
Training Assessment Project Romania Country Report



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Acronyms

| | |
|-------------|---|
| ANOFM | National Agency for Workforce Employment |
| ATP | Authorized Training Provider |
| CTP | Companies providing in-house training |
| CVET | Continuing vocational education and training |
| DESI | Digital Economy and Society Index |
| EMIS | Education Management Information System |
| EQAVET | European Quality Assurance in Vocational Education and Training |
| EQF | European Qualifications Framework |
| EU | European Union |
| HCI | Human Capital Index |
| IVET | Initial vocational education and training |
| MoLSJ | Ministry of Labour and Social Justice |
| MoE | Ministry of Education |
| NAQ | National Authority for Qualifications |
| NGO | Non-governmental organization |
| NRRP | National Recovery and Resilience Plan |
| PD | Professional development |
| POEO | Education and Employment Operational Program |
| RTP | Registered Training Provider |
| SABER | Systems Approach for Better Education Results |
| TAP | Training Assessment Project |
| TVET Center | National Centre for TVET Development |
| VET | Vocational education and training |
| VTP | VET Training Provider |

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Executive Summary

This Romania Country Report was prepared under the World Bank's (WB) project *Shifting Production Frontiers: Delivering Inclusive Training along the Lifecycle* (also known as the *Training Assessment Project* or TAP), financed by a trust fund under the Korea-World Bank Group Partnership Facility (KWPF). The assessment is aimed at identifying and assessing the current conditions and common practices under which Romanian training institutions operate and providing policy makers and training providers with key actions and recommendations to strengthen the education and training system in the country, with the intention of leading to increased economic productivity and competitiveness.

The Romania Country Report presents the findings and results of TAP analysis, and the overall performance of Romanian training providers as benchmarked by the TAP methodology, highlighting actions to improve training outcomes, e.g., employability of graduates, and raising performance to meet international good practices. The TAP analysis focused on two groups of training providers, namely: institutions offering initial vocational education and training (IVET) programs with a duration between three and five years, and institutions offering continuous vocational education and training (CVET), offering short courses targeting adults (including public and private companies and non-governmental organizations providing internal training to their own staff).

This report includes actions and recommendations for policymakers facing human capital decline, to inform improved policy decisions on training delivery, as well as specific recommendations for training providers to enable acknowledgement of diversity, relevance of their programs, and overall excellence, based on evidence.

Landscape mapping for the TAP survey shows that out of approximately 4,500 training providers in the country, 67% of Romania's training landscape is dominated by small-scale providers that deliver certified courses for individuals or companies, followed by medium-sized providers (19% of the total) and large-scale providers (14% of the total). Private providers make up more than half of the training market (57%), while the other half is made up (equally) of public providers and non-governmental organizations (NGOs). Moreover, the most predominant training area is represented by services (54%), covering the full spectrum from support services, local development, entrepreneurship, human resources, scientific and professional services, beauty, and personal development to education and hospitality. Around 29% of providers are focused on industry, manufacturing, health, and construction, integrated mainly into production, while 16% deliver programs in other areas, ranging from agriculture, information communication technology (ICT) and transportation to recreational and cultural activities.

The findings of the TAP survey conducted through in-depth interviews and self-reported data and information indicate that although training institutions perform generally well across all key Action Areas, there is still room for improvement, notably in aspects such as strategic management, promoting a demand-driven approach in designing and delivering training programs, learning conditions and materials, and creating opportunities for students and graduates to continue their studies and/or find employment.

Moreover, in all Action Areas, IVET institutions performed better than CVET institutions, but more significantly so in the areas of relationship with authorities, learning (assessment strategies, instructor evaluation, and professional development opportunities), meeting quality standards, and preparing students for the world of work (especially in terms of tracking placement of students after graduation, which is more prevalent in IVET than in CVET).

A key challenge institutions faced during the COVID-19 pandemic was that almost a third of institutions reported that less than 10% of the student population could maintain engagement. Among the main reasons for not being able to maintain engagement in online lessons, most training institutions

indicated the lack of adequate digital devices or equipment, and, in some cases, even the lack of adequate internet connectivity/bandwidth, especially among students from rural areas.

The key findings from focus group interviews with the main stakeholder groups highlight several issues and challenges in the education and training system in terms of the quality and relevance of training programs for the labor market. More specifically, according to both students and graduates, training programs offered by CVET institutions are more practice-oriented than those delivered in IVET, with over 70% of curricula consisting of practical training. In addition, program flexibility and short duration are among the main advantages of CVET. Moreover, IVET providers – technological high schools in particular – are perceived to be of lower quality than other providers. However, most students and graduates consider that vocational training provides a good and relevant background for a future career. Another key finding from the focus groups is that teachers/instructors of IVET institutions, compared to those from CVET institutions, have limited freedom and flexibility to adapt curriculum content, which is perceived by most as being heavily overloaded and too focused on theory rather than on developing practical skills.

Reaction to the COVID-19 pandemic by institutions varied. All institutions adapted the content of programs and courses for online teaching, purchasing licenses for online platforms, especially during general lockdown. Most IVET students had issues with internet connectivity, and some did not have adequate devices to attend online classes reliably. During this time, practical training was significantly affected as students could not attend their apprenticeships at employers' premises. In addition, student assessment was seriously affected, with many students reporting that this was not done properly, and the results were inaccurate.

Based on these findings, a set of key recommendations are proposed separately for regulating authorities and providers, as summarized below.

Recommendations for regulating authorities (policy and sector level)

Build on current efforts to better collect, manage, and use data from education and training institutions to make informed policy decisions. Considering that data collection efforts in CVET are fairly limited, the government could explore establishing a national data collection and analysis system covering both IVET and CVET. It could also conduct impact evaluations of IVET and CVET programs or pilot tracer studies for selected programs, which could offer valuable information on the benefits generated by a specific training program, both for the employee and the employer.

Harmonize quality assurance processes between IVET and CVET and introduce quality standards for support services. This may require developing training programs under a common curricular framework, clarifying the link between occupational standards, qualifications and curricula, and the standardization of quality assurance mechanisms and procedures. At the same time, there is a need to develop and implement quality standards for some types of services provided by both IVET and CVET providers, such as student services, digital instruction, and labor market transition support for students preparing to enter the labor market.

Develop measures and create mechanisms which enable a more active participation of employers and other non-government stakeholders in TVET. At national level, the government could foster the active participation of employers and other non-government stakeholders in setting strategic priorities by using the already existing social partnership structures to increase the roles and responsibilities not only of employers, but also professional associations, trade unions, NGOs, and training institutions.

Review strategies to strengthen diversity and inclusion is to ensure equal access to quality education and training. Across various areas of institutional activity in different Action Areas in both IVET and CVET, there is limited engagement with and/or consideration of the needs of learners with special

educational needs and minority populations (for example, in curriculum design, program delivery, data management, staff professional development, and strategic planning, among others).

The government could use incentives more intensively to encourage education and training institutions to diversify their sources of funding and resourcing, including in-kind resource contributions. Romania's overall expenditure on education (only 3.2% of GDP) remains among the lowest in the European Union. There is also negligible evidence of any research and development (R&D) relationships with industry, hence R&D projects implemented in partnership with industry can help to strengthen program design and build lasting relationships with the private sector, so might be worth supporting and nurturing. The government should explore strategies to incentivize private investments in CVET. Possible solutions range from campaigns to raise awareness of the benefits of CVET, support for businesses to assess skills needs, to the establishment of a training fund. In the case of IVET, institutional autonomy should be enhanced to promote the use of resources in more focused ways. Sponsorships from employers or other social and local partners should be considered, while schools could focus on generating and using additional revenue streams.

Create mechanisms to render TVET more flexible and accessible as part of building lifelong learning opportunities for the Romanian workforce. Awareness-raising processes could be implemented as a first step in encouraging institutions to introduce greater flexibility in access to learning, with a focus on program flexibility, as well as use of alternative modes of delivery, such as online and blended learning.

Prioritize investments in digital infrastructure and training programs to enhance students' and teachers' digital skills for online learning and teaching, especially in IVET. The school curriculum should be revised to include development of these skills throughout the entire education cycle, which requires teachers with enhanced digital skills. Despite many training courses available to teachers to develop/improve digital skills, their quality, coverage, and relevance are lower than expected.

Recommendations for training providers

Strengthen communication and collaboration of training institutions, especially vocational training providers (VTPs), with industry and companies to get up-to-date information on current and future labor market needs and latest technologies. Provide incentives for employers, including financial ones, to offer apprenticeships and to become more engaged in developing and updating curricula relevant to businesses and/or design exclusive courses for companies willing to provide funding or ready to employ a significant number of graduates from such programs. Romania's Recovery and Resilience Plan, recently approved by the European Commission, includes dedicated funds (grants) to extend dual VET at regional level, focusing on consolidating partnerships between IVET institutions, local authorities, and other relevant stakeholders, including universities and employers.

Ensure more inclusive approaches to program delivery. Both IVET and CVET providers could collect more data and information on students with disabilities, students with special educational needs, and minority learners, and ensure their participation in activities related to the educational process and program planning, institution financing, quality assurance, and monitoring and evaluation.

Develop and implement measures and actions to mitigate risks related to possible new waves of pandemic and other similar emergency situations. Although half of participating institutions indicated that they had developed an operational continuity plan as a result of the COVID-19 outbreak, each institution should be prepared for future scenarios that would affect program delivery. Moreover, maintaining practical training and making it COVID-safe should be prioritized.

1 Introduction

As the Fourth Industrial Revolution unfolds, technology, markets, and economies are changing at an ever-increasing pace, a process that the ongoing global COVID-19 pandemic has only accelerated. This rapid and ongoing change presents a ‘new normal’ for countries that want to reach, or keep pace with, the ‘economic frontier.’ This flexible term refers to countries, firms, and individuals operating at an optimal and efficient state and implies high productivity, innovation, and income. But the frontier is an ever-moving target, and keeping up with it requires ongoing strategic investments in human capital. At every level, being at the frontier requires the right skills and training models that allow individuals, employees, and workforces to update their skills frequently and efficiently to meet changing needs identified by organisations and governments.

The flagship area, ‘Reskill and upskill’, defined in the Annual Sustainable Growth Strategy 2021, explains that re- and upskilling are central to supporting the green and digital transitions, enhancing innovation and growth potential, fostering economic and social resilience, and ensuring quality employment and social inclusion. Investments and reforms should focus on digital skills and educational and vocational training for all ages. Education systems need to be further adapted and increase digital literacy for both students and teachers. One of the European Union (EU) targets to be achieved by 2025 is ***at least four in five VET graduates should be employed, and three in five should benefit from on-the-job-training.***

The skills agenda in EU member states is to provide the workforce of today and tomorrow with skills in line with current and future labor market needs, including the green and digital transitions, by also aligning distinct reforms with the European Skills Agenda, the Pact for Skills, the European Education Area, the Digital Education Action Plan, and the European Industrial Strategy. Three policy areas are envisaged: (i) **jobs and growth** through better matching between skills and labor market needs, given an aging population; (ii) **twin transition to digital and green** through new working methods, new emerging jobs, and through investing in digital skills and (iii) **Social resilience** through supporting school-to-work transitions, workforce adaptability, and easing necessary job transitions. Particular attention should be paid to those who most need training, and who often have the least access to training opportunities, including low-qualified/skilled adults and people with a migrant background. Digital skills are key for accessing online services, remote working, and distance learning – all elements that support economic and social resilience in the context of the current crisis.

Considering this, the World Bank has been implementing the Training Assessment Project (TAP) under the Systems Approach for Better Education Results (SABER) Initiative of the World Bank’s Education Global Practice. The focus of TAP is to help governments assess the readiness of their training systems and institutions to support human capital development in ways that will enable countries either to reach or stay at the economic frontier.

TAP is an evolving, structured research methodology that seeks to assess and compare the readiness of training systems and institutions to prepare workers to find meaningful employment in economies that are moving towards the economic frontier – and then to be able to keep their skills current and relevant in the face of ongoing changes in demand in the labor market. TAP has developed a series of research instruments that are customized to the policy, regulatory, and economic contexts of individual countries and is used to assess training institutions and systems in terms of their readiness to meet changing training needs.

The TAP in Romania was conducted by the World Bank Romania team between April 2020 and June 2021 in four phases, as follows: **phase 1:** landscape mapping of approximately 4,500 existing training providers in Romania using available data and information; **phase 2:** selecting the research sample consisting of 75 institutions, plus a reserve list of other 151 institutions; **phase 3:** conducting a pilot survey with 6 training institutions to test the validity of the TAP survey design and its instruments; and

phase 4: conducting the TAP survey with selected training institutions through online in depth interviews with representatives of 62 institutions, focus groups with relevant stakeholders (students, recent graduates, teachers/instructors, and directors of training institutions), and data and information collected from training institutions through an online form.

Section 1 presents the EU training and skills development agenda, focusing on upskilling and reskilling the current workforce within the rapid and ongoing changing economic and technological context. This section briefly describes the TAP survey methodology, and its associated instruments, as well as the key implementation steps.

Section 2 provides a short description of the structure of both the initial (IVET) and the continuous (CVET) vocational education and training system in Romania, focusing on the legal and institutional framework governing its organization and functioning, including most recent data on the number of existing IVET institutions and student population, and funding of the sector. This section also presents the key challenges Romania is currently facing in terms of economic growth and productivity, demographic decline and quality and relevance of its education and training system, especially in the current COVID-19 pandemic context. The section details the key challenges in IVET, e.g. low basic skills among students entering IVET, outdated infrastructure, and insufficient training materials, underfinancing and limited access to resources, limited focus on digital skills, inconsistent tracer studies and labor market forecasting, and insufficient and inadequate supply of education and career counseling services, among others. It also describes the process of customizing TAP survey instruments to the country context, together with detailing the survey implementation phases mentioned above.

Section 3 presents an overview of the participating training institutions based on the analysis data collected by the World Bank team via the Institutional Data Form in terms of institution profile, number and type of programs, students and graduates, teachers/instructors, facilities, budget allocations and revenues.

Section 4 presents the findings from the in-depth interviews held with representatives of the 62 participating training institutions around the nine key Action Areas that have been identified through research as essential requirements for effective training systems reform, plus a new one related to the response to the current pandemic context, namely: (1) Setting strategic direction; (2) Gathering, analyzing, and publicizing data for informed decision-making; (3) Developing a demand-driven approach to training; (4) Establishing a sustained relationship with authorities; (5) Ensuring institutional financial viability and efficiency; (6) Fulfilling quality standards; (7) Creating a teaching experience conducive to learning; (8) Preparing students for the world of work; (9) Enabling students to pursue education and training opportunities, and (10) Responding to COVID-19 and other emergencies.

Section 5 presents the key findings from the focus groups with students, graduates, teachers/trainers, managers of the training institutions participating in the TAP survey interviews and employers who are representative of the industries covered by the training institutions included in the survey. It also presents participants' reactions to the COVID-19 pandemic, its challenges, and how they adapted to remote learning, teaching, assessments, and practical training.

Section 6 includes sector and policy level recommendations for regulating authorities in the country, as well as some key suggestions for training providers.

2 The Vocational Education and Training System in Romania

The Romanian education system consists of about 17,000 school units offering services ranging from early childhood to tertiary education. Approximately 2.9 million students are currently enrolled in these schools.

The structure of Romania's education levels¹ can be described as follows:

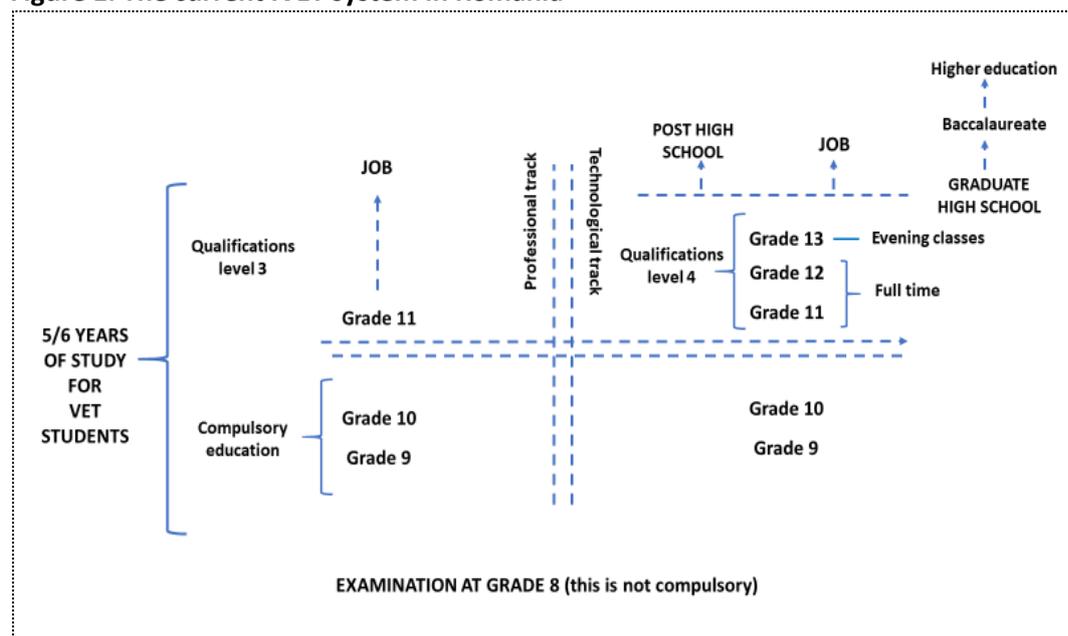
- Early childhood education, comprising ante-preschool education (age group 0 to three years, delivered in nurseries) and preschool education (age group three to six years, delivered in kindergartens).
- Primary education, including a preparatory grade and Grades 1 to 4, for the age group six to ten years.
- Secondary education, which comprises lower secondary education (offered in gymnasiums) – Grades 5 to 8, for the age group eleven to fourteen.
- Upper secondary education, which includes:
 - High school education delivered through three tracks: theoretical, technological, and vocational² – Grades 9–12.
 - VET (known as professional and technical education in Romania), with a duration of three years, delivered through the VET track in professional schools, or technological high schools which are part of the initial VET (IVET).
- Tertiary education, which comprises:
 - Non-university tertiary education – post-secondary VET with a duration of up to three years, which is also part of the initial VET (IVET).
 - University education (higher education), organized in three cycles: bachelor's degrees, master's degrees, and doctorate.

IVET (Figure 1) is provided at the upper secondary level by schools that mostly deliver education services for both streams: a VET track for three-year programs that end with a level 3 qualification that allows students either to continue their studies at high school level or find a job; and a technological high-school track for four-year programs that end with a qualification level 4 and/or a Baccalaureate diploma, which allows graduates to continue their studies at university or find a job. IVET also includes the post-secondary level delivered in technological high schools, post-high schools, and colleges/universities, mainly based on market demands, with qualifications corresponding to European Qualifications Framework (EQF) levels 3 to 5. The Ministry of Education issues qualification and graduation certificates. The system is not currently permeable nor flexible enough to ensure a smooth transition for VET students. Figure 1 explains that a VET student, after three years of programs, can opt for a job and to continue studies in parallel, but the student needs to enroll in high school for evening or reduced frequency classes for another three years. Comparing the six-year program for a VET student to a four-year program for a high school student with the same outcome reflects the fact that the education and training system needs to change to offer equal opportunities to students across different pathways, as well as a variety of study options.

¹ National Education Law no. 1/2011 with updates, Chapter II, The structure of the national pre-university education system and Title III University Education

² The 'vocational' high school path in Romania includes schools such as arts, sports, military, pedagogical, and theological high schools. These are termed 'vocational' high schools, which should not be confused with VET as in other countries.

Figure 1. The current IVET system in Romania



Source: World Bank, 2019

Continuing VET (CVET) refers to adult training available for learners from age 16. Training programs help develop competencies acquired in the existing qualification, new competencies in the same occupational area, fundamental competencies, or new technical competencies specific to a new occupation. Training programs are often shorter than those provided in IVET; they are focused on a specific occupation, whereas IVET qualifications are broader and may prepare a student simultaneously for more than one occupation.

CVET is provided by authorized private and public training institutions based on employers' demand or required by individuals who want to upskill or reskill and who are willing to obtain a qualification, specialization, or key competencies. Training courses delivered by employers to their staff do not require the issuance of nationally recognized certificates.

In CVET programs, on-the-job training makes up at least two-thirds of the program. For students who demonstrate the required skills, the program is reduced by half after the initial assessment. Qualification programs are organized at EQF levels 1 to 4, and their duration varies depending on the level of qualification obtained at the end of the program: (i) for EQF level 1: minimum 180 hours; (ii) for EQF level 2: minimum 360 hours; (iii) for EQF level 3: minimum 720 hours; and (iv) for EQF level 4: minimum 1,080 hours. The Ministry of Labour issues qualification and graduation certificates.

| IVET ³ | CVET ⁴ |
|---|---|
| The Romanian national framework for quality assurance (QA) was established by Law 86 in 2006. The law defines a series of principles to guide QA in pre-university education, including VET, focusing on learning outcomes, promoting quality improvement, and relying on providers' self-evaluation processes. Since 2009, Romania has adjusted the framework to | Romania adopted the National Qualifications Framework (NQF) by a Government Decision in December 2013. The NQF has 8 levels of qualifications that can be acquired through the formal education and training system in Romania and by recognition of learning outcomes acquired through non-formal and informal learning. |

³ World Bank, 2019, Romania's Vocational Education and Training Subsector.

⁴ UNESCO, TVET Country Profiles Romania.

ensure it refers specifically to EQAVET, the European quality assurance reference framework, and the Law of National Education from 2011 has reinforced the approach to QA. The standards used for the accreditation of programs and providers in IVET were revised and updated, and the new accreditation standards entered into force in 2018.

There is an overlap of responsibilities also among the actors responsible for the QA function. This results in a QA system excessively focused on inputs rather than on outcomes, on compliance with minimum standards rather than on enhancing performance. Links with employers in the established processes for QA in IVET are still weak, and, in turn, employers' involvement in the QA of IVET providers and programs is limited. The mechanisms to assess the quality of on-the-job and practical skills are unevenly developed and a key pending issue regards data collection systems for QA procedures. The possibilities of using data for enhancing education quality are limited – the data refer mostly to the school network, educational areas, levels, and specializations, and are insufficient to enable prospective students to make informed decisions or to assess the performance of training institutions.

Adults with professional competencies acquired in non-formal and informal learning can be assessed in the competence assessment centers authorized by the National Authority for Qualifications (NAQ).

According to the Law of National Education, community centers of lifelong learning at the local level can also provide educational services through programs for validating the results of non-formal and informal learning. However, except for a project carried out between 2015 and 2018 by the Romanian Institute of Adult Education, within which four community centers were established in four localities in four counties in western Romania, their legal framework has never been applied nor does it contain elements to ensure the sustainable operation of these entities.

The key institutions responsible for governing the VET system in Romania (see Figure 2) are the following:

- The **Ministry of Education (MoE)** has the overall responsibility for developing and implementing education and training policies and strategies in coordination with the Ministry of Labour and other agencies with responsibilities in this area. The MoE is also in charge of financing IVET institutions (including teacher salaries and student scholarships); coordinating IVET teacher salary policies and levels; management, recruitment and deployment of IVET teachers, principals and auxiliary staff; management of the Education Management Information System (EMIS) through which IVET institutions collect data and information on IVET.
- The **National Centre for TVET Development (TVET Center)** is subordinated to the MoE and is responsible for developing IVET policies and strategies; providing quality assurance for IVET; developing, updating and revising the IVET curriculum; contributing to IVET teacher training development; coordinating social partnerships in IVET, at the national, regional, and local levels; and preparing programs for supplying IVET institutions with equipment and other resources, in line with the international standards.
- The **National Authority for Qualifications (NAQ)** is responsible for developing, implementing, and updating the National Qualifications Framework (NQF) and correlating them with the European Qualifications Framework (EQF). Currently, the NAQ is under the Ministry of Education⁵ and is responsible for managing and updating the National Qualifications Register, as well as the Register of National Evaluators who assess professional competencies. The NAQ also coordinates the development of occupational standards, and qualification standards (part of the IVET curriculum). It authorizes and monitors the evaluation centres of professional competencies.
- The **Ministry of Labour and Social Justice (MoLSJ)**, together with its regional branches, is responsible for developing employment and workforce training policies based on national and

⁵ Until 2017, the NAQ was coordinated by the Ministry of Labour and Social Justice.

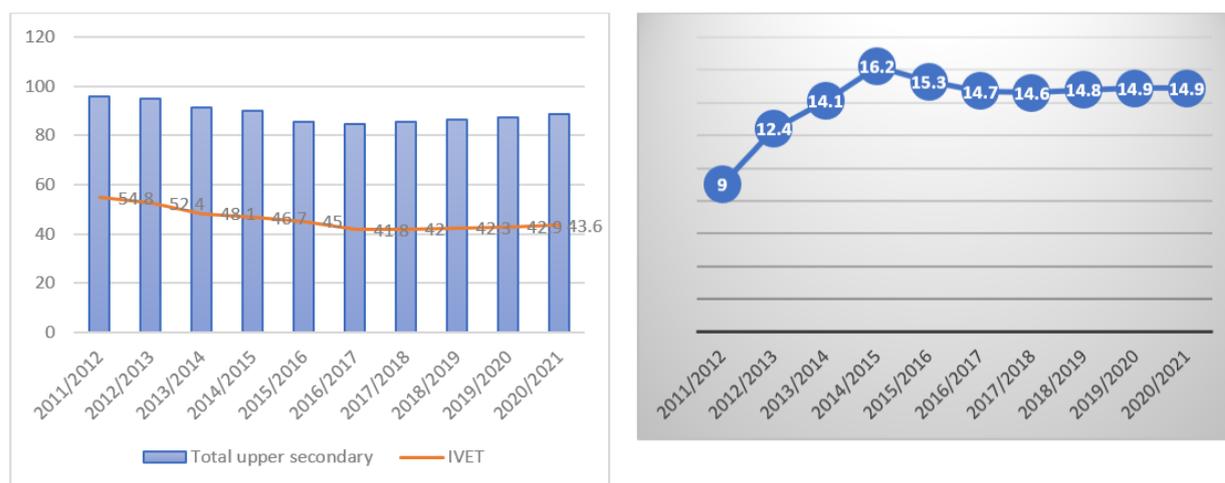
European requirements and managing the National Register of Adult Training Providers and other training-related registers. Since 2017, the MoLSJ has coordinated the authorization of CVET providers through its 42 county authorization commissions. Previously, this was the NAQ's responsibility. The authorization is issued and valid for four years, and CVET providers are monitored by the commissions to renew their authorization.

- The **National Agency for Workforce Employment (ANOFM)**, an independent agency led by a tripartite board and coordinated by MoLSJ, is responsible for maintaining dialogue with representatives of the government, trade unions and employers on issues pertaining to employment. This agency coordinates 42 county branches and offers training courses for unemployed as well as employed workers, through its centers and departments.

Romania's current academic offering

In Romania, IVET is provided at upper secondary (three-year VET programs and four-year technological high schools) and postsecondary levels. In 2021, 43.6% of all students in upper secondary education were enrolled in vocational education programs (compared to the EU average of about 48.7%), and 14.9% of students were enrolled in postsecondary education⁶.

Figure 2. Proportion of students in vocational programs, of the total enrolment in upper secondary education; proportion of students enrolled in postsecondary education



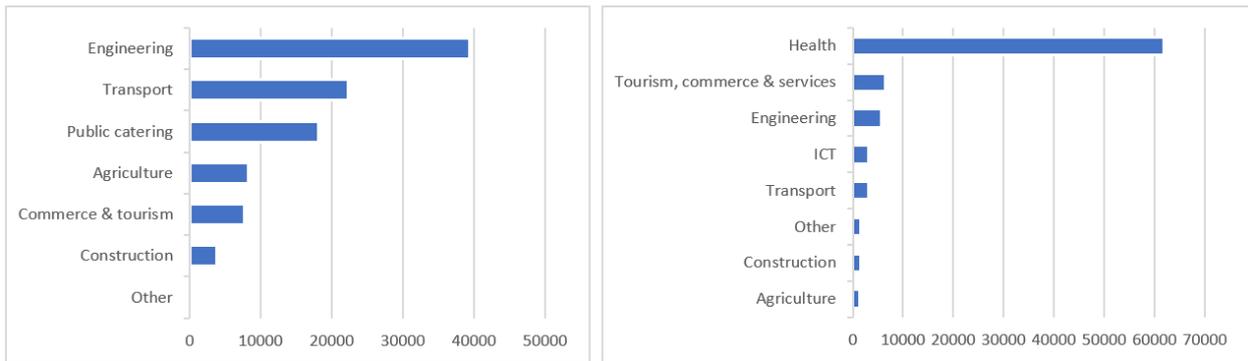
Source: National Institute of Statistics data

In upper secondary vocational programs, students enrol primarily in engineering programs (40%), transport programs (22%), or public catering programs (18%), and fewer students opt for agriculture, commerce and tourism, or construction. In postsecondary education, the largest proportion of students opts for health programs (73%), and fewer for engineering, tourism, or ICT⁷.

Figure 3. Distribution of enrolment by type of programs in upper secondary education, and postsecondary education

⁶ Ministry of Education, 2022, Status of the Preuniversity Education Romania, based on the National Institute of Statistics data.

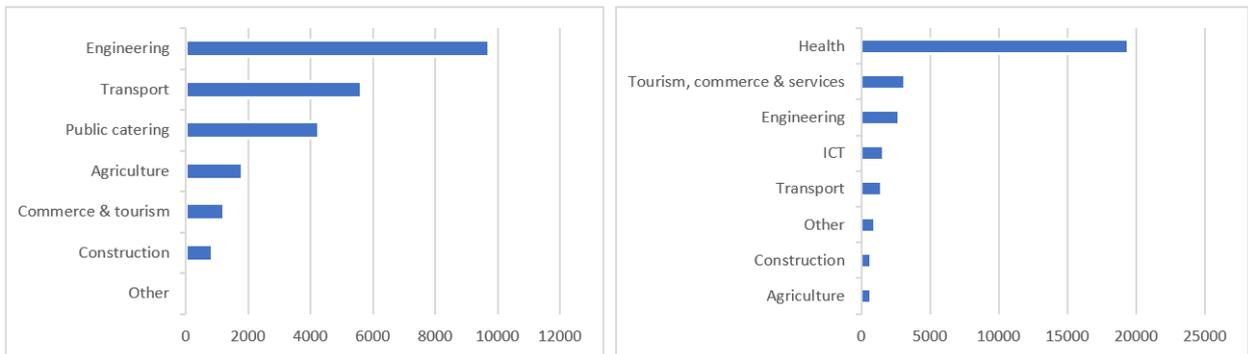
⁷ National Institute of Statistics (Tempo Online, online code: SCL103K).



Source: National Institute of Statistics data

Approximately 25% of the students graduated from upper secondary vocational programs in 2020⁸, and 15.4% from postsecondary education. In upper secondary vocational programs, students graduated from engineering programs (41%), transport programs (24%), and public catering programs (18%). Meanwhile, in postsecondary education, 63% graduated from health programs, 10% from tourism programs, and 9% from engineering programs⁹.

Figure 4. Distribution of graduation by type of programs in upper secondary education, and postsecondary education



Source: National Institute of Statistics data

Adult participation in lifelong learning and continuing training programs is low, at only 4.9%, compared to the EU average of 10.8%, in 2021¹⁰. Very low participation rates are also reported among individuals with a low level of education; only 1.1% compared to the EU average of 4.3%¹¹.

⁸ Calculations based on Eurostat data (online data codes: EDUC_UOE_GRAD01 and EDUC_UOE_ENRS04).

⁹ National Institute of Statistics (Tempo Online, online code: SCL109E).

¹⁰ Eurostat (online data code: trng_lfse_01).

¹¹ Eurostat (online data code: trng_lfse_03).

