

Recommendation on Technical and Vocational Education and Training (2015)

Results of the Second Consultation of Member States
on the Implementation of the UNESCO TVET
Recommendation, 2019–2022



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List of Acronyms

CEDEFOP	European Centre for the Development of Vocational Training
Cinterfor	Inter-American Centre for Knowledge Development in Vocational Training
CVET	Continuing vocational education and training
EC	European Commission
ETF	European Training Foundation
EU	European Union
FCDO	Foreign, Commonwealth & Development Office, UK
FET	Further education and training
GCC	Gulf Cooperation Council
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (German Development Agency)
ICT	Information and communications technology
ILO	International Labour Organization
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
LLL	Lifelong learning
MISC	Manpower Industry Steering Committee, Brunei Darussalam
MoE	Ministry of Education
NGO	Non-governmental organization
NQF	National qualification framework
OECD	Organisation for Economic Co-operation and Development
RPL	Recognition of prior learning
SDC	Swiss Agency for Development and Cooperation
SSO	Sector skills organization
TVET	Technical and vocational education and training
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO-UNEVOC	International Centre for Technical and Vocational Education and Training
VET	Vocational education and training

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Executive Summary

Background to the Second Consultation

The UNESCO Recommendation concerning Technical and Vocational Education and Training was adopted by UNESCO's General Conference in November 2015. It aimed to promote technical and vocational education and training (TVET) as part of lifelong learning and to contribute to employment and decent work, inclusive and sustainable economic growth and competitiveness, social equity, and environmental sustainability.

This report presents a synthesis of the outcomes of the Second Consultation of Member States on the implementation of the 2015 TVET Recommendation, covering the period from 2019 to 2022, based on 87 submitted reports.

Scope of the Recommendation

Two thirds (67%) of States that responded consider the 2015 TVET Recommendation reflected in their TVET legislation, policies, and strategies to a moderate or full extent. The majority of participating States reported changes in how TVET was conceptualized in their country over the reporting period, especially with regard to learning sites (74%), governance (66%), level of education (56%), and lifelong learning (55%). For learning sites, many States noted greater attention given to online and hybrid learning, as well as to work-based learning. For governance, States highlighted how inter-ministerial collaboration had strengthened and pointed to increased decentralization efforts aimed at facilitating TVET providers' work. The majority of responses about changes in the aims of TVET focused on its role in promoting employment and work, and its role in advancing lifelong learning and promoting equity and inclusion. Finally, environmental sustainability appeared as a major concern with over 68% of States have introduced or adopted policies or practices to facilitate the greening of TVET systems in the reporting period.

Policies and Governance

At least 90% of States have policies relating to TVET, a figure that includes both dedicated TVET policies and other government policies applicable to the TVET sector. A number of States indicated taking specific measures to raise TVET's public profile and attractiveness, including enhancing the quality and quality assurance of training offers; reforming curricula to make them demand-driven; improving accessibility and inclusiveness; and increasing the flexibility of training delivery. In terms of governance and the regulatory framework, 79% of States have given increased attention to the establishment or reinforcement of stakeholders' participation and partnerships in TVET. Inter-ministerial coordination is often combined with the involvement of social partners, such as employers, trade unions, civil society organizations, and sector skills councils.

A majority of States reported increased involvement of social partners, in particular the private sector, in developing TVET policies and strategies (71%) and programmes (81%). In terms of financing, 49% have given additional attention to pursuing reform measures aimed at diversifying sources of TVET funding. Some 40% reported an increased emphasis on incentives and accountability mechanisms.

Over three-quarters (78%) of States cited increased focus on measures to widen access and participation, such as offering free TVET or setting up scholarship schemes. Three-quarters (77%) also mentioned a stronger emphasis on promoting equal access and participation of disadvantaged or vulnerable groups of individuals and nearly two-thirds (66%) made specific mention of measures for promoting equal access and participation of women and girls. Forty-one per cent reported being aware of the potential of digital learning tools and platforms to improve marginalized groups' access to, participation in, or completion of TVET.

Quality and Relevance

A majority of States reported changes to the types of skills delivered through initial TVET programmes during the reporting period, including digital skills (76%), transversal skills (68%), and job-specific skills (58%). Just under half (47%) of States reported increased emphasis on work-based learning during the reporting period, in particular through apprenticeships and enterprise-based learning.

For information and communication technologies (ICT), 85% of States have introduced or adopted policies or practices to facilitate the digitalization of their TVET systems during the reporting period, for example, through the introduction of new digital resources, upgrades of digital infrastructure, and the strengthening of TVET-staff capacity. In addition, 51% indicated using open-educational resources in initial TVET teaching and learning.

In terms of TVET staff, 57% of States reported having policies that cover TVET teachers. However, most of these are not dedicated TVET teacher policies, but often civil-service policies applying to all civil servants or overall teacher policies. Over the four-year reporting period, TVET teacher policies and strategies mainly addressed initial teacher education (55%); teaching-staff recruitment and retention (51%); and career structure and path (49%). Compliance with national laws for nominally required qualifications for TVET teachers is generally not strong, with only 48% of States reporting that over 80% of their TVET teachers had the minimum level of qualifications required by law.

Just over three-quarters (76%) of States have undertaken specific reforms of qualifications systems. The most common type of reform related to the establishment or revision of national qualifications frameworks (55%); the establishment of a system for the recognition, validation and accreditation of prior learning (49%); the development of quality assurance of qualifications (48%); and the establishment of regulatory mechanisms for flexible learning pathways (43%). With regard to quality assurance, two-thirds (66%) of States indicated undergoing specific reforms or legislative changes during the reporting period, such as establishing clear and measurable objectives and standards, and regulating private providers.

In terms of the relevance of TVET for the labour market and work, many States reported introducing or strengthening entrepreneurial skills in the curricula as a means to support and encourage entrepreneurship. Almost 60% reported developing specific TVET policies to prepare for or respond to 'Industry 4.0'. Such policies were reported to be significantly more prevalent in North America and Western Europe (80% of reporting States), East Asia (75%), and Central and Eastern Europe (75%), and significantly less prevalent in Latin America and the Caribbean (40%), and sub-Saharan Africa (33%).

Finally, 85% of reporting countries have taken specific measures to improve information and guidance services for learners. The establishment of counselling and guidance at TVET institutions was the most common measure reported (54%).

Monitoring, Evaluation, Research and Cooperation

Some 79% of reporting Member States having introduced specific measures to improve TVET monitoring and evaluation. The most common initiatives were impact and outcomes studies of TVET policies (49%) and measurements of effectiveness and efficiency (45%). Less than half (45%) of States invested in interdisciplinary TVET research during the reporting period. The vast majority (83%) invested in TVET management information systems, while 56% invested in labour-market information systems for the TVET sector. The most common measure was the use of tracer studies (30%); followed by the establishment of special bodies (21%); impact studies (17%); and measures to use open and real-time labour-market data (16%).

Progress and Overall Assessment

The COVID-19 pandemic has been a major disruption since the First Consultation. All States indicated that it had had an effect on their TVET systems. Eighty-nine per cent indicated either full or partial closure of TVET schools and training centres, while 87% indicated that the delivery of work-based learning and/or apprenticeships were affected by the closure of workplaces.

