Chile

Andrés Beaujanot[33], INACAP representative, and Carolina García, representative of the Confederation of Production and Commerce (Spanish initials, CPC), described the links between the training sector and the labour market, with a focus on the Technical Vocational Qualifications Framework (Spanish initials, MCTP), and populating sector frameworks.

INACAP has locations throughout Chile: 27 sites and over 100,000 students. This means the institution's work has a great impact nationally. They informed us that "INACAP recently developed **a new educational model. One of its pillars is the relationship with the productive and services sectors.** That's why the work with the CPC is more important than ever."

According to the INACAP panelist, the MCTP "is what guides us and directs us in carrying out all our training activity." However, if frameworks are not populated with qualifications, they remain a good teaching example, but not something that can be translated and implemented in training." For this reason, the CPC and the INACAP created the National Industrial Skills Council 4.0, which "creates initiatives that eventually are translated into effective training for students," explained Carolina García. This council formed the **Consejo Multisectorial de Competencias de Mantenimiento 4.0**, [Maintenance Competencies Multisectoral Council 4.0], a major milestone "because it's a council that goes beyond the sectoral level." Specifically, this action was to populate the maintenance profile. Populating multiple sectors enabled those involved to create three work-trainingoptions: mechanical maintenance, electric maintenance, and mechatronics maintenance. The goal is for the training institutions to produce programs for the threeoptions. For 2021, the INACAP has created two training options based on population of the maintenance framework: (1) Automation and Robotics, and (2) Heavy Machinery.

According to Carolina García, one of the CPC's goals is "to solve some of the communication problems between the world of training and the world of production, where there are inefficient, non-productive training trajectories that don't get it right with high-level programs and suitability, where the company is not taken into account when addressing the challenges in training human capital. **The case of CPC and INACAP is a good example of joint efforts between companies and training institutions."** She emphasized that "a board of directors composed of outstanding business leaders and a State representative, elected respectively by the CPC, the private social development corporation, and the Technical Cooperation Service (Sercotec), are in charge of administration and management of INACAP." That is, industry is an integral part of governing the training institution.

Enhancing Programs at Durham College, Canada

Traci Ellis[34] listed the main elements of training at **Durham College**, the training institute she represents, mainly regarding its ties with the labour market and the importance of having learning occur in real environments.

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[33] Click here to get a copy of the presentation and here to access the recording.
[34] Click here to get a copy of the presentation and here to access the recording.

First, the panelist indicated that, "we are connected with industry in so many varied ways since **we obtain quality in our training supply directly from our links with industry**." All programs have an advisory committee where professionals from the corresponding industry "help us by guiding us in developing the program and in an annual review to keep equipment up-to-date." Also, all the instructors come from industry.

The college is also connected with training institutions at other levels to produce training paths between levels. They have a total of over 400 paths, from lower levels to higher-degree levels. This includesdiplomas, certificates, post-graduate certificates, master's, and professional programs.

In this context, "Many graduates finish college with skills certifications in their respective industries," she explained.

In connection with these points, Traci Ellis referenced the need for students to have "real-world experiences" related to the training paths they have chosen. This happens through experiences such as internships and projects. Due to the COVID-19 pandemic, the college has had to make major adjustments in how it provides training. Specifically, it has had to enhance virtual training, but "always with an experiential component."

One of the key elements in Durham College's value offer can be summarized in the expression, "Be Job Ready," as a set of attributes its graduates possess. According to the speaker, 93% of employees surveyed are satisfied with the graduates who joined their companies. The institution's slogan refers to employability as something that is extremely important and valuable: "Graduates are prepared for success with employers." The panelist also spoke about entrepreneurial opportunities promoted by Durham College.

Technology at the University of Guadalajara, Mexico

In her talk, **Guadalupe González**[35], Coordinator for the Master's in Development and Innovation Management at the **University of Guadalajara**, discussed **the importance of gender equity in majors in science**, technology, engineering, and math (commonly known as STEM majors).

According to the panelist, 60% of positions offered on the labour market require STEM skills, which are not being covered with today's current curriculum. This is because other areas tend to receive more attention. In fact, 45% of students entering higher education in Mexico study majors in "social sciences or business," which is a huge portion of the total number of students in the country. Another 9% are in "health" majors, 12% in "education," and 13% in "humanities, art, science, agriculture, and services."[36]

In addition, Guadalupe González states that women are not entering STEM majors, at least not in a proportion that helps advance equality in these disciplines, and therefore, in the labour market. She said that various sociocultural factors explain women's low participation in this set of majors. More specifically, she explained that people learn social roles taught from early childhood and boys and girls are treated differently. So, women are not encouraged to choose a career in science and math, unlike men.