Figure 5. The key institutions responsible for governing the VET system in Romania

| | | | |
|---|--|---|--|
| Ministry of Education IVET policy making Teachers' salaries and professional scholarship financing Management, recruitment and deployment of VET teachers, principals and auxiliary staff Annual standard cost for VET students used for per capita financing Education data management through SIIR TVET Center structure and appointment of a director | | Ministry of Labor and Social Justice Classification of Romanian occupations preparation and update Nomenclature of qualifications preparation and update | |
| TVET Centre (under MoE) Sectoral policy and strategy preparation VET curriculum (training standards and syllabi for specialty subjects) development, revision and update VET teacher training management Strategic planning jointly with social partners | National Authority for Qualification (under MoE) National Qualifications Framework preparation National Qualifications Register Skills Evaluation Centres accreditation and evaluation Occupational standard and qualification development coordination | National Agency for Employment Accredited adult training providers Register Trainees' certification Facilitation of graduate transition to employment | |
| IVET (under MoE) and CVET (under MoLSJ) providers Deliver education and training services Provide career guidance | | Employers IVET school partners Tutoring and placements for apprentices Employment of graduates | |

Source: World Bank team, 2021

The legal framework for education and training in Romania

The following regulations provide the general national legal framework for education and training in Romania:

| Law/regulation | Scope |
|---|--|
| National Education Law (No. 1/2011) | This law sets the legal and institutional framework for initial education and training and for lifelong learning. It lays the foundation for lifelong learning in Romania (which includes the major aspects of education and training) in an integrated and coherent manner and identifies roles and responsibilities within the sector. It includes requirements for the recognition and certification of skills acquired through formal, non-formal and informal education. |
| Labour Code (2003), updated regularly | This code regulates employment relationships and the enforcement of regulations on employment relationships. It includes provisions on training for employees and related obligations and duties for employers. |
| Unemployment Insurance System Law (No. 76/2002) | This law regulates the training of persons (i) seeking employment; (ii) working in rural areas with no income, or income lower than the reference social indicator in force; and (iii) registered at the agencies for workforce employment, as well as active labor market programs. Training programs are legally compliant, tailored according to current and future requirements of the labor market, and consistent with the options and abilities of the individuals concerned. |
| Law on Adult Training (No. 167/2013) | This law provides the legal framework on adult training. Adult training that provides a qualification certificate, a completion certificate and/or a certificate of professional competence is an activity of general interest and is part of the national education and training system. |
| Fiscal Code Law (No. 227/2015) | This law regulates the tax deductions for expenses for the training of employees, among many other specific provisions. |

| Law/regulation | Scope |
|--|---|
| Apprenticeship Law (No. 279/2005, amended in 2013 and updated in 2019) | This law regulates work-based learning. It creates a framework to promote employment among young people and improve the quality of professional qualifications. The evaluation and certification of apprenticeship training is to be done in accordance with the legal provision on adult training and completed with issuance of a qualification certificate. The amended law stipulates financing for apprenticeship activities: employers may receive monthly subsidies from the Unemployment Insurance Fund if they hire apprentices. This law is complementary to the Traineeship Law and is part of Romania's Youth Guarantee Scheme. |
| Traineeship for Higher Education Graduates Law (No. 335/2013) | This law supports the transition of university graduates from the education system to the labor market. Graduates will have a training period of six months in their first job, ending with an evaluation. A positive evaluation will result in a trainee being issued a certificate signed by the employer, and the training period will be added to the length of service. Employers who conclude a traineeship contract can receive subsidies from the Unemployment Insurance Fund or European funds. |
| Volunteering Law (No. 78/2014) | This law (i) regulates the relationship between the volunteer and the host organization through a framework agreement; (ii) recognizes volunteering as professional experience; and (iii) provides a certificate of the competencies acquired through volunteering (the certificate contains eight key competencies according to the National and European Qualifications Framework). |
| Order on Dual System (No. 3554/2017) | This order regulates the organization and function of the dual VET system for qualification levels 3, 4 and 5 according to the National Qualifications Framework and provides details about partnership agreements between IVET schools and employers. |
| National Qualifications Register (Decision No. 917/2018) | This decision approves the official structure of the National Qualifications Register which is regularly updated by the NAQ. |
| Order on Authorization for CVET Providers to Deliver Online Training (No. 1149/2020) | This order regulates the conditions and areas for authorizing CVET providers to deliver adult training programs in online modalities as a result of sanitary restrictions related to the COVID-19 pandemic. |

The appeal of vocational education and training has increased, and the number of students enrolled in professional schools has increased ten times in the past ten years, revealing a growing interest among students and companies in this training path. There are several reasons for this, including the shorter duration of the program (three years instead of four), ending with a level 3 qualification that provides students direct access to the labor market, and provision of a scholarship for all students enrolled in professional schools. In the 2020/21 school year, the school network comprised 884 VET schools and 203 post-high schools. Table 1 indicates that post-high schools include 35% of private schools serving 48% of the total post-high school student population in their network.

Table 1. The number of VET schools, post-high schools and students by rural/urban classification in 2020/21

| Area | VET Schools | Of which private schools | Students | Post-high schools | Of which private schools | Students |
|--------------|-------------|--------------------------|----------------|-------------------|--------------------------|---------------|
| Rural | 220 | 0 | 16,164 | 27 | 4 | 2,061 |
| Urban | 664 | 14 | 93,795 | 544 | 199 | 88,371 |
| Total | 884 | 14 | 109,959 | 571 | 203 | 90,432 |

Source: MoE EMIS – SIIR, 2021

In 2019, new six-month apprenticeship programs became available for low-qualified people and those who left school without any qualification. These programs support integration in the labor market and

do not require prior formal qualifications, while employers receive an incentive of about EUR 340 per month for each apprenticeship contract¹².

However, the COVID-19 pandemic hit the VET schools harder than others, as schools were closed and companies and learning happened virtually and remotely. Graduation examinations for European Qualifications Framework (EQF) 3 and 4 training programs were replaced by a student project in the field of study, submitted for examination. The final grade replaced the practical stage for EQF 5 level graduates.

Funding of TVET in Romania

Government expenditure on education in 2020 was 3.7% of GDP, compared to the EU average of 5%. Expenditure on IVET is particularly low. Public expenditure per student in IVET in thousands of purchasing parity standard units (PPS) per student enrolled in 2018 was 0.7 compared to 7.8 – the EU average¹³. IVET is mostly financed by the state budget and only marginally by private funding.

The IVET system faces excessive fragmentation and overlaps of responsibilities among different actors. An analysis conducted by the World Bank to inform strategic decisions in education infrastructure (World Bank, 2017) reveals infrastructure shortages with more than half of secondary schools lacking science laboratories, and 20% of IVET schools having no workshop on their premises. Priorities for investments in education are set out by local authorities (which are subordinated to the Ministry for Regional Development) in dialogue with schools, and with the participation of the Ministry of Education, and the TVET Center. However, the responsibility for developing the standards to assess the appropriateness of IVET providers' equipment in relation to the needs of the training field lies with the Ministry of Education and Ministry of Labor, along with the TVET Center, and Sectoral Committees.

Employers are also aware of the lack of and outdated equipment in many IVET schools across the country. They are more interested in the sustainability of investments in equipment and new cutting-edge technology due to the rapid technological progress and high costs. Hence, many of them prefer training IVET students using their own equipment on their premises. However, there are several cases whereby employers, usually large companies, decided to bridge this gap and invest in IVET infrastructure and equipment.

CVET funding is much more fragmented. Employees' training costs are either paid by the trainee or by the employer and, to some extent, on funding from European Funds. Training for vulnerable groups (for example, the unemployed and Roma people) benefits from public funding under the Education and Employment Operational Program. In 2020 the average cost of CVET courses per trainee was EUR 462, less than one-third of the European average cost (EUR 1,441)¹⁴.

Romania's labor market – 2021 statistics¹⁵

| | Total | Male | Female |
|--|--------------|-------------|---------------|
|--|--------------|-------------|---------------|

¹² The 2020 Education and Training Monitor, Romania

¹³ Cedefop, <https://www.cedefop.europa.eu/en/tools/key-indicators-on-vet/indicators?year=#26>.

¹⁴ Eurostat (online data code: TRNG_CVT_19S).

¹⁵ <https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?locations=RO>

| | | | |
|---|-------|-------|------|
| Labor force participation (over 15 years old) | 51.1% | 61.8% | 41% |
| Unemployment rate (labor force over 15 years old) | 5.6% | 4.5% | 6.1% |
| Labor force with advanced education | 82% | 83% | 81% |

Despite the level of advanced education being similar between males and females for Romania, a 2019¹⁶ enterprise survey indicates that only 37.3% of firms have females employed and represented in top management and ownership. This is slightly lower than the average figure for the ECA region, which is 40.1%. The same survey indicates that only 21% of Romanian firms offer formal training to employees (compared to the average of 31% for the ECA region). Annual employment growth was negative, -0.5%, compared to 2.8% across the region. Notably, of Romanian firms surveyed, 22% cited 'inadequately educated workforce' as their greatest obstacle to business – higher than the 15% of firms in ECA citing this as an obstacle. In terms of business size, 30% of both medium-sized businesses (employing 20-99 staff) and large-sized businesses (employing 100+ staff) cited 'inadequately educated workforce' as an obstacle in business. These figures suggest a disconnect between the training sector and the reality of the workforce as perceived by employers.

¹⁶ World Bank Group, European Bank for Reconstruction and Development, European Investment Bank. 2019. Enterprise Surveys What Businesses Experience. Romania 2019 Country Profile. [efaidnbnmnnibpcajpcglclefindmkaj/https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country/Romania-2019.pdf](https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country/Romania-2019.pdf)

2.1 Why implement TAP in Romania?

Romania's economic growth has been one of the highest in the EU since 2010, with an average growth rate of around 5% in the last three years. Nevertheless, growth was forecast to ease to 3.6% and 3.3% in 2020 and 2021 respectively, due to weaker industrial production and a softening external demand (European Commission, 2020).

Romania's population fell from 22.8 to 19.3 million between 2000 and 2020 and is expected to fall by 15 million by 2070 (European Commission, 2020). At the same time, over 2 million people of working age (20.6% of the labor force) are estimated to have emigrated in search of better job opportunities. The emigration of working age Romanians increased by 7% compared to 2017, calling for continuous efforts to upskill and re-skill the labor force remaining in the country (European Commission, 2020). At present, it is estimated that three to five million Romanians are living and working abroad, with highly educated emigrants representing 26.6% of the total.

At the same time, in 2021, there are 2.1 million fewer children and youth (aged 0–25) living in Romania compared with 2002 levels, while the school-age population has dropped by 1.5 million in the last 19 years, as shown in Table 2. In other words, the data suggest that in a country where the young population has been constantly declining, the system could retain a greater youth population in school than before. However, it also needs to bring adults back to education and training, as non-traditional students, to reach previous levels.

Table 2. Demographic trends of Romania

| Year | Resident population (million) | Population (aged 0–25) percentage of resident population | School population (million) | Percentage of school population of the population aged 0–25 | Percentage of school population of the resident population |
|------------|-------------------------------|--|-----------------------------|---|--|
| 2002 | 21.6 | 7.1 (33%) | 4.5 | 61 | 21 |
| 2021 | 19.1 | 5.0 (26%) | 3.0 | 60 | 15.7 |
| Difference | -2.5 | -2.1 | -1.5 | -1 | -5.3 |

Source: National Institute of Statistics, 2021

In addition to a relatively large informal sector, which, according to official data estimates, represents 0.6% of the total population (EC, Country Report Romania, 2017), the labor market participation rate was at a record level of 70.8% in the third quarter of 2019.

Before the outbreak of the global COVID-19 pandemic, the education system in Romania was struggling to provide high-quality education to all students and faced several challenges in human development. Romania has the lowest scores in the EU on the Human Capital Index (HCI) (World Bank, 2020). Its score of .58 means that children born in Romania today will be 58% as productive when they grow up as they could be if they received complete high-quality education and health services. According to the HCI, a four-year-old in Romania today can expect to complete 11.8 years of education by age 18, compared to 12.6 years in 2010. Factoring in what children learn, the expected number of years of schooling is only 8.4, the lowest among EU member countries. Current deepening inequalities in human capital outcomes make it imperative to target interventions to children from the most disadvantaged families. This is the way to prevent setbacks where they risk generating the worst consequences for people's life trajectories.

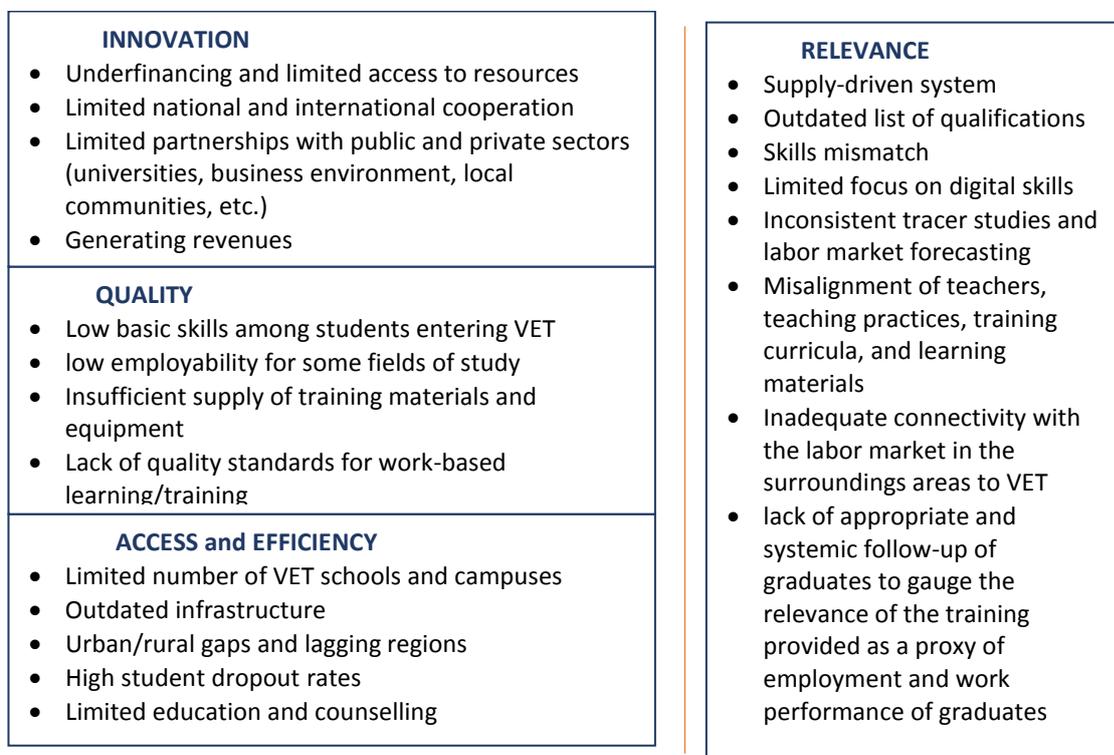
In Romania, the COVID-19 pandemic may increase the share of functionally illiterate students by up to 10 percentage points (from 41% to 51%). In 2018, Romanian students performed below the EU

average for reading achievement by 54 PISA points (close to 1.5 years of schooling). Of 15-year-old students, 41% have below basic reading proficiency. Due to the emergency nature of remote teaching modalities, effectiveness is likely to be lower than traditional instruction. A renewed, society-wide commitment is needed to protect human capital and to remediate the looming losses in the longer term. Romanian authorities prioritize repositioning society on values and building a resilient and sustainable education system. The Educated Romania national project also targets a results-based curriculum, functional literacy, STEAM education, digitalization, and resilience.

Romanian citizens have low levels of digital skills compared with European countries. The human capital dimension of the Digital Economy and Society Index (DESI), which provides comparative data on digital skills in the Member States, shows that only 31% of Romanian citizens have basic and above digital skills compared with 44% in the EU, and or 76% in Finland. Romania ranks in Europe's penultimate place given the lack of targeted efforts and coordination to improve digital competencies in schools.

The effect of COVID-19 on education will have a decades-long impact on the economy unless authorities act to recover learning losses and protect the human capital of affected cohorts. Learning losses and reduced years of schooling for student cohorts affected by COVID-19 will reduce their expected earnings by an estimated 3.6%, assuming a year of schooling increases earnings by 8% on average. This may amount to an overall economic loss of up to US\$2 billion (2011 PPP) every year. Romania needs to protect the education budget, ensure remediation to recover learning losses, prevent student dropouts, and invest in building a resilient education system for other crises in the future. At the same time, the Report on the Functional Analysis of the Vocational Education and Training (VET) sub-sector, prepared by the World Bank in 2019, highlights several challenges this sub-sector is facing in terms of access and efficiency, quality, relevance and innovation, as described in Figure 3.

Figure 6. Main challenges in Romania's initial VET



Source: World Bank team, 2019

Some of these challenges were also expressed by different VET stakeholders, such as policy and decision-makers at national and local levels, school principals, teachers, students, parents, and employers, who were interviewed and surveyed during the preparation of the functional analysis. A summary of the key feedback from the interviews and survey are presented in Table 3.

Table 3. Key feedback from VET stakeholders

| Topics | Main feedback |
|--------------------------------------|---|
| Public perception of VET | <ul style="list-style-type: none"> • A relatively good perception of VET exists among younger generations. • Good employment opportunities exist after graduation. • There exists access to fairly well-paid jobs. • VET has appeal due to available internships and scholarships, and opportunities for work-based learning. |
| Relevance of VET | <p>Curriculum and teaching</p> <ul style="list-style-type: none"> • An overloaded and overly theoretical curriculum leads to an insufficient number of hours for practical training. • The VET curriculum is misaligned with the current needs of the labor market and rapid technological progress. • Traditional teaching methods are outdated, with a focus on memorization rather than practical application. <p>Teacher training</p> <ul style="list-style-type: none"> • Pre-service and in-service teacher training are not relevant enough, especially for teachers teaching specialty subjects and practical training. <p>Skills gaps</p> <ul style="list-style-type: none"> • Significant gaps exist between the skills students and graduates possess and the skills required by employers. <p>Career guidance</p> <ul style="list-style-type: none"> • There exists limited or complete lack of career guidance services for students and parents in most VET schools due to insufficient supply of dedicated and specialized staff (e.g. school counselors). |
| Quality of VET infrastructure | <ul style="list-style-type: none"> • Infrastructure and equipment are obsolete in many VET schools, especially in technological high schools. • Limited and/or lack of materials and tools exist for practical training and demonstrations in many VET schools. |

Source: World Bank team, 2019

In 2019, only 1.3% of adults had had a recent learning experience, representing one of the lowest levels in the EU; significantly below the EU average of 10.8% (European Commission, 2020). Moreover, in 2019, a methodology for managing the national register of qualifications was adopted to help bring the descriptions of all qualifications acquired through initial, continuing, and tertiary education and training together in one place. In 2020, the National Authority for Qualifications launched a project to systematize and simplify registries for qualifications.

The government allocated 3.6 billion Euros under Romania's National Recovery and Resilience Plan (NRRP) for Educated Romania, consisting of six sub-components addressing key challenges in the education system: (i) early childhood education and care expansion; (ii) reducing early school leaving; (iii) professional route for vocational education and training; (iv) digitalization of education; (v) upgrading infrastructure; and (vi) reform of school governance. Measures in component 15 (education) of the Plan are expected to significantly contribute to reform and develop a complete professional route for vocational and educational training (VET) and dual education for students to transition smoothly to tertiary education in alignment with labor market needs. The reform will be

complemented by investments in ten education consortia, ten vocational campuses, and transforming 57 agricultural schools into professional centers. Furthermore, 909 VET schools will benefit from the equipment of IT laboratories and workshops. This reform aims to develop dual education by increasing the number of fields, qualifications, and graduates and by ensuring a complete educational pathway for students registered under dual secondary to go up to the third level education programs (qualifications 3–7).

The Education and Employment Operational Program (POEO) will benefit from an estimated budget of 5.8 billion Euros, also targeting VET to enhance its quality; integrate young people into the labor market; develop an entrepreneurial culture; support entrepreneurship, and the social economy; or increase participation in lifelong learning. Recovering learning loss in VET education is extremely challenging as it reflects immediately on skills level and quality. Key players in the VET area should be future-oriented and support recovery by anticipating long-term changes, adapting to short-term changes, and providing targeted information for careers, skills, and workforce development. However, this report emphasizes the idea of turning CVET into a real game-changer in the post-pandemic context, with reskilling and upskilling of the workforce playing a significant part. The post-pandemic recovery and the transition to green, digital and fair economies will take us from a skills crisis to a skills revolution, having at its core a VET sector for Romania able to meet policy-related targets while using EU funds.

2.2 Customizing TAP to Romania

The World Bank Romania team customized and adapted the TAP survey instruments (Annex 1) – Mapping Tool, TAP survey questionnaire, Institutional Data Form and the focus group guidelines – to Romania’s education and training context, policies, and regulations. The adaptation of the TAP instruments also considered the COVID-19 pandemic context which impacted the organization and provision of education and training services. Hence, the TAP survey questionnaire was revised and adapted by including a separate section (**Action 10: Response to COVID-19**) with specific questions aimed at learning about the challenges training providers experienced during the general lockdown imposed by the government to contain the spread of the virus and the solutions they adopted to adapt to online teaching and learning, and to better prepare for future emergencies/lockdowns.

This new set of questions was divided in two parts:

- **Part 1** included questions related to the situation prior to the COVID-19 pandemic and immediate response to its outbreak, to assess the degree of training providers’ readiness to quickly adapt to online teaching, and their immediate responses to changing conditions in the delivery of education and training services. Special attention was given to how practical training was conducted during general lockdown when students/trainees were unable to physically attend practical training lessons in workshops or at employers’ premises. At the same time, emphasis was placed on if and how learning assessments have been conducted remotely during lockdown. For example, in the VET three-year program, the certification exam includes, in addition to the assessment of theoretical knowledge, an assessment of practical skills which has been more challenging to conduct under remote learning conditions. Furthermore, the way training providers ensured access to remote learning, including materials and adequate devices for students/trainees with special and diverse needs was analysed.
- **Part 2** included questions related to the current situation and the plans training providers developed or were planning to develop for preparing for new COVID-19 cases or other emergencies. The following key aspects were under analysis: (i) development of operational plans describing how a training institution will work to provide for a continuation of essential services during prolonged absences caused by emergencies; (ii) teachers/trainers in need of developing or upgrading digital skills; (iii) need for additional staff, financial and other resources to expand the use of online and offline distance learning; and (iv) other foreseen challenges in terms of preparedness and continuity of training, considering the possibility of future emergencies.

The focus group guidelines were revised and adapted to include aspects related to how different stakeholders (students/trainees, teachers/trainers, graduates, managers of training institutions, and employers) were impacted by the COVID-19 pandemic crisis and the three-month general lockdown.

As a first step, the country team adapted and revised the English version of the tools which were discussed and agreed with the TAP team. As second step, based on the agreed versions, the country team translated all instruments into Romanian in two versions translated by different translators. Both translations were checked by the country team and one version of the translation was validated as final and applied in the survey. The customization of the TAP Mapping Tool is described in greater detail in section 2.3.

2.3 Landscape mapping and selecting the research sample

In Romania, TAP builds on the achievements of the World Bank System Approach for Better Education Result – Workforce Development (SABER WFD), prepared in 2017. Romania scored at an **Established** level (3 on a scale of 4) for two functional dimensions: Strategic Framework and System Oversight. A lower score – **Emerging** level (2 on a scale of 4) was recorded for the Service Delivery dimension. This dimension refers to the diversity, organization, and management of training provision, both state and

non-state, that deliver results on the ground by enabling individuals to acquire market- and job-relevant skills. As such, the next step of applying TAP became relevant to pursue in-depth analytical work and solutions dedicated to individual providers that deliver training services.

Considering the key findings and recommendations of the SABER WFD on service delivery, the overall scope of mapping and assessing training providers in Romania is twofold, namely: i) to support policymakers facing human capital decline to inform better policy decisions on training delivery, and ii) to support training providers to enable diversity, excellence, and relevance of their programs based on evidence. The specific objectives of the TAP exercise in Romania envisaged (i) an assessment of the overall performance of training providers, highlighting actions to improve training outcomes and improve performance; (ii) providing an analysis of the training systems for the skills development arrangements, practices, and outcomes; (iii) increasing capacity to build inclusive skills development systems with employer buy-in; and (iv) identifying effective and inclusive employer training engagements that can be scaled up.

TAP was conducted in four phases in Romania.

First phase: landscape mapping of training providers (April–May 2020)

During the first phase, the team conducted a primary landscape scan of existing training providers by collecting data and information for approximately 4,500 institutions on a range of variables, using various sources, as indicated in Table 4. After mapping them, the team grouped them into four clusters: (1) ATP – Authorized Training Providers (certified programs); (2) VTP – VET Training Providers; (3) RTP – Registered Training Providers (main economic activity); and (4) CTP – Companies providing in-house training. All data and information regarding the training landscape is reflected in the Mapping Tool that was designed by the World Bank for this purpose and customized to the country context.

Table 4. Landscape mapping of training providers – clusters, data source and variables

| Cluster | Data source | Variables |
|--|---|--|
| Authorized Training Providers (ATP) | Registers of training providers with certified programs from 42 counties (data available at the county level in databases provided by county commissions for authorization of training programs which are under the Ministry of Labor). | Name, address, contact details, legal status, year of establishment, number of employees, training programs offered by the firm and types of program (initiation, qualification, specialization and refreshing). |
| VET Training Providers (VTP) | The MoE’s EMIS database (SIIR) | Name, address, contact details, legal status, year of establishment, number of students enrolled by field of training |
| Registered Training Providers (RTP) | Lista Firme (List of Firms) database containing all companies registered and operating in Romania | Name, address, contact details, legal status, year of establishment, number of employees. |
| Companies providing in-house training (CTP) | Lista Firme (List of Firms) database containing all companies registered and operating in Romania | Name, address, contact details, legal status, year of establishment, number of employees, field of economic activity. |

Source: The World Bank team, 2020

Considering the high volume of data and information, the team split the work into counties and typologies of institutions, such as VET schools, and checked the duplicates at the end. During this process, the team faced several challenges in collecting reliable and accurate data, most of which were collected from secondary sources for which the team dedicated much more time. Moreover, most of the data on ATPs was found in different formats, for example PDF and JPEG, and needed to be converted into Excel files. This is a critical aspect to be flagged if a country’s training system becomes

transparent to the public and competitive, and if decisions on education and training are to be made in an informed way.

After conducting the primary landscape scan, the team identified readily available information for training providers and adjusted the Mapping Tool to reflect the country context and realities regarding level of socio-economic development, location, and industry focus of training providers. In this regard, the team included four additional relevant location-related variables, namely region, locality, county and area (urban/rural) to more accurately capture the social and economic environments where these training providers are operating. At the same time, the Mapping Tool was customized to include the four clusters of training providers (ATPs, VTPs, RTPs and CTPs) based on the different legal provisions governing the organization and delivery of training in Romania. The tool was customized to include the industry focus of training providers grouped in three clusters based on the main economic area for which each training provider delivers its programs.

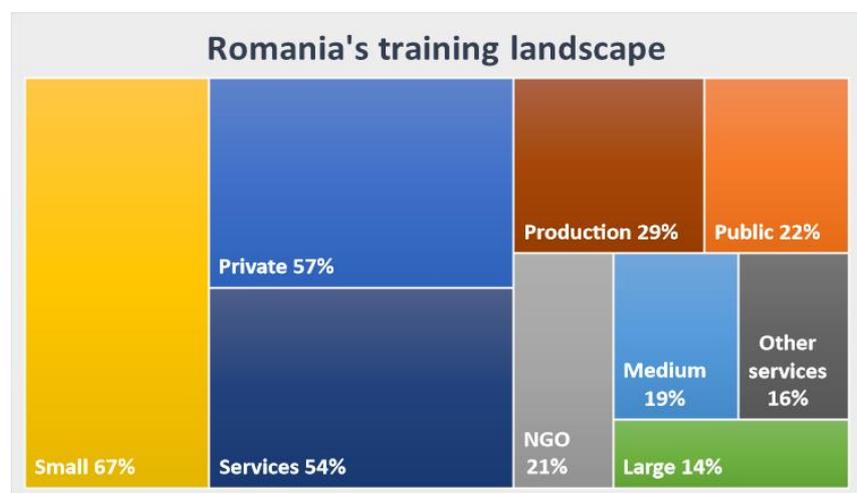
The Mapping Tool for Romania includes data and information for approximately 4,500 training providers on the following nine variables: (i) training provider **name**; (ii) **contact point** (email, website, phone number); (iii) **location** (street, region, locality, county, area); (iv) **year of establishment**; (v) **type of institution** (public, private, NGO); (vi) **education level** (no level, secondary, post-secondary non-tertiary, post-secondary); (vii) **legal status** (ATP, VTP, RTP, CTP); (viii) **company/enrolment size** (number of employees/ students) – small (less than 50), medium (less than 250) and large (more than 250); and (ix) **industry focus of training programs** clustered in three groups: 1) services, 2) production and 3) other areas.

The data collected and reflected in the Mapping Tool shows that Romania’s training landscape is largely dominated by small-sized providers (67%) that deliver certified courses for individuals or other companies, followed by medium-sized (19%) and large (14%) training providers. More than half of the training market is covered by private companies (57%), while the other half is made up (equally) of public and NGO providers.

Another dimension/variable the team considers is the industry covered by the training providers through their programs.

The predominant area for training is services (54%), covering the full spectrum

from support services, local development, entrepreneurship, human resources, scientific and professional services, beauty, and personal development to education and hospitality. More than a third of the training providers (29%) are focused on industry, manufacturing, health, and construction areas which are integrated mainly into production, while the rest (16%) deliver programs in other areas ranging from agriculture, ICT and transportation to recreational and cultural activities.



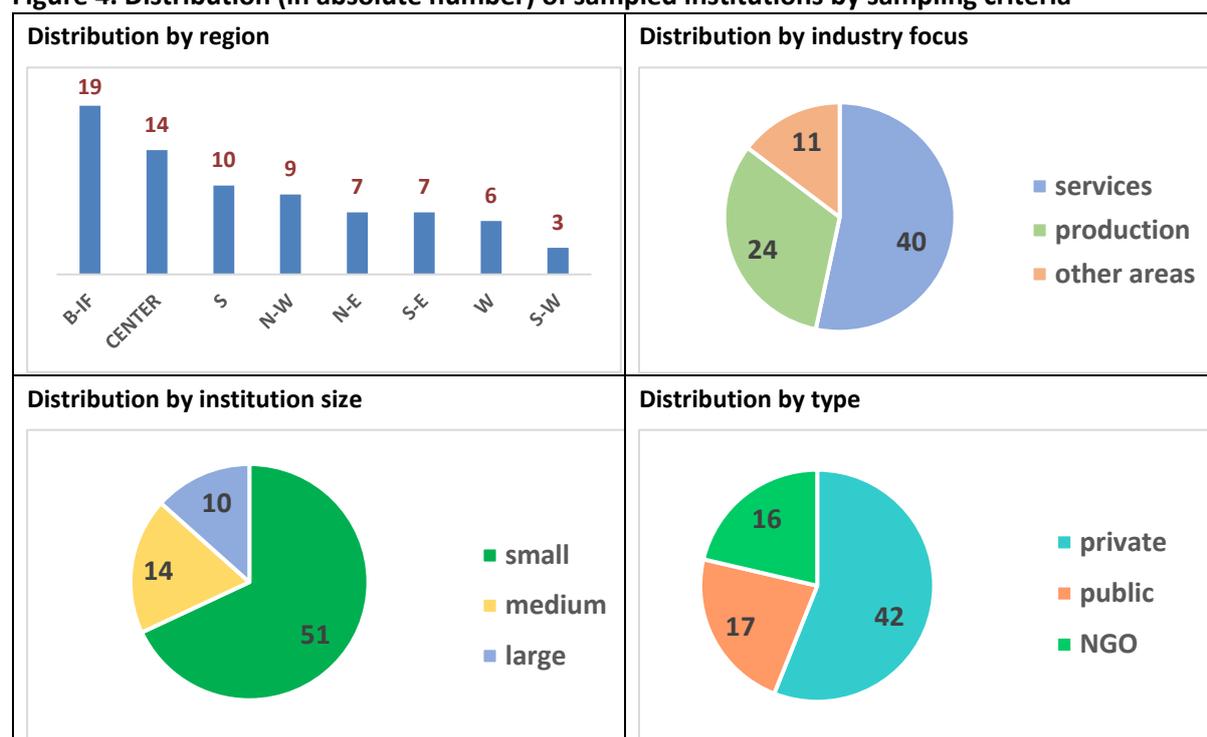
Second phase: selection of training providers (May 2020)

During the second phase, the team drew two samples based on the customized Mapping Tool: **sample #1** with a list of 75 education and training institutions, and **sample #2** – a reserve list of 151 institutions as a backup for cases of refusals or other situations which may impede the team to reach the original sample. The institutions in the reserve list were sampled based on the same criteria as those from the original sample.