Despite this, notable progress has been made since the First Consultation. Of the 55 Member States that took part in both Consultations, analysis shows that the percentage whose TVET legislation, policies and strategies reflected the 2015 TVET Recommendation increased from 69% to 75% by the Second Consultation. This progression is marked by regional disparities: for example, a majority of countries in South and West Asia indicated that the 2015 TVET Recommendation was still not fully reflected in their legislation and policies, whereas in sub-Saharan Africa there was a 10% increase in the number of countries that indicated that the Recommendation is reflected in their legislation, policies and strategies. Across both the First and Second Consultation, there is a lack of reference to TVET in the informal economy, including issues related to the quality of informal apprenticeship and rural livelihoods.

In conclusion, the period covered by the Second Consultation was characterized by a number of overlapping crises and a rapid change in the labour market, particularly in terms of developments in digital technologies that the 2015 Recommendation could not have anticipated despite its forward-looking nature. These emerging trends are addressed in the *UNESCO Strategy for TVET (2022–2029)*.¹ A more holistic approach is needed for TVET policies to ensure they combine economic growth, social equity, and environmental sustainability in a balanced and strategic manner. Since TVET remains fragmented across multiple ministries in most countries, more attention needs to be given at a country level as to how the 2015 TVET Recommendation can inform TVET policy, governance, and practice beyond ministries of education. More attention also needs to be given to the issue of TVET in the informal economy, given its large size in many States. Finally, more attention should be given to the equity and efficiency of funds allocated to TVET, and not just to increasing resource levels. In particular, this should focus on the role that financing can play in incentivizing the achievement of TVET policy objectives such as improvements in quality, relevance, and equity.

¹ UNESCO. 2021. *UNESCO Strategy for TVET (2022–2029): Transforming TVET for successful and just transitions*. Paris, UNESCO. https://unevoc.unesco.org/pub/unesco_strategy_for_tvete_2022-2029_discussion_document.pdf

2015 Recommendation on Technical and Vocational Education and Training

Results of Second Consultation of Member States, 2019–2022

1. Background

1.1. About the 2015 TVET Recommendation

The UNESCO Recommendation concerning Technical and Vocational Education and Training (2015 TVET Recommendation)² aimed to promote Technical and Vocational Education and Training (TVET) as part of lifelong learning and to contribute to employment and decent work; inclusive and sustainable economic growth and competitiveness; social equity; and environmental sustainability. It was adopted in November 2015 by the General Conference of UNESCO at its 38th session.

In the 2015 TVET Recommendation, TVET is defined ‘as comprising education, training and skills development relating to a wide range of occupational fields, production, services and livelihoods. As part of lifelong learning, TVET can take place at secondary, post-secondary and tertiary levels and includes work-based learning and continuing training and professional development, which may lead to qualifications. TVET also includes a wide range of skills development opportunities attuned to national and local contexts. Learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET’.³

The Recommendation sets out general principles and goals for TVET, and provisions in five important areas:

- policies and governance
- quality and relevance
- monitoring and evaluation
- research and knowledge management
- international cooperation.

1.2. Context of the Second Consultation

In 2018–2019 UNESCO launched the First Consultation of the 2015 TVET Recommendation, covering the period 2015–2019, with the results published in 2020.⁴ In 2022–2023, the Second Consultation of the 2015 TVET Recommendation was launched, covering the period 2019–2022. Member and Associate States were invited to report on the steps taken during this four-year period to implement the Recommendation’s principles and provisions. More specifically, States were invited to respond and submit a questionnaire to UNESCO that covered all the 2015 Recommendation’s provisions, including the following:

- the scope, vision, and aims of TVET in their country
- TVET policies and strategies, focusing in particular on issues related to governance, regulatory frameworks, financing, stakeholder involvement, equity and access
- the quality and relevance of TVET systems, including learning processes; TVET teachers, trainers and managers; qualification systems and learning pathways; quality-assurance mechanisms and processes; and career guidance
- monitoring and evaluating of TVET
- TVET-related research and knowledge management
- international cooperation.

Additionally, the Second Consultation contained questions related to technology in TVET, as well the impact of the COVID-19 pandemic.

The completed questionnaires were supplemented by further desk research to fill information gaps and complement the analysis of the findings.⁵

2 UNESCO. 2016. *Recommendation Concerning Technical and Vocational Education and Training (TVET)*. Paris, UNESCO. (ED.2016/WS/11). <https://unesdoc.unesco.org/ark:/48223/pf0000245118.page=3>

3 UNESCO. 2016. p.9.

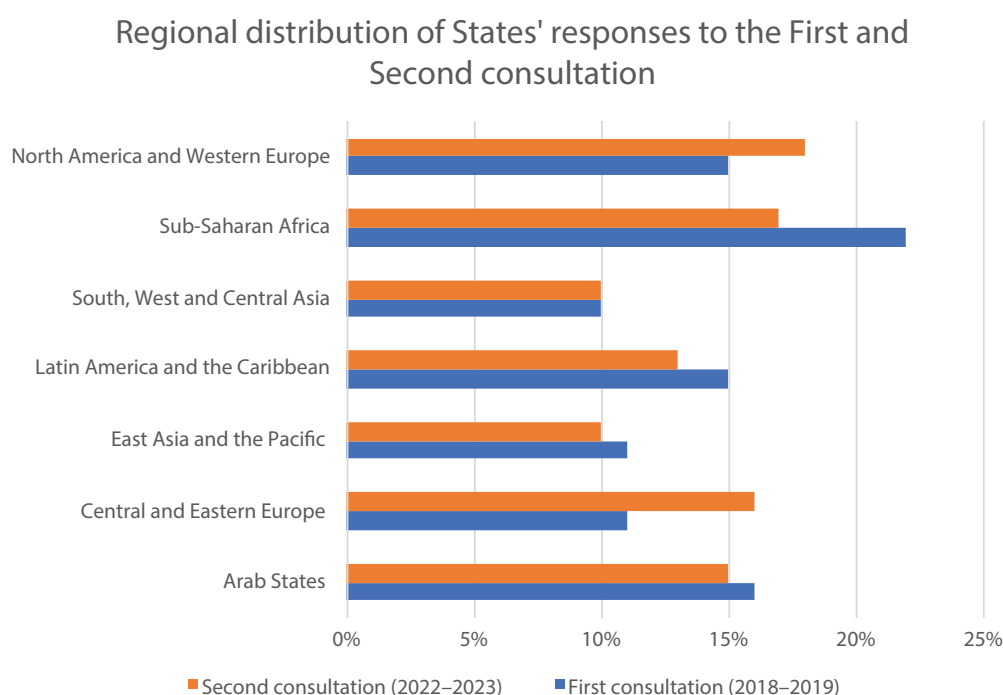
4 UNESCO. 2020. UNESCO Recommendation concerning Technical and Vocational Education and Training (2015): Results of the First Consultation of Member States Conducted in 2019 on the Implementation of the Recommendation. Paris, UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000373810>

5 Unreferenced information in this report is sourced from Member States’ completed questionnaires.

Within the framework of the Second Consultation, UNESCO received 87 reports from Member and Associate Member States (States), representing about 40% of their total. This was an almost identical overall response rate to the first consultation (89 States), even if it is important to stress

that exactly the same States did not participate in the two consultations. The percentage of responding States in the two rounds of consultation are shown by geographical region in Figure 1.⁶

Figure 1. Percentage of States participating in the First and Second Consultations, by region, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Regions where less than half of States responded to the Second Consultation included North America and Western Europe (48%); sub-Saharan Africa (32%); East Asia and the Pacific (28%); and Latin America and the Caribbean (27%).