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[35] Click here to get a copy of the presentation and here to access the recording.
[36] The categories presented here are those of the speaker.

In addition to this information, the panelist insisted that students' main difficulty when learning math and other STEM subjects is connecting the field with concrete applications. To solve this problem, simulators can be used as a pedagogical tool. **The main benefit of simulators is that they allow the teaching and learning process to take place in actual, yet safe, environments.** Other benefits of simulators are that they "bring the student closer to reality as a worker," promote multidisciplinary work, save material resources and time, and improve motivation through gaming techniques.

Recommendations

Below is a summary of the panelists' recommendations, specifically concerning enhancing TVET and technologies:

- The first item mentioned was the importance of **having organizations from the world of work take part in TVET**, for several reasons. One reason was that it leads to the design of **long-term public policies**. These organizations do not depend on successive changes in government and therefore, they must create plans that **apply for more than the term of each administration**.

- A second recommendation was to focus on **gender equality in TVET**, especially by creating strategic alliances between stakeholders who are knowledgeable in this area. One success story in this field was the alliance between the National Training and Employment Service of Chile (SENCE) and that country's Ministry of Women.

- A third recommendation was to make progress in strengthening **vocational guidance for future students' decision-making**, while including the participation of parents and key industry players. One success story cited was the **Mentor Exchange**, in Canada, where corporate professionals sign up to help and talk with students and describe a company, a position, or an industry.

Technical and Vocational Education and Training Intersectoral Forum

Practices and Policies from the Pacific Alliance and Canada

Day 3: Quality Assurance

Learning Evaluation, Distance Education and Training Models

The third webinar on Quality Assurance was a success in terms of participation with **1,043 people** connected, mainly teachers, civil servants, directors, students and employees.

The sub-theme of **Distance Education** was identi¬fied as the most relevant theme (to the work carried out by the majority of participants).

Distance Education

Learning Evaluation

Dual Education System
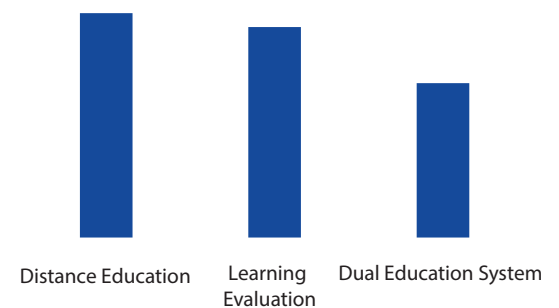
Data source: Post forum survey, 2019

72%

According to the post-forum survey, the third webinar **provided new information** for **72% of participants** and moderately new information for 28% of participants.

Day three covered learning assessment, dual education, and distance education.

Alain Roy[37], Vice-President of International Partnerships at CICan, opened this panel by reminding us of the global dimension of the theme of this third day of work, Quality Assurance. He explained that in Canada, TVET institutions and provincial ministries focus on assessing the quality of education, with a particular emphasis on user and beneficiary assessment. He also emphasized that the Canadian system is flexible and ensures that practical work is integrated with learning in order to prepare students for employment once they have completed their studies. He also emphasized the importance of industry participation in training and applied research.

To start things off, **the Deputy Minister of Higher Education for Mexico Luciano Concheiro Bórquez[38]** gave the opening remarks. The deputy minister stressed that the mechanisms for ensuring relevance in educational outcomes, the **search for excellence based on connecting with productive sectors**, and dual education and work-linked training methods "allow for the construction of a future that is sustainable, lasting, and culturally compatible with the lifelong projects of our societies." He also mentioned that "more than ever, distance education is presenting us with challenges to bridge existing gaps and inequalities, while we are experiencing a rapid digital revolution. In the middle of this pandemic, distance education has allowed us to exchange information via images, virtual reality, music, and hypertext on the Web, tools that should strengthen technical training." He also underlined that "in Mexico, we are committed to transforming the way knowledge is managed, making progress in how educational systems and teacher training are created and developed." He also seeks transformation in how to conceive knowledge and take advantage of digital tools to democratize their widespread use and application.