The sampling was drawn from a total population of 4,492 training providers at the national level based on four criteria identified by the country team to ensure a representative sample at the national level: (i) **region** (eight development regions); (ii) **type of institution** (public, private, NGO); (iii) **company/enrolment size** (large, medium, small); and (iv) **industry focus** of training providers clustered in the three groups: services, production, and other areas. The selection of cases was random, and the validation was made by comparing the distribution of the entire population of training institutions and the sample based on the four sampling criteria. The results show that both the sample (75) and the replacements (151) have roughly similar distributions to the total population. Detailed information on the sampling methodology can be found in Appendix 2.

The distribution of the 75 sampled institutions by the four sampling criteria is presented in Figure 4.

Figure 4. Distribution (in absolute number) of sampled institutions by sampling criteria



Source: WB country team, 2020

Third phase: TAP pilot survey (July–August 2020)

During the third phase, the team conducted a pilot survey to test the validity of the TAP survey design and its instruments¹⁷, through online interviews with six of eight selected training institutions, and refine the survey before its application at national level. The pilot institutions were selected to cover the three clusters of training providers identified in the Mapping Tool, as described in Table 5. The pilot institutions are different from those included in the two samples of the TAP survey.

Table 5. Pilot training institutions

| No. | Institution name and location | Cluster | Type | Size |
|-----|---|---------|---------|-------|
| 1 | Avangarde Business Academy, Bucharest | ATP | Private | Small |
| 2 | Colegiul Tehnic Dinicu Golescu, Bucharest | VTP | Public | Large |
| 3 | Colegiul Tehnic Posta Si Telecomunicatii Gh. Airinei, Bucharest | VTP | Public | Large |

¹⁷ During the pilot survey, the team administered and tested only the Institutional Data Form and the TAP survey, except the focus groups.

| No. | Institution name and location | Cluster | Type | Size |
|-----|-------------------------------|---------|---------|-------|
| 4 | Colegiul Tehnic Petru Maior | VTP | Public | Large |
| 5 | Euro Best Team, Bucharest | RTP | Private | Small |
| 6 | Formenerg, Bucharest | RTP | Private | Small |
| 7 | Mondo Consult, Buzau | ATP | Private | Small |
| 8 | Tiab, Bucharest | CTP | Private | Large |

Source: World Bank team, 2020

Based on the pilot results, the team revised and fine tuned the TAP survey instruments, namely the TAP Provider Survey and the Institutional Data Form, for the survey application with the 75 sampled training institutions at the national level.

Fourth phase: implementation of the TAP survey (October 2020–July 2021)

During the final phase, the team conducted a quality assessment of training providers by gathering more in-depth and targeted information on the characteristics, practices, values, and performance of sample training institutions through in-depth interviews (TAP Provider Survey) with representatives of sampled training providers, and collection of statistical data and information on: (i) institution's profile; (ii) training programs and students; (iii) most popular program; (iv) trainers and instructors; (v) facilities; and (vi) finance. The TAP country team also conducted focus group discussions with managers of training institutions, students and graduates, teachers/trainers, and employers. The data and information gathered during these discussions complemented and informed the TAP survey analysis and policy recommendations.

During October 2020–March 2021, the country team administered the TAP Provider Survey through online interviews with representatives of 62 training institutions. At the same time, the team collected data through the Institutional Data Form, which was sent to the 62 institutions to be completed online.

After the completion of interviews with the 62 institutions, the country team conducted focus group discussions (April–July 2021) with the following key stakeholders: (i) **students** in their last year of study; (ii) recent **graduates**; (iii) **teachers/instructors**; (iv) **managers** of training institutions which were selected as to belong to the same sampled institutions; and (v) **employers** selected to be representative of the industries that the training institutions included in the survey were representing.

Limitations of the TAP exercise

It should be noted that the TAP assessment has some limitations, and responses and recommendations should be understood with this in mind. The TAP instrument may contain reporting bias in terms of the target group that responded to the questionnaire (general managers). In addition, TAP is able to assess the availability of services and certain good practices, but its limitation in this regard is that it cannot specifically measure the quality of the good practices or services assessed.

3 An Overview of Participating Institutions

An analysis of data collected by the World Bank team via the Institutional Data Form is presented here. It provides a sense of the size and shape of the research sample. A full list of the assumptions made when analyzing the data is provided in Appendix 2, along with additional analysis not included in the write-up.

3.1 Institutional profile

Table 6. Breakdown of length of time institutions have been operating, by institution type

| | Less than two years | Two to four years | Five years or more | Total |
|--------------|---------------------|-------------------|--------------------|-------------|
| CVET | 0% | 11% | 64% | 75% |
| IVET | 0% | 0% | 25% | 25% |
| Total | 0% | 11% | 89% | 100% |

CVETs made up three-quarters (75%) of the sample, while IVETs comprised 25% of the sample. Table 6 demonstrates that most of CVET and IVET institutions in the sample had been operating for five years or more – collectively, these institutions made up 89% of the sample. In comparison, only 11% of institutions had been operating for two to four years. This indicates that most institutions – and their processes – are well-established.

Figure 5. Breakdown of institutions by type

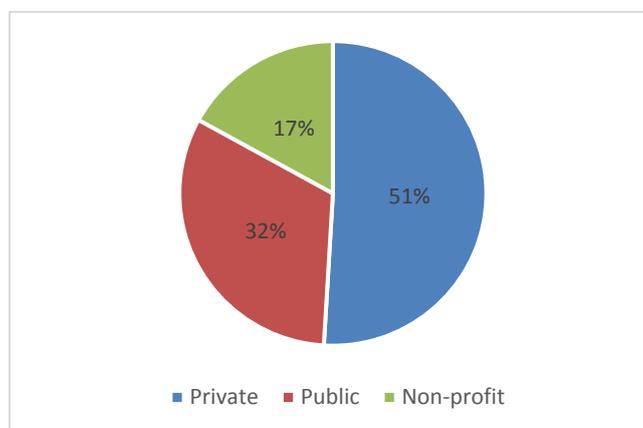


Figure 5 demonstrates that half of institutions in the sample (51%) are private and 32% are public.

3.2 Programs and students

Table 7. Breakdown of CVET providers in the sample

| Program type | Average number of programs | Average number of full-time students | Average number of part-time students | Ave percentage of female students |
|------------------------------|----------------------------|--------------------------------------|--------------------------------------|-----------------------------------|
| Three- to four-year programs | 0.1 | 2.2 | 0.0 | 0.0% |
| One- to two-year programs | 0.6 | 0.5 | 5.4 | 5.9% |

| Program type | Average number of programs | Average number of full-time students | Average number of part-time students | Ave percentage of female students |
|---|-----------------------------------|---|---|--|
| Program duration 150 hours to 11 months | 5.3 | 143.4 | 4.5 | 26.5% |
| Programs duration 150 hours or less | 17.9 | 162.0 | 543.2 | 47.1% |

When examining the CVET providers in the sample (Table 7), the most common programs that institutions offered were programs that were 150 hours or less (18 programs), followed by programs that lasted between 151 hours and 11 months (five programs). These institutions also had the highest enrolment in these programs, with 162 full-time students and 143 full-time students respectively. Interestingly, programs of duration 150 hours or less had a significantly higher number of part-time students (543) on average.

The average percentage of female students in each program was generally less than half; the highest female enrolment being for programs that were 150 hours or less (47.1%). This was followed by 26.5% of programs that were between 151 hours and 11 months. Both programs also happen to be the shortest programs on offer at CVET institutions. This could either be due to the length of the program or subjects that these programs are generally offer. However, across all programs the average female participation was only 27%, which is an alarming sign of a lack of female representation for CVET programs.

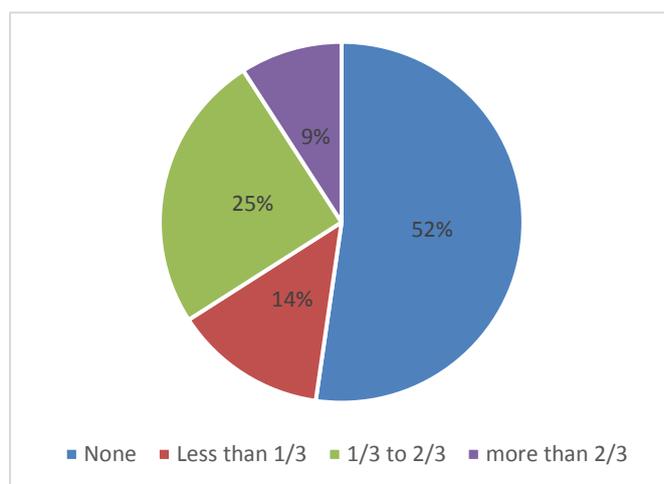
Table 8. Breakdown of IVET providers in the sample

| Program type | Average number of programs | Average number of full-time students | Average number of part-time students | Ave percentage of female students |
|---|-----------------------------------|---|---|--|
| Three- to four-year programs | 7.1 | 507.0 | 61.7 | 45.6% |
| One- to two-year programs | 1.2 | 23.3 | 26.8 | 15.8% |
| Program duration 150 hours to 11 months | 0.0 | 0.0 | 0.0 | 0.0% |
| Program duration 150 hours or less | 0.0 | 0.0 | 0.0 | 0.0% |

According to the breakdown of IVET providers in 8, the most popular offering in this group was three- to four-year programs (with an average of seven programs per institution), followed by one- to two-year programs (with an average of one program offering per institution). IVET providers did not generally offer shorter program options. In line with this, these program types also had the highest enrolment: 507 full-time students and 23 full-time students, respectively.

Female representation was most even for three- to four-year programs (45.6%), while it was particularly unequal for one- to two-year programs (15.8%). Once again, this might be attributed to the length or subject matter of the programs.

Figure 6. Average proportion of females with a scholarship or grant



On average, institutions reported that 25% of their student population received a scholarship or grant – including an employer subsidy. When examining opportunities for female students to access scholarships or grants, institutions reported that overall, females have less access to these kinds of opportunities than their male counterparts. This can be gleaned from Table 9, which shows that 52% of institutions reported that no females had access to scholarships or grants and 14% indicated that less than a third of female students had such access. It is, however, possible that these numbers

are particularly high because of a lack of scholarship or grant opportunities for both sexes.

Table 9. Average number of students and percentage of female students by age group and institution type

| Age group | Average number of students | | Average percentage female students | |
|-------------|----------------------------|-------|------------------------------------|------|
| | CVET | IVET | CVET | IVET |
| < 20 years | 12.6 | 303.5 | 35% | 37% |
| 20–25 years | 64.7 | 50.2 | 37% | 17% |
| > 25 years | 408.1 | 57.6 | 46% | 29% |

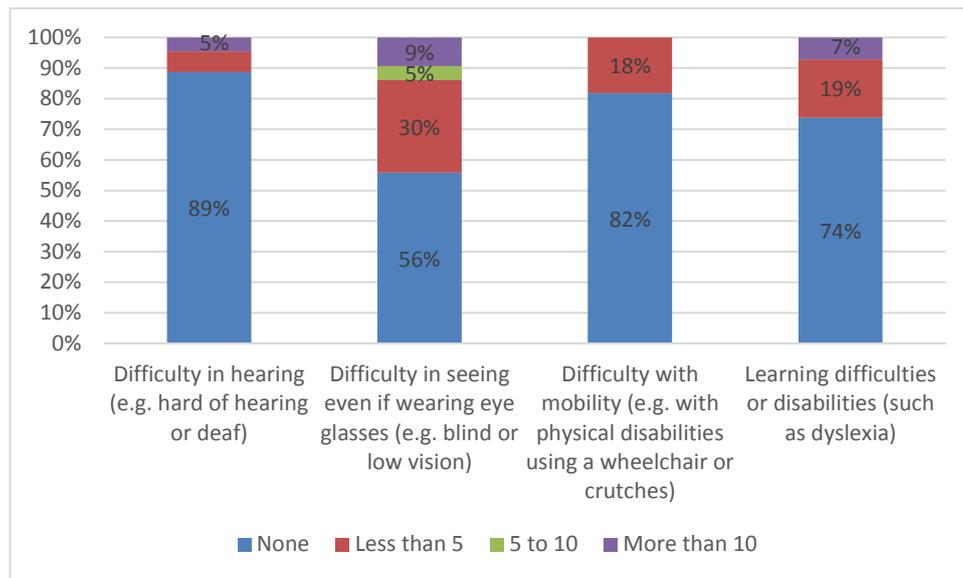
The breakdown of students by age group and institution type in the sample (Table 9) shows that results were significantly different between CVETs and IVETs. CVETs tended to have an older age group, with an average of 408 students across all programs that were over the age of 25. By comparison, IVETs had a younger age group, with an average of 304 students across all programs that were under the age of 20. CVETs were also more representative in gender breakdown, with 45% female representation for the >25 years age group, and 37% and 35% for the 20–25 and <20 age groups respectively.

Table 10. Average number of graduates and percentage of female graduates by institution type

| | Graduates | Percentage female |
|------|-----------|-------------------|
| CVET | 488.9 | 52% |
| IVET | 263.1 | 55% |

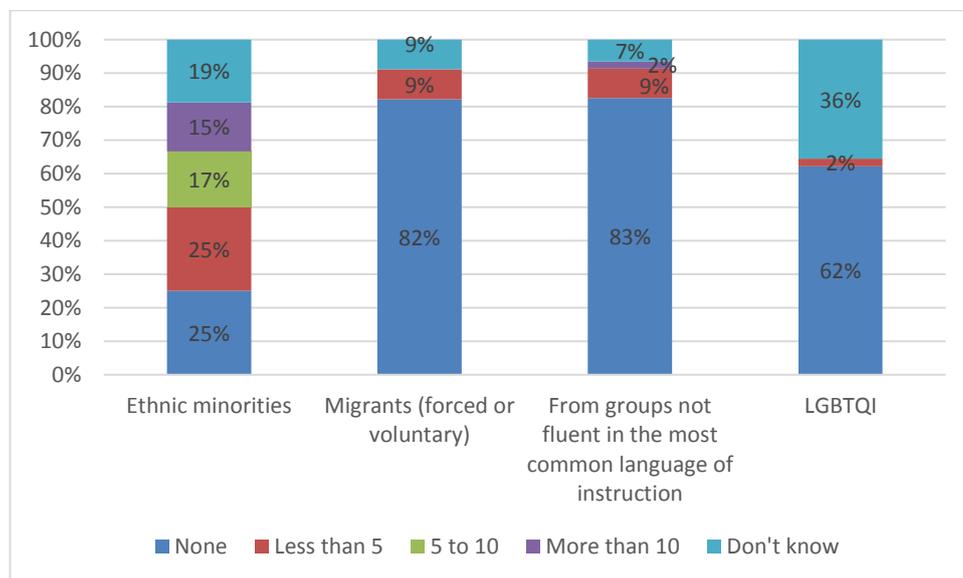
When examining graduates by institution type, there were – on average – nearly double the number of CVET graduates compared to IVET graduates. The gender breakdown was evenly split for both institution types, with 55% of IVET graduates and 52% of CVET graduates being female. Across the sample, institutions also indicated that an average of 54% of the total student population who graduated were in (or from) programs of 150 hours or less duration.

Figure 7. Proportion of students with impairments



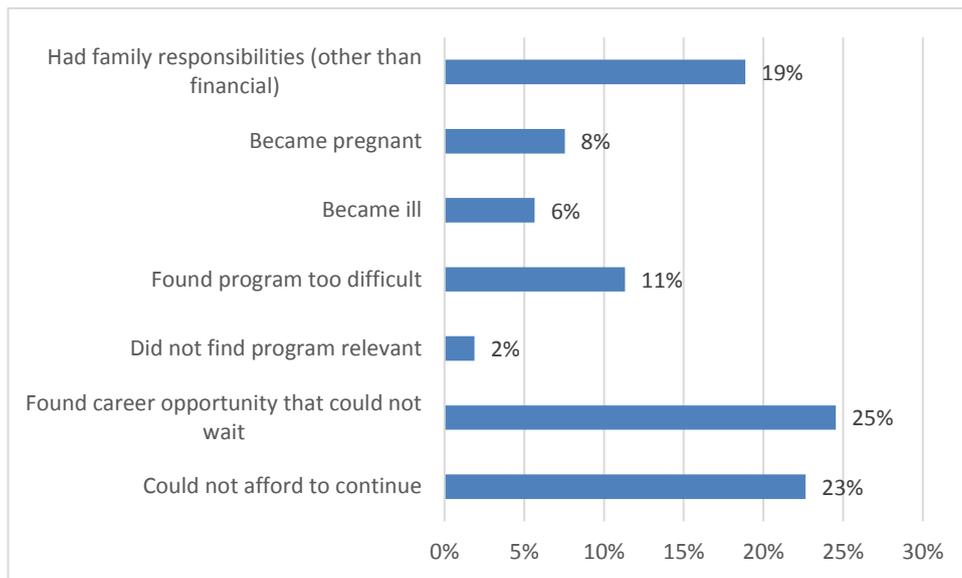
When examining how many students at institutions had impairments, as reflected in Figure 7, feedback from institutions indicated that the most common impairment was difficulty seeing, followed by learning difficulties. However, even among these institutions, the proportion of students who experienced these difficulties was still relatively low. Interestingly though, 9% of institutions reported that more than 10 students had difficulty seeing.

Figure 8. Proportion of students from minority groups



Regarding students from minority groups (Figure), more than half of institutions (57%) reported having ethnic minorities at their institutions, while significantly fewer reported having migrants (9%) or groups who were not fluent in the medium of instruction (11%). Approximately 36% of institutions indicated that they did not know how many students were LGBTQI, while 19% did not know the proportion of their student population from ethnic minorities. This kind of data would be useful for indicating how diverse the student population is overall within these institutions.

Figure 9. Main reasons students dropped out

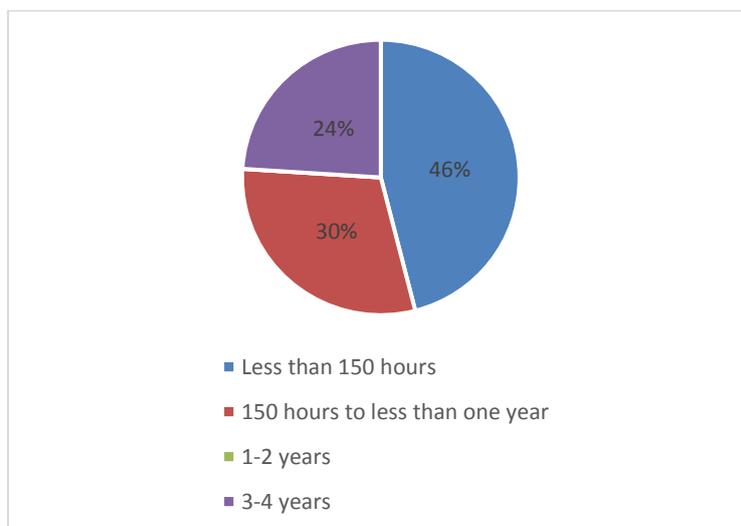


Students dropped out for various reasons; the most common being that they found a career opportunity that could not wait (reported by 25% of institutions). This was followed by 23% of institutions reporting that students could not afford to continue with their studies, while 19% indicated that students dropped out due to family responsibilities.

3.3 Most popular programs at institutions

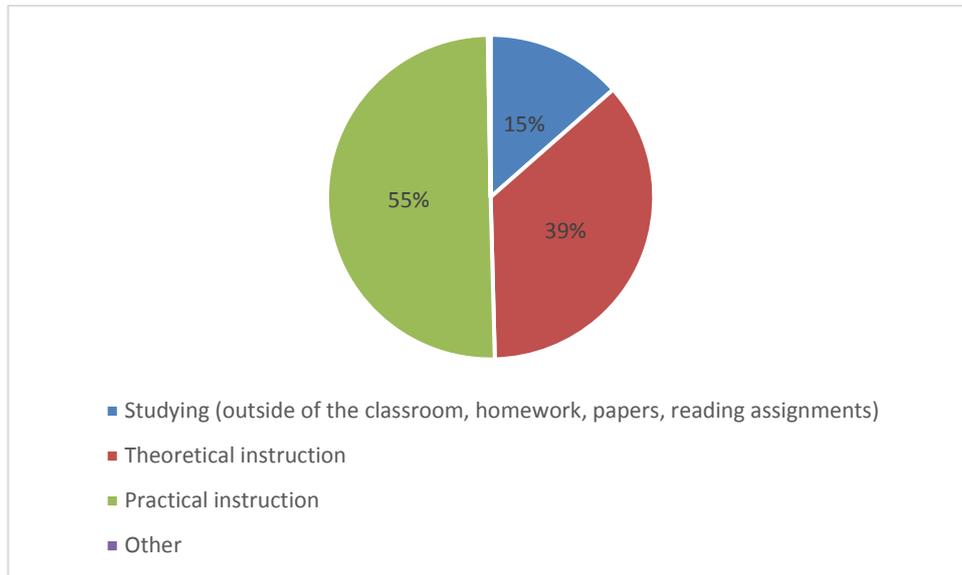
Institutions were asked to report on statistics from their most popular program. The results indicate that across institutions, average enrolment was 115 students in the most popular program. There was an average of 18 students in the same classroom sessions and an average of 16 students in the same workshop sessions for the most popular program. Institutions also indicated that an average of 94% of students graduated from their most popular program.

Figure 7. Duration of most popular program



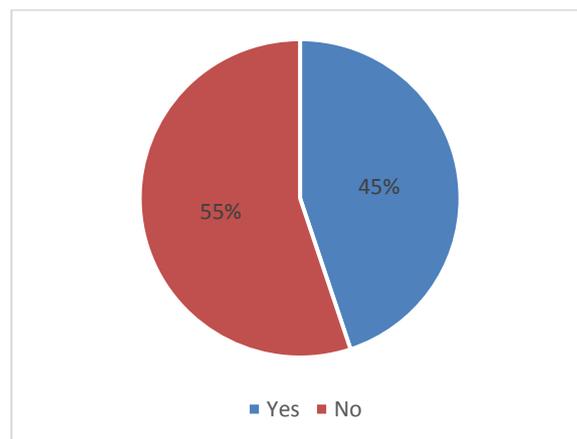
When looking at the duration of the most popular program in Figure 7, most programs that were popular lasted less than 150 hours (reported by 46% of institutions). This is unsurprising, considering that shorter programs are generally more sought after because of the reduced time commitment. Institutions also reported that there was an even gender split of 51% on average, within their most popular program.

Figure 8. Average time allocation for students in most popular program



When examining the time allocations within these programs (Figure 8), most time was allocated to practical instruction (55%) followed by theoretical instruction (39%). On average, studying was allocated the least amount of time (15%).

Figure 9. Share of students in the most popular program required to complete internship/apprenticeship



Most institutions (55%) also reported that students in their most popular program were not required to complete an internship or apprenticeship as part of the program requirements. This suggests that practical elements of instruction generally took place within the institutions themselves.

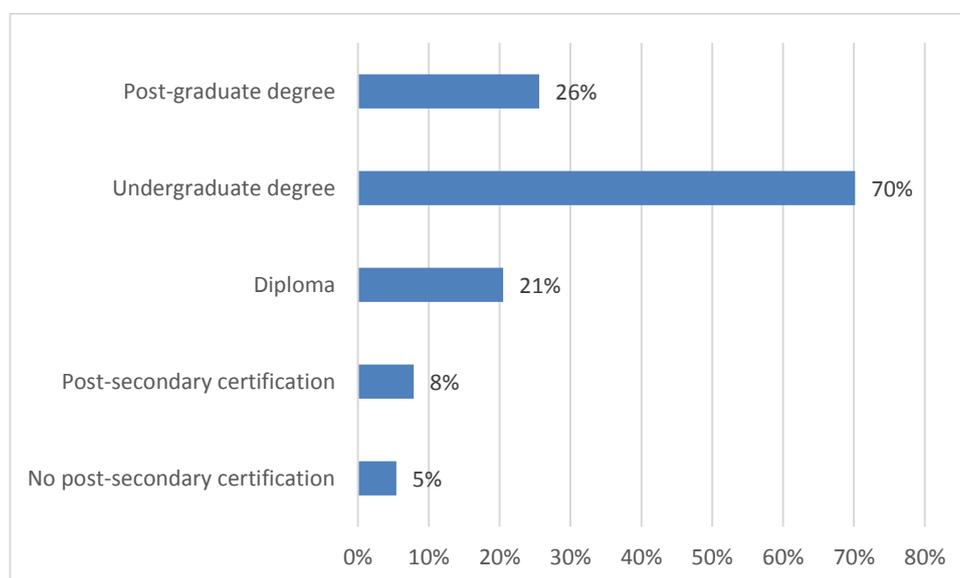
3.4 Trainers and instructors

Table 11. Average number of trainers/instructors and share of females by employment and institution type

| | Average number of trainers/instructors | | Approximate percentage female | |
|-----------|--|------|-------------------------------|------|
| | CVET | IVET | CVET | IVET |
| Full-time | 4 | 39 | 46% | 78% |
| Part-time | 11 | 10 | 34% | 51% |

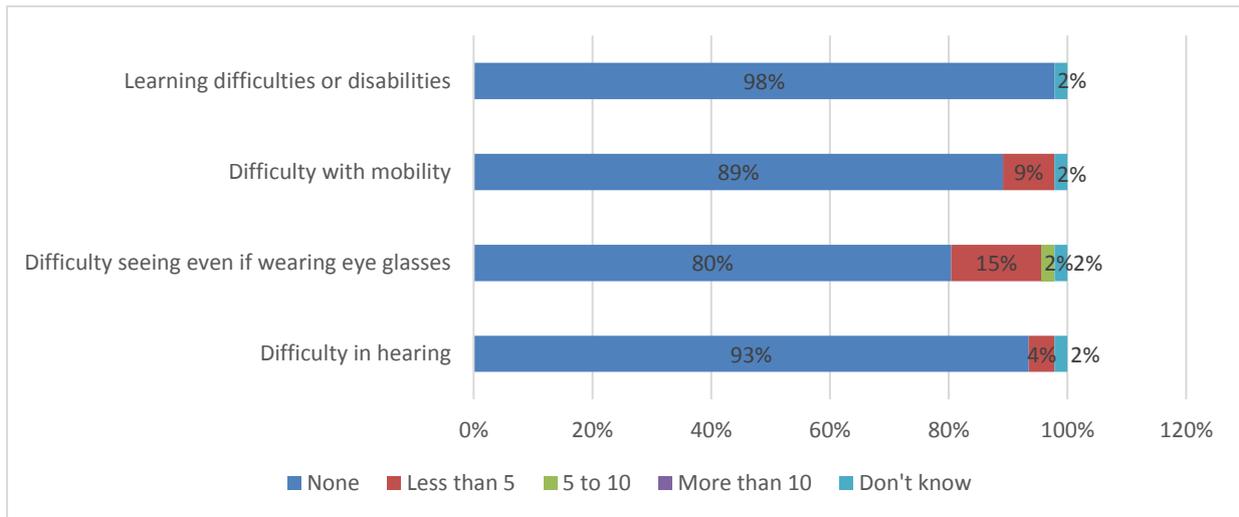
Table 11 shows that, on average, there were a higher number of part-time trainers/instructors at CVET institutions (11), but a higher number of full-time trainers at IVET institutions (39). The gender breakdown for female trainers/instructors was more even among IVET institutions, with a disproportionately large percentage of female full-time trainers/instructors at IVET institutions on average (78%).

Figure 10. Education level of trainers/instructors



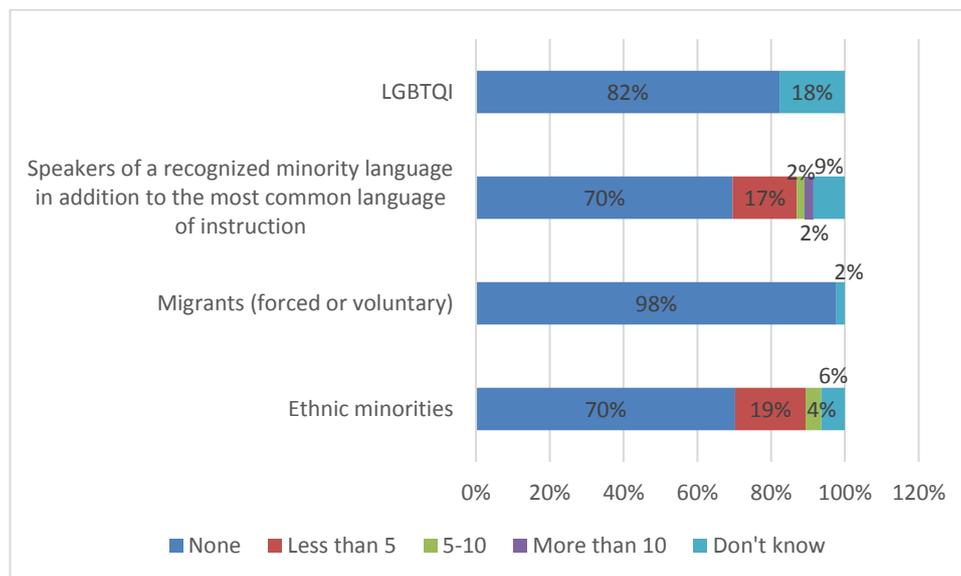
When examining the education level of trainers/instructors in Figure 10, institutions reported that, on average, most trainers/instructors had an undergraduate degree (70%) followed by an average of 26% who had a post-graduate degree. Note that because these are averages provided by institutions, the figures do not add up to 100%.

Figure 11. Proportion of trainers/instructors with impairments



Institutions indicated that the most common impairment amongst trainers/instructors was difficulty seeing (17%), followed by difficulty with mobility (9%). However, relatively few trainers/instructors at such institutions had these kinds of impairments. A very small number of institutions (2%) indicated that they did not know about the impairments that their trainers/instructors had. This suggests that overall, institutions have a good grasp of the kinds of impairments that their staff face.

Figure 12. Proportion of trainers/instructors from minority groups

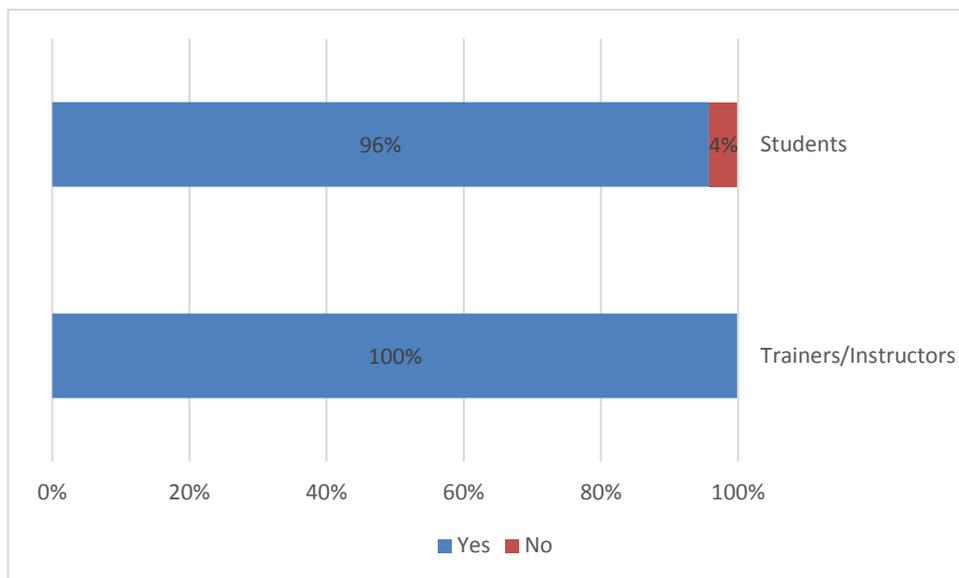


Looking at the proportion of trainers/instructors from minority groups in Figure 12, the results indicate that ethnic minorities (23%) and those who speak recognized minority languages (21%) were the most represented minority groups employed at institutions. A lack of employment and/or knowledge about employing members of the LGBTQI community suggests a need to explore representation of this community at institutions.