The First Consultation had low response rates from North America and Western Europe (39%); Latin American and Caribbean (31%).

⁶ This report uses the same regional classifications as the First Consultation, namely, the UNESCO UIS Regions.

Table 1. Member and Associate Member States reporting in the Second Consultation

North American and Western Europe (Group 1)
Andorra, Austria*, Belgium*, Cyprus*, Denmark*, Finland, France*, Germany*, Iceland*, Ireland*, Luxembourg, Malta*, Norway, Spain*, Sweden*, Switzerland*
Central and Eastern Europe (Group 2)
Albania, Bosnia and Herzegovina*, Bulgaria, Croatia*, Estonia, Hungary*, Latvia*, Lithuania*, North Macedonia, Poland, Republic of Moldova*, Romania*, Slovenia*, Türkiye*
Central Asia (Group 2)
Armenia*, Azerbaijan*, Georgia, Kyrgyzstan, Mongolia*
Latin America and the Caribbean (Group 3)
Antigua and Barbuda, Chile, Colombia*, Cuba*, Ecuador*, Guatemala*, Guyana, Nicaragua, Panama, Trinidad and Tobago, Venezuela (Bolivarian Republic of)
East Asia and the Pacific (Group 4)
Brunei Darussalam*; Cambodia, Japan*; Lao People's Democratic Republic; Macao, China (i); Malaysia; Myanmar*; New Zealand; Thailand*
South and West Asia (Group 4)
Afghanistan, Bangladesh*, Nepal*, Pakistan
Africa (Group 5)
Benin*, Botswana*, Burkina Faso*, Burundi*, Cameroon, Côte d'Ivoire, Ethiopia*, Gambia, Kenya*, Lesotho*, Madagascar, Mali*, Mauritius*, South Africa*, Tanzania
Arab States (Group 5)
Bahrain*, Egypt*, Jordan*, Libya, Morocco*, Oman*, Qatar*, Saudi Arabia*, State of Palestine*, Sudan*, Tunisia*, United Arab Emirates, Yemen*

(i) Associate Member State

* State that also responded to the First Consultation in 2019

Due to the variation in responding countries between the First and Second Consultations, it was impossible to compare directly the averages of all responding States in the First Consultation in 2019 with those of all responding States in the Second Consultation. However, 55 States participated in both Consultations, which did allow for limited comparison (see Section 8).

1.3. The 2015 TVET Recommendation and States' TVET Legislation, Policies and Strategies

Just over two-thirds (67%) of all responding States indicated that the 2015 TVET Recommendation is reflected in their TVET legislation, policies, and strategies to a moderate or complete extent: North America and Western Europe (81%); Central and Eastern Europe (71%); East Asia and the Pacific (67%); Latin America and the Caribbean (67%); Arab States

(69%); Central Asia (100%), sub-Saharan Africa (60%); and South and West Asia (0%).

Of the 55 States that participated in both Consultations, 75% of comparable States in the Second Consultation indicated that the 2015 TVET Recommendation is reflected in their TVET legislation, policies, and strategies to a moderate or complete extent, compared to 70% for the First Consultation. With only 55 comparable States the percentage change is attributable to only a couple of States. Nonetheless, it signals a small move in a positive direction.

While noting that the States in reporting regions vary between the two Consultations, it is possible to note which regions are doing least well in terms of incorporating the 2015 TVET Recommendation in their TVET legislation, policies, and strategies. In both the First and Second Consultations, a majority of countries in South and West Asia consistently indicated that the 2015 TVET Recommendation was not being reflected to a moderate or full extent. Similarly, 40% to 50% of countries in sub-Saharan Africa had not incorporated the 2015 TVET Recommendation into their TVET legislation, policies, and strategies.

Several States noted that specific efforts had already been made, or were then being made, to integrate key parts of the 2015 TVET Recommendation into national TVET policies and strategies (including **Armenia, Cyprus, Luxembourg, Malta, Republic of Moldova, and Romania**). Several other states from North America and Western Europe (such as **Sweden and Switzerland**) reported that the 2015 TVET Recommendation's vision and aims were largely already incorporated into national legislation or policy frameworks prior to the adoption of the Recommendation.

2. Scope of the 2015 TVET Recommendation

2.1. Scope of TVET

States were asked if there had been any major changes in how was they conceptualized TVET during the reporting period. Overall, the majority of States reported changes, especially for learning sites (74% of States); governance (66%); level of education (56%); and lifelong learning (55%).

For learning sites, an increased focus on online, distance and blended learning – not surprising given the COVID-19 pandemic (see Section 4.1) – and work-based learning (see Section 4.1) were the most important issues. For governance, many States reported on stronger emerging inter-ministerial ties and on decentralization efforts aimed at empowering TVET providers' decision-making (see Section 3.2). For education levels, a lot of States referred to their national qualification frameworks (NQFs) and their continued development (see Section 4.3). Lastly, lifelong learning also came across strongly from many States (see Section 3.1).

2.2. Aims of TVET

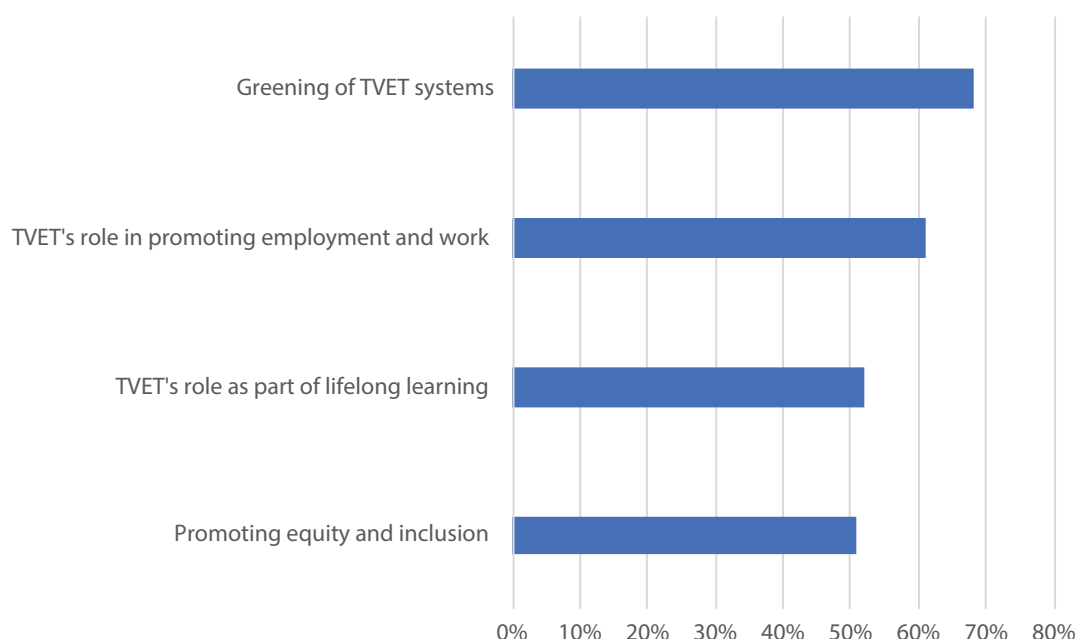
The 2015 TVET Recommendation elaborated four aims to aid TVET in contributing to sustainable development, including:

- empowering individuals and promoting employment, decent work, and lifelong learning⁷
- promoting inclusive and sustainable economic growth
- promoting social equity
- promoting environmental sustainability.