After the Mexican Deputy Minister, t**he Director of the UNESCO-UNEVOC International Center for Technical and Vocational Education and Training, Soo-Hyang Choi[39]**, offered words of welcome. The director first explained that UNEVOC was created to support the work of TVET institutions, such as ministries, national organizations, research centres, and training providers. UNEVOC currently has a network of 250 institutions, including 38 UNEVOC centres in Latin American and the Caribbean (including Chile, Colombia, Mexico, and Peru).

Soo-Hyang Choi said that UNEVOC's goal is to promote collaboration among countries, uniting institutions to discuss their shared challenges and opportunities. The world is facing a series of questions in this area for which we do not have the answers. "No bookstore exists where we can find the answer to the challenges posed by COVID-19, or the imminent transformation of the labour market," she explained. Therefore, it is vital to exchange experiences to gain information and knowledge so that all of us may survive. **Creating networks, sharing, and partnership are the key words of this forum**, and they are the words that summarize the work of UNEVOC, stressed the director.

Regarding the quality of TVET, Soo-Hyang Choi highlighted three major points. First, high-quality TVET should prepare workers for the future. It should therefore measure future requirements and make the necessary adjustments in due time.

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[37] Click here for the recording.

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Second, a quality assurance system cannot overlook the absolute need to support sustainable development: "**An ecological TVET that includes sustainable practices and principles in all professions is an obligation for all people and institutions on this planet**," she added. Therefore, the extractive sector is key. Third, high-quality TVET cannot leave anyone behind: Many times, there are disadvantages for some young people with informal training paths who cannot access formal education institutions. While the concept of inclusion has been promoted, if it is not done with excellence, it is another way of perpetuating inequality, she explained.

After the welcome speech by the Deputy Minister of Higher Education for Mexico and the Director of the UNESCO-UNEVOC International Center for Technical and Vocational Education and Training, **Sonia Michaud[40], from New Brunswick Community College**, spoke on the skills approach and its features. As she stated, CICan works collaboratively in many regions: South America, the Caribbean, eastern Africa, western Africa, southern Africa, and northern Africa. Based on this experience, CICan developed the **Education for Employment (EFE)** focus, which is directly involved in the creation or updating of training programs, always with a skills approach, as it improves the relationship between training and work.

EFE has evolved over the last few years, increasing the participation of CICan training institutes in international efforts. As a result, it had to ensure that all members have a shared vision and guidelines. This is especially true since education in Canada does not depend on a federal ministry, but on each province. Therefore, the **CICan Reference Framework** was created. This tool helps maintain consistency of Canadian institutions' actions abroad. The framework establishes various basic principles, including employer participation, student participation, updating of pedagogical practices, an iterative process to ensure flexible learning and management. The framework also includes some cross-sectional topics, such as the gender perspective, the environment, and entrepreneurship.

At the end of the third day, Peruvian Minister of Education Carlos Martin Benavides Abanto gave the closing remarks. The minister stated, "The Peruvian State is facing a great challenge in improving the quality of education at all stages, levels, and modalities." This is what drives the current reform, whose goal is to improve educational access, quality, and relevance. "We have begun a very intense process of transformation of university education, and we have transferred all that experience to other modes," specifically to TVET, he said. The **Política Nacional de Educación Superior y Técnico Productiva** [The National Policy on Higher and Technical/Productive Education] was approved. It is a set of guidelines with a 2030 horizon.

One of the most essential points is the **creation of licensing for training institutes**, i.e., providing a state license for institutions that ensures minimum quality of service. "To date, we have delivered this license to 75 institutes that meet basic quality conditions," he explained. Yet, "in Peru, we have approximately 1,000 institutes, so we have a great deal of work ahead of us."

The minister also mentioned that the policy seeks to impact current access indexes in the country.

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[40] Click here to get a copy of the presentation and here to access the recording.

In fact, only three out of every 10 elementary education graduates move on to higher education. The figures also show large socio-economic gaps between those who access higher education and those who do not. "And we want to address this very proactively through the policy we have formulated," he added. "We strongly believe that education is one of the most important tools for making citizens, and it is even more important for it to be inclusive and favour diversity, respect for differences, in order to eradicate discrimination and inequality among students."