3.5 Facilities – classrooms, workshops, and internet connectivity

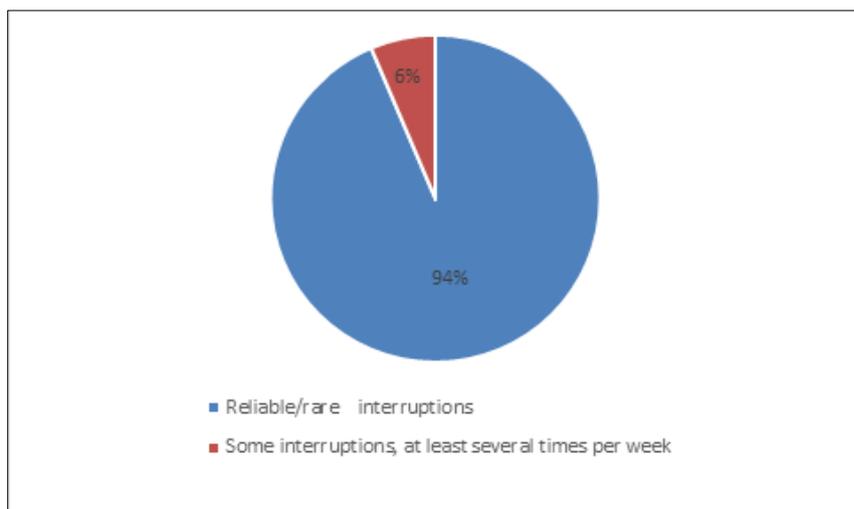
Institutions indicated that on average, they had ten functioning classrooms and five functioning workshops.

Figure 13. Percentage of institutions that provide internet connectivity for trainers/instructors and students



As demonstrated in Figure 13, all institutions in the sample reported that their trainers/instructors had access to internet connectivity, while 4% of students do not have access to the internet when they are on the institution’s premises.

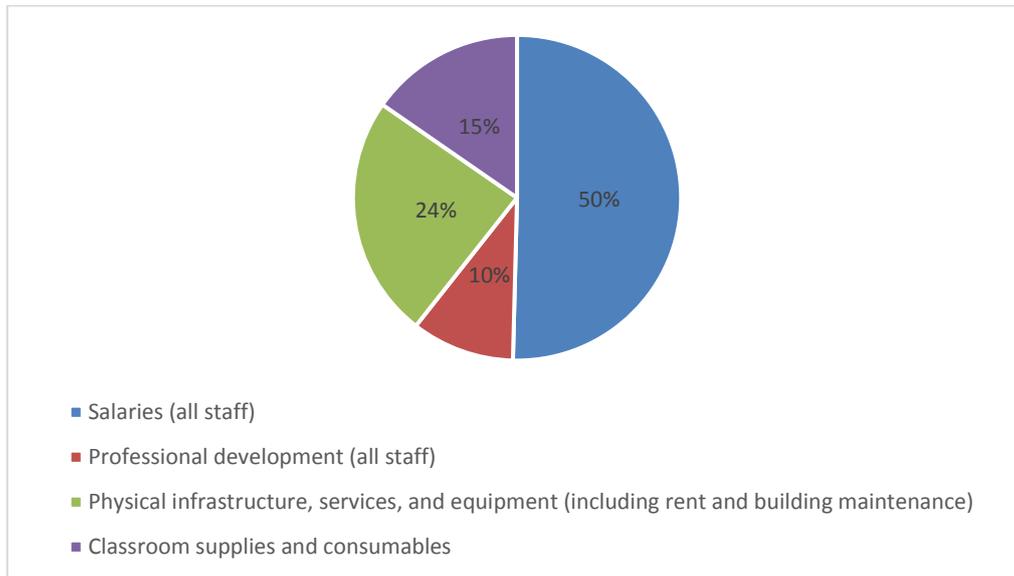
Figure 14. Reliability of internet connection at institutions



Most institutions (94%) with internet connectivity reported that the quality of the connection is reliable overall and disruptions are rare. Only 6% of institutions indicated that they experienced some disruptions at least several times per week.

3.6 Budget allocations

Figure 15. Average breakdown of institutions' total budget



When examining the average budget breakdown across institutions (Figure 15), the results indicate that institutions allocate most of their budget (50%) to salaries for all staff. This is followed by 25% of the total budget dedicated to providing infrastructure, services, and equipment. The smallest portion of the budget is allocated to professional development for all staff (10%).

4 How Are Institutions Performing?

As has been noted, a detailed institutional survey was administered through in-depth interviews. The survey was designed around nine key Action Areas that have been identified through research as essential requirements for effective training systems reform in the context of the Fourth Industrial Revolution:

- 1) Setting strategic direction
- 2) Gathering, analyzing, and publicizing data for informed decision-making
- 3) Developing a demand-driven approach to training
- 4) Establishing a sustained relationship with authorities
- 5) Ensuring institutional financial viability and efficiency
- 6) Fulfilling quality standards
- 7) Creating a teaching experience conducive to learning
- 8) Preparing students for the world of work
- 9) Enabling students to pursue education and training opportunities
- 10) Responding to COVID-19 and other emergencies.

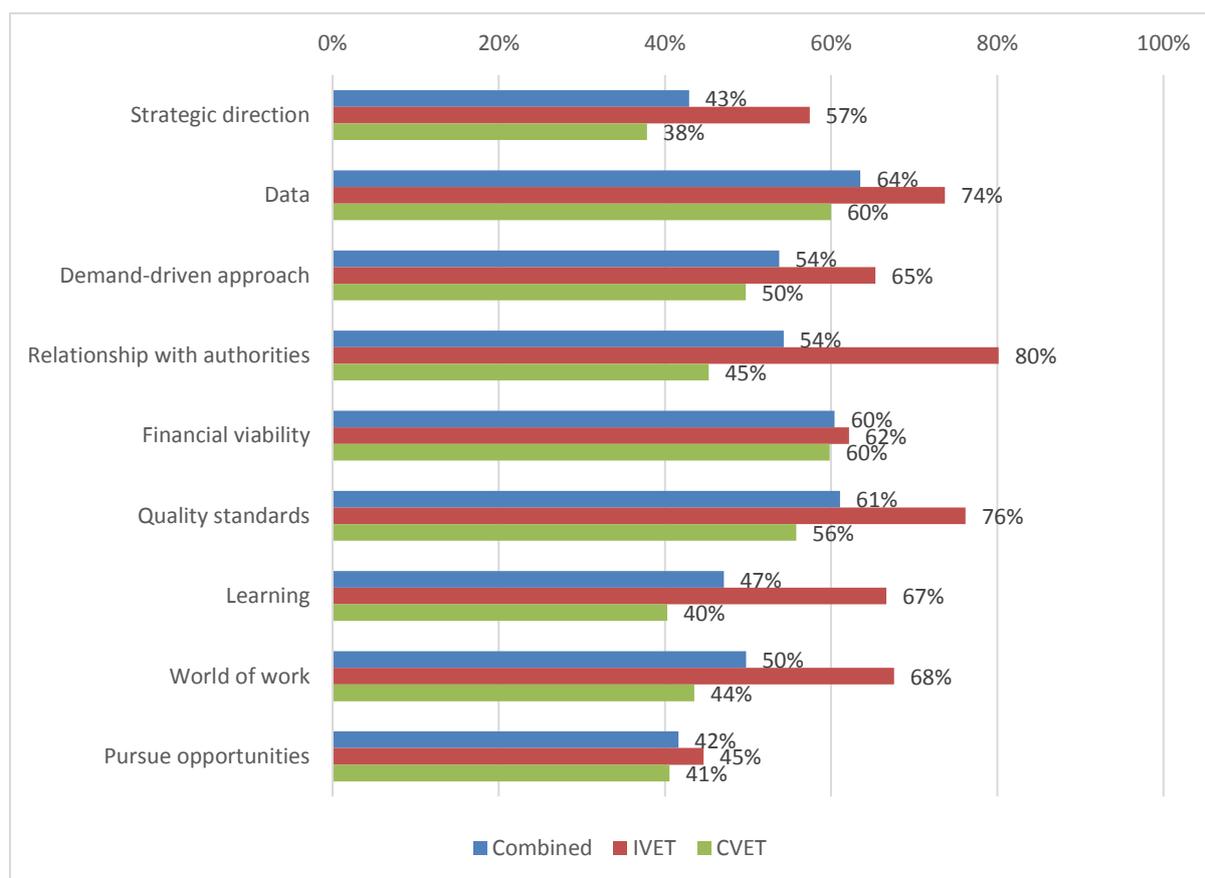
The survey is designed to enable detailed assessment of training provider practices within each Action Area, as well as across them all, accompanied by a sophisticated online scoring system that generates actionable feedback for institutions and government stakeholders. A detailed description of the scoring methodology is presented in Appendix 1, and the full set of results is in Appendix 3.

Overall results for each of the nine Action Areas is presented in Figure 19. These results are intended to reflect the extent to which the practices of surveyed institutions align with identified global good practices in TVET. Thus, the percentages presented in the graphs and analysis below are not intended to reflect judgment on the institutions' performance, but rather provide indicative suggestions as to where some good international practices might potentially be introduced into the Romanian TVET system. Appendix 1 provides the full list of global good practices explored during the survey.

It is also important to define how to interpret the percentages presented, given limitations regarding the results. First, because the survey design is aligned with practices identified through international literature review that have shown strong evidence of strengthening professional training systems, some aspects of these may not fully align with the unique local context in Romania. With this background, it is essential to note that low scores should not necessarily be equated with under-performance – they may reflect policy preferences, contextual specificities, or constraints outside the influence or control of the training institution. Second, results are self-reported. While self-reported results are strong indicators of practice within training institutions, there may be elements of subjectivity in responses. Third, given the nature of the survey (outlined in more detail in Appendix 1), results are only quantitatively indicative of possible areas for policy action. Still, they do not provide qualitative nuance on the details of specific action required, which would require further analysis.

With those caveats in mind, Figure 19 presents overall survey results within each Action Area. The detailed results, per question, from which these scores were derived are presented in Appendix 2, with a few specific highlights integrated into the summary analysis below.

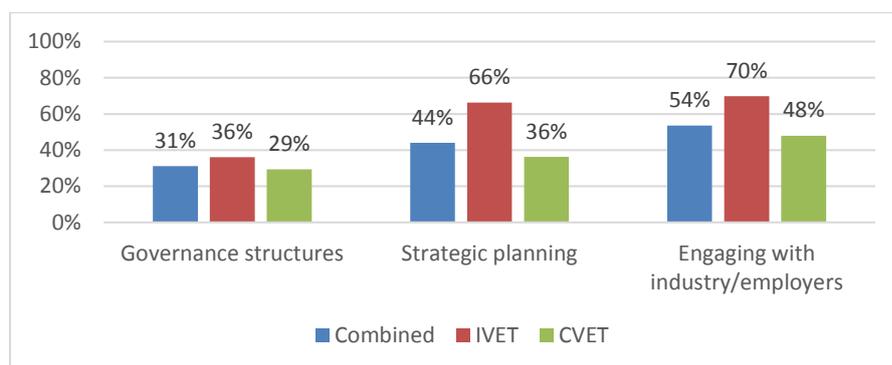
Figure 19. Overall Action Area scores for institutional surveys, by institutional type



4.1 Setting strategic direction

Overall results for this Action Area are presented in Figure 16, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 16. Strategic direction scores



Setting strategic direction (Action 1) focuses on three key aspects of the participating institutions: their governance and management structures, effectiveness of strategic planning, and their engagement with industry employers. Governance is mainly concerned with the existence of a governance board and an institutional management committee, frequency of meetings held, and how these elements (if at all) connect with industry. Institutions' strategic planning was measured according to the existence of a strategic plan: the frequency with which it is updated; the range of

stakeholders who supervise and participate in implementing the strategic plan; and how and with whom it is shared. Engagement with industry and employers was measured according to how each institution engages with industry or employers (if at all), and who heads up this area of responsibility.

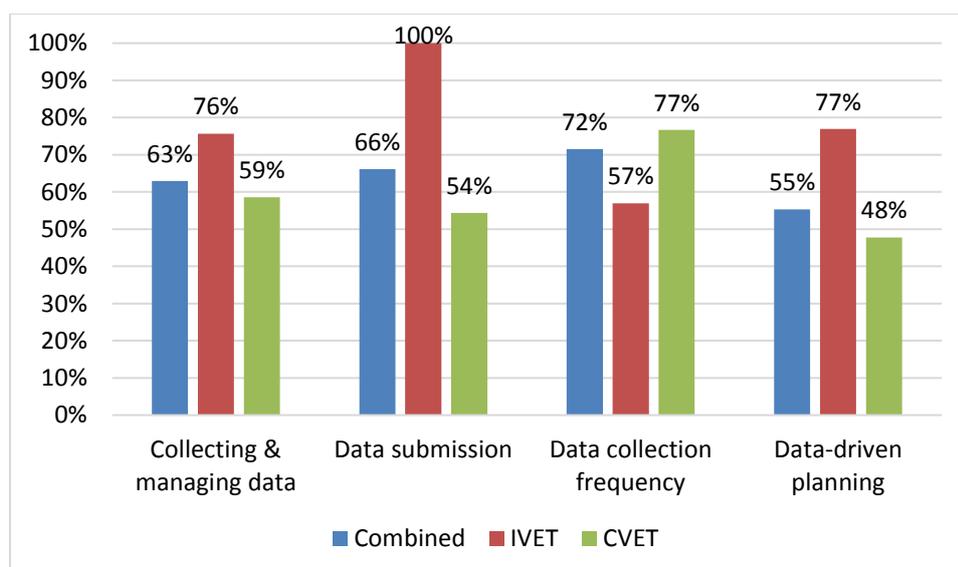
As can be seen from Figure 16, in all three areas identified, IVET institutions performed better than CVET institutions, but more significantly so in the areas of strategic planning and engaging with industry and employers. Results were generally low in the area of governance structures, primarily because few institutions of either type reported having a governance board and few CVETs reported having an institutional management committee (although nearly 71% of IVETs reported having an institutional management committee that had met in the past 12 months). This could be because they have different structures in place that fulfil similar functions, but further investigation would be required to determine whether there is a need for strengthening this area. Across both institutional types, limited linkages between these structures and industry were reported.

Most institutions reported having an institutional strategic plan (100% for CVETs and 74% for IVETs) and these plans are generally regularly updated. However, there is limited involvement of wider stakeholders in development of the strategic plan, including relatively limited representation of minority populations in planning. Most institutions (100% of IVETs and 74% of CVETs) report sharing strategic plans with stakeholders, although only with selected groups of stakeholders and using relatively limited methods of distribution. All IVETs and 63% of CVETs indicate that their strategic plan makes reference to engagement with industry, employers, and/or industry associations and most institutions have someone appointed to take responsibility for this engagement.

4.2 Gathering, analyzing, and publicizing data for informed decision-making

Overall results for this Action Area are presented in Figure 17, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 17. Data management scores



Gathering, analyzing, and publicizing data for informed decision-making (Action 2) was measured according to three key aspects: collecting and managing data; data submission to national databases; and the use of data and data analytics. Specifically, institutions were scored according to how they collect and manage data, who in the institution is responsible for managing data, and their disaster

recovery policies and data backup protocols. The use of data was measured according to how the institutions use data to evaluate institutional performance; how data is disaggregated in data analytics; how data is used to assess programs and monitor planning targets, and how targets are shared.

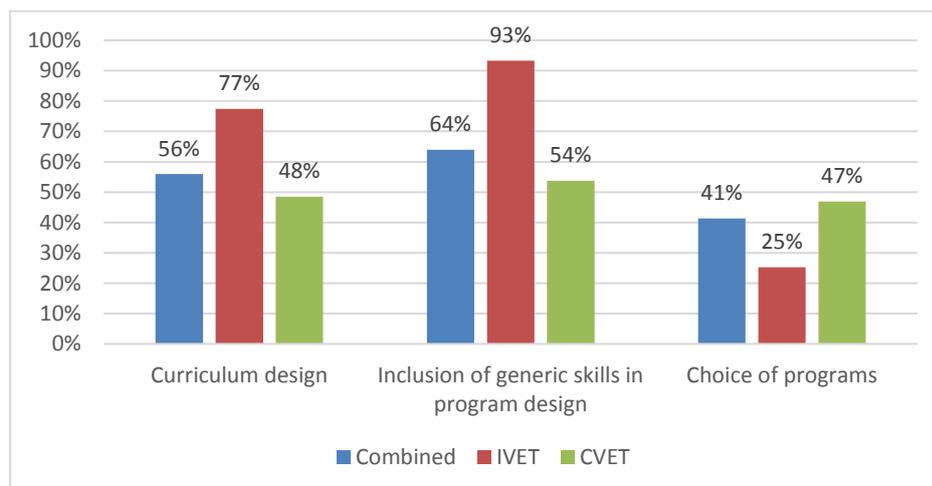
In general, institutions reported relatively good data practices, with most having a person/post at management level responsible for institutional data systems and data quality. Responses received suggest there might be some merit in exploring the systems being used by institutions to collect and manage data to assess whether these are consistent with current best practice in institutional data management. Likewise, while 75% of IVETs and 61% of CVETs report having a disaster recovery policy, it also appears that data backup is not being implemented sufficiently rigorously, which introduces risks of data loss. Across both institutional types, though, most have processes in place to ensure quality and accuracy of data. Institutions appear to collect a fairly broad range of data, although, interestingly, relatively few (31%) IVETs report collecting data on graduates, while more than 63% of CVETs collect data in this area. All IVETs and 54% of CVETs submit data to relevant national databases.

Use of data to evaluate programs and overall institutional performance is stronger at IVETs (71.5%) than CVETs (54%), but both scored relatively less well in disaggregation of data by key metrics related to diversity and inclusion during performance analysis (55% and 32% respectively). IVETs generally recorded good practices of sharing data and performance against targets with internal and external stakeholders, while CVETs did relatively less well in this area (and particularly appeared to do little to shared targets and performance against targets with key stakeholders). Generally, IVETs reported regular meetings to discuss performance based on data, while CVETs engaged in less of this kind of activity.

4.3 Developing a demand-driven approach to training

Overall results for this Action Area are presented in Figure 18, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 18. Demand-driven approach scores



Demand-driven approach (Action Area 3) was measured according to three areas: curriculum design issues, program choices, and inclusion of generic skills. Curriculum design is concerned with institutional control over curriculum design and specific program content, how the institution decides what skills should be taught, and who makes these decisions. Program choices refers to the degree of

autonomy that an institution exercises in introducing or closing program, and the processes and criteria it uses to do so. (This is closely related to preparing learners for the world of work, and pursuing opportunities, which are measured as separate criteria.) Inclusion of generic skills involves the identification of generic skills included in programs and the extent to which they are facilitated through extra-curricular activities.

Institutions generally report high levels of control over content and design of curricula for their programs (100% for IVETs and 66% for CVETs), as well as noting that these are reviewed on a frequent basis. However, whereas 98% of IVETs indicate that they have a strategy in place for engaging employers and industry during curriculum design, the same applies to only 43.5% of CVETs. Far fewer institutions have a strategy for engaging organizations representing persons with disabilities and/or persons with diverse learning needs in curriculum design (44% of IVETs and 15% of CVETs).

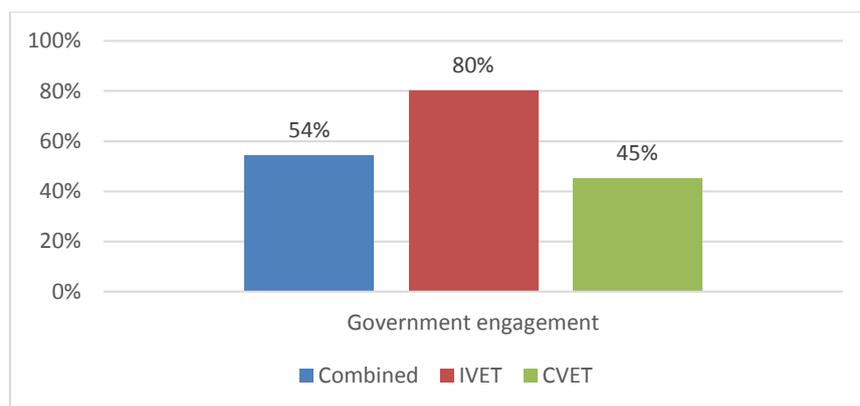
Both types of institutions report incorporating the inclusion of generic skills, such as literacy, working with numbers, teamwork, computer literacy, and communication skills, in programs (100% of IVETs and 76% of CVETs), but the coverage of skills is much broader for IVETs than CVETs. Most IVETs (92%) also teach generic skills through extra-curricular activities, compared with 39% of CVETs.

Conversely, more CVETs (61%) than IVETs (37.5%) have structured annual processes in place to decide whether to introduce new training programs and to close low-performing ones (61% for CVETs and 31% for IVETs). In both cases, though, the range of criteria used to make these decisions is relatively limited.

4.4 Establishing a sustained relationship with authorities

Overall results for this Action Area are presented in Figure , with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 23. Relationship with authorities scores

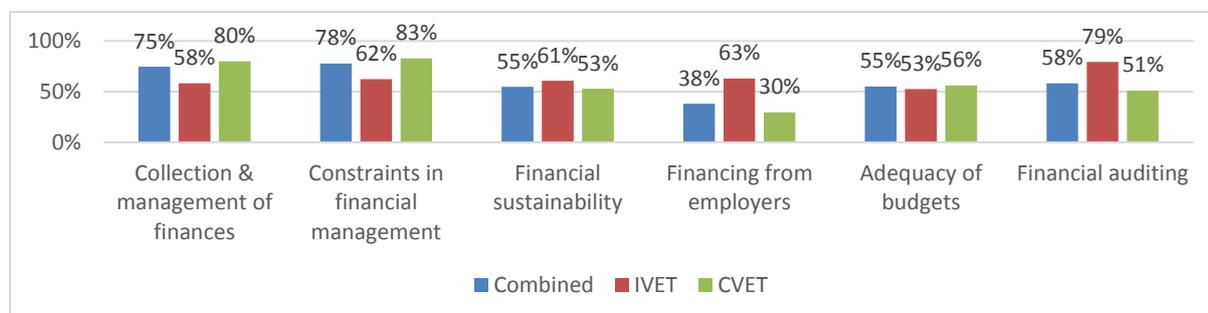


Relationship with authorities (Action Area 4) seeks to measure the nature and extent of the institution’s engagement and communication with governmental authorities, the purpose/s of such engagement, and who, within the institution, is responsible for engagement with relevant government authorities. As can be seen from Figure , IVETs report significantly stronger relationships with government authorities than CVETs. Around 70% of both types of institutions indicate that appropriate people are appointed to handle government communications or requests, but many more IVETs (87.5%) report participating in events of some kind with government officials, compared with just under 37% of CVETs.

4.5 Ensuring institutional financial viability and efficiency

Overall results for this Action Area are presented in Figure 19, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 19. Financial viability scores



Ensuring institutional financial viability and efficiency (Action Area 5) measures six aspects: collection and management of finances; the extent of existing constraints in financial management across different operational areas; the financial sustainability of the institution; mobilization of funding from the private sector and industry employers; adequacy of budgets in running the institution’s operations; and financial auditing practices. Specifically, the collection and management of finances seeks to measure the extent of institutional authority over raising income, collecting revenue, and the operational use and management of finance. Financial sustainability measures whether the institution employs strategies (and what they are) to ensure financial sustainability, as well as the extent of in-kind financial contributions from government and the private sector, and factors considered in allocating funds within the budget.

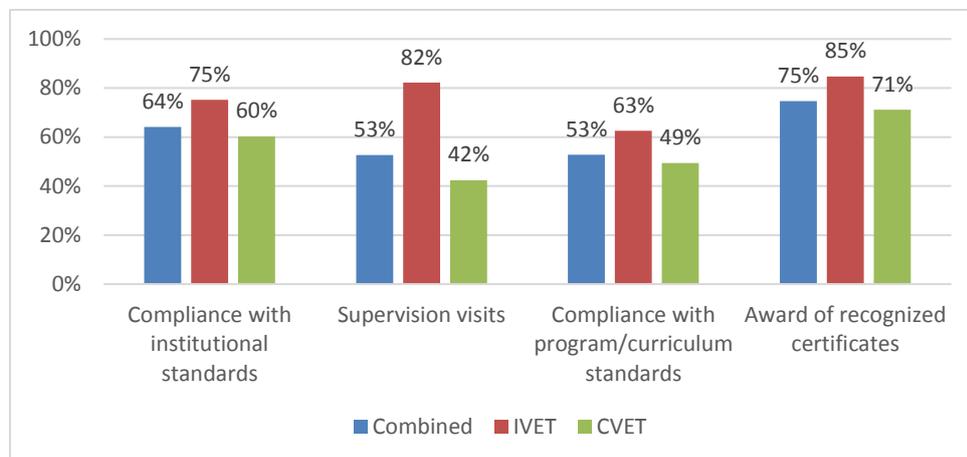
With respect to collection/management of finances, 91% of CVETs indicate high levels of authority over collection of financial resources, compared with 53% of CVETs, with CVETs having correspondingly higher levels of authority over use and management of those resources. However, both types of institutions indicate that policies are in place set spending limits. Given these responses, CVETs also unsurprisingly report fewer constraints regarding financial management (setting annual budgets, making investments for the future, reducing expenses where needed, and being able to increase revenue). In most areas, the discrepancies are not too significant, except for freedom in setting tuition fees, where CVETS (82%) score much higher than IVETs (33%), and in determining staff remuneration (81% for CVETs compared with 48% for IVETs).

Institutions in general reported leveraging relatively few additional mechanisms to ensure continued access to financial resources. For example, just over half of IVETs reported some receipt of in-kind or non-cash donations from government authorities and/or private sources, compared with fewer than 10% of CVETs. Likewise, 87.5% of IVETs actively seek funding for various purposes from employers, compared with 46% of CVETs. However, most institutions (100% of IVETs and 83% of CVETs) have an operating budget and both consider a relatively diverse range of factors when deciding how to allocate funds. Generally, both types of institutions report that budgets are not adequate in all areas, although this varies for different line items. For example, budgets are generally reported as adequate for physical infrastructure and equipment maintenance and staff professional development, but not for capital investment and monitoring, evaluation, and research. Both types of institutions do not have clear plans in place to fill budget gaps where those exist. Finally, all IVETs undergo either an internal or external financial audit, compared with just 67% of CVETs.

4.6 Fulfilling quality standards

Overall results for this Action Area are presented in Figure 20, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 20. Quality standards scores



Fulfilling quality standards (Action Area 6) measures institutions against three key criteria: compliance with national institutional standards; the quality and nature of supervision visits (specifically, the frequency of visits and post-visit actions); and program and curriculum standards, focusing on compliance with national, international, and industry-recognized standards.

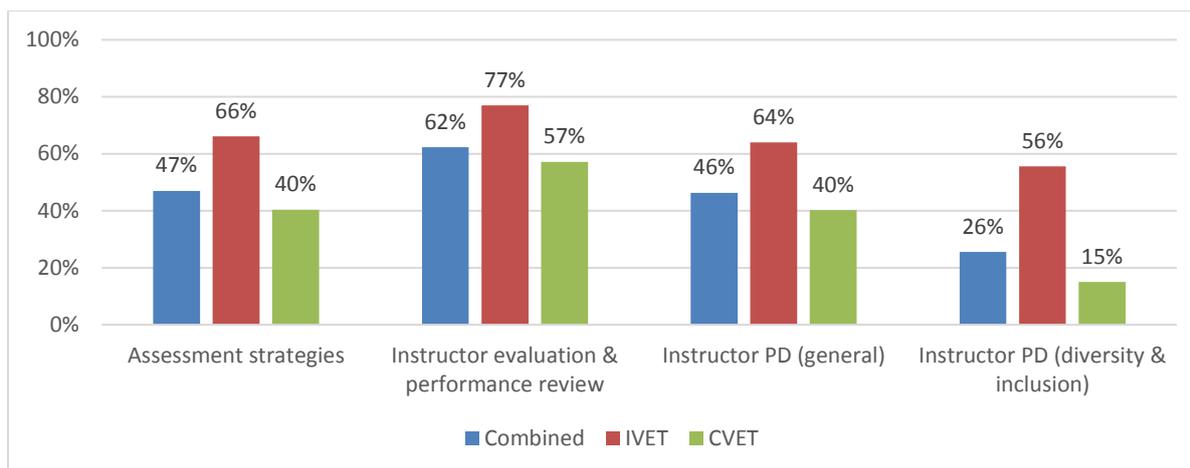
Levels of compliance with institutional accreditation standards are reportedly very high (100% for IVETs and 98% for CVETs). Notwithstanding this high level of compliance, far fewer institutions indicated that they have mechanisms in place to ensure ongoing compliance with standards (59% of IVETs and 35% of CVETs). Mandatory supervision visits occur much more frequently at IVETs than CVETs, typically last longer, include clear recommendations for improvement, and require institutions to prepare improvement plans. Such practices are much less prevalent amongst CVETs.

Like institutional standards, levels of compliance with program and curriculum standards are reportedly very high (100% for IVETs and 85% for CVETs), although fewer institutions of both types report having mechanisms in place to ensure this adherence on an ongoing basis (61% for IVETs and 38% for CVETS). Both institutional types also report relatively high levels of issuing of certificates that are nationally recognized, internationally recognized, and or-industry-recognized. Both also test for competencies based on recognized standards of some kind.

4.7 Creating a teaching experience conducive to learning

Overall results for this Action Area are presented in Figure 21 with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 21. Learning scores



Creating a teaching experience conducive to learning (Action Area 7) is the core business of participating institutions. Institutions are measured against three key criteria: their use of assessment strategies; the evaluation and performance review of instructors; and the nature of instructors' professional development (PD). Specifically, instructor evaluation and performance review are concerned with how instructors' performance is evaluated, what action is taken to address poor performance, and the nature of student complaint and grievance redress mechanisms within the institutions. Professional development focuses on the frequency and types of PD offered to instructors; the extent of participation in these programs, and PD opportunities targeted at diversity and inclusion.

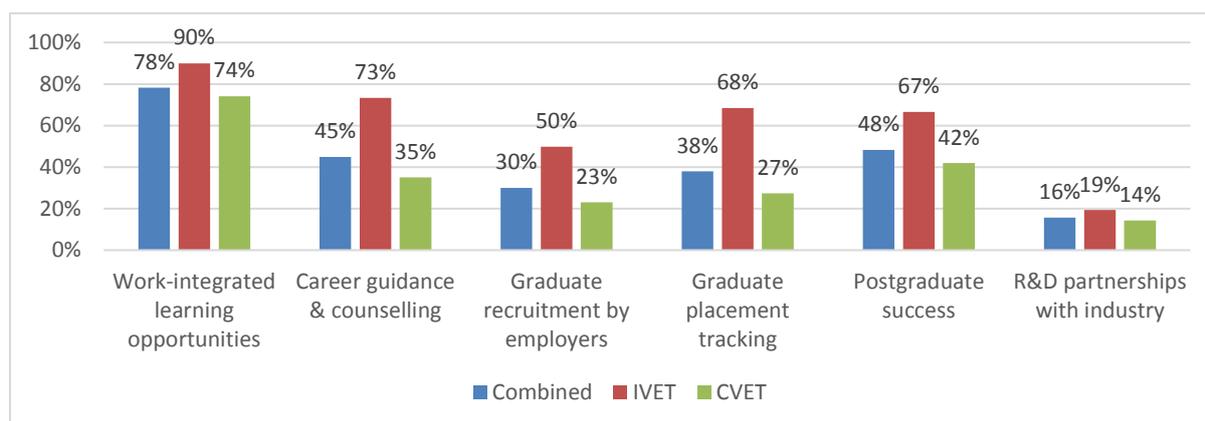
IVETs report use of a wider range of methods than CVETs in assessing student competence, but both types of institutions score less well in accommodating students with disabilities and/or diverse learning needs during assessment. Both types of institutions engage in evaluation of instructor performance (87.5% of IVETs and 65% of CVETs) and reward good performance (75% and 65% respectively). However, whereas 69% of IVETs report taking action on poor performance of instructors, the same is only true for 37% of CVETs. IVETs use more diverse methods than CVETs in conducting instructor evaluations, but both request feedback from students/graduates in this area (94% of IVETs and 80.5% of CVETs). While 94% of IVETs have a grievance redress mechanism in place for students, the same is only true of 59% of CVETs.