When asked about any changes in the aims of TVET over the reporting period, 61% of States focused on TVET's role in promoting employment and work, and to a lesser extent on its role as part of lifelong learning (52%) and promoting equity and inclusion (51%). Additionally, over two-thirds (68%) of States indicated having introduced or adopted policies or practices to facilitate the greening of TVET systems over the reporting period, in line with the 2015 TVET Recommendation's environmental sustainability goal.

⁷ Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for all, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men. Source: <https://www.ilo.org/topics/decent-work>

Figure 2. Changes in TVET aims reported by countries, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

3. Policies and Governance

3.1. Policy Development

TVET Policies

Specific TVET policies are needed to provide strategic direction and guidance to the sector; these are particularly important as the sector continues to suffer from fragmentation.

A vast majority (90%) of participating States reported having policies related to TVET. This, however, includes both dedicated TVET policies and other government policies with TVET applications, such as national development or education policies with relevant TVET sections. Over half (56%) reported that dedicated national TVET policies either already existed or were being developed or updated. Over a quarter (26%) reported that their TVET policies are covered as part of other government policies, including Belgium; Brunei Darussalam; Cameroon; Croatia; Cuba; Denmark; Finland; Iceland; Japan; Kyrgyzstan; Lao People's Democratic Republic; Latvia; Macao, China; Mauritius; Mongolia; Oman; Republic of Moldova; Romania; Slovenia; Switzerland; Trinidad and Tobago; Türkiye; and United Arab Emirates.

Less than 10% of responding countries report currently having no policies relating to TVET, including Andorra, Colombia, Mali, North Macedonia, State of Palestine, and Sweden.

Over the period 2019–2022, at least 33 States of the 87 States that responded to the second Consultation either updated (23%) or introduced dedicated TVET policy or strategy documents (26%) (Figure 3). Many of these policy and strategy documents refer directly to certain key aspects of the 2015 TVET Recommendation. In terms of 'policies and governance', **Bosnia and Herzegovina, Cyprus, Gambia, Hungary, and Saint Lucia** reported raising the public profile and attractiveness of TVET; **Cambodia and Saint Lucia** noted strengthening national governance; **Cambodia, Indonesia, Kenya, and Morocco** strengthened governance models for TVET institutions; **Bangladesh, Cambodia, Kenya, New Zealand, Poland, Saudi Arabia, United Kingdom of Great Britain and Northern Ireland** fostered social partners' participation in TVET; **Cambodia, Kenya, Morocco, Saint Lucia, Sierra Leone, and Uganda** increased TVET financing; **Bangladesh, Cambodia, Chile, Ireland, Jordan, Kenya, New Zealand, Philippines, Poland, and Uganda** widened inclusion; and **Benin, Cyprus, Gambia, Sierra Leone, and South Africa** expanded access and participation.

In terms of ‘quality and relevance’, **Bosnia and Herzegovina, Cyprus, Indonesia, Ireland, Saint Lucia, South Africa, and United Kingdom** paid renewed attention to work-based learning; **Ghana, Indonesia, Poland, United Kingdom, and Viet nam** explored the potential of information and communication technologies in TVET; **Cambodia, Hungary, Indonesia, Kenya, Poland, Saint Lucia, Saudi Arabia, Viet nam** raised levels of suitably qualified, high-quality TVET staff; **Cambodia** established or updated NQFs; **New Zealand** improved recognition of qualifications; **Cyprus, Germany, Ireland, New Zealand, Saint Lucia, Saudi Arabia, and United Kingdom** promoted flexible learning pathways, lifelong

and continuous learning; **Bosnia and Herzegovina, Indonesia, Philippines, and Saint Lucia** improved quality assurance in TVET; **Albania, Gambia, Indonesia, and Kenya** expanded TVET and labour-market information systems; and **South Africa and United Kingdom** enhanced career guidance.

In terms of ‘monitoring and evaluation’ and ‘research and knowledge management’, the **Philippines** widened monitoring and evaluation, while **Kenya, Philippines, Saint Lucia, and United Kingdom** reported improving evidence-informed TVET policies and decision-making.

Table 3. Examples of States’ implemented TVET strategies and policies, 2019–2022, by region

Country	Strategy
North America and Western Europe	
Cyprus	<p>Strategic Plan for the System of TVET, 2022–2027</p> <p>The updated Strategic Plan focuses on five priorities aligned with the European Council Recommendation on Vocational Education and Training, the Osnabrück Declaration, and the UNESCO 2015 TVET Recommendation.</p> <ol style="list-style-type: none"> 1. Further enhancing the quality, inclusiveness, and flexibility of vocational education and training (VET), transforming it into an attractive choice for all by: equipping young people and adults with the necessary knowledge, skills and competencies to be competitive in an ever-changing labour market; addressing gender balance; providing equal learning opportunities for all; and adapting to changing labour-market conditions. 2. Further promoting a culture of lifelong learning by providing more opportunities to adults in order to either improve their skills or acquire new skills in demand in the labour market. 3. Achieving specific EU-level objectives with regard to VET-graduates employability, and exposure to work-based learning and mobility. 4. Increasing the rate of participation of secondary-education students in TVET programmes and close the gap between the participation rate in Cyprus and the current average European rate. 5. Establishing and supporting partnerships at a national and international level.

Germany	National Skills Strategy, 2019	The National Skills Strategy was adopted by the Federal Ministry of Labour and Social Affairs, the Federal Ministry of Education and Research, the Federal Ministry for Economic Affairs and Energy, the Federal Employment Agency, three Conferences of Ministers of the Länder, trade unions, and employer and business associations in June 2019. The strategy, which focuses on continuing vocational education and training (CVET), is intended to make a significant contribution to enabling both individuals and society to successfully cope with structural changes and new challenges, such as automation and digitalization.
Ireland	Future in Further Education and Training (FET): Transforming Learning, 2020	<p>The Future FET: Transforming Learning strategy is based around the three core pillars.</p> <ol style="list-style-type: none"> 1. Building skills through a new vocational proposition, up-skilling the workforce, delivering on apprenticeship, and meeting critical skills needs. 2. Fostering inclusion through embedding inclusive practice, prioritizing target cohorts, providing consistent learner support, and improving literacy and numeracy. 3. Facilitating pathways from school to FET, within FET, between FET and higher education, and facilitating lifelong learning.⁸
United Kingdom (*)	Skills Development Scotland, <i>Skills for a Changing World: Strategic Plan, 2022–2027</i> ⁹	The devolved Scottish government agency Skills Development Scotland published a strategic plan, <i>Skills for a Changing World</i> , which sets out its vision for an agile, dynamic, and employer-led skills and careers ecosystem that enables all people to develop the skills, adaptive resilience, and personal agency to thrive in a vibrant and inclusive labour market. Pillars of the strategy include investment in modern apprenticeships; career guidance; the promotion of lifelong learning; an increased role for employers in the design, delivery, and assessment of skills; the digitalization of TVET; and an enhanced use of data and intelligence to inform skills policies.