Lastly, in the context of the pandemic, and the shut-down of in-person classes, the Ministry of Education has taken these actions: the **Estrategia Formativa 360** [Training Strategy 360] was created, giving 48,000 students access to virtual and radio classes, and 6,000 educators and directors in 325 public institutions received training in digitizing classes. A device was also created that provides free Internet service to students at public institutions, which reached 22,000 students and educators. Students whose families were affected by the pandemic received grants.

Learning Assessment

The following section summarizes the talks on learning assessment. Panelists and countries:

- **Renaud Bellemare**: Assistant Director of Studies, Pedagogical Development and School Success at Collège Montmorency, Canada.
- **Richard Caicedo**: Head of Academic Development Office of Santander Technological Units, Colombia.
- **Ana Alfaro:** Director of Technical-Productive and Higher Technological and Artistic Education, Peru.

The best practices and policies presented during the panel are described below.

Learning Assessment at Collège Montmorency, Canada

Renaud Bellemare[41], the assistant director of studies for pedagogical development and school success at Collège Montmorency, gave an overview of how quality assurance mechanisms work, specifically of the role of skills assessment.

The first thing to note is that quality assurance mechanisms arise from a context of educational competitiveness and effectiveness, also as part of the logic of continuous improvement. In some cases, these mechanisms are linked to certification or approval of the institutions or the programs of study.

Overall, **the quality assurance mechanisms are focused on three items: quality of institutions, quality of programs of study, and quality of certifications**. Of the three, the third is the most important, as well as being one of the most complicated topics to cover. This is why he recommends that ministries create adequate frameworks for ensuring the quality of assessment processes.

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[41] Click here to get a copy of the presentation and here to access the recording.

For example, establish principles such as justice (students should have rights and duties in connection with the assessment; these rights must be exercised indiscriminately), equity (no matter who does the assessing, students must undergo comparable tests, and the professors must use equivalent tools), coherence (the assessment must be aligned with learning goals), equality (requirements must be the same for all), and independence (the assessment must be independent from any other factor).

Renaud Bellemare added pertinent elements to expand on skills assessment, indicating that there are three approaches to measuring a skill: the product (what traditional assessment looks at), the process ("lab notebooks," "learning portfolios," "collection of texts," "sketch books," "road map"), and the goal (this means what students can say about their skill; it can be a self-assessment, justification of ideas, personal diary, or an interview). He recommends evaluating the three points above and using evaluation as a learning tool.

Assessment of Learning in Santander Technological Units, Colombia

Richard Caicedo[42], Head of the Academic Development Office, described skills assessment at the institution he represents, stressing two different types of assessment, and the model called **EVALFOR** (evaluation in training contexts).

Richard Caicedo said that "the methodology for assessing qualifications has brought together training institutions and interest groups (business people, employers) to find gaps" between training and the needs of the labour market. To be able to have skilled people, he explained, "we need the help and support of actors from [the world of] work. That will allow us to train the employers at their companies."

The panelist called on the various TVET stakeholders to help make progress in several of its key areas. He stated, "If we want companies to form alliances with higher education institutes, let's help to make this happen." This could be done, for example, with tax-type benefits. Thus, articulation between training institutions and companies is also a challenge for the State. He also called on the ministries of education to facilitate the work of connecting with companies by making curriculums more flexible. He called on employers to create a "culture of learning among their employees," allowing them to take part in the assessment processes.

Lastly, Richard Caicedo described in more detail an assessment model created by the **EVALFOR** group at the University of Cádiz. This model is based on the concept of "learning outcomes," which are observed when the student "knows and applies." This model stresses the need for **assessment to be a learning tool**. Actors can participate through self-assessment, peer-assessments, and hetero-assessments. For the latter, the speaker underscored that employers, as well as instructors, should participate.

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[42] Click here to get a copy of the presentation and here to access the recording.

Ana Alfaro[43], Director of Technical-Productive and Higher Technological and Artistic Education at the Ministry of Education, Peru, described TVET standards in Peru,[44] with an emphasis on evaluation of skills and quality assurance.

As part of quality assurance, the ministry promotes the **Education Service Model**, which has six components: institutional management, physical and technological infrastructure, research, entrepreneurship and innovation, institutional economic sustainability, connection with the environment and training. Management of programs of study is part of the training component. Of note in this area is that Peru has a national catalog of technical productive and technological higher education training programs.

In 2015, as part of educational reform and more specifically Act 30.512, a standards framework was created for technical vocational higher education. This framework "is the normative support we have to be able to use a skills-based approach, because you need a practical approach that meets the current and future demands of the labour market," the panelist explained. "Today, all TVET institutions in Peru use the skills-based approach."