In the same vein, more IVETs (94%) reported providing some form of professional development for instructors than CVETs (67%). For both institutional types, the range of methods used in PD is quite limited and there are relatively few sources of funding available for this activity. It is estimated that up to 77% of staff from IVETs participated in this professional development in the most recent academic year, compared with 49% of staff in CVETs. Where staff participated, both types of institutions felt that this had led to changes in instructors' practices in teaching and learning. However, while 75% of IVETs indicated that they had also offered some form of professional development focused on diversity and inclusion, only 22% of CVETs reported the same and numbers of staff involved were lower than for all professional development (42% for IVETs and 13% for CVETs).

4.8 Preparing students for the world of work

Overall results for this Action Area are presented in Figure 22, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 22. World of work scores



As for quality of teaching, **preparing students for the world of work** (Action Area 8) is another foundational aspect of relevance for all institutions. This Action Area is measured according to five key criteria: the nature of career guidance and counselling; work-integrated learning (WiL) opportunities; the uptake of graduate recruitment by employers; the existence of graduate placement tracking strategies and approaches; and strategies for measuring student success post-graduation.

Both IVETs (100%) and CVETs (98%) expect students to participate in some form of work-integrated learning (including internships or apprenticeships), with around 50% of students at both participating in both. Practices around this for both institutional types are generally good, with sufficiently in-depth experiences, institutions helping students to find such opportunities, and the experiences including formal assessment of some kind.

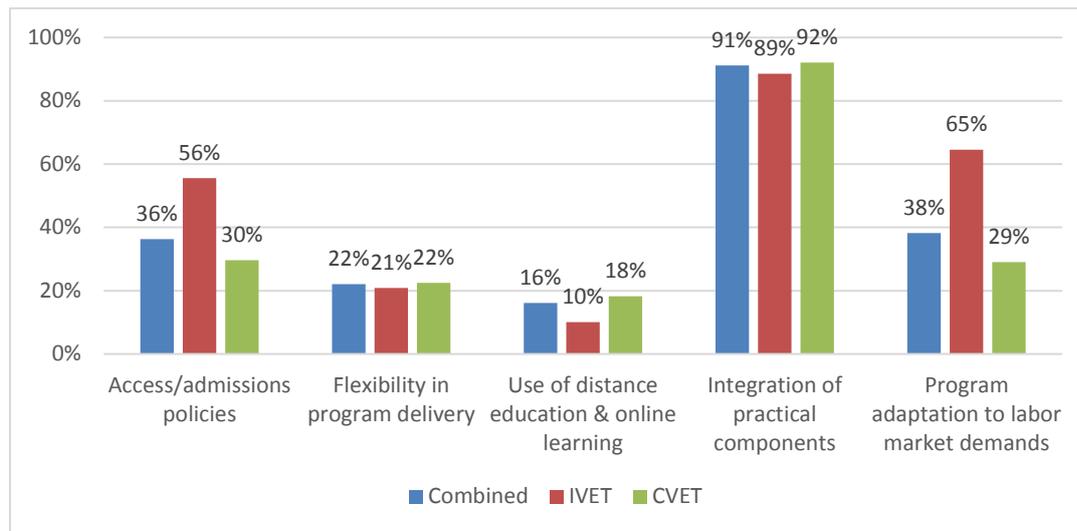
Both types of institutions offer career counselling to students (94% of IVETs and 65% of CVETs), although only 30.5% of CVETs have career counsellors on staff compared with 94% of IVETs. As a result, while it is estimated that up to 87.5% of IVET students have accessed such services in the last academic year, the same is true for only 43% of CVET students. Likewise, 69% of IVETs have a specific focus on diversity and inclusion, compared with 35% of CVETs.

More IVETs (68%) than CVETs (35%) report that businesses fund programs in the expectation of recruiting students on graduation. Far higher numbers (94%) of IVETs than CVETs (39%) track placement of students after graduation. Although the spread is smaller in relation to tracking the satisfaction of employers who have recruited graduates (69% of IVETs and 43.5% of CVETs). For both institutional types, though, there is very little evidence of research and development (R&D) projects with industry.

4.9 Enabling students to pursue education and training opportunities

Overall results for this Action Area are presented in Figure 23, with detailed results presented in Appendix 2, and scores in Appendix 3.

Figure 23. Pursue opportunities scores



Enabling students to **pursue education and training opportunities** (Action Area 9) is measured according to five key criteria: the nature of access and admissions policies; adaptation of key programs to labor market demands; availability of flexible learning options; the use of distance education and online learning; and the extent of integration of practical components into programs. Access and admissions policies includes the existence of these policies at the program level; who determines access and admissions criteria; and the content of the policies. The use of distance education and online learning is reported according to the extent of use of distance education and online or blended learning, and the level of considerations for students with disabilities in these programs.

All IVETs, but only 59% of CVETs, report having an access or admissions policy for programs. However, only half of IVETs and 26% of CVETs assess foundational and other relevant skills proficiencies on entry and, for both types of institutions, the range of criteria used in determining access/admissions is limited.

There is very little evidence of implementation of strategies to enable more flexible access to learning, such as the ability to complete programs faster than the scheduled program duration; availability of part-time programs; delivery of remote programs via satellite centers, evening and/or weekend classes; open-ended program durations (as long as courses are completed); or credit recognition on transfer from other institutions. In addition, no IVETs and only 23% of CVETs offer programs via distance education and there is also very little use of online or blended learning in on-campus programs. There is correspondingly negligible evidence of strategies to make distance education programs accessible for students with disabilities, although there are more efforts to ensure this for on-campus programs (67% of IVETs and 32% of CVETs). Both IVETs and CVETS make extensive use of practical work in programs with a practical component.

4.10 Responding to COVID-19 and other emergencies

Institutions' feedback regarding COVID-19 and preparedness for future emergencies provides insight into the impact of the pandemic on institutional operations as well as measures that are being taken to address current challenges and mitigate against future risk.

Table 12. Institutions' feedback regarding COVID-19 and preparedness for future emergencies

| Responses regarding closure of the institution during the COVID-19 pandemic | CVET | IVET | Total |
|---|------------|------------|-------------|
| Yes, and it is still closed | 8% | – | 8% |
| Yes, but it has partially or fully reopened | 29% | 21% | 50% |
| No, it did not fully close, and some face-to-face classes and/or practical training activities were continued | 37% | 5% | 42% |
| Total | 74% | 26% | 100% |

The data in Table 12 displays the proportion of institutions that closed for face-to-face classes because of the COVID-19 pandemic. All percentages are shown as a proportion of the entire sample to provide a sense of the size and scope of closures in CVETs and TVETs. The data indicates that more than half of institutions (59%) in the sample had closed for face-to-face classes in response to the COVID-19 pandemic. CVETs were evenly split between those who did close but had either partially or fully reopened (29% of the total sample) and those who did not fully close (37%). In comparison, IVETs were far more likely to have closed but partially reopened (21% of the total sample).

Figure 29. Share of programs offered partially or fully using online and/or distance learning prior to COVID-19

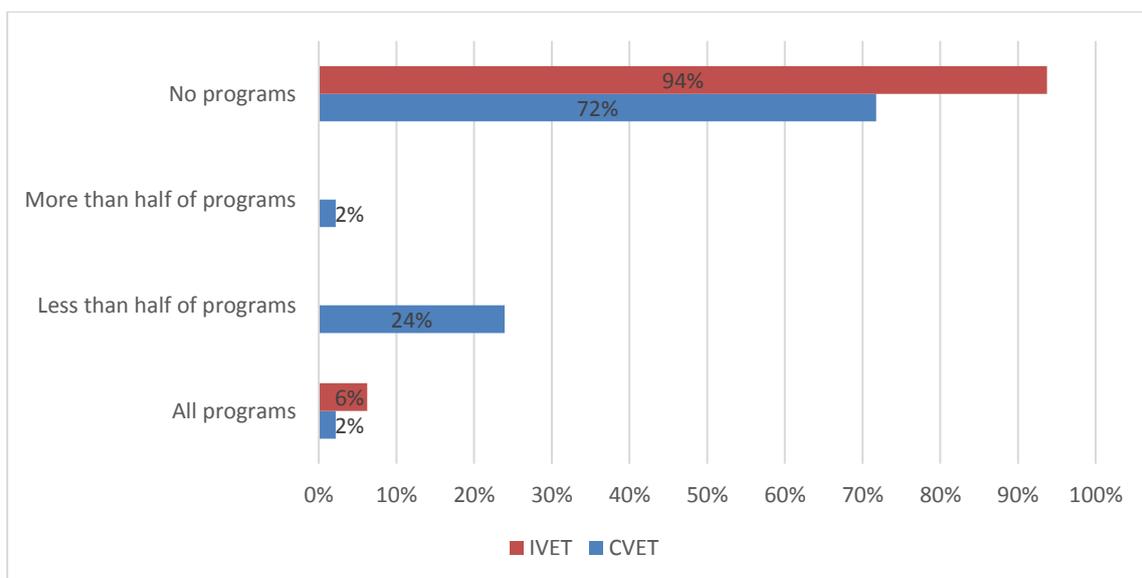
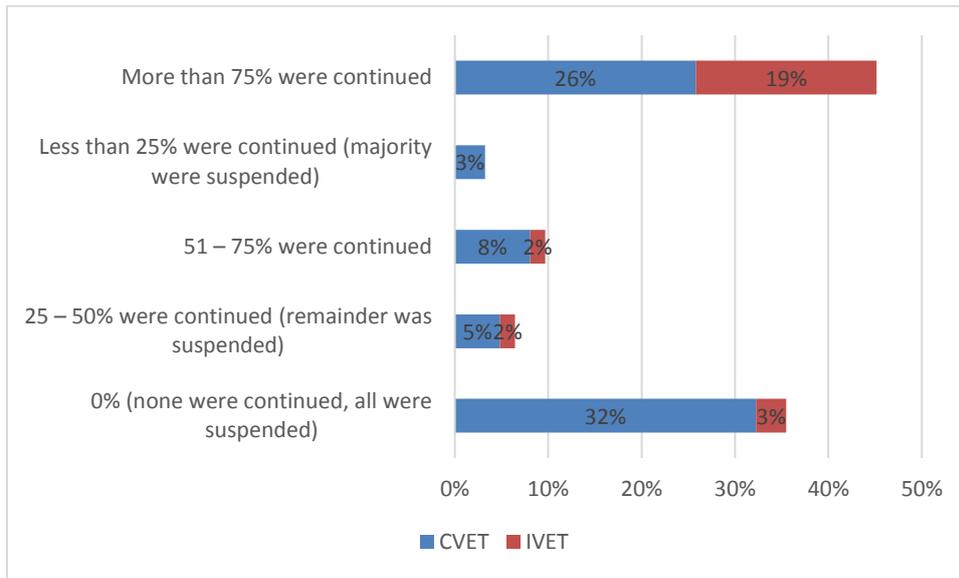


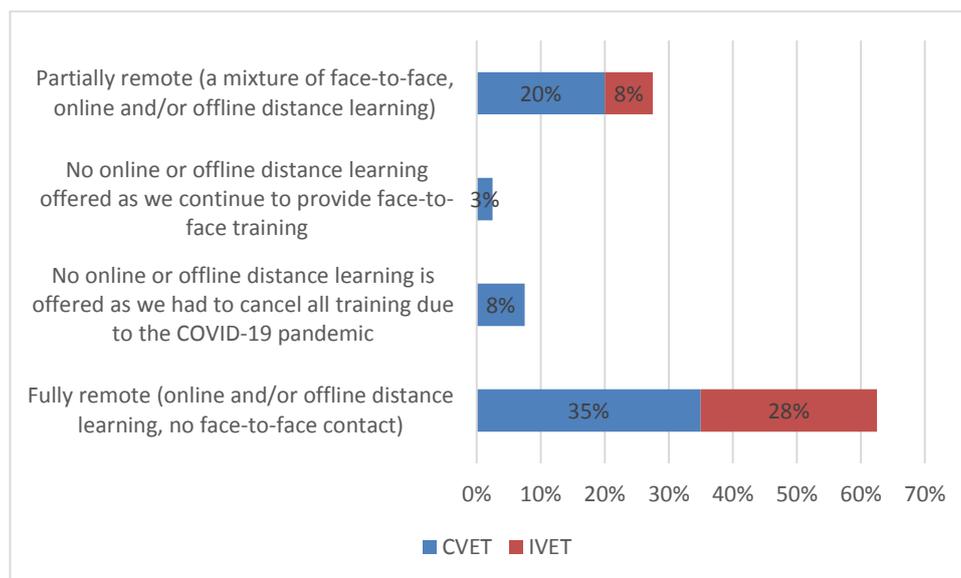
Figure 29 indicates that prior to the outbreak of the COVID-19 pandemic in March 2020, most institutions (94% of IVETs and 72% of CVETs) were not offering any of their programs either partially or fully online, and were not using any distance learning modalities. This may be attributed to a greater emphasis on practical training and less of a need to conduct training online or using distance learning modes.

Figure 24. Percentage of programs involving face-to-face training courses that were continued using emergency remote teaching measures after the COVID-19 outbreak



The findings are consistent with Figure 24 which provides percentages as a proportion of the total sample. Despite not offering programs online or using distance learning prior to the COVID-19 outbreak, 45% of institutions were able to continue with providing more than a third of their programs once the COVID-19 outbreak had occurred. Despite this positive finding, approximately half of institutions (45%) reported that they were unable to continue at least half of their face-to-face programs using emergency remote teaching measures. This suggests that many institutions struggled to adapt to new teaching configurations for programs that had previously contained face-to-face components.

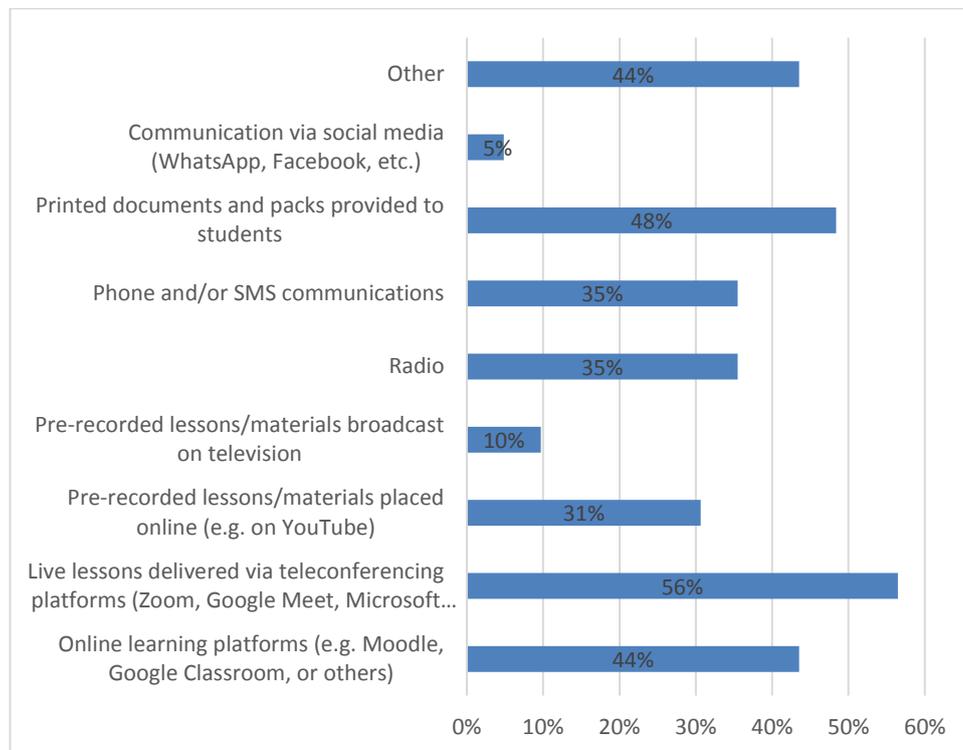
Figure 25. Modes of training during the COVID-19 pandemic



Over the course of the COVID-19 pandemic, institutions reported using different modes of training, the most popular of which was fully remote training (reported by 63% of institutions), followed by blended learning (28% of institutions). Fully remote training was the most popular mode amongst

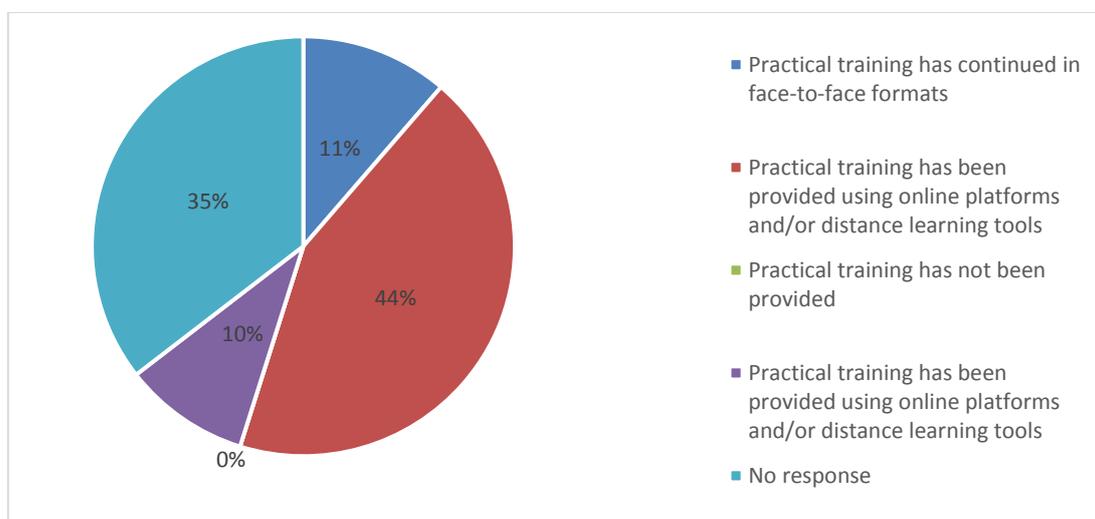
both CVETs and IVETs, presumably because this allowed institutions to reliably observe social distancing measures and lockdown regulations.

Figure 26. Modalities used for emergency remote teaching



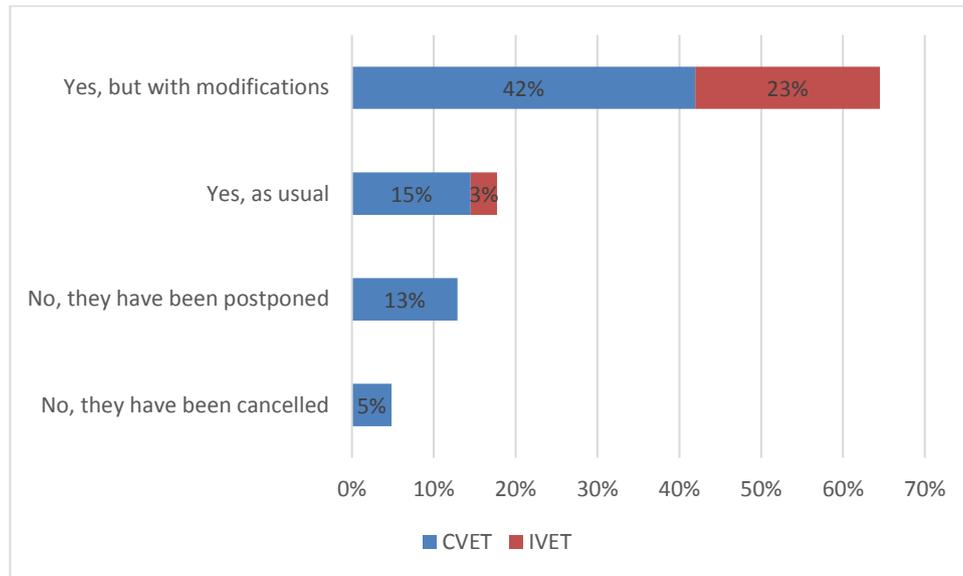
When examining the most popular modalities employed for emergency remote teaching, live lessons on teleconferencing platforms (noted by 56% of institutions) and printed documents (48% of institutions) were the most popular – two very different modalities. Note that institutions were able to provide multiple responses to this question. However, overall, institutions seem to have employed a wide variety of modalities. The data demonstrates that more often than not, institutions would use multiple modalities to deliver emergency remote teaching, which suggests that content was likely more accessible for students.

Figure 27. Modalities used to provide practical training in response to COVID-19



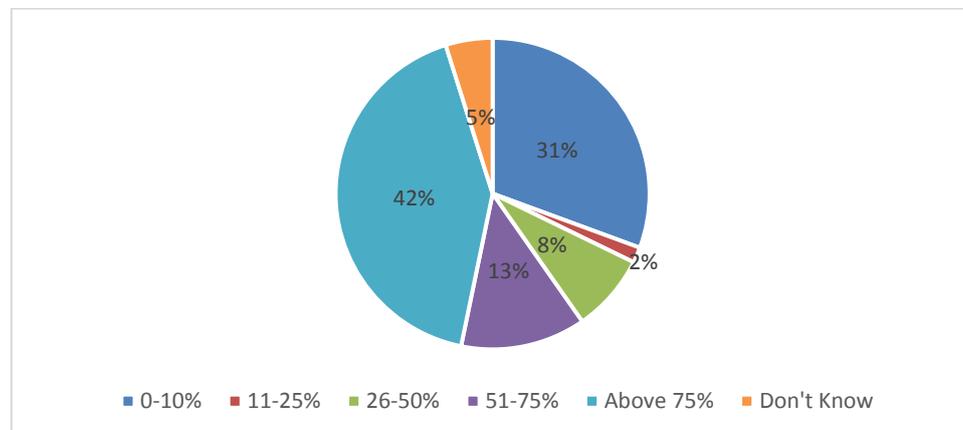
In response to COVID-19, most institutions (44%) have provided practical training using online platforms and/or distance learning tools. This is an interesting finding considering that, as demonstrated in Figure 27, most institutions had not been using these modalities for practical training prior to the pandemic. This suggests that institutions needed to make significant shifts in attempts to deliver practical training to students and minimize disruptions to educational delivery. Given that practical training often occurs in workshops and laboratories at the institution or through work-based learning or apprenticeships, changing to modes other than face-to-face training would have required significant coordination efforts.

Figure 28. Whether certifying exams/assessments were held in the 2019/20 academic year



In line with the findings above, most institutions (65%) reported that they were able to continue providing certifying exams and/or assessments for trainees during the 2019/20 academic year, but with modifications. This included interventions such as moving to online exams or applying hygiene and social distancing protocols in cases where face-to-face contact was required. Very few institutions reported that they postponed or cancelled certifying exams altogether – all of which were CVETs.

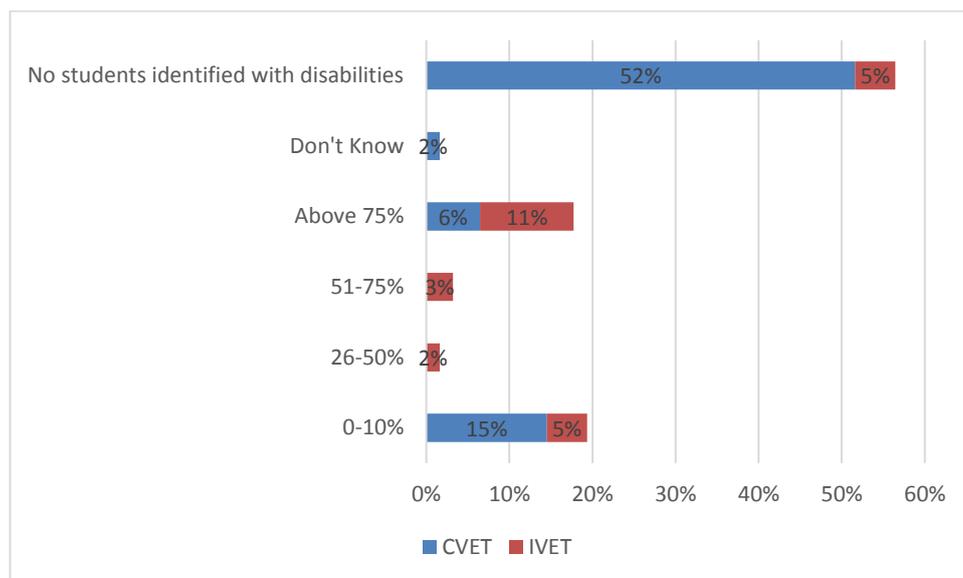
Figure 29. Estimated proportion of the student population that has been able to stay engaged and continue their studies during COVID-19



Institutions were asked to estimate what percentage of their overall student population has been able to stay engaged in a sustained way over time and continue their studies during the period of unexpected shutdown, considering the distance learning modalities deployed and their access to digital devices and connectivity. Nearly half of institutions (42%) estimated that more than a third of students were able to stay meaningfully engaged. In comparison, 31% of institutions reported that less than 10% of the student population could maintain engagement. Although these are just estimates, they speak to educational difficulties that a large proportion of the student population at many institutions experienced because of COVID-19.

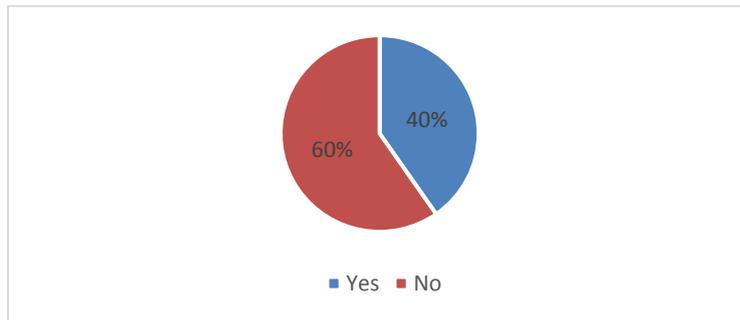
Among the main reasons for not being able to maintain engagement in online lessons, most training institutions indicated the lack of adequate digital devices or equipment, and in some cases, even the lack of adequate internet connectivity/bandwidth, especially among students from rural areas. Moreover, the training content was not deemed suitable for distance learning modalities, while for some training areas, such as those that require hands-on training (make-up) or those for highly regulated jobs for which attestation cannot be obtained online, online courses could not be delivered at all. This situation was also due to the lack of specific legal framework, at the beginning of the pandemic, regulating the conditions for online training, assessment and certification.

Figure 30. Estimate of the student population with disabilities able to continue their studies during shutdown



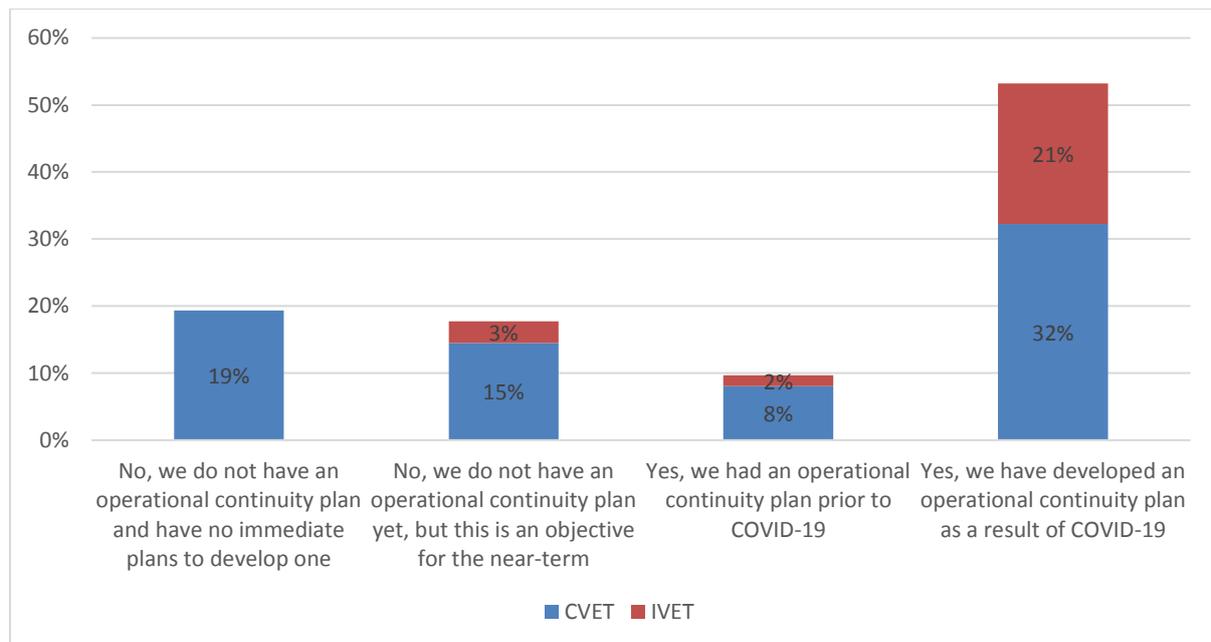
When examining the proportion of students with disabilities who were able to continue their studies during institutional closures in Figure 30, most institutions (57%) indicated that they did not identify any students with disabilities, while 17% noted that more than three quarters of such students could continue their studies. This may suggest a lack of diversity within student populations at institutions, since most reported not having students with disabilities.

Figure 31. Whether institutions are committing additional human or financial resources to expand the use of online and offline distance learning



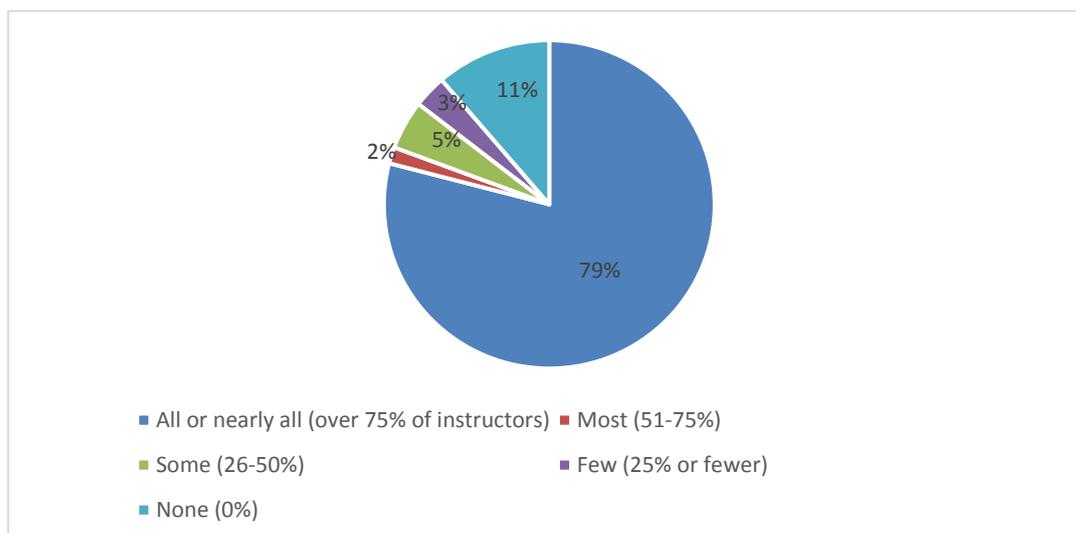
Most institutions (60%) indicated that they were not committing additional financial or human resources to expand the use of online and distance learning. This is a surprising finding, considering the uncertainties around how future waves of COVID-19 may play out. Instead of a reluctance to expand the use of these modalities, these findings are more likely to suggest that institutions either do not have additional resources to commit to this activity or that they have other institutional priorities that are deemed more urgent.

Figure 32. Whether institutions have (or are developing) a documented operational continuity plan



Half of institutions (53%) indicated that they had developed an operational continuity plan as a result of the COVID-19 outbreak, implying that the pandemic had encouraged them to think about how institutional processes might continue as optimally as possible in the case of future such emergencies.

Figure 39. Percentage of instructors that currently have the skills needed to teach remotely when required



Institutions were asked what percentage of their instructors currently have the skills needed to teach remotely. For example, this might include skills related to teaching online using the institution’s preferred learning platforms or using other methods of educational delivery. The responses were encouraging, with most institutions (79%) indicating that all or nearly all their instructors were equipped with such skills. In some cases, these skills are presumably a new development with shifts to remote learning due to COVID-19.

5 Key Findings from the Focus Groups

This section presents the key findings from the focus groups with students, graduates, teachers/trainers, managers of the training institutions participating in the TAP survey interviews and employers who are representative of the industries covered by the training institutions included in the survey. It also presents participants’ reactions to the COVID-19 pandemic, its challenges, and how they adapted to remote learning, teaching, assessments, and practical training.