8 SOLAS. 2020. Future FET: Transforming Learning. The National Further Education and Training (FET) Strategy. www.solas.ie/f/70398/x/64d0718c9e/solas_fet_strategy_web.pdf

9 Skills Development Scotland. 2022. Skills for a Changing World: Strategic Plan, 2022–2027. www.skillsdevelopmentscotland.co.uk/media/49796/sds-strategic-plan-2022-27.pdf

Central and Eastern Europe

Albania	National Employment and Skills Strategy 2019–2022	The Strategy aims to improve the quality and gender balance of labour-market information, develop information-sharing instruments for labour-market data, and establish sectoral-skills forecasting mechanisms.
Bosnia and Herzegovina	Improvement of Quality and Relevance of Vocational Education and Training in Bosnia and Herzegovina, 2021–2030	The policy's objectives include developing a plan of priorities and activities in Bosnia and Herzegovina for competitive and attractive vocational education and training; quality assurance in VET; and expanding the scope and quality of work-based learning. ¹⁰
Hungary	Vocational Education and Training 4.0: A Medium-Term Vocational Policy Strategy for the Renewal of Vocational Education and Adult Education and Training	The strategy's vision is to ensure that each working-age Hungarian citizen has at least one modern VET qualification based on the needs of the economy, providing a job in the labour market. It has three main pillars: attractive career opportunities for students; trainers with up-to-date skills and knowledge; and the creation of an attractive learning environment. ¹¹
Poland	Integrated Skills Strategy, 2030 Action Plan for Vocational Education and Training, 2022–2025	<p>In 2019–2020, the Council of Ministers approved the Integrated Skills Strategy 2030, a framework for lifelong learning, covering the entire education and training system, including general education, vocational education, higher education, non-formal education, and informal learning.</p> <p>In 2022, the Ministry of Education and Science, in cooperation with other ministries, adopted an Action Plan for Vocational Education and Training, 2022–2025. The plan's aim to prepare employees for the needs of the modern economy is a continuation of the vocational education reforms that began in 2019. The plan takes into account the challenges faced by vocational education resulting from economic changes, and the development of new technologies and progressing digitization. These changes means the vocational education offer needs updating and expanding to those new professions needed on the labour market, including those related to the use of environmental and digital skills, and new technological solutions.</p>

10 European Training Foundation (ETF). 2023. Key Policy Developments in Education, Training and Employment, Bosnia and Herzegovina 2022. ETF, Turin. www.etf.europa.eu/en/document-attachments/key-policy-developments-education-training-and-employment-bosnia-and-herzegovina-2022

11 Ministry of Innovation and Technology. 2019. Vocational Education and Training 4.0: A Medium-Term Vocational Policy Strategy for the Renewal of Vocational Education and Adult Education and Training. https://dualis.mkik.hu/letoltesek/12_Szakkepzes_es_felnottkepzes_kozept_megujitasi_strategiaja_SZ4_0_20210827_EN.pdf

East Asia and the Pacific

Cambodia	Cambodia Skills Development Roadmap, 2023–2035	Developed in 2022 and launched in March 2023, the Cambodia Skills Development Roadmap aims to improve national socio-economic development and respond to the needs of the current and future labour market by transforming Cambodia's labour force and human resources into supportive resources with high capacity and productivity, while providing opportunities for lifelong learning that ensure every citizen has at least one skill in life, a better job, dignity, and higher living standards. ¹² The roadmap consists of five strategic pillars: strengthening the quality of TVET through a full implementation of the Cambodia's qualification framework, curriculum and assessment reform, teacher training, and support to TVET institutes; enhancing branding and outreach, including making TVET more inclusive; making TVET industry relevant by expanding the role, duties and participation of the private sector in skills development; improving Governance and Leadership, including at the national level through legislation, and at the institutional level through capacity strengthening; and expanding funding and sustainability, through diversifying sources of finance and giving institutions greater autonomy.
Indonesia (*)	National Strategy of Vocational Education and Vocational Training, 2022	The national strategy's vision is to develop competent, productive and competitive human resources and manpower to support Indonesia's Vision 2045. This will be done through implementation of TVET based on labour-market demand. Its mission is to establish competent human resources improve work or entrepreneurial skills; organize competency-based TVET according to labour-market demand effectively, efficiently, and inclusively; strengthen the role of business and industry in the implementation of TVET and the recognition of competency certification; and strengthen stakeholders' synergy at central and local levels through collaboration and coordination. ¹³
New Zealand	Reform of Vocational Education, 2020	The reform of vocational education is aimed at creating a system that 'is collaborative, flexible, innovative and sustainable for all regions of New Zealand'. The reform plans to create a vocational-education system that better responds to the needs of learners and employers by allowing more flexibility and portability of learning; facilitating consistency of qualification content so that employers across the country can be confident of what learners know and can do; bringing industry, employers, and <i>iwi</i> (tribes) closer to the design of qualifications; and being more inclusive and equitable for all learners.

12 Ministry of Labour and Vocational Training. 2023. Cambodia Skills Development Roadmap, 2023–2035. www.mlvt.gov.kh/index.php/en/policies-and-plan.html

13 Kemenko PMK (The Coordinating Ministry for Human Development and Cultural Affairs). 2022. National Strategy of Vocational Education and Vocational Training.

Philippines (*)	National Technical Education and Skills Development Plan, 2023–2028	The development plan's mission is to promote, provide, and support accessible, inclusive, equitable, relevant, and high-quality TVET. The plan focuses on improving system responsiveness to labour-market demand; promoting lifelong learning; widening participation and promoting inclusion; assuring quality; improving partnerships with social partners; and expanding research, monitoring, and evaluation.
Viet nam (*)	TVET Strategy, 2021–2030	The TVET Strategy aims to boost the quality and efficiency of vocational training to meet the demand for skilled labourers for modern industrial production by 2030. It includes a focus on accelerating digital transformation; the modernization of training equipment; and the reform of training curricula and methods, along with an enhanced quality of trainers, lecturers, and management officials in the vocational-training sector. ¹⁴
South and West Asia		
Bangladesh	National Skills Development Policy, 2020	The development policy aims to create a demand-driven skilled workforce as part of Bangladesh's socio-economic development. It is based on three key principles: shared responsibilities among various actors and stakeholders in the design of skills training and its delivery; matching skills to demand and supply; and equal opportunities to cover training opportunities across all segments of society. ¹⁵
Africa		
Benin	National Strategy for TVET, 2019	One area of focus for the TVET strategy is to broaden access to all types of training provider, including high schools, centres, companies, and online.
Botswana		As of December 2022, the existing policy has been reviewed and a newly developed version was awaiting approval by parliament.
Ethiopia	TVET Policy and Strategy, 2020	No further information available.
Gambia	TVET Roadmap, 2020–2024 TVET Policy, 2021–2030	The TVET Roadmap, 2020–2024 aims to strengthen the coordination framework for a demand-driven TVET system that is responsive to labour-market needs; reinforce training and learning resources for promising value chains with high opportunities for youth employment; improve overall perception of, and access to, skills-development programmes; and increase labour-market monitoring through sectoral advisory arrangements. The TVET Roadmap recognized the need for an overarching TVET framework, which became TVET Policy, 2021–2030, approved in late 2022.
Ghana (*)	Strategic Plan and Policy for TVET Transformation, 2023–2027	This plan is expected to focus on the digitalization of the TVET system, as well as the licensing and professionalization of TVET graduates. ¹⁶