Regarding learning assessments, Ana Alfaro stated that "the assessment is developed using the skills approach." Lack of in-person classes due to the pandemic "has led the ministry to reformulate these assessment mechanisms to ensure student learning." Specifically, they focused on three strategies for virtual assessments: (1) validating understanding of content using questionnaires or checklists, (2) evaluating skills development, such as problem-solving or developing projects, and (3) evaluating student engagement or motivation, using gaming, for instance. All assessment standards implemented by the ministry are included in the "training" component of the Education Service Model.

Lastly, the panelist also stated the importance of evaluating students on internships and on extracurricular classes, feedback from employers on the graduates and trainees, peer assessment, and Ongoing and formative assessment.

Recommendations

Below is a summary of the panelists' recommendations, specifically concerning learning assessment:

- First, they mentioned that it is particularly important to achieve **closer cooperation and articulation between workers, business organizations, and the public sector**. This involves job-skills certification systems, but also the design and implementation of qualification frameworks. In general, they recommend promoting and enhancing spaces for dialog among all these actors through public policy.

- Second, they recommend advancing with the roll-out of **digital technologies to improve remote training opportunities**. According to Ana Alfaro, nearly all

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[43] Click here to get a copy of the presentation and here to access the recording.
[44] In Peru, higher education is divided into pedagogical, technical-vocational, and university education. It also has a pathway called "technical productive education" that develops programs of study tied to technical-vocational training.

education in Peru was in person, and few institutions had the technological resources to implement virtual classrooms, which made it difficult to continue studies during the pandemic.

- Third, they recommend **improving the link between training institutions and companies, specifically as regardsinternships**. In fact, one of the Chilean panelists said that "Students have trouble approaching companies and companies also have trouble accepting them." Among other reasons, this is due to the labour and regulatory environment, which is still not flexible enough. Another internships recommendation was for complementary efforts to **turn the State and the various associated public services into spaces for internships.**

- Fourth, they recommend making progress toward the **design and implementation of socio-emotional skills assessment strategies**, in both in-person and digital environments. This should include the creation of achievement descriptors.

- Lastly, they highlighted the need to **move forward in recognition of qualifications among Pacific Alliance countries**, along with gradual installation of national qualification systems.

Dual Education and Distance Education

The following section summarizes the talks on dual education and distance education. The panelists:

- **Delia Tovar Vásquez**: Educational Innovation Advisor for the Sectoral Coordination of Academic Strengthening, Undersecretariat of Higher Secondary Education, Mexico.
- **Sally Vinden**: Centre Fellow of the Centre of Innovation and Excellence in Learning, Vancouver Island University, Canada.
- **Esko Lius**: Digital Learning Expert, Project Manager in Omnia, Finland.
- **Guadalupe González:** Coordinator for Master's in Development and Innovation Management at the University of Guadalajara, Mexico.

The best practices and policies presented during the panel are described below.

Delia Tovar: dual education in Mexico

Delia Trovar[45], **Advisor on Educational Innovation for the Sectoral Coordination of Academic Strengthening, Undersecretariat of Higher Secondary Education, Mexico,** described her country's dual education system.

She said that the Political Dialog for Scaling up Dual Education took place in 2019. A memorandum was signed with Germany to enhance cooperation between the countries. In the same year, the General Education Act was published. Its article 45 established "that the Technology Bachillerato [high school diploma] and the Technical Vocational Bachiller [high school degree] and its equivalents may be offered in the dual education option with school and company training." Lastly, the **Dual Education System in Higher Secondary**

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[45] Click here to get a copy of the presentation and here to access the recording.

Education was designed in 2020 and the **Dual Education System** was created, consisting of the Company Directory and the Academic Platform for Dual Education Students.

Delia Trovar explained that one of the important features of dual education is that lessons are relevant, because theory is tied to practice: "What is learned in a virtual learning space, in the classroom, is directly related to the reality the student is experiencing in the company along with his instructor and his academic advisor. In this way, the instructors are no longer the only source of knowledge. Their main function is to support, guide, facilitate, and give feedback to students throughout the whole process."

In general, the key actors in dual education are the training center and the students; the coordinator, who is in charge of making sure the academic agreements and the learning agreements with the companies are carried out; the academic facilitator for the platform and the academic advisor, who, together with the instructor, are responsible for ensuring the student develops the defined skills. Lastly, the parents or the legal guardian also participate in the dual education model.