All focus groups were conducted virtually using online conference platforms such as Zoom and Webex. The country team encouraged all participants to connect both audio and video to create a comfortable climate for discussions and establish a reliable and confident rapport. All virtual meetings were recorded upon participants’ prior consent.

5.1 Key findings from the focus groups with students and graduates

1. Vocational training providers (vocational and technological tracks)

While the VET pathway provides students and graduates with a qualification and an easier access to the labor market, the technological track is still perceived to be of lower quality than the theoretical one.

While some students choose VET because of proximity to home and good reputation, others are not happy as they ended up in a certain technological high school and specialization through a computer-based allocation which considers their past academic performance during gymnasium and at the national examination at the end of Grade 8, and their choices for high schools. In the case of these students, the high school where the computer allocated them was not among their first options.

A recent WB analysis¹⁸ on data on high school admissions indicate that a relatively high share (41% in 2018) of low-performing students (below score 6) are going to upper secondary, mainly to the technological track. In turn, this may contribute to the public perception that technological high school is second-class education and therefore unattractive.

'I didn't decide to come here. I was assigned by the computer according to my grades. I didn't want to study at this high school, but now I appreciate the knowledge I gained, and I want to go to a university in the field of design.' (Student in a technological high school)

Some students chose the training institution due to its reputation, especially teachers' qualifications, and proximity to their home, which enables them to cut down all associated transportation costs, especially for students from rural areas.

'I decided to choose this high school because I was attracted by the profile of tourism and food industry. The high school is located close to my house, and I knew the teachers. I only had advantages in choosing this high school.' (Graduate of a technological high school)

Choice of future profession relies very little on labor market research. Provision of specialized career guidance services should be ensured in all lower and upper secondary institutions, especially in VTP institutions to allow students to make better-informed career decisions.

Choice of specialization is driven mainly by a mix of personal interests in a certain field, relevance of a certain specialization which is in high demand in the labor market, as well as insider knowledge of the field provided by older friends. Friends and peers' interests and preferences are also considered, together with family advice, which has a strong influence on their educational and future career choices.

'I chose this field alone after discussions with colleagues and older friends. I liked the idea of making cakes.' *'Initially I was interested in the natural sciences profile because I wanted to study medicine.'* *'Since I was a child, I discovered my artistic side.'*

Despite limited and even lack of supply of specialized career guidance services in VTP institutions, all respondents reported they have been supported by the institution to find employment upon graduation in various ways such as internships and work-based learning at the premises of firms and companies who are partners of VTP institutions. Both students and graduates highly appreciate internships and practical training opportunities because they experience the world of work, they know what to expect from the workplace and what employers expect from them.

'Our high school helps us find a job because it collaborates with many potential employers, plus our specialization (tourism and food industry) is in high demand on the labor market.' *'Our high school is involved in many European projects. This summer we will go to Portugal where we will receive a degree in gastronomy, and this will definitely help us find a job.'*

'The teachers are the best advisors during our studies, plus the institution offers many opportunities for practical training in the medical field, which increased chances to find a job after graduation.'

Most respondents consider that finding employment, including accurate and reliable information about labor market trends and demands are solely their responsibility, with very few of them expecting or even demanding support from school and teachers or other government institutions.

¹⁸ The entire data analysis can be found in World Bank's *Report on a Functional Analysis of Romania's Vocational Education and Training Subsector*, July 2019.

Their primary sources of information are the internet, dedicated recruitment platforms, and sometimes they get information directly from potential employers.

'The responsibility for finding a job should belong to the student because only they know what they want.'

'There is a shared responsibility for finding a job – 60 percent of students and 40 percent of teachers and institutions.'

'Correct information about the labor market should be obtained from the internet and directly from employers.'

According to the students' and graduates' perceptions, vocational training provides a good and relevant background for a future career.

Generally, students and graduates show good satisfaction with their training received in VTP institutions because it is more practical and skills-oriented. Most students reported that the share between theory and practice is well balanced, helping them acquire the knowledge and practical skills needed to find a job and perform well in the labor market. Some students reported that participation in exchange programs and internships abroad helped them a lot in enriching their knowledge and skills, especially communication. This definitely contributes to their success in finding a job. However, some students also mentioned that they wished for a more practical approach to training with less focus on theory.

'The theory-practice ratio is 80 percent theory and 20 percent practice. It does not seem to me that this report is sufficient. More practice is needed. A better ratio would be 50 percent by 50 percent.'

'For my specialization the ratio was 80 percent practice and the rest theory. I think it was enough and very useful.'

'The theory-practice ratio is 50 percent theory and 50 percent practice. Yes. It is a sufficient report that gives me the skills necessary to practice an occupation.'

Most VTP students, especially those from technological high schools, plan to continue their studies after graduation and get a higher education diploma. Also, academic performance plays a significant role in receiving scholarships and being admitted in higher education institutions. After graduation, some of them also plan to open their own businesses.

'Yes, after graduating from high school I chose to continue my studies at the University of Agronomic Sciences and Veterinary Medicine. I applied only once for this university to be admitted. I want to have my own business in the future.'

'I want to go to university, and I want to study law and later I want to have my own law company.'

'I want to continue my studies in the field of food control and to open a business in this field.'

'I want to go to university, and I want to find a part-time job. Maybe in the future I will open a cake store or a clothing store.'

'Due to the good results at school, I received a scholarship during high school.'

2. Authorized training providers and companies providing in-house training

Some adults get into vocational training seeking personal development and advancement in their career by improving their skills level, while others seek obtaining a recognized qualification in a given area to get better employment and remuneration. Some seek it to retrain in different areas which are in more demand on the labor market compared to the area they previously graduated from.

Program flexibility and short duration are among the main advantages of continuous vocational training mentioned by both students and graduates. Given the short duration of courses provided by

both ATP and CTP institutions, the content becomes more focused and concentrated. Some respondents reported that quality of institution and of training were among the key criteria influencing their decision to sign up for continuous training course. Variety of course offer was also mentioned.

'I chose this training provider because they have professional trainers, because they have courses dedicated to teachers and courses that meet the requirements/needs of teachers.' (ATP student)

'I chose a private institution for the variety of the training offer.' (ATP student)

'I decided to make a change and choose the food industry, after working for 12 years in the automotive industry. I wanted to know other organizational cultures and other types of business. The advantages of my choice are: flexible working environment, professional development, autonomy, responsibility, a team with wonderful people.' (CTP graduate)

According to both students and graduates, training programs offered by CTP and CTP institutions are more practice-oriented, with over 70 percent of curricula consisting of practical training. This helps them in improving their practical skills in addition to new or updated information on different subjects and areas.

'The ratio is 80 percent practice and 20 percent theory. We alternate theory with practice. We learned something and then we implemented.' (ATP student, online teaching methods)

'The course is held online, and the practice is done online. 70 percent of the total course hours are allocated to practical exercises. The practical exercises are done virtually.' (ATP student, landscaping)

5.2 Key findings from the focus groups with teachers/instructors

1. Vocational training providers (vocational and technological tracks)

Teachers demand more flexible and up-to-date curriculum to meet the demands of the labor market.

Teachers have limited freedom and flexibility to adapt curriculum content which is perceived by most of them as heavily overloaded and focused more on theory than on developing practical skills. Teachers also reported that curricula are outdated and need to be updated to meet labor market needs. This impacts students' readiness for the labor market, with only one or two students working in their field after graduation out of a group of 25 students.

'Adaptation, resetting the content, resetting the competencies as main actions for all educational activities. I think more freedom is needed to change the curriculum.'

'Out of a group of 25 students, they end up working in the field just one or two (fashion design). The curriculum must be really adapted to the needs of the market.'

'Loaded educational program, mostly useless and difficult. I had to adapt with essential information.'

'The school curriculum is not enough especially because it is out of date.'

Teachers enjoy a variety of in-service training opportunities, but these could be further improved to be more practically-oriented to meet their needs, especially those related to development of digital skills.

Teachers have a rich variety of opportunities for personal development either through Teachers' Houses which offer a wide variety of in-service training programs and courses for teachers in the pre-university education system, or through different European Union funded projects focused on VET

and teacher training. Despite the rich offer, teachers report that most of these courses are more theoretical and less practice-oriented, and that the current training offer should be extended to provide courses in digital skills and career counselling.

'Also need to participate to digital skills development courses.'

'The offer is very rich but most of the courses are not productive.'

'I would like to take courses that will really improve my trainer skills.'

Teachers' performance evaluation is systematic and conducted annually, based on students' academic results and teachers' pedagogical activity.

Teachers' performance is evaluated annually through a methodology established by the MoE and updated each year. The evaluation procedure has three components: (1) self-evaluation, (2) evaluation performed by a commission at school level, and (3) evaluation done by the school management board. This process is conducted at the end of each school year based on performance indicators grouped in a few areas related to teaching and pedagogy, training students and developing specific skills, monitoring and evaluation of activities and students' results, classroom management, communication and development of institutional partnerships, personal development and career management, contribution to institutional development and personal conduct. Based on performance evaluation, teachers are graded; those with high performance ratings may get a salary increase of up to 25 percent. On the other hand, there is no penalty system for those teachers performing poorly, and this is an issue to be addressed within the entire education system. Teachers also mentioned that they are evaluated by their peers, students and their parents, but this is most often conducted informally.

'Always at the end of the year by awarding grades.'

'Moreover, we are continuously evaluated by students, by parents, by colleagues. That's why we are in a continuous training.'

'I believe that the most important is the evaluation from the students.'

'From the state system no one can be 'fined' if he has unsatisfactory performance or less.'

Teachers from VTP institutions face extensive workload depending on how much they get involved in school activities, including extra-curricular and professional development.

Teachers report high workload, sometimes working during weekends, and overtime hours are paid in addition to their monthly salary. They are moderately satisfied with the existing infrastructure, equipment, and materials in the institutions, but indicate that some of them need to be updated with current technologies currently used by industry. They would welcome increased involvement of companies which are partners of VTP institutions to invest in VTP infrastructure and equipment. Moreover, practical training of students, which is mostly done at employers' premises, plays a crucial role in developing the required skills to perform well in the labor market.

'A closer connection with economic agents (employers) is needed.'

'We have absolutely everything at our disposal.'

'Practical trainings and internships which helps their professional training.'

'Practice in laboratories, but also at local economic agents (future employers) – example: a big oil company finances the training by allocating scholarships, and hires after graduation.'

2. Authorized training providers

Trainers enjoy greater flexibility in adapting curriculum content and teaching methods to meet both student and labor market demands.

Trainers from ATP institutions have greater flexibility in adapting the curriculum and its content to the latest information in the field and technology, including adopting new teaching methods which are more interactive and practice-oriented.

'I have total flexibility; the educational program is updated as needed and when needed.'
'The program is designed to meet educational needs from a scientific point of view.'

ATP institutions focus on practical skills, yet they are limited by the number of hours assigned and sometimes the equipment available.

In ATP institutions, practical skills are a focus, with theoretical knowledge put into digital or written form. ICT use varies depending on the area, with some trainers seeking to become more ICT-capable. According to trainers, most graduates are ready for work as most of them already have a job and seek to advance in their career by upskilling. For those looking for a job, they focus more on reskilling in a different field and they need more knowledge and practical training.

'The practice is dominant in educational activity.'

'Curricular and extracurricular intertwines.'

5.3 Key findings from the focus groups with directors of training institutions

Institutional performance of training providers improved over the last three years, with an increase in enrolments, frequency of training and quality of teaching by attracting highly qualified trainers to deliver more practice-oriented programs. However, the impact of the COVID-19 pandemic crisis had a significant impact on the operation of training providers, especially private ones and NGOs who had to quickly adapt to new online teaching and learning methods to keep their business running.

'The institution's performance in the field of vocational training has shown an increasing trend. The rapid development of technology forces us to intensify training sessions. The performance of the employees is good, it means that the professional training is qualitative.'

'The answer to this question must be approached from two perspectives: before 2020 and after 2020. After 2020, the performance consisted in the fact that we had to adapt to the crisis during the pandemic and to all the restrictions. The number of enrolled students decreased but the attendance at the courses improved a lot. The profit was lower but stable. The quality of our courses is very high due to the fact that our lecturers practice the qualifications they teach. They speak from the perspective of practitioners.'

All institutions implemented various changes in the organization and management of the institution, improvements in communication and visibility to attract trainees, and introduction of new programs and courses in areas which are in more demand in the labor market. Other changes were also made to improve the institutional dialogue with state and local authorities, and potential employers. This is also reflected in the increased number of partnerships with state institutions such as County School Inspectorate, city halls schools and high schools, different NGOs, employers, as well as universities.

'I changed my approach in the dialogue with the authorities, in the sense of writing more. I structured and clarified the procedures and rules. I changed the relationship with the trainers.'

'We changed the website, we made it more attractive and more oriented to customer requirements. We turned our attention to our own employees and their personal development.'

Teaching and learning methods are interactive and are designed to meet trainees' needs and are focused on developing practical and social skills like teamwork, communication.

'Our courses are interactive and very practical. During this period full of restrictions, we try to bring the practical part in to the classroom.'

'The job profile requires an interactive teaching style. After completing the courses, employees must be able to meet the requirements of the job even if it is in a very isolated place. Our students learn to manage. We don't just teach them technical skills.'

Areas for improvement relate to extending partnerships with universities, harmonizing the legislation in the field of tourism with the legislation in the field of vocational education and training, as well as

opening new branches abroad. Among the key challenges mentioned by the directors are those related to collaboration with education institutions due to school closure, resistance to change from the inside and outside from other state authorities, and political and legislative instability.

'I would like to improve training programs and I would like to expand partnerships with universities. We have seven regional meteorological centres, and we want to enter into partnerships with universities for each of them.'

'I would like to harmonize the legislation in the field of tourism with the legislation in the field of vocational training.'

'A real challenge for me is the resistance to change of the authorities and my own team.'

'Political and legislative instability in the Republic of Moldova forces me to postpone this project.'

5.4 Training processes during the COVID-19 pandemic (students, graduates, instructors, directors)

Clear guidelines and additional training for teachers to develop/improve their pedagogical skills for online teaching are required to prepare training institutions for distance learning and secure practical training through apprenticeship programs.

Reaction to the COVID-19 pandemic by institutions varied broadly. Hygiene measures were introduced in both public and private institutions. All institutions adapted the contents of programs and courses for online teaching, purchasing licenses for online platforms, especially during general lockdown. Training programs were delivered through online modalities, yet there were many challenges in ensuring a quality online educational process.

Most VTP students had issues with internet connectivity, and some did not have adequate devices to attend online classes in an efficient way. Moreover, practical training was significantly affected by school closure and general lockdown when they could not attend apprenticeships at employers' premises. Learning mathematics was a real challenge for most students mainly because teachers were not prepared to teach online and did not know how to properly use devices (video camera, laptops) and online learning platforms.

The level of instruction during distance learning varied from teacher to teacher, depending on individual technical skills. Some tried to provide quality training even in changed conditions, while others provided minimum contact with students. Student assessment was also severely affected, with many students reporting that this was not done properly, and the results were inaccurate.

'The first and most difficult barrier for me was the adaptation to the use of new tools (online): platforms, internet, utility, sharing materials and so on.' (VTP teacher)

'Working with technology and platforms.' (VTP teacher)

'Internet or laptop connection and speed.' (VTP student)

'Sometimes I didn't have electricity, other times the connection was not good, and it could be heard with interruptions. The hardest part was math.' (VTP students)

'For various reasons, I was not able to attend all the online courses. I did not do internships and the evaluation was very difficult both for us and for the teachers.' (VTP students)

'It was a real challenge and it was very difficult to learn math online.' (VTP student)

6 What Can be Done to Improve Training? Policy Recommendations

6.1 Recommendations for regulating authorities (policy and sector level)

Build on current efforts to better collect, manage, and use data from education and training institutions to make informed policy decisions.

Although the Government has made efforts to collect data from TVET institutions, the data appears to be mostly administrative and less focused on evaluating performance. IVET institutions are monitored through school inspections based on technical and administrative information and data collected in the MoE's EMIS (SIIR). In other words, inputs are measured, rather than outputs or outcomes. In this sense, the MoE should reconsider this approach and enable school inspectors to provide more appropriate support and encourage institutional performance, as evidenced by the number of graduates who find employment or by improvement in students' learning outcomes and evaluation results of teachers. Most of the public data reported in SIIR is administrative (e.g., enrolment, class size, infrastructure) and provides indications of each IVET's institutional capacity, so it can be useful for policymakers and employers. However, the data is insufficient to enable prospective students to make informed decisions or assess training institutions' performance.

Considering that data collection efforts in CVET are more limited, the government could explore establishing a national data collection and analysis system covering both IVET and CVET. It could also conduct impact evaluations of IVET and CVET programs or pilot tracer studies for selected programs, which could offer valuable information on the benefits generated by a specific training program, both for the employee and the employer.

Although disaster recovery policies exist, there is limited evidence that these translate into key practices such as regular data backup, which might cause problems. There may also be value in assessing technologies used to collect, manage, and analyze data to determine if these require modernizing.

Quality assurance processes should be harmonized between IVET and CVET where possible and strengthened particularly for CVET, while additional quality standards should also be introduced for some services provided by both IVET and CVET.

IVET and CVET are managed independently. This is particularly true regarding quality assurance, as described in Section 2 above. Occupational standards are used as a benchmark for CVET, whereas training standards are used as a benchmark for IVET. The quality assurance system is well defined and rigorously implemented in IVET, but in CVET the system is less robust. Quality assurance criteria and procedures for CVET need to be revised and harmonized with the European Quality Assurance in Vocational Education and Training framework (EQAVET). This may require developing training programs under a common curricular framework, clarifying the link between occupational standards, qualifications and curricula, and the standardization of quality assurance mechanisms and procedures.

At the same time, there is a need to develop and implement quality standards for some types of services provided by both IVET and CVET providers, such as student services, digital instruction, and labor market transition support for students preparing to enter the labor market. TAP survey results indicate that most institutions provide such services, but the standards for quality are undetermined.

Develop measures and create mechanisms which enable a more active participation of employers and other non-government stakeholders in TVET.

Strategic planning could be strengthened through more active participation by a wider representation of stakeholders and minority populations during development and reviewing/updating processes.

Although some non-government stakeholders have advanced several initiatives in TVET, such as the piloting and introduction of the dual system in IVET, most of them do not participate in policy dialogue in a consistent manner. As social partners have a more reactive rather than proactive approach, government institutions continue to be the driving force in the process of developing and implementing national workforce development strategies. The government has taken steps to ensure the participation of employers in decision-making and consultative bodies at different levels, including the Economic and Social Council, sectoral committees, and the boards of the National Employment Agency and the National Qualifications Authority. However, the participation of employers and other social partners needs to be expanded to strengthen their voice.

At national level, the government could foster the active participation of employers and other non-government stakeholders in setting strategic priorities by using the already existing social partnership structures to increase the roles and responsibilities not only of employers, but also professional associations, trade unions, NGOs, and training institutions. Once they become more active, they could gain a coordination role to strengthen the collaboration between relevant key stakeholders around the implementation and monitoring of key strategic initiatives.

In IVET, for example, sectoral committees could play a more active role not only in the development of standards to increase the relevance of training programs, but also in coordinating and facilitating dialogue with the authorities, as well as between training institutions and companies in the sectors they represent. The IVET dual system has already created the framework to increase the engagement of industry partners in school decision-making processes through their participation in school boards and their involvement in curriculum design.

General review of strategies to strengthen diversity and inclusion in TVET is highly recommended to ensure equal access to quality education and training.

Across various areas of institutional activity in different Action Areas in both IVET and CVET, there is limited engagement with and/or consideration of the needs of learners with special educational needs and minority populations (for example, in curriculum design, program delivery, data management, staff professional development, and strategic planning, among others).

The government could use incentives more intensively to encourage education and training institutions to diversify their sources of funding and resourcing, including in-kind resource contributions.

Romania's overall expenditure on education (only 3.2% of GDP) remains among the lowest in the EU. It is, therefore, safe to assume that investment in TVET is also lower compared to other European systems. Moreover, there is negligible evidence of any R&D relationships with industry. R&D projects implemented in partnership with industry can help to strengthen program design and build lasting relationships with the private sector, so might be worth supporting and nurturing.

In the case of CVET, there is no overall public funding scheme, while incentives for private firms to provide training to their employees are somewhat limited. The training of employees in the private sector is rather ad hoc, as only a few large companies have a training strategy or special fund/budget allocated for training. Small companies are even less likely to train their employees because they usually lack the institutional infrastructure to organize and implement human resource development programs. For this reason, the government should explore strategies to incentivize private investments in CVET. Possible solutions range from campaigns to raise awareness of the benefits of CVET, support for businesses to assess skills needs, or the establishment of a training fund. Regardless of the mechanism chosen, it is crucial to ensure that it is sufficiently flexible to accommodate the training needs of employers, and that it is accessible and regularly monitored and evaluated.

In the case of IVET, institutional autonomy should be enhanced to use resources. In IVET institutions, most funds are allocated for current costs and teachers' salaries, with very few resources left to innovation and investments, especially in teacher professional development.

For example, state funds for teacher training are not allocated directly to schools, but to local authorities, adding another layer of bureaucracy and dependency. Many school principals rely mostly on EU funded projects to support professional development which, in the longer term, is not a sustainable approach. Regulatory changes that can allow for refund systems for professional development courses chosen by schools or individuals could help to avoid these additional bureaucratic layers and, at the same time, to address the lack of courses based on needs.

Furthermore, sponsorships from employers or other social and local partners should be considered, while schools could focus on generating more revenues and using them.

Create mechanisms to render TVET more flexible and accessible as part of building lifelong learning opportunities for the Romanian workforce.

Awareness-raising processes could be implemented as a first step in encouraging institutions to introduce greater flexibility in access to learning, with a focus on program flexibility, as well as use of alternative modes of delivery, such as online and blended learning. These processes could assist in identifying where and how such approaches might work most successfully in the Romanian education and training context.

In addition, processes to determine when and whether to introduce new programs and/or close underperforming ones are insufficient and use relatively limited metrics to make these determinations. Hence, these processes could be strengthened as part of wider efforts to ensure better alignment between skills supply and demand.

Prioritize investments in digital infrastructure and training programs to enhance students' and teachers' digital skills for online learning and teaching, especially in IVET.

In recent years, Romania introduced elements of digital technology in its policies, school curricula and training programs, coupled with some investments at national level. However, these initiatives did not prove to be sustainable due to a lack of monitoring and support mechanisms, which need to be strengthened and enforced.

Overall, only 57% of young Romanians aged 16–19 have basic or above basic digital skills, which is well below the EU average of 82% (Education and Training Monitor Romania, 2020). This gap is more prominent in areas such as problem-solving and software skills, which include making decisions about digital tools and using them, purchasing online, creating content and coding. The school curriculum should be revised to include development of these skills throughout the entire education cycle, which requires teachers with enhanced digital skills. Despite many training courses available to teachers to develop/improve digital skills, their quality, coverage, and relevance are lower than expected.

6.2 Key recommendations for training providers

Strengthen communication and collaboration of training institutions, especially VTPs, with industry and companies to get up-to-date information on the current and future labor market needs and latest technologies.

Provide incentives for employers, including financial ones, to offer apprenticeships and to become more engaged in developing and updating curricula relevant to businesses and/or design exclusive courses for companies willing to provide funding or ready to employ a significant number of graduates from such programs. The Romania's Recovery and Resilience Plan, recently approved by the European Commission, includes dedicated funds (grants) to extend dual VET at regional level, focusing on

consolidating partnerships between VTPs, local authorities, and other relevant stakeholders, including universities and employers. The grants will fund, for the next five years, several measures and actions such as internships and apprenticeships, improvement of physical infrastructure and purchase of new equipment and tools for practical training, learning materials, work equipment, suits, costs associated with health and safety insurances, taxes, and regular medical checks of students during internships, teacher training programs, and so on.

These funds could also be used to develop or enhance existing partnership between VTPs and employers to allow teachers and instructors to spend some time in industry to update their knowledge and skills, and companies' trainers to spend time in VET schools to develop and/or improve their pedagogical skills.

Develop quality benchmarking standards for services provided to students.

Providers could improve the quality of their services by developing quality standards that can be used as benchmarks for evaluating and improving their operations. These quality standards could be applied to aspects such as student support services, the scope and quality of digital instruction, and support for students transitioning into the labor market.

Ensure more inclusive approaches to program delivery.

Providers could collect more data and information on students with disabilities, students with special educational needs, and minority learners and ensure their participation in activities related to the educational process and program planning, institution financing, quality assurance, and monitoring and evaluation. This recommendation is based on the finding that most institutions do not disaggregate data by criteria such as minorities and learners with disabilities and/or special educational needs.

Furthermore, providers could ensure that learners from diverse backgrounds, including from minority groups, are involved in the development of institutional plans. This recommendation is based on the finding that there was very little evidence that institutions engage with organizations representing people with disabilities and/or diverse learning needs during curriculum design.

Develop and implement measures and actions to mitigate risks related to possible new waves of pandemic and other similar emergency situations.

Although half of institutions indicated that they had developed an operational continuity plan as a result of the COVID-19 outbreak, each institution should be prepared for future scenarios that would affect program delivery. Moreover, most institutions indicated that they were not committing additional financial or human resources to expand the use of online and distance learning, which is a surprising finding, considering the uncertainties around how future waves of COVID-19 may play out.

Hence, all institutions should develop continuity and contingency plans for unexpected situations and emergencies, create corresponding guidelines and rules for all the parties involved, and allocate adequate financial and human resources, especially to expand the use of online and distance learning.

In addition, maintaining practical training and making it COVID-safe should be prioritized. The main challenge institutions faced with going online is that practical training could not continue, or it was carried out with limitations. There was an inability to replicate practical training adequately in distance learning modalities, and there was a lack of access to necessary physical equipment, which is only available in institutions or workplaces. As for now, ICT skills and equipment requirements do not allow institutions to offer practical training fully online. Maintaining them, but making them COVID-safe, is quite important for the TVET system. COVID-safe measures could include wearing masks and gloves,

regular testing, suitable management of timing and schedules for such practices, and other such measures.

Appendix 1: The TAP Scoring Methodology Explained

The TAP TPS (see Appendix Two) presents a series of structured questions to TVET institutions within a country to gauge the extent to which specific institutional practices or conditions are prevalent in those institutions. The practices identified for analysis were derived from extensive research underlying the World Bank's 'Systems Approach for Better Education Results' (SABER) program on workforce development. This research was initially conducted during the first phase of implementation of the Training Assessment Project (TAP) in 2018 and subsequently refined and expanded for implementation in this second phase (2019-2021). This research focused on identifying global good practices and key institutional practices and reforms that have been identified in the literature as having significant potential to improve the quality and impact of skills development in a country.

The survey is divided into nine primary Action Areas, each corresponding to institutional goals:

- 1) Setting strategic direction
- 2) Gathering, analysing, and publicizing data for informed decision-making
- 3) Developing a demand-driven approach to training
- 4) Establishing a sustained relationship with authorities
- 5) Ensuring institutional financial viability and efficiency
- 6) Fulfilling quality standards
- 7) Creating a teaching experience conducive to learning
- 8) Preparing students for the world of work
- 9) Enabling students to pursue education and training opportunities

Each Action Area is broken down into several clusters of questions that probe specific aspects of that Action Area. For every question (except a few intended for information purposes only), there is an accompanying list of answers. Depending on the nature of the question, respondents may be allowed to give only a single answer, a limited number, or as many as they like. However, to avoid the risk that respondents might review these answers and seek to guess the 'right' answer, the answer options are not provided to respondents and the survey is administered through a structured interview with the institution's director or another representative. Ideally, these interviews are conducted face-to-face but often done virtually in instances where countries were in lockdown during the COVID19 pandemic.

During the interview process, interviewers record the institutional responses to questions and match these with the available answers. These answers are captured in a structured format and entered into a database for analysis. During the analysis stage, every answer is then allocated a weight, which is used to assess the prevalence of that practice within and across the participating institutions. Answers that are aligned with internationally recognized 'good practices' are typically accorded higher weights. Where scores are low after analysis, this typically either means that the practice is not prevalent within that country's sample of institutions, or that the manner of implementation in the sampled institutions diverges from internationally recognized good practice. The weighting of responses happens at several levels to enable the scores to reveal the relative prevalence of internationally recognized good practices. These are as follows:

- 1) Every answer option is accorded a score, which indicates its relative weight compared to other options for that question.
- 2) Every question is accorded a relative weight within the cluster of which it forms part, which enables those questions that focus on more impactful practices to be granted greater weight in calculating percentages than the others.
- 3) Every question cluster is accorded a relative weight within the Action Area of which it forms part, which in turn allows those clusters of questions that focus on more impactful practices to be granted greater weight in calculating percentages than the others.

Based on the above, percentages are calculated for every question, question cluster, and Action Area. These percentages make it very quick and easy to see which of the identified practices are prevalent within the sample of institutions surveyed. Given the nature of the survey, these results are only quantitatively indicative of possible areas for policy action; they do not provide qualitative nuance on details of action required, though this can be supplemented through focus groups or other qualitative approaches.

The weights for each Action Area's Question Clusters are presented below.

| Action Areas | Categories | Weights |
|---|---|----------------|
| Setting strategic direction | Governance structures | 33% |
| | Strategic planning | 33% |
| | Engaging with industry/employers | 33% |
| Gathering, analyzing, and publicizing data for informed decision-making | Collecting and managing data | 40% |
| | Data submission to national databases | 10% |
| | Data collection frequency | 25% |
| | Use of data and data analytics | 25% |
| Developing a demand-driven approach to training | Curriculum design issues: | 33% |
| | Inclusion of generic skills | 33% |
| | Program choices | 33% |
| Establishing a sustained relationship with authorities | Engagement with the government | 100% |
| Ensuring institutional financial viability and efficiency | Collection and management of finances: | 20% |
| | Extent of constraints in financial management | 20% |
| | Financial sustainability | 20% |
| | Mobilization of funding from private sector/employers | 20% |
| | Adequacy of budgets | 10% |
| | Financial audit practices | 10% |
| Fulfilling quality standards | Compliance with institutional standards: | 25% |
| | Supervision visits | 25% |
| | Compliance with program/curriculum standards | 25% |
| | Awards of recognized certificates | 25% |
| Creating a teaching experience conducive to learning | Assessment strategies used | 20% |
| | Instructor evaluation and performance review | 30% |
| | Instructor professional development (General) | 30% |
| | Instructor professional development (Diversity and inclusion) | 20% |
| Preparing students for the world of work | Work-integrated learning opportunities | 30% |
| | Career guidance and counselling | 15% |
| | Graduate recruitment by employers | 15% |
| | Graduate placement tracking | 10% |
| | Postgraduate success | 20% |
| | R&D project partnerships with industry | 10% |
| Enabling students to pursue education and training opportunities | Access and admissions policies | 15% |
| | Availability of flexible learning options | 25% |
| | Use of distance education and online learning | 25% |
| | Extent of integration of practical components into programs | 25% |
| | Adaptation of key programs to labor market demands | 10% |

Note on Comparability and Interpretation of Scoring

As the generic TPS has been designed for use across multiple countries, it is inevitably the case that some of the questions are not relevant to the TVET system of a specific country. To an extent, this problem is resolved when the survey is customized to different country contexts, but it remains the case that many of the identified international good practices embedded in the survey design may not be fully applicable for a given country. Further, as the survey has been applied only to specific samples of institutions that differ across countries, it can also be the case that some of the practices are not relevant to many of the institutions in that sample. For example, formal secondary TVET institutions typically play a very limited, if any role, in providing access to lifelong learning opportunities for those who have already graduated and who are either already in the workforce or unemployed and in need of upskilling or reskilling opportunities. Given the large differences in context and in sample selection, institutional scores are not intended to be compared across countries. Rather, they are customized specifically to the sample of selected institutions within a given country and intended for formative purposes.

There can be several valid reasons why scores are apparently 'low' when analysing the survey results and this should not be taken to imply any judgement of the participating institutions or be interpreted to mean that they are 'underperforming'. Common reasons for lower percentages might include:

- National policies do not allow or encourage the adoption of given practices (often for very good reasons).
- Sample institutions might be operating in sectors where certain practices are not appropriate or relevant.
- The nature of the labor market or the larger education ecosystem in certain countries might render certain practices redundant.

For these reasons, the range of scores needs to be considered and compared against the larger operating context for the sampled institutions.