14 Anh Kiet, 10 January 2022. 'Viet nam's strategy to enhance vocational education and training until 2030'. Hanoi Times. <https://hanoitimes.vn/vietnams-strategy-to-enhance-vocational-education-and-training-until-2030-319701.html>

15 National Skills Development Authority. 2020. *National Skills Development Policy*, 2020. Prime Minister's Office, Government of the People's Republic of Bangladesh, Dhaka. <https://nsda.portal.gov.bd/sites/default/files/files/nsda.portal.gov.bd/npfblock/2020-12-21-14-24-8c85b4482cf8516df94dd6471eaf30a4.pdf>

16 *Business Ghana*. 3 February 2023. Government to develop new five-year strategic plan for TVET. www.businessghana.com/site/news/general/279192/Government-to-develop-new-five-year-strategic-plan-for-TVET

Kenya	National TVET Blueprint, 2021–2025	The National TVET Blueprint's strategic priorities are TVET governance, accountability and management systems; TVET capacity, including access, participation and equity; TVET relevance and quality; and TVET financing and efficiency. ¹⁷
	National Skills Development Policy (NSDP), 2020	The National Skills Development Policy's goal is 'to promote sustainable socio-economic development through the development of a skilled workforce that is employable, productive, enterprising, innovative and competitive'. ¹⁸
Mauritius	National Skills Development Strategy, 2022–2026	The main aim of the National Skills Development Strategy is to improve the effectiveness and efficiency of the skills-development system in Mauritius to make it more responsive to future skills challenges. ¹⁹
Namibia (*)	National Technical and Vocational Education and Training Policy	The overarching goal of the 2021 policy for the TVET sector is to respond to current and future skills-development imperatives by building a knowledge-based citizenry to make Namibia an industrialized nation and a globally competitive country. ²⁰
Rwanda (*)	National Skills Development and Employment Promotion Strategy (NSDEPS), 2019–2024	The strategy's vision is that Rwanda will have a competitive, skilled workforce suited to a middle-income economy, in which skills meet private-sector needs and the workforce has dignified and fulfilling work. ²¹
Sierra Leone (*)	National TVET Policy, 2019	The policy's main objectives are improving TVET coordination and management; enhancing access to quality TVET programmes; improving relevance of training; developing skills for jobs; promoting productivity in non-formal TVET; and assuring sustainable TVET funding. ²²
South Africa	National Skills Development Plan, 2030	The National Skills Development Plan's vision is for 'an educated, skilled and capable workforce for South Africa'. The plan set outs eight priorities: identifying and increasing production of highly demanded occupations; linking education and the workplace; improving the skills level of the South African workforce; increasing access to occupationally directed programmes; supporting the growth of the public college system; providing skills-development support for entrepreneurship and cooperative development; encouraging and supporting worker-initiated training; and supporting career-development services. ²³

17 Ministry of Education. 2022. *National TVET Blueprint, 2021–2025*. Nairobi, Republic of Kenya.

18 Ministry of Education. November 2020. *National Skills Development Policy*. Nairobi, Republic of Kenya.

19 Human Resources Development Council, 23 July 2023. *National Skills Development Strategy*. www.hrdc.mu/index.php/projects/301-national-skills-development-strategy-nsds-2019-2023

20 Ministry of Higher Education, Technology and Innovation. 2021. *National Technical and Vocational Education and Training Policy*. www.nta.com.na/download/national-technical-and-vocational-education-and-training-tvet-policy

21 Rwanda Development Board. 2019. *National Skills Development and Employment Promotion Strategy (NSDEPS), 2019 – 2024*. <https://rdb.rw/wp-content/uploads/2019/07/NSDEPS.pdf>

22 Ministry for Technical and Higher Education. 2019. *National Technical and Vocational Education and Training (TVET) Policy for Sierra Leone*. www.mthe.gov.sl/PDF/Media/Approved%20TVET-Policy.pdf

23 Department of Higher Education and Training. 2019. *National Skills Development Plan 2030*. www.merseta.org.za/wp-content/uploads/2021/04/Promulgation-of-the-National-Skills-Development-Plan.pdf

Uganda (*)	TVET Policy, 2019	The TVET policy's specific objectives are to promote TVET's economic relevance; improve equitable access to TVET and employability of TVET graduates; improve TVET quality; promote sustainable TVET financing; and, ensure effectiveness in TVET management and organization. ²⁴
Arab States		
Egypt	Technical Education 2.0	Launched in 2019 around five main reform pillars, the reform strategy aims to increase the attractiveness and relevance of TVET; ensure quality; train teachers; review governance models; and establish new models of public-private partnerships.
Jordan	Strategic Plan for TVET, 2022	In 2022, the Ministry of Education and Ministry of Labour launched a Strategic Plan for TVET that aims to improve access to equitable and inclusive vocational education for all groups.
Morocco	The National Vocational Training Strategy, 2021	The strategy's main objective is 'quality TVET for all and throughout life, to support development, to increase the value of human capital and boost competitiveness'. It has two main policy directives: to rethink the governance and financing of public provision of vocational training to better respond to economic needs, including delegating the management of training centres to industry federations; and to make vocational training more demand driven by reorienting training programmes so they respond to the particular skills and employment needs identified in sectoral strategies.
Saudi Arabia	Technical and Vocational Training Corporation Charter, 2020	The charter's priority pillars are expanding access to quality and flexible TVET; improving trainers' skills and leaders' competencies; establishing and strengthening partnerships with the labour market; providing quality service to trainees; ensuring financial sustainability and spending effectiveness; instituting digital transformation and institutional excellence; and establishing an effective framework for TVET. ²⁵

24 Ministry of Education and Sports. 2019. *The Technical Vocational Education and Training Policy*. www.education.go.ug/wp-content/uploads/2020/05/FINAL-TVET-POLICY_IMPLEMENTATION-STANDARDS_IMPLEMENTATION-GUIDELINES_19TH_MAY_2020.pdf

25 Technical and Vocational Training Corporation. December 2020. *Technical & Vocational Training Corporation At a Glance: Excellence in Skill Development*. <https://tvtc.gov.sa/En/MediaCenter/DocumentsLibrary/Documents1/TVTC-at-a-Glance.pdf>