The Dual Education System in Higher Secondary Education encompasses a very large set of educational models. There is the Mexican Dual Training Model, Subsystems Models, Dual Training Models in the states, and Dual Training Models promoted by companies. All models must be authorized by the Undersecretary of Higher Secondary Education via the Sectoral and Academic Strengthening Coordination Office. Once the models are authorized, they move on to the Dual Education Information System and are added to the platform to register companies and training.

There is also the academic platform for students, established in 2016, that contains the curriculum learning units in a virtual space. According to the speaker, once the student is selected for dual education, he must enroll in a predual phase where his socio-emotional skills are strengthened so that he may adjust to the company culture.

Distance Education at Vancouver Island University, Canada

Sally Vinden[46], **Centre Fellow at the Centre of Innovation and Excellence in Learning, at Vancouver Island University**, spoke on a blended project for level 2 hairstylists implemented jointly by two technical-vocational training institutes: College of the Rockies and Selkirk College.

The **blended delivery** program includes 12 weeks of training, 10 hours per week of online classes, and one in-person week of 30 hours at the corresponding provincial centers. This allows the apprentices to train while they work. Sally Vinden explained that "At work, a person's tasks are not broken down into skills units." The knowledge, emotions, and actions form part of a work experience where the three components are blended. This is why they developed a holistic approach to learning outcomes in three areas: cognitive, psycho motor, and affective. The curriculum and the "student journey" for the program are designed based on this definition of learning outcomes.

All in all, the results of the blended delivery program were positive.

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[46] Click here to get a copy of the presentation and here to access the recording.

The teachers said that the blended program students had achieved better results in the technical and communication skills than the in-person students. These outcomes ease the way for scaling up this distance method for TVET.

Distance Education in Omnia, Finland

Esko Lius[47], Project Manager in Omnia, described the use of digital technologies at the training institute during the feedback and skills assessment stages.

The panelist began by explaining that in Finland, all of TVET is based on skills, and students are evaluated on concrete actions in actual labour environments. **The panelist also made a clear distinction between assessment and feedback**. In fact, in legal terms, assessment refers exclusively to demonstrating a skill after studies.

During their studies, students are not "assessed," but they receive feedback regarding the development of their skills. The training providers are the ones who develop the assessment plans. The professors work on the plans, as well as the advisors/instructors, holding assessment sessions in the workplace. Equally important are the Working Life Committees, which ensure quality in implementing assessments.

Concerning distance education, the speaker stated that we should think about how digital technologies help improve existing assessment strategies, on the one hand, and how these technologies can be used to create or facilitate innovative approaches to assessment, on the other. He noted that professors should keep these two goals in mind when using digital technologies. For example, digital technologies can directly help with monitoring student progress, facilitate feedback, and allow professors to assess and adapt their training strategies.

In terms of the benefits of using digital tools in TVET, Esko Lius pointed out that according to the students, communication is easier with digital technologies, including communication with the workplace through digital portfolios (badges). From the viewpoint of institutions and professors, the administrative burden is reduced, collaboration with industry is easier, and people can more readily communicate what skills they have.

As for the use of digital tools in giving feedback and assessing skills, the speaker mentioned various complementary applications: for formative and summative assessments, recording and analysis of evidence based on digital technologies, and feedback and planning. This means using technologies to provide timely feedback, adapt educational strategies, and offer specific support. Regarding the latter point, it is important "to allow students and their parents to understand the evidence [of learning] provided by the digital technologies and use them in decision-making."

Lastly, Esko Lius explained that OMNIA used "Open Badges," or digital certificates. This technology provides a better way to communicate the skills a person has or the skills required in a job, because it links the content, criteria, and evidence of each skill to a CV or a job offer.

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[47] Click here to get a copy of the presentation and here to access the recording.

Guadalupe González[48], **Coordinator for the Master's in Development and Innovation Management at the University of Guadalajara**, presented the distance education model used at her institution.

She said that at the start of the pandemic, when educational institutions had to eliminate in-person classes, they began to use free digital platforms that were fairly limiting during the teaching and learning process. As the health crisis continued, institutions had to choose safer platforms that would at least allow for monitoring of activities, as is the case with online fee-based education platforms available on the market.