Note on COVID-19

In addition, the initial design of the TAP 2.0 research process encountered an unexpected challenge when the COVID-19 pandemic broke out globally. Consequently, an additional Action Area was developed:

10) Responding to COVID-19 and other emergencies

However, this section was designed exclusively to collect information on emerging practices and was therefore excluded from the scoring process, given the unique nature of what has happened since the pandemic broke out.

Appendix 2: Institutional Overview (Additional data)

Data analysis assumptions and process

The following process was followed, and assumptions were made when analyzing the dataset:

- All data was downloaded from Alchemer (completed/submitted responses and incomplete responses).
- Incomplete responses with meaningful data were retained during the data cleaning process.
- The dataset was cleaned to remove duplicates and incomplete responses (i.e. those where less than a quarter of the survey was complete)
- The total number of responses analyzed was 53. Unless otherwise stated, all calculations were based on 53 responses.
- The number of responses (n) for each question varies and is indicated per question. Where a '0' was indicated in the data, the response for that question was excluded from the analysis (where appropriate).
- Where responses are partially complete for a question, logic was applied to complete the intended response (for example, by adding a 0).
- A response for a question was removed if it was clearly incorrect/invalid (e.g. providing a percentage of 119%).

Programs and students

Figure 33. Average percentage of students by highest completed education level

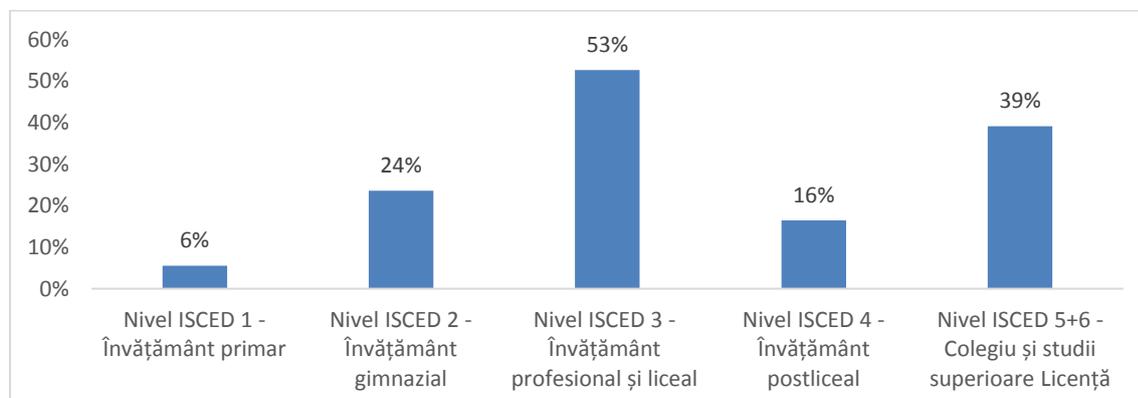
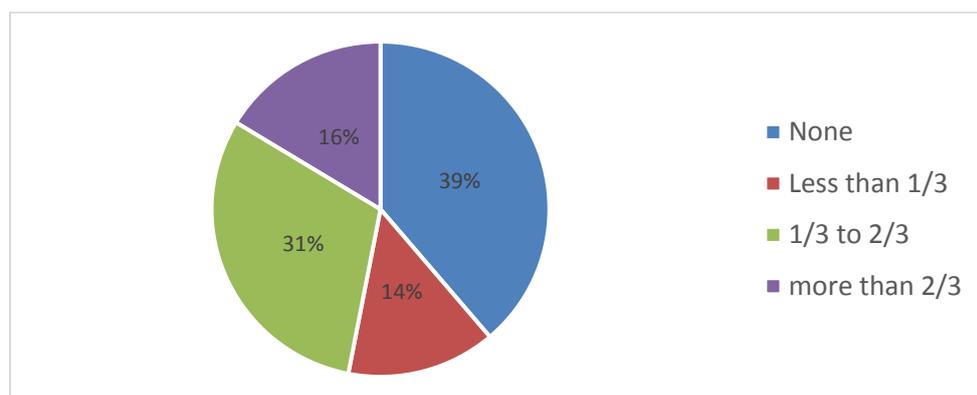


Figure 34. Proportion of female students from programs of 150 hours or less duration



Most popular program at institutions

Figure 35. Average percentage of students by highest completed education level for most popular program

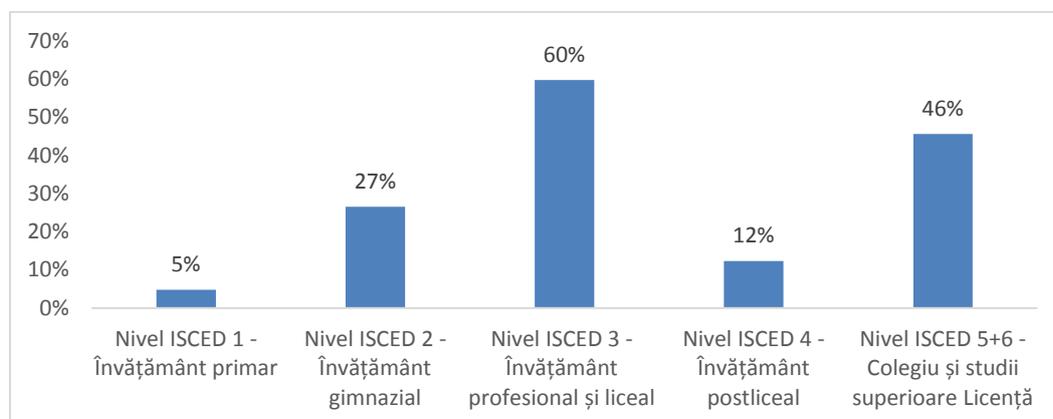


Figure 36. Whether students in most popular program had work experience prior to commencing the most popular program

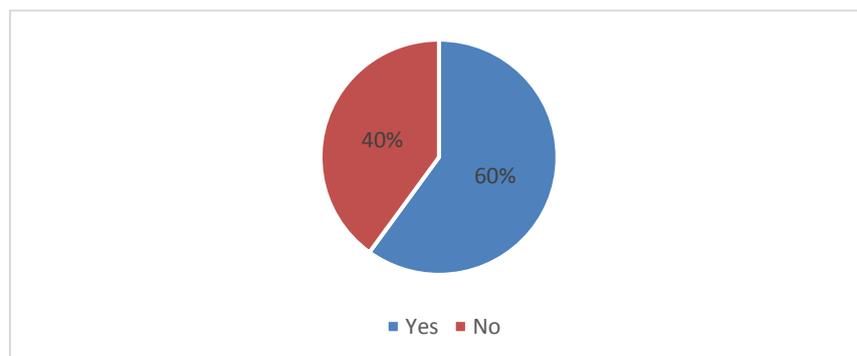


Figure 37. Average percentage of graduates from most popular program who applied for further education or found employment

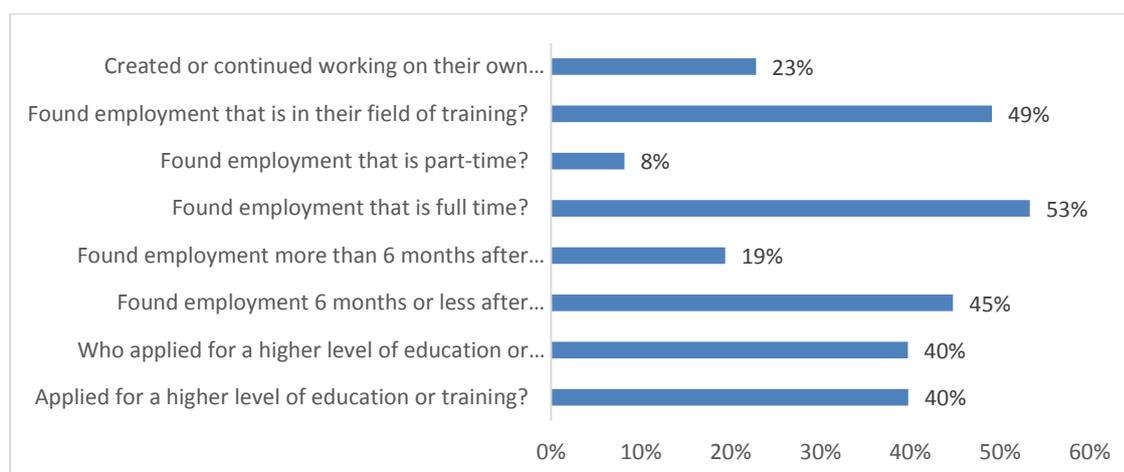
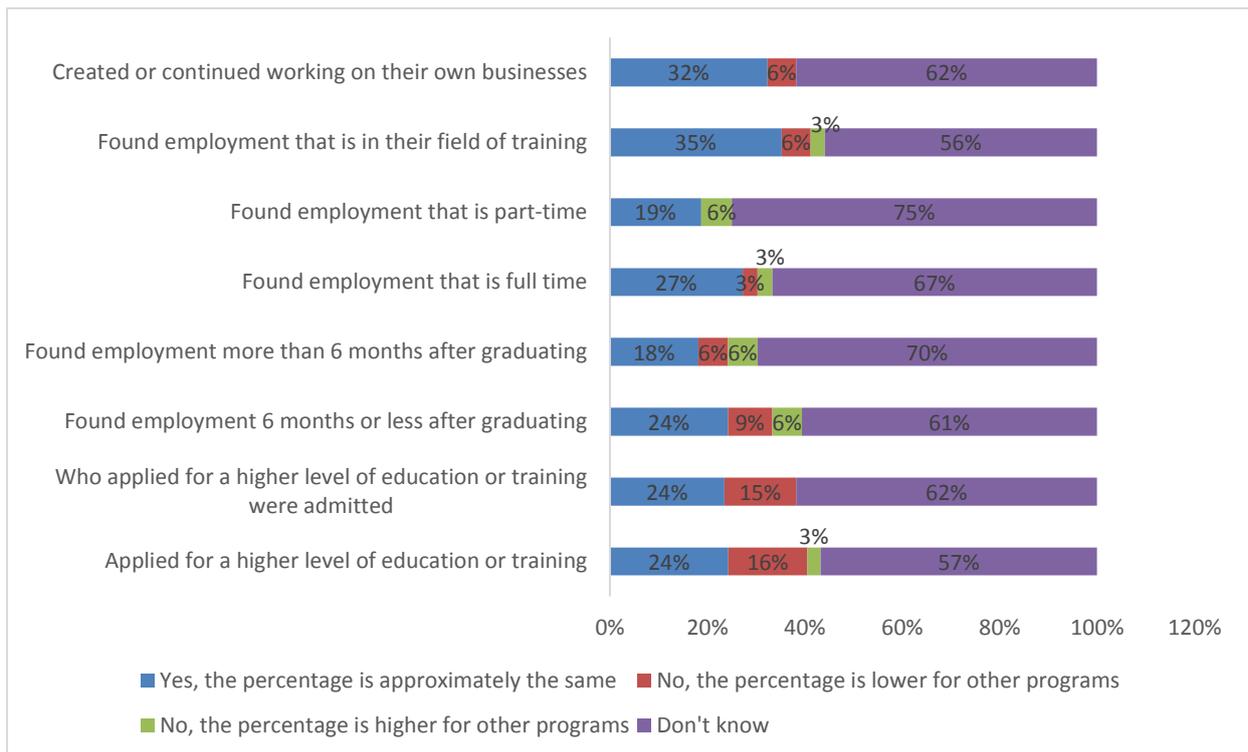


Figure 38. Comparing graduates from most popular program to all other programs



Trainers/instructors

Figure 39. Proportion of females according to education level of trainers/instructors

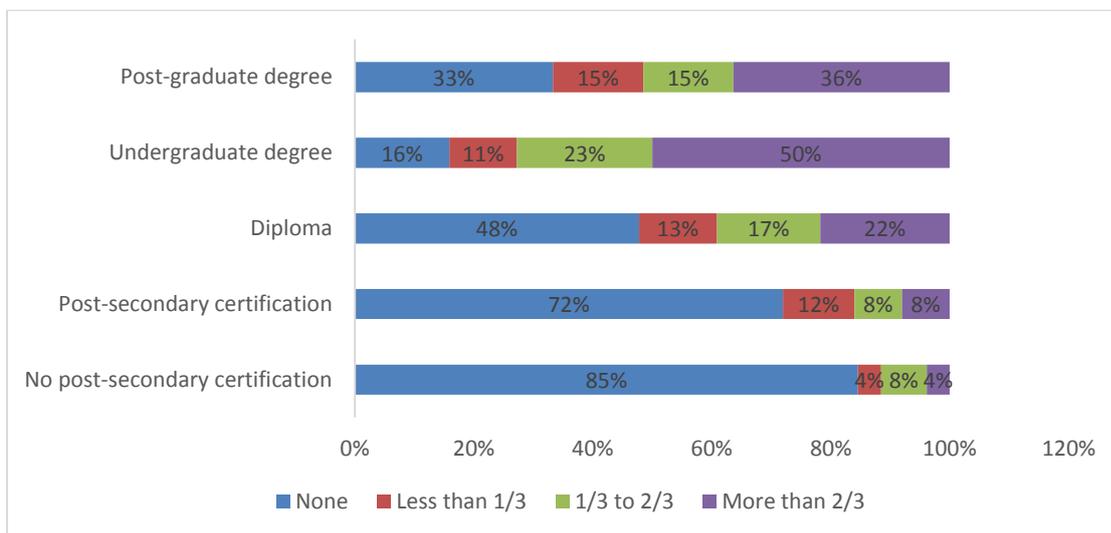


Figure 40. Average level of teaching experience for trainers/instructors

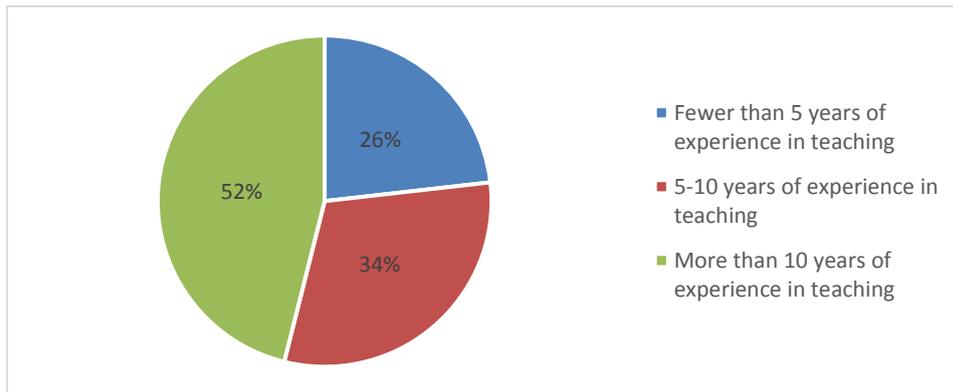


Figure 41. Proportion of female instructors/trainers according to years of experience teaching

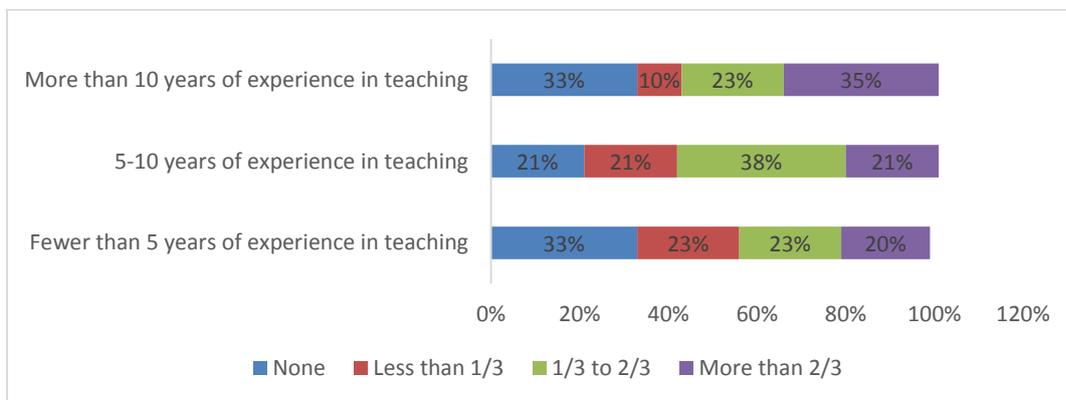


Figure 49. Average level of industry experience for trainers/instructors

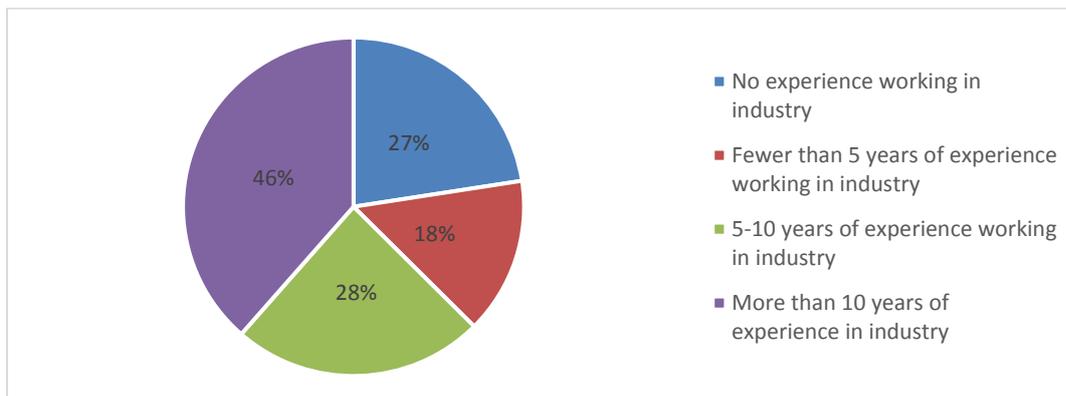
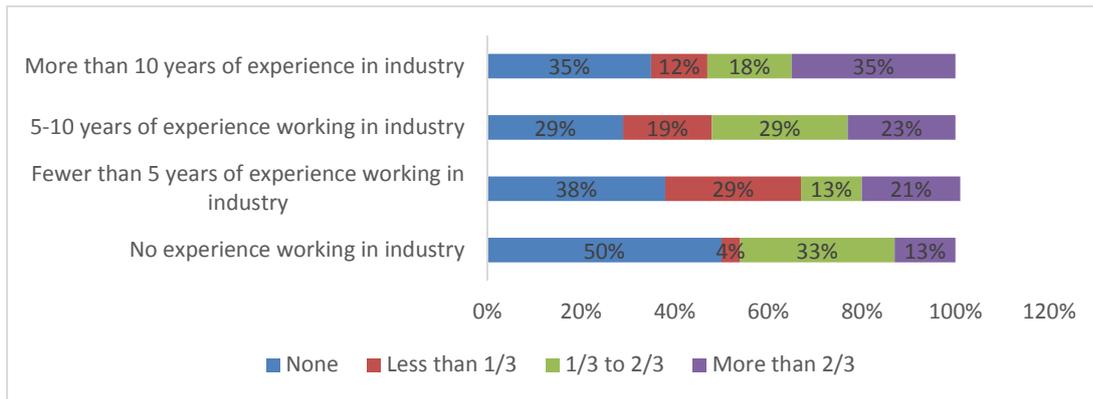


Figure 42. Proportion of female instructors/trainers according to years of experience in industry



Facilities

Table 13. Institutions with a 'bring your own device' policy for staff and/or students

| | Non-profit | Private | Public |
|------------------------|-------------------|----------------|---------------|
| No | 6% | 30% | 13% |
| Yes | 13% | 21% | 17% |
| Total responses | 19% | 51% | 30% |

Appendix 3: Full set of scoring results

| Question | IVET | CVET | Combined |
|---|---------------|---------------|---------------|
| 1. Strategic Direction | 57,43% | 37,84% | 42,90% |
| 1.1.1 Does this institution have a governance board or an institutional management committee or both? | 56,25% | 46,74% | 49,19% |
| 1.1.2 Thinking of the last 12 months, how many times did this Governance Board meet? | 6,25% | 26,09% | 20,97% |
| 1.1.3 Thinking of the last 12 months, how many times did this institutional management committee meet? | 70,83% | 34,06% | 43,55% |
| 1.1.4 What links are there with the Governance Board members and industry? | 23,96% | 18,48% | 19,89% |
| 1.1.5 What links are there with the Management Committee members and industry? | 27,08% | 18,12% | 20,43% |
| 1.1.6 To whom is the Institution Director accountable? | 43,75% | 41,30% | 41,94% |
| 1.2.1 Does the institution have an institutional strategic plan? | 100,00% | 73,91% | 80,65% |
| 1.2.2 Who supervises implementation of the strategic plan? | 75,00% | 55,80% | 60,75% |
| 1.2.3 How often in the past 12 months has the implementation of the strategic plan been reported to the Governance Board? | 43,75% | 29,35% | 33,06% |
| 1.2.4 How frequently is the institutional strategic plan updated (revised/adapted) and approved by either the Governance Board or the Institutional Management Committee)? | 95,83% | 60,87% | 69,89% |
| 1.2.5 Who is involved in developing the strategic plan of the institution? | 41,96% | 17,08% | 23,50% |
| 1.2.6 Is there contact with any groups/ individuals in the community who represent minority populations (such as groups that work with immigrants, LGBTQ, persons with disabilities, ethnic minorities) when developing the strategic plan? | 56,25% | 19,57% | 29,03% |
| 1.2.7 Is the strategic plan of the institution shared with any key stakeholders? | 100,00% | 63,04% | 72,58% |
| 1.2.8 With which key stakeholders is the strategic plan of the institution shared? | 61,36% | 21,54% | 31,82% |
| 1.2.9 How is the strategic plan shared? | 69,14% | 26,36% | 37,40% |
| 1.3.1 Does the strategic plan refer to engaging with industry/ employers/ industry associations? | 100,00% | 50,00% | 62,90% |
| 1.3.2 In the last 12 months what steps has the institution taken to connect with industry? | 60,42% | 37,68% | 43,55% |
| 1.3.3 What does the strategy to engage with industry/employers consist of? | 65,62% | 40,76% | 47,18% |
| 1.3.4 Who is in charge of the strategy with employers or industry? | 77,08% | 76,81% | 76,88% |
| 2. Data | 73,71% | 59,98% | 63,53% |
| 2.1.1 How does the institution collect and manage data for operational and planning purposes (student records, assessment data, placement data, educator data, infrastructure data, etc.)? | 68,75% | 52,17% | 56,45% |
| 2.1.2 Does the institution have a person/post at management level responsible for institutional data systems and data quality? | 93,75% | 78,26% | 82,26% |

| Question | IVET | CVET | Combined |
|--|---------|--------|----------|
| 2.1.3 Does the institution have a disaster recovery policy for institutional data? | 75,00% | 60,87% | 64,52% |
| 2.1.4 How frequently is institutional data backed up? | 50,00% | 34,24% | 38,31% |
| 2.1.5 Does the institution have a process for ensuring quality and accuracy of data? | 93,75% | 71,74% | 77,42% |
| 2.2.1 Does your institution submit data to any national databases? | 100,00% | 54,35% | 66,13% |
| 2.3.1 How frequently does the administration collect data on the following? | | | |
| 2.3.2 Administrative data (e.g. enrolment, staffing, spending, etc.) | 71,88% | 79,89% | 77,82% |
| 2.3.3 Student performance (e.g. learning results, completion and graduation) | 67,19% | 86,96% | 81,85% |
| 2.3.4 Graduates (e.g. employment outcomes, earnings of graduates, employer satisfaction with graduate skills) | 31,25% | 63,04% | 54,84% |
| 2.4.1 Which of the following does the institution use to evaluate its programs and its overall performance? a) Enrolment rates b) Staffing c) Spending against budgets d) Student performance e) Graduation statistics f) Student satisfaction g) Trainer/instructor performance h) Earnings of graduates i) Employer satisfaction | 71,53% | 53,62% | 58,24% |
| 2.4.2 Does the institution disaggregate data according to any of the following criteria when analysing its performance? a) Gender b) Ethnic minorities c) Migrants (forced or voluntary) d) Groups not fluent in the most common language of instruction e) Students who have difficulty seeing, even if wearing glasses, or difficulty hearing even if using a hearing aid f) Students who have difficulty walking or climbing steps g) Students who require support with self-care (e.g. in dressing or washing) h) Students with other difficulties | 55,00% | 31,74% | 37,74% |
| 2.4.3 Does the institution share internally (staff or students) or externally any of the information it uses to assess its programs or to monitor targets? | 93,75% | 65,22% | 72,58% |
| 2.4.4 With whom does the institution share its targets and its performance against these targets? | 73,75% | 26,96% | 39,03% |
| 2.4.5 Does the institution have internal meetings to discuss institutional performance based on data collected? | 93,75% | 63,04% | 70,97% |
| 2.4.6 (If yes), how frequently did the institution have such meetings, over the past two years? | 87,50% | 59,78% | 66,94% |

| Question | IVET | CVET | Combined |
|---|---------------|---------------|---------------|
| 3. Demand-driven approach | 65,33% | 49,72% | 53,75% |
| 3.1.1 Does your institution have any control over the content and design of curricula for its programs? | 100,00% | 66,30% | 75,00% |
| 3.1.2 (If yes) How often are program curricula reviewed, on average over all your programs? | 91,67% | 72,46% | 77,42% |
| 3.1.3 How does the institution determine the skills to be taught per program? | 57,81% | 44,93% | 48,25% |
| 3.1.4 Does the institution have a strategy or process for engaging employers/industry in curriculum design? | 93,75% | 43,48% | 56,45% |
| 3.1.5 Does the institution have a strategy or process for engaging, for example, with organizations representing persons with disabilities and/or persons with diverse learning needs in curriculum design? | 43,75% | 15,22% | 22,58% |
| 3.2.1 Are there generic skills that the institution seeks to develop as part of the course content in your programs, such as literacy, working with numbers, teamwork, computer literacy, communication skills, etc.? | 100,00% | 76,09% | 82,26% |
| 3.2.2 Do the programs that you deliver try to develop the following skills (as part of course content) in your students? | 91,67% | 57,25% | 66,13% |
| 3.2.3 Do you implement any extra-curricular efforts or activities to ensure these skills are acquired? | N/A | N/A | N/A |
| 3.2.4 Which skills are taught in extra-curricular activities? | 91,67% | 39,13% | 52,69% |
| 3.3.1 Does the institution have autonomy to introduce or close training programs? | 37,50% | 93,48% | 79,03% |
| 3.3.2 Does the institution have a structured annual process for deciding whether to introduce new training programs? | 37,50% | 60,87% | 54,84% |
| 3.3.3 (If yes) What criteria are used to decide whether to introduce training programs? | 20,00% | 29,13% | 26,77% |
| 3.3.4 What was the main source of funding to develop the newly introduced training programs? | N/A | N/A | N/A |
| 3.3.5 Does the institution have an annual process for reviewing existing programs to decide whether to close low-performing programs or those that are no longer relevant? | 31,25% | 60,87% | 53,23% |
| 3.3.6 (If yes) What criteria were used to determine whether or not to close a program? | 16,25% | 24,35% | 22,26% |
| 4. Relationship with Authorities | 80,18% | 45,27% | 54,28% |
| 4.1.1 In the past 3 years, has the institution participated in events to discuss policies regarding training and skills development with government officials? | 87,50% | 36,96% | 50,00% |
| 4.1.2 What are your institution's main purposes of engagement with government officials? | 80,36% | 41,30% | 51,38% |
| 4.1.3 In the past 12 months, what has been the nature of the communication between the institution and government authorities? | 84,38% | 33,97% | 46,98% |
| 4.1.4 Within the institution, who is responsible overall for addressing government communications or requests? | 71,88% | 70,65% | 70,97% |
| 5. Financial Viability | 62,14% | 59,83% | 60,43% |
| 5.1.1 Does the institution have authority over the collection of financial resources? | 53,13% | 91,30% | 81,45% |
| 5.1.2 Who within the institution has authority over the collection of financial resources? | 40,63% | 69,57% | 62,10% |
| 5.1.3 Does the institution have authority over the use and management of financial resources? | 68,75% | 95,65% | 88,71% |

| Question | IVET | CVET | Combined |
|---|---------|--------|----------|
| 5.1.4 Who within the institution has authority over the use and management of financial resources? | 35,42% | 61,59% | 54,84% |
| 5.1.5 Are there policies on spending limits approved by the Board/ Institutional Management Committee or some other relevant governance/ management structure? | 93,75% | 82,61% | 85,48% |
| 5.2.1 To what extent, if any, does your institution have challenges/ constraints to: | | | |
| 5.2.2 Set its annual budget | 75,00% | 86,23% | 83,33% |
| 5.2.3 Set tuition fees | 33,33% | 81,88% | 69,35% |
| 5.2.4 Make investments for the future | 64,58% | 79,71% | 75,81% |
| 5.2.5 Reduce expenses | 66,67% | 84,06% | 79,57% |
| 5.2.6 Find/ increase revenue | 77,08% | 86,23% | 83,87% |
| 5.2.7 Mobilize third-stream income (research contracts, donations, funding partnerships with industry, sale of specialized services, entrepreneurial activities, etc) | 77,08% | 81,16% | 80,11% |
| 5.2.8 Determine staff remuneration | 47,92% | 81,16% | 72,58% |
| 5.3.1 How has your institution ensured continued access to financial resources? | 38,94% | 36,45% | 37,10% |
| 5.3.2 In the past 2 years, has your institution received in-kind or non-cash donations (such as equipment) from government authorities? | 50,00% | 4,35% | 16,13% |
| 5.3.3 In the past 2 years, has your institution received in-kind or non-cash donations (such as equipment) from private sources? | 62,50% | 10,87% | 24,19% |
| 5.3.4 Does your institution have an operating budget? | 100,00% | 82,61% | 87,10% |
| 5.3.5 What factors does your institution consider important when deciding how to allocate funds? | 53,13% | 60,87% | 58,87% |
| 5.3.6 (If more than one Yes in 5.3.5) What is the critically important factor of the ones you mention as important when deciding how to manage funds? | 45,31% | 68,48% | 62,50% |
| 5.4.1 Does your institution actively seek funding or resources from employers? | 87,50% | 45,65% | 56,45% |
| 5.4.2 (If yes), What types of resources are generally provided for your institution? | 52,68% | 22,67% | 30,41% |
| 5.5.1 For each of the following budget items, please indicate whether you feel the available budget is sufficient to meet the institution's needs to deliver high quality programs. | | | |
| 5.5.2 Physical infrastructure and equipment maintenance | 71,88% | 76,09% | 75,00% |
| 5.5.3 Staff professional development | 71,88% | 82,61% | 79,84% |
| 5.5.4 Capital investment (including new physical facilities and new specialized equipment) | 53,13% | 50,00% | 50,81% |
| 5.5.5 Monitoring, evaluation, and research | 34,38% | 53,26% | 48,39% |
| 5.5.6 If any are marked inadequate (2), How do you plan to fill the gaps for those that you reported were inadequately budgeted: | 31,25% | 18,12% | 21,51% |
| 5.6.1 Does this institution undergo regular financial auditing through internal or external audit? | 100,00% | 67,39% | 75,81% |