Latin America and the Caribbean		
Antigua and Barbuda	National Policy for TVET, 2021	No information available.
Chile	National Strategy for Technical and Vocational Training 2020	Chile establishes a national TVET strategy every five years, proposed by the TVET Advisory Council and led by the Ministry of Education. The mission of the National Strategy for Technical and Vocational Training 2020 is: 'Ensuring the development of the diversity of talents and abilities of people throughout their lives, in accordance with the economic, social and sustainability needs of the country, contributing to a more equitable Chile, with greater social mobility and decent work.' The strategy is based on three policies: the trajectories of students and workers; the world of work as a learning space; and the strengthening of the TVET system's capabilities. These are accompanied by five horizontal goals: quality; territorial development; gender equity; inclusion; and sustainability. ²⁶
Ecuador	National Plan for Education and TVET, 2021	No information available.
Saint Lucia (*)	National TVET Policy and Strategy, 2019–2025	The policy's mission is to provide equitable, holistic, and integrated lifelong learning opportunities for citizens to realize their full potential and for the achievement of a capable, competent, and competitive labour force. Its focus areas include strengthening national governance arrangements; promoting experiential learning; mobilizing adequate financial resources for TVET; investing in human resources for the management and delivery of quality TVET; providing equitable and flexible TVET learning opportunities for widening participation and addressing social exclusion; enhancing the diversity and articulation of programmes for a more responsive and inclusive TVET; strengthening a quality-assurance system; advocating, promoting and marketing TVET; employing evidence-based decision-making; and establishing systems for continuous monitoring and evaluation. ²⁷

Note: (*) indicates that the State did not respond to the Second Consultation

Sources: Second Consultation Survey, supplemented by internet research in July 2023 (policies and strategies not referred to directly in the Second Consultation are referenced in footnotes).

26 Ministry of Education – Ministry of Labour and Social Welfare. 2020. Estrategia Nacional de la Formación Técnico Profesional 2020 (National Strategy for Technical and Vocational Training 2020). <https://educacionsuperior.mineduc.cl/wp-content/uploads/sites/49/2020/12/Estrategia-FTP.pdf>

27 Government of Saint Lucia. 2019. *TVET Saint Lucia: A Broader Perspective. Saint Lucia National Technical and Vocational Education and Training (TVET) Policy & Strategy 2019–2025*. Castries, Ministry of Education, Innovation, Gender Relations and Sustainable Development and the Saint Lucia Council for Technical and Vocational Education and Training. https://planipolis.iiep.unesco.org/sites/default/files/ressources/saint-lucia_tv-et-strategy-2019-2025.pdf

A Lifelong Learning Framework

Knowledge, skills and competencies for work and life are developed over a lifetime, which makes strategic a coherent national skills policy with a lifelong-learning perspective. The 2015 TVET Recommendation called on States to guide, recognize and promote TVET in all forms and settings through an overall lifelong-learning framework.

Over half (55%) of States reported an increased emphasis on lifelong learning over the reporting period. sub-Saharan Africa, the Arab States, Central Asia, North America, and Western Europe are the regions where the greatest number of States reported this change.

Specific approaches to lifelong learning were mentioned by several States in the Consultation. In **Armenia**, amendments to the country's education law in 2022 aimed to improve and set the legislative basis for lifelong-learning opportunities in the country. In **Bahrain**, all national institutions, including ministries, have adopted, and implemented diverse plans and initiatives related to lifelong learning. For example, the Department of Continuous Education at the Ministry of Education organizes a variety of lifelong-learning programmes that target different age groups, including specialized short courses in subjects such as auto mechanics, electrical-appliance maintenance, and computer maintenance and literacy. In **Côte d'Ivoire**, a General Directorate for Apprenticeship and Continuing Education was established in the Ministry of Education to deal with training throughout life, learning, and professional integration. In **Ireland**, SOLAS – the government body responsible for administering TVET courses – acknowledged the importance of facilitating lifelong-learning pathways in its 2020 strategy document *Future FET: Transforming Learning*; it intends to achieve these through the provision of more modular, flexible, technology-driven, and year-round approaches. In **Norway**, a 2019 skills reform for lifelong learning aimed to ensure that no one would be excluded from working due to a lack of skills, and all would have the opportunity to renew and supplement their skills and to work longer.²⁸ In **Spain**, a Royal Decree established the Spanish Qualifications Framework for Lifelong Learning in 2022.

The Right to TVET from a Lifelong-Learning Perspective

Nearly half (49%) of States reported the implementation of specific reforms or legislation on the right to TVET from a lifelong-learning perspective, most commonly, learning

entitlement (29% of States), vouchers (10%), and learning accounts (8%).

Two States also noted that their strategy or policy specifically referred to the right to TVET from a lifelong-learning perspective. In **Morocco**, the National Vocational Training Strategy 2021 enshrines the right to training 'everywhere, for everyone and throughout life', in accordance with the provisions of Article 31 of the Constitution. In **Norway**, the Completion Reform White Paper 21 (2020-2021) (Fullføringsreformen) includes measures referring to the right to complete upper secondary with a qualification; the right to an apprenticeship for qualified applicants or an equivalent offer; and an extended right for adults to return to upper secondary school.

Public Profile and Attractiveness of TVET

The 2015 TVET Recommendation further called on States to raise the public profile and attractiveness of TVET among learners, families, and all other stakeholders. Over the reporting period, a number of States indicated that specific approaches had been taken to raise the public profile and attractiveness of TVET. These included enhancing overall quality and quality assurance (**Cyprus, Finland, Germany, Lithuania, Morocco**); reforming curricula so that vocational education more closely meets the demands of the labour market (**Croatia, Norway**); increasing the flexibility of training delivery, for example, through offering modular and microcredentials (**Cyprus, Malaysia**); improving accessibility and inclusiveness (**Cyprus, Republic of Moldova**); enhancing the branding of TVET, for example, through promotional campaigns (**Croatia, Lithuania, Malaysia**); skills competitions (**Bahrain, Croatia, Ethiopia, Gambia, Luxembourg, Myanmar**); and, symposia, exhibitions and other events to help promote TVET (**Ethiopia**).

Two approaches used in **Croatia**, for example, have included skills competitions and promotional campaigns. Inspired by the competitions organized by charities EuroSkills and WorldSkills, a new national competition for vocational school students – WorldSkills Croatia – was introduced in 2019–2020. Additionally, in order to improve the public perception of vocational education, the Agency for VET and Adult Education and the Ministry of Economy launched nationwide campaigns for the promotion of VET, with the central message: 'Vocational skills are all around

²⁸ Report No. 14 to the Storting (2019-2020), *Skills Reform – Lifelong Learning*. www.regjeringen.no/en/dokumenter/report-no-14-to-the-storting-20192020/id2698284

us. Choose vocational education!’ This messaging was intended to emphasize the importance of vocational skills in the economy, as well as strong employment prospects for vocational graduates. The campaign also announced the upcoming reform of vocational curricula intended to ensure that vocational education better meets the demands of the labour market.

In two States, the main approach to improving the public profile and attractiveness of TVET has been a focus on significant quality improvements in vocational institutes. In **Germany**, the Federal Government’s Vocational Education and Training Excellence Initiative (*Exzellenzinitiative Berufliche Bildung*) was launched in December 2022 with the aim of making vocational education and training more modern and attractive. It was focused on better promotion of opportunities for individuals; more innovative and attractive vocational training programmes; and improved international orientation. Measures have included comprehensive career guidance and digital orientation programmes; improved support structures through the Upgrading Training Assistance Act (*Aufstiegsfortbildungsförderungsgesetz*); expanded scholarship programmes; development and testing of attractive digital qualification offers for initial and continuing education and training; further development of the National Continuing Education Strategy (*Nationale Weiterbildungsstrategie*); and creating inter-company training centres as centres of excellence within the dual system. In addition, international mobility in TVET, recognition grants to support the immigration of skilled workers, and the internationalization of TVET have been promoted.²⁹

In **Morocco**, a roadmap dedicated to improving TVET was adopted in 2019 and has since focused on the establishment of a new generation of vocational training centres of excellence known as Cités des Métiers et des Compétences. Since then, twelve Cités have opened in each region of the country with the aim of making TVET more attractive and enhancing its image.