With the arrival of online education came a significant increase in the teachers' work day and in students' anxiety, due to an overload of activities. This was due to having the wrong perception of how distance education works, mainly on the role of the teachers, the role of students, and how activities should be developed. Despite this, Mexican institutions have been improving their implementation of educational strategies lately. This is important, if we consider that "normal" in-person classes may not return after the crisis, with the digital tools installed in education being here to stay.

According to the panelist, the University of Guadalajara developed a distance education model in 2004, which allowed the school to continue training students during the pandemic. This model contains a specific instructional design for online education, a customized teaching measurement, a learning community, and curricular flexibility. Of particular note, she said, was that in the online model, the teacher has the role of creating learning experiences by collaboration among students. This model prevented students from falling behind in the classes due to the pandemic.

Recommendations

Below is a summary of the panelists' recommendations, specifically concerning dual education and distance education.
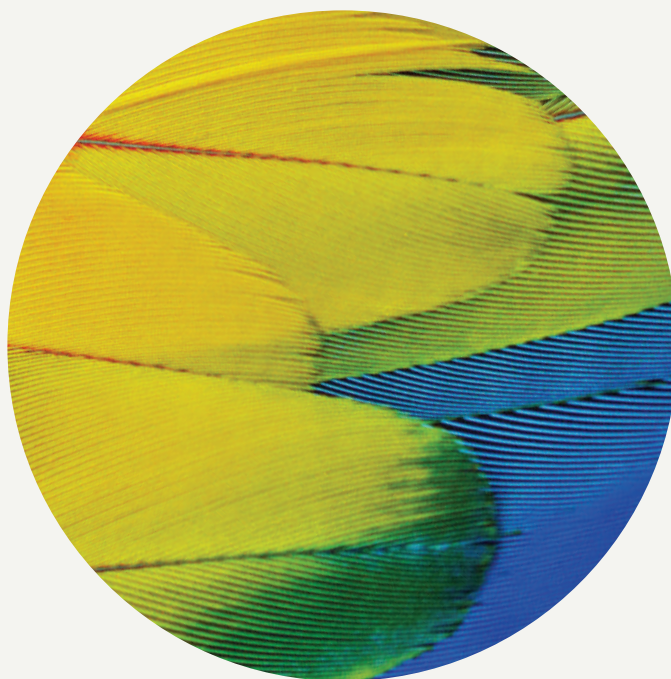
- First, they recommend correcting any lack of **digital skills in the students** and unfamiliarity with **digital pedagogy** in the professors when these technologies are used for training. According to Sally Vinden, of Vancouver Island University, in order to solve this problem in the project she described in her presentation, they planned a week of classes at the start to **guide students in the use of the digital platforms** used in the course, and a **three-day orientation on ad hoc pedagogies in distance learning for the teachers**.

- Second, they recommend **making progress in the implementation of digital tools to improve and scale up distance education in TVET**. This implies making the appropriate adjustments to the curriculum and instructional methods in order to adapt the training programs to the virtual environments. Other points to consider are the role of the teacher, the student's autonomy, and the participation of actors from the workforce as advisors.

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[48] Click here to get a copy of the presentation and here to access the recording.

Technical and Vocational Education and Training Intersectoral Forum

Practices and Policies from the Pacific Alliance and Canada

Conclusions and Next Steps

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270 people, representatives of the public, private and civil society sectors met in the fourth webinar of the forum (working in sub-groups), with the objective of strengthening the capacities of national and regional stakeholders and accompanying them in the development of policies and best practices.

Regarding the post-forum survey, **64%** of participants **consider it feasible to incorporate the shared best practices** on TVET into their work.

64%

97% of participants who responded to the post-forum survey said they were **very satisfied** with the event and 3% said they were satisfied.

The Technical and Vocational Education and Training (TVET) Intersectoral Forum: Best Practices and Policies from the Pacific Alliance and Canada was an opportunity to learn about the progress achieved over the past few years in terms of policies and lessons learned in the four countries of the Pacific Alliance, the strategies and challenges faced in our new context and with distance education, the knowledge acquired and the challenges that still lie ahead.