| Question | IVET | CVET | Combined |
|---|---------------|---------------|---------------|
| 5.6.2 (If yes) in what year did the last internal audits take place? | 75,00% | 63,04% | 66,13% |
| 5.6.3 (If yes) in what year did the last external audits take place? (External audits can be from a private company or a unit of government, such as an Audit Authority or Court of Accounts) | 56,25% | 34,78% | 40,32% |
| 5.6.4 Are external audit results shared with Governance Board/investors? | 87,50% | 39,13% | 51,61% |
| 6. Quality Standards | 76,19% | 55,81% | 61,06% |
| 6.1.1 Does your institution comply with any institutional accreditation standards? Set by government, prof association, regulatory body, etc.? | 100,00% | 97,83% | 98,39% |
| 6.1.2 (If yes), Who sets the standards to which the institution is required to adhere? | N/A | N/A | N/A |
| 6.1.3 What mechanisms does your institution have in place to ensure that it complies with these standards on an ongoing basis? | 58,75% | 35,22% | 41,29% |
| 6.2.1 Does your institution undergo mandatory supervision visits? | 93,75% | 65,22% | 72,58% |
| 6.2.3 In the last two years (24 months), how often has an institutional supervision visit taken place? | 87,50% | 64,13% | 70,16% |
| 6.2.4 How many hours did each supervision visit take, on average? | 62,50% | 38,41% | 44,62% |
| 6.2.5 Does the supervision report recommend specific priorities to improve your institution? | 93,75% | 30,43% | 46,77% |
| 6.2.6 (If yes), Is your institution required to submit an improvement plan following the supervision recommendations? | 81,25% | 21,74% | 37,10% |
| 6.2.7 (If yes), Do you receive feedback on the improvement plan after submission? | 68,75% | 19,57% | 32,26% |
| 6.3.1 Now we would like to ask about program/ curriculum standards. Does your institution comply with defined program/curriculum standards for its programs? | 100,00% | 84,78% | 88,71% |
| 6.3.2 Why does your institute not comply with defined program/ curriculum standards for its programs? | N/A | N/A | N/A |
| 6.3.3 Who sets the program/curriculum to the institution is required to adhere? | 41,67% | 42,03% | 41,94% |
| 6.3.4 Does your institution have any systematic mechanisms in place to ensure that it complies with these program/ curriculum standards? | N/A | N/A | N/A |
| 6.3.5 What mechanisms does your institution have in place to ensure that it complies with these program/curriculum standards? | 61,25% | 37,83% | 43,87% |
| 6.4.1 For what percentage of your programs are nationally recognized certificates awarded upon completion? | 100,00% | 83,33% | 87,63% |
| 6.4.2 For what percentage of your programs are internationally recognized certificates awarded upon completion? | 71,88% | 66,30% | 67,74% |
| 6.4.3 For what percentage of your programs are industry-recognized certificates awarded upon completion? | 70,31% | 53,26% | 57,66% |
| 6.4.4 Do you test for competency based on recognized standards? | 96,88% | 81,52% | 85,48% |
| 7. Learning | 66,63% | 40,28% | 47,08% |
| 7.1.1 What are the main methodologies you use to confirm the student has reached the level of knowledge/ skill required to complete a level or a program? | 74,31% | 49,03% | 55,56% |
| 7.1.2 In what ways do you accommodate students with disabilities and/or diverse learning needs during assessments? | 46,88% | 20,11% | 27,02% |

| Question | IVET | CVET | Combined |
|--|---------------|---------------|---------------|
| 7.2.1 Are instructors at the institution evaluated? | 87,50% | 65,22% | 70,97% |
| 7.2.2 Do you reward good performance of instructors? | 75,00% | 65,22% | 67,74% |
| 7.2.3 Do you take action on poor performance of instructors? | 68,75% | 36,96% | 45,16% |
| 7.2.4 Which methods are used to contribute to evaluations of instructors? | 65,63% | 44,57% | 50,00% |
| 7.2.5 Which of these methods is most critical for instructors as a form of evaluation? | 72,92% | 46,38% | 53,23% |
| 7.2.6 Does the institution request feedback from students or graduates on the performance of instructors? | 93,75% | 80,43% | 83,87% |
| 7.2.7 Who is responsible for receiving and addressing complaints from students? | 71,88% | 64,13% | 66,13% |
| 7.2.8 Does the institutions have a grievance redress mechanism in place for students? | 93,75% | 58,70% | 67,74% |
| 7.3.1 Did the institution offer or support instructor participation in some form of professional development during the last academic year (workshops, mentoring, short programs, etc.)? | 93,75% | 67,39% | 74,19% |
| 7.3.2 What kinds of professional development were available to instructors in the most recently completed school year? | 46,25% | 22,17% | 28,39% |
| 7.3.3 What are your main sources of funding for professional development? | 48,44% | 35,87% | 39,11% |
| 7.3.4 What is the approximate percentage of staff who participated in professional development in the last academic year? | 77,08% | 49,28% | 56,45% |
| 7.3.5 Has the professional development resulted in changes in instructors' practises and teaching? | 78,13% | 48,91% | 56,45% |
| 7.4.1 In the past 12 months, have staff received any professional development focused specifically on issues of diversity and inclusion? | 75,00% | 21,74% | 35,48% |
| 7.4.2 What kinds of professional development were available to instructors in the most recently completed school year? | 68,75% | 15,76% | 29,44% |
| 7.4.3 What percentage of staff participated in this training? | 41,67% | 13,04% | 20,43% |
| 7.4.4 What was the focus of the training(s)? | N/A | N/A | N/A |
| 7.4.5 Has the training resulted in changes in instructors' practises and teaching? | 50,00% | 14,13% | 23,39% |
| 8. World of Work | 67,56% | 43,55% | 49,75% |
| 8.1.1 As part of their program, are students expected to participate in some form of work-integrated learning (including internships or apprenticeships)? | 100,00% | 97,83% | 98,39% |
| 8.1.2 If yes, what percentage of students participate in a work-integrated learning experience? | 50,00% | 48,91% | 49,19% |
| 8.1.3 What is the average length of the internship or apprenticeship? | 100,00% | 96,74% | 97,58% |
| 8.1.4 Does the institution help students find opportunities for internships /apprenticeships? | 100,00% | 80,43% | 85,48% |
| 8.1.5 Does the institution support students from diverse backgrounds or students with disabilities in finding opportunities for internships /apprenticeships, providing reasonable accommodations as needed? | 100,00% | 48,91% | 62,10% |
| 8.1.6 Does your institution assess the performance of students who participated in internships and apprenticeships? | 100,00% | 91,30% | 93,55% |
| 8.2.1 In the most recent academic year, did your institution provide career counselling to students? | 93,75% | 65,22% | 72,58% |

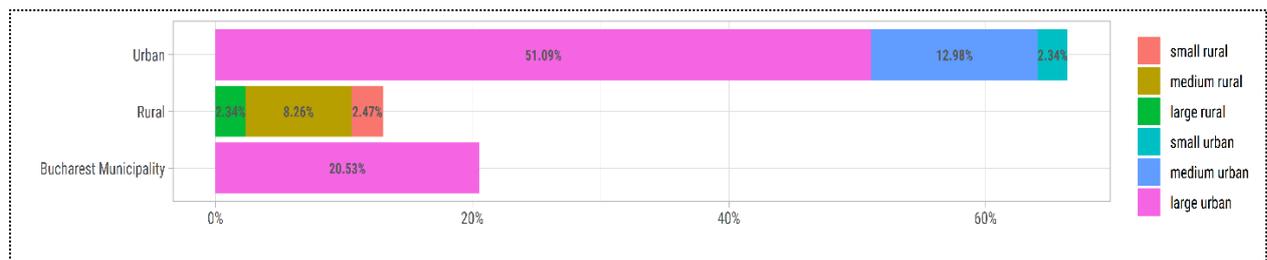
| Question | IVET | CVET | Combined |
|---|---------------|---------------|---------------|
| 8.2.2 If yes, does the institution have career counsellors among its staff? | 75,00% | 30,43% | 41,94% |
| 8.2.3 Which career guidance/ and counselling services are provided? | 54,86% | 19,08% | 28,32% |
| 8.2.4 In the most recent academic year for which you have data, what percentage of students used career guidance/and counselling services? | 87,50% | 42,75% | 54,30% |
| 8.2.5 Roughly, what percentage of these students were female? | N/A | N/A | N/A |
| 8.2.6 Does the counselling available provide specific focus on diversity and inclusion where applicable? | 68,75% | 34,78% | 43,55% |
| 8.3.1 Do any businesses fund programs in the expectation of recruiting students on graduation? | 68,75% | 34,78% | 43,55% |
| 8.3.2 (If yes) In the last academic year, what percentage of programs were funded (even partially) by businesses in the expectation of recruiting students on graduation? | 41,67% | 18,12% | 24,19% |
| 8.4.1 Does the institution track placements of students after graduation? | 93,75% | 39,13% | 53,23% |
| 8.4.2 If yes, how? | 51,56% | 19,57% | 27,82% |
| 8.5.1 Does the institution track satisfaction of employers who have recruited graduates? | 68,75% | 43,48% | 50,00% |
| 8.5.2 If yes, how frequently? | 65,63% | 41,30% | 47,58% |
| 8.6.1 Does your institution have any R&D projects with employers or industry? | 25,00% | 17,39% | 19,35% |
| 8.6.2 In developing your interaction with employers, how important is creating R&D projects? | 18,75% | 13,04% | 14,52% |
| 8.6.3 What percentage of your current total revenue is from these R&D projects? | 12,50% | 13,04% | 12,90% |
| 9. To enable students to pursue opportunities | 44,65% | 40,56% | 41,62% |
| 9.1.1 Do any of the programs offered at the institution have an access or admissions policy? | 100,00% | 58,70% | 69,35% |
| 9.1.2 What % of programs at the institution have an access or admissions policy? | 82,81% | 45,11% | 54,84% |
| 9.1.3 Who determines the criteria for the access or admission policy for your main programs? (Select all that apply) | 30,36% | 16,77% | 20,28% |
| 9.1.4 Do you assess any foundational (literacy, numeracy, IT skills, etc.) and other relevant skills proficiencies upon entry with a test? | 50,00% | 26,09% | 32,26% |
| 9.1.5 Does the access or admissions policy take account of: a) Educational qualifications b) Prior work experience c) Gender d) Students from diverse backgrounds e) Ethnicity f) Socioeconomic background g) Persons with disabilities h) Concurrent employment status | 32,03% | 14,40% | 18,95% |

| Question | IVET | CVET | Combined |
|---|--------|--------|----------|
| i) Other (specify) | | | |
| 9.2.1 Does your institution offer any of the following options? a) Complete programs faster than the scheduled program duration b) Part-time programs c) Remote programs offered via satellite centres d) Evening and/or weekend classes e) Open-ended program durations (as long as courses are completed) f) Credit recognition on transfer from other institutions | 20,83% | 22,46% | 22,04% |
| 9.3.1 What percentage of your programs are offered through distance education (print-based or online) to enable access by remote students or students in employment? | 0,00% | 22,83% | 16,94% |
| 9.3.2 What percentage of your distance education programs are accessible for students with print disabilities, using sign language, and/or requiring some other special accommodation? | 0,00% | 8,70% | 6,45% |
| 9.3.3 What percentage of your on-campus programs use online or blended learning as a central mode of delivery? | 0,00% | 11,96% | 8,87% |
| 9.3.4 What percentage of your on-campus programs are accessible for students with disabilities? | 67,19% | 32,07% | 41,13% |
| 9.4.1 What percentage of programs include a practical component (versus only theoretical)? | 93,75% | 90,00% | 90,97% |
| 9.4.2 For programs that have a practical component, roughly what percentage of the curriculum comprises practical work? | 83,33% | 94,20% | 91,40% |
| 9.5.1 Please think of one program that is especially important for your institution (for example, most in demand, highly prestigious, a model of excellence, or especially profitable). | N/A | N/A | N/A |
| 9.5.2 For this most popular program, how did your institution adapt its curricula to meet the needs of industry or employers? | 64,58% | 28,99% | 38,17% |

Appendix 4: Overview of Romania's education and training landscape

The territorial distribution¹⁹ of the training providers mapped under the TAP exercise (Figure 43) shows significantly higher concentrations in urban areas (86,9%) compared with only 13% of the providers located in rural areas. The breakdown by size reveals that an overwhelmingly majority (71,6%) operate in large urban areas, while almost 13% are in medium urban, and very few (2,34%) in small urban. Moreover, out of all training providers located in urban, almost 21% operate in the capital city of Bucharest only. Out of the total rural providers, most of them are located in medium rural, while the rest in roughly equal shares operate in large and small rural.

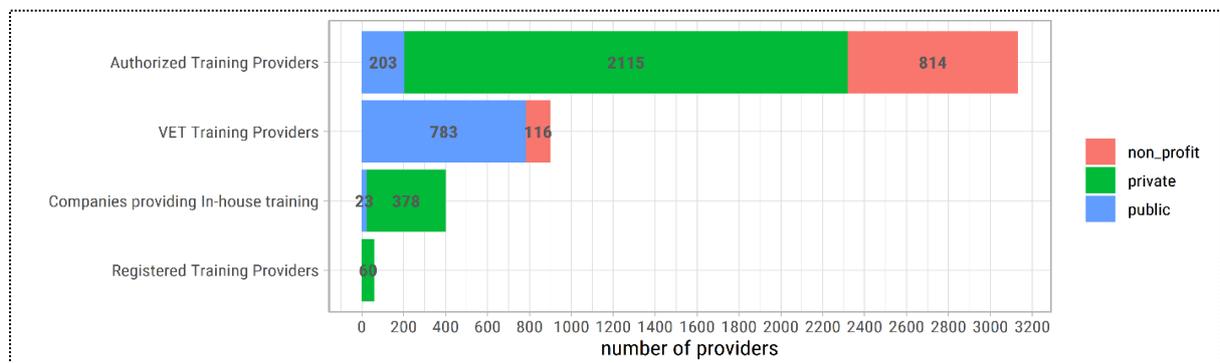
Figure 43. The distribution (%) of training providers by size of urban and rural areas



Source: World Bank team, 2021

The Romanian training landscape is dominated by private training institutions and NGOs which are largely represented by ATPs, followed by public institutions with most of them being VTPs. Most of the public training institutions consist of VTPs (vocational schools, technological high schools and post high schools), and very few represented by ATPs and CTPs.

Figure 44. The distribution of training providers by legal status and type



Source: World Bank team, 2021

The data shows a high concentration of training providers in urban areas, especially large urban. VTP providers are unevenly distributed at territorial level with urban areas being well covered, whereas rural areas are still underserved. This distribution reflects the industrialization pattern before the 90's when most of the VET school network was established to serve factories located in big, industrialized cities. The data indicates high concentration of VTPs (over 10 units per locality) in the largest educational (and university) centres: Bucharest, Cluj-Napoca, Timisoara and Iasi (Map 1). Moreover, large number of VTPs can be found in Craiova, Constanta and Galati, where the automotive and naval

¹⁹ The territorial distribution was analysed based on three categories for both urban and rural areas based on the number of inhabitants, as follows:

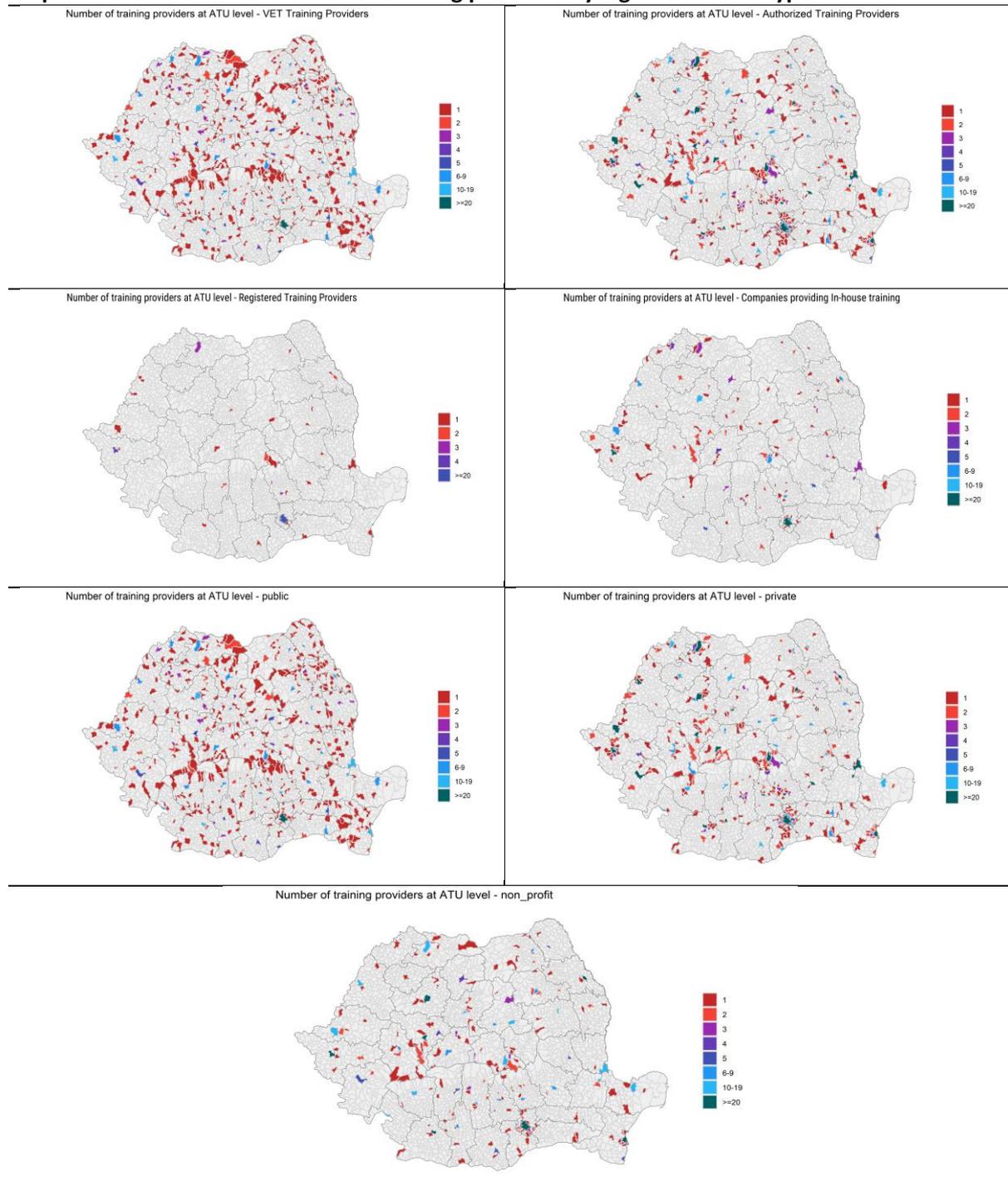
Small rural below or equal 3,000; medium rural between 3,001 and 10,000; large rural over 10,000.

Small urban below or equal 10,000; medium urban between 10,001 and 50,000; large urban equal or over 50,000.

industries are well developed. This is also reflected in the distribution of public training institutions which most are VTPs.

Similarly, ATP providers are also found in large numbers across the territory. They are clustered in large urban and economically developed areas, namely Bucharest, Constanta, Brasov, Baia Mare, Timisoara. This is also noticed in the case of the companies providing in-house training. Thus, the territorial distribution in these cases is similar to the distribution of private training institutions. There are also 930 non-profit training providers, but these are also established in economic centres and seem to follow the same clustering pattern as the privately-owned providers. Also, in this case, there are significant territorial gaps in the Northeast, Northwest, and East of the country.

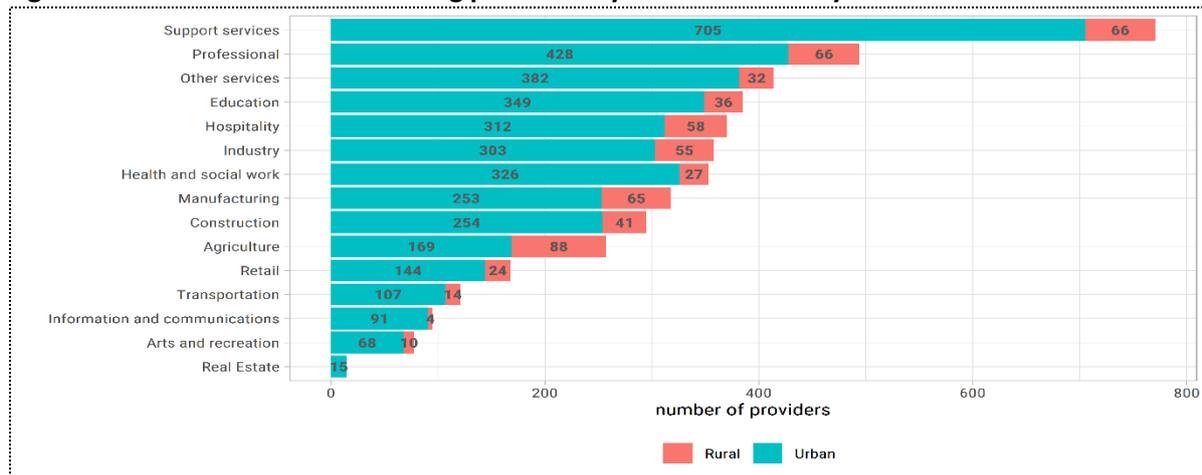
Map 1. The territorial distribution of training providers by legal status and type



Source: World Bank team, 2021

At the same time, there is a large urban-rural gap in terms of both training offer and industry focus (Figure 45) of these programs, with most programs focusing on support services, professional occupations, other services, education, hospitality and industry. The least offered areas are construction, ITC, transportation, retail and agriculture. It is worth noting that there is a limited training offer in the field of agriculture which poses significant challenges for Romania’s economic development considering that half of its population lives in rural areas where the predominant source of income is agriculture.

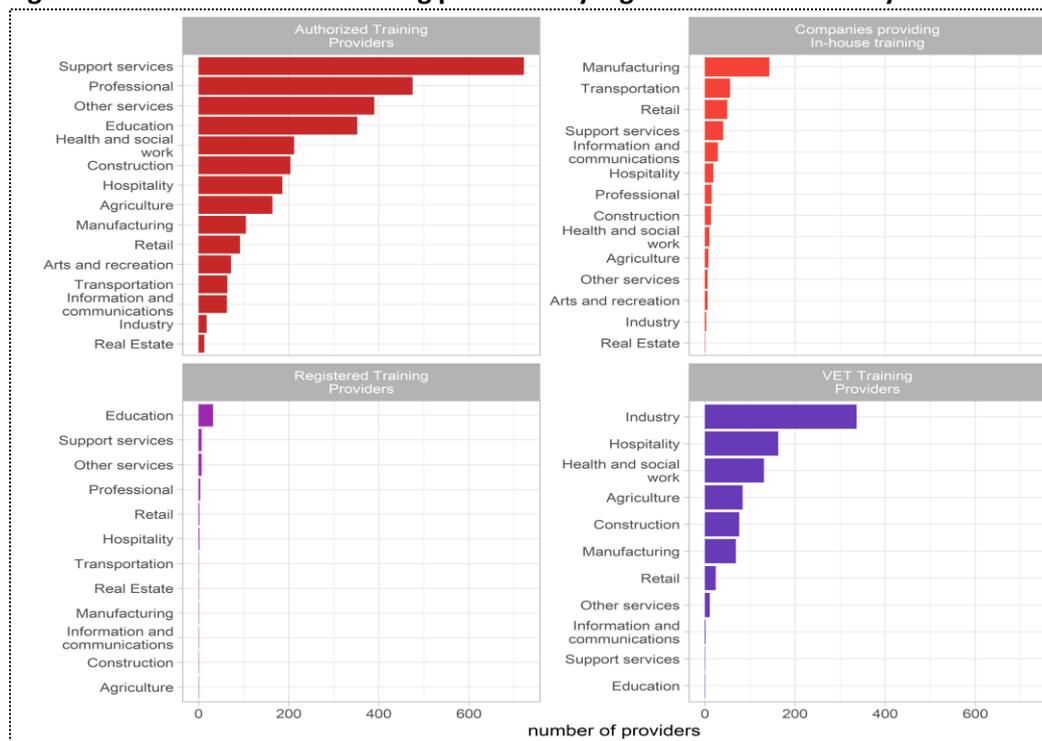
Figure 45. The distribution of training providers by area and industry focus



Source: World Bank team, 2021

The breakdown by legal status of training institutions shows a high fragmentation and clustering of training areas (Figure 46), with ATPs having the most diverse training offer compared with VTPs which are predominantly focused on very few areas such as industry, hospitality, health, social work, agriculture and manufacturing. This suggests that the preuniversity vocational education and training offer is extremely limited in some areas and not fully in line with the current labor market needs. According to employers’ union, there is a surplus of car mechanics in VTPs than the labor market needs or can absorb, and same with waiter, machine operator and car mechanic whereas enrolment in textile industry, carpenter and mason qualifications registered declining enrolments in the last four years.

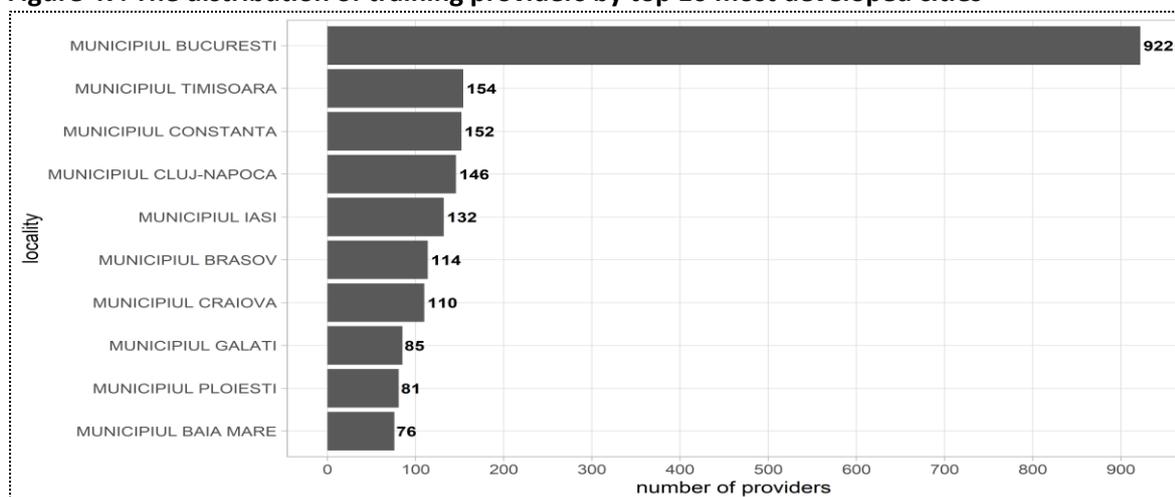
Figure 46. The distribution training providers by legal status and industry focus



Source: World Bank team, 2021

Almost half (44%) of the training providers are operating in the top 10 most developed cities, including Bucharest (Figure 47). These cities are regional centres of development with high population density and income per capita, they are very well connected with the rest of the country and have well developed road, social and economic infrastructure.

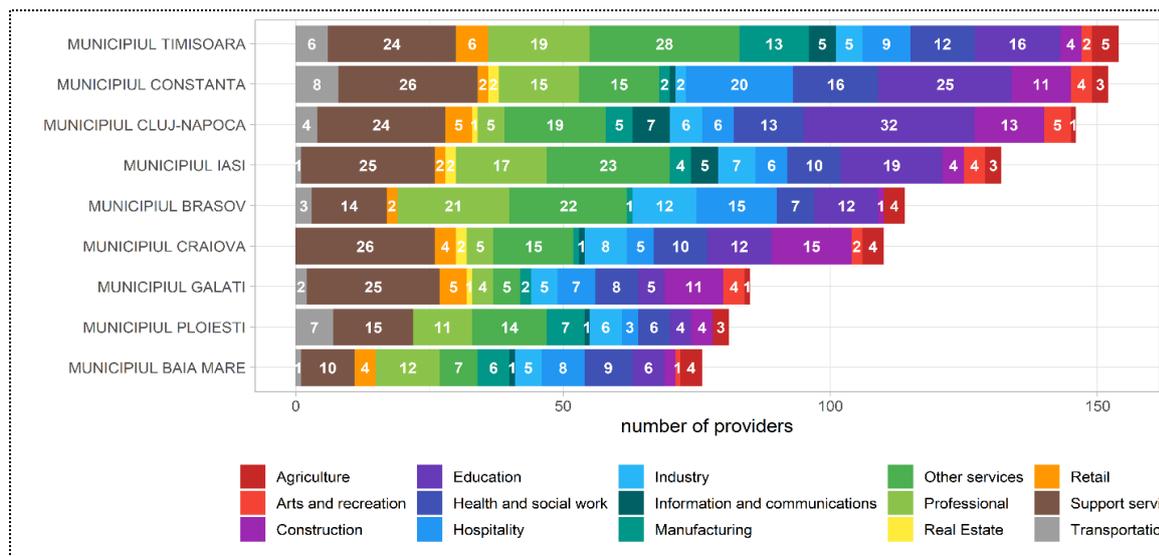
Figure 47. The distribution of training providers by top 10 most developed cities



Source: World Bank team, 2021

In these top 10 cities, except for Bucharest, the general distribution of training providers by industry focus is rather similar. In these cities which are large urban areas, most training providers focus on support and other services, education and hospitality. This is mainly because in large urban areas most businesses are focused on provision of different services and less on manufacturing or agriculture. It must be noted that in all these cities, education and health and social work represent a large share of the training offer, especially in educational and university centres like Cluj-Napoca, Iași, Constanța, and Timișoara.

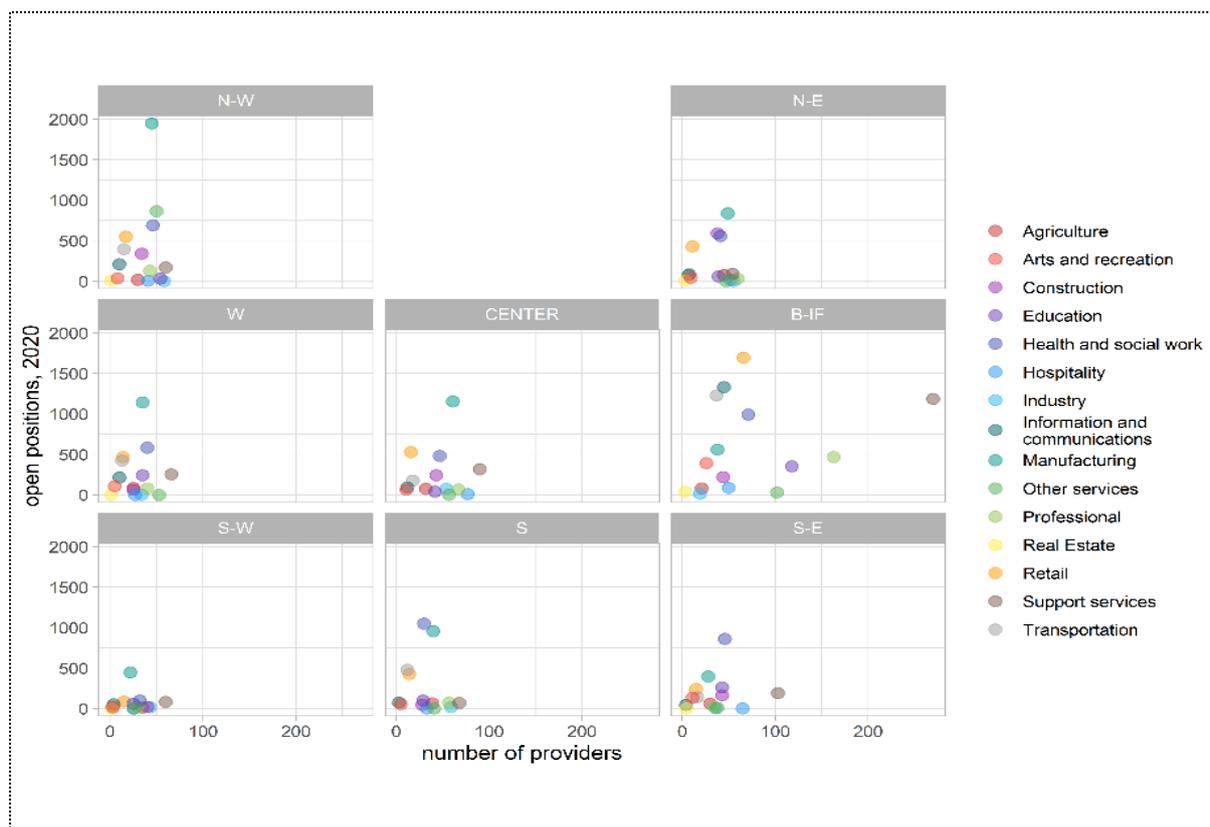
Figure 48. The distribution of training providers in the 10 top cities by industry focus



Source: World Bank team, 2021

Moreover, the data shows a clear mismatch between the training offer and the labor market needs for workers trained in specific areas (Figure 49), especially in most developed regions like Bucharest-Ilfov Northwest, West, Centre and South. In these regions, based on the number of job vacancies from 2020, there is a high demand for trained workers in manufacturing, retail, transportation, health and social work, yet there is a limited training offer in these areas. On the other hand, in Bucharest-Ilfov region, there is a high correlation between offer and demand in the area of support services, which may be explained by the large number of ATPs with most training programs in support services.

Figure 49. The distribution of training providers and job opening by industry focus and region



Source: World Bank team, 2021