3.2. Governance and Regulatory Framework

In most lower- and middle-income States, TVET systems remain highly fragmented, with provision delivered by multiple entities: different ministries, such as education, labour, agriculture, trade, and tourism; NGOs; and the private sector, including private technical schools, colleges,

vocational institutes, and enterprise-based training, in both the formal and informal sectors. All of these entities have roles, rights, obligations, and accountability in ensuring equitable, higher-quality and relevant provisions, as do stakeholders on the demand side, notably private-sector enterprises and employers, and government agencies responsible for creating and enabling the environment for job creation and economic growth. Coherent governance and regulatory frameworks can help to reduce some of the challenges associated with a fragmented sector, not just in relation to the coordination of provision, but also in relation to the coordination of strategies, policies and development plans; programmes; committees; legislative frameworks; certification and qualification frameworks; information and monitoring systems; the matching of demand and supply; financing; and development partner support.

Over three-quarters (79%) of States reported having increased emphasis on the establishment or reinforcement of stakeholder participation and partnerships in TVET over the reporting period.

In many States, inter-ministerial coordination mechanisms extend beyond coordination between government ministries, and often also include social partners, such as employers, trade unions, and civil-society organizations. Other national-level coordination approaches adopted by some States, which are based upon the central involvement of social partners, especially employers, include sector-based bodies like sector skills councils.

Inter-Ministerial Coordination Mechanisms

The 2015 TVET Recommendation called for States to facilitate inter-ministerial coordination, a key approach for the national coordination of TVET systems. Just over half (51%) of responding States indicated increased emphasis over the reporting period on inter-ministerial coordination mechanisms, most prevalently in the Caribbean (100%), Latin America (88%), Arab States (77%), and Central Asia (60%), and less commonly in sub-Saharan Africa (40%), Central and Eastern Europe (36%), and South and West Asia (0%).

In **Chile**, an inter-ministerial TVET Committee was set up in 2022 to complement the work of the National TVET Council. In **Egypt**, a new Council for Human Resources Development and Skills, chaired by the prime minister, was established in 2021. In **Georgia**, the Ministry of Education and Science and the Chamber of Commerce and Industry established a Vocational Skills Agency in 2021 ‘to support

²⁹ European Commission. 2024. ‘Germany: National reforms in vocational education and training and adult learning’. <https://eurydice.eacea.ec.europa.eu/national-education-systems/germany/national-reforms-vocational-education-and-training-and-adult>

modern skills development though individually tailored inclusive VET provision, enhance the internationalisation of VET, and increase the capacity of VET providers in terms of the delivery of VET programs and the relevance of labour-market demand.³⁰ The agency, which became operational in March 2022, has ‘supported the establishment of sector skills organisations (SSOs), which will replace the previous ad hoc sector councils’, and provides funding for qualification development at them that will play³¹ a leading role in defining learning outcomes, standards and assessment criteria’. Nine SSOs had been established by the end of 2022, and more were planned. In **Ghana**, Ghana TVET Service, a new body under the Ministry of Education, was launched in mid-December 2021 and is responsible for the implementation of all public pre-tertiary formal TVET in the country. The implementation responsibility of all public TVET providers, which was previously fragmented across 19 different ministries, is now under the remit of this entity.³² In **Malaysia**, a new National TVET Council was established in November 2020 as both the highest decision-making body for the country’s TVET and a platform for TVET discussion. It is responsible for coordinating the TVET ecosystem, which consists of 11 TVET provider ministries, industry, and 1,295 public and private TVET institutions. In **State of Palestine**, a new National TVET Commission was approved by the Presidential Law No. 4 in February 2021. It aims to end the fragmentation of governance between the Ministry of Education, the Ministry of Higher Education and Scientific Research, and the Ministry of Labour. The Commission contains representatives of these three ministries, in addition to the Ministry of Social Affairs, Ministry of Transport, Chambers of Commerce, trade union association, and the Nablus TVET University.³³

Certain States noted changes over the reporting period to other non-inter-ministerial, national governance and coordination arrangements that involve public and private stakeholders. For example, in **Luxembourg**, a VET steering committee, comprised of representatives from the Ministry of Education, Board of Secondary Education, school principals, employer and employee associations and others, was introduced in 2019 to improve VET coordination.

Capacity Strengthening of TVET Governance, Management and Financing

The 2015 TVET Recommendation called for the strengthening of the technical, administrative and institutional capacities related to the governance, management and financing of TVET. Reporting States provided limited information on this issue. Nonetheless, in **Saint Lucia**, the National TVET Policy and Strategy notes the intention to strengthen the Saint Lucia Council for TVET, the formal governing body for the coordination and management of TVET, so that it functions more efficiently and effectively.³⁴

Governance Models for TVET Institutions

The 2015 TVET Recommendation urged States to strengthen governance models for TVET institutions involving relevant local stakeholders and improved cooperation, when relevant, with business associations in supporting work-based learning. Certain types of decentralization among TVET institutes have become increasingly popular internationally, which has led to a greater focus on governance models for TVET institutions. Indeed, 70% of States reported an increased emphasis over the four-year period on measures related to the development and strengthening of governance models of TVET institutions, which was most pronounced among States in East Asia and the Pacific (89%), Arab States (85%), Central Asia (80%), North America and Western Europa (75%), Latin America and the Caribbean (73%), and sub-Saharan Africa (73%). A lower incidence was reported among States in Central and Eastern Europe (43%) and South and West Asia (25%).

Illustrations of approaches to the strengthening of governance models among TVET institutions were provided in the second Consultation. In **Azerbaijan**, boards of trustees were established in VET providers in 2022. In **Indonesia**, the 2022 National Strategy of Vocational Education and Vocational Training notes that, ‘Government-owned and operated institutions will [...] – where possible – be given autonomy in financial management and more appropriate personnel

30 European Training Foundation. 2023. *Key Policy Developments in Education, Training and Employment – Georgia 2022*. ETF: Turin. www.etf.europa.eu/sites/default/files/2023-04/Country%20Fiche_Georgia_2022_EN_web.pdf. pp.9-10.

31 European Training Foundation. 2023. *Key Policy Developments in Education, Training and Employment – Georgia 2022*. p.3.

32 Palmer, R. 2022. ‘Review of TVET Supply in Ghana’. Unpublished background paper for the British Council, Ghana, for the VET Toolbox project.

33 European Training Foundation. 2023. *Key Policy Developments in Education, Training and Employment – Palestine 2022*. ETF, Turin.

34 Government of Saint Lucia. 2019. *TVET Saint Lucia: A Broader Perspective*. Saint Lucia National Technical and Vocational Education and Training (TVET) Policy & Strategy 2019–2025. https://planipolis.iiep.unesco.org/sites/default/files/ressources/saint-lucia_tv-et-strategy-2019-2025.pdf