The fourth day of the Forum was set aside for participatory and interactive work. Over two sessions, participants were divided into two subgroups (by sub-theme of interest and by country); these sessions were facilitated by members of the Organizing Committee and CICan. Opening and closing speeches were also made by government officials. The opening remarks were given by **Ralph Jansen, Canadian Ambassador to Peru and Bolivia,**[49] and **Juan Eduardo Vargas, Higher Education Undersecretary from the Chilean Education Ministry.**[50] The session was closed by **Angélica Romero, Multilateral Director General, Undersecretary of International Economic Relationships (SUBREI), Chilean Ministry of Foreign Affairs,**[51] and **Sara Cohen, Director General, South America and the Interamerican System, Global Affairs Canada.**[52]

Below are a few key takeaways from the presentations made during the sessions and the working group discussions held on the last day.

- Panelists discussed their interest in advancing the creation of an educational space in the Pacific Alliance, which would significantly facilitate the mobility of workers and students among the four member countries. All countries have advanced in their qualifications frameworks and gained a wealth of experience in terms of vision, processes and results. There is still a need to strengthen the educational systems of each member country. Highlights include the advances made by Chile in the implementation of a qualifications framework for TVET, as well as Colombia's achievements with the creation of the National Qualifications System. Peru and Mexico are both in a process of consolidation, and their representatives each mentioned their desire to move in the same direction.
- Another standout is the work achieved by REMCAP (Red de Especialistas de Marcos de Cualificaciones de la Alianza del Pacífico – group of qualifications framework specialists of the Pacific Alliance), which was formed in 2018 as part of the Declaration of Puerto Vallarta. The Pacific Alliance for Education for Employment Program is supporting this regional initiative, which aims at developing equivalency mechanisms for training through the exchange of national qualifications frameworks, the creation of recognition systems and the implementation of best practices for quality assurance in TVET.
- The experiences shared around transferability and certification demonstrated the importance of this theme as part of the results of developing qualification frameworks and recognizing certifications of competencies and their value in the labour market.
- Reflections were made on how to address the challenges of distance education, which is necessary in the new reality faced by each country.

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[49] Click here for the recording.

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- Quality improvement was discussed for this new context, which requires strategies that ensure educational effectiveness and continuous improvement.
- Another important takeaway was the presentation and discussion of the labour market and the **level of women's participation in industry** and on the progress made in gender equality in terms of **women's participation goals and the policies developed by some companies in the sector.**
- Fernando Vargas, a specialist from Cinterfor (Centro Interamericano para el Desarrollo del Conocimiento en la Formación Profesional – inter-American centre for knowledge development and professional training), gave a presentation on the work done by Cinterfor in the region and on the publication of a **Regional Qualifications Framework,** developed through collaborative work with different countries in the region.

Looking ahead: next steps

One of the reasons for organizing themed forums within the framework of the Program (besides facilitating an exchange of policies and best practices in technical training for the extractive sector, using an approach based on quality, equity and environmental responsibility in the PA countries) is to provide continuity for the dialogue started in the Forum and to track, to the extent possible, the best practices, policies and guidelines presented, with the aim of systematizing them and assembling a dossier containing best practices and knowledge from these countries on the topic.

To this end, a strategy has been created for tracking and identifying the policies and best practices presented in the Forums in order to systematize them and disseminate them in collaboration with the relevant stakeholders from each country, as a form of knowledge exchange and management, which we believe to be one of the best ways of collectively building best practices and shared knowledge.

Focus groups will be organized in each country to work on the themes that were covered in the three Forums, with the aim of identifying the most relevant topics for collective learning.

This work will be a joint effort with specialists who presented their experiences on different themes in the Forum. The aim will be to gather these experiences in the development of policies and best practices as a basis for progress and learning in the region.

The Forum fulfilled its purpose, which was to strike up a dialogue on TVET and contribute knowledge and experiences from these countries. In the next step of this exchange, we hope to contribute further to the knowledge of policies and best practices in the Pacific Alliance countries, continue the dialogue among the countries, recover and disseminate best practices, guidelines and policies and contribute to improved knowledge of the themes covered.

At the end of this experience, we hope that all participants feel enriched by what they have learned and are ready to continue this dialogue and exchange, which will enable us to improve the TVET systems and processes that we are implementing in our new context.

The CICan Team from the PA-EFE Program

Appendix

Appendix 1: Framework and agenda

You can use the following link to access the Framework and agenda:

https://collegesinstitutes.sharepoint.com/:b:/s/ALLIANCEPACIFIQUE/EXUkuzfBJSxFit0ToPF8pEkBU
b6fYGJEuqMaFklpEBEDtg?e=wlVJ5h

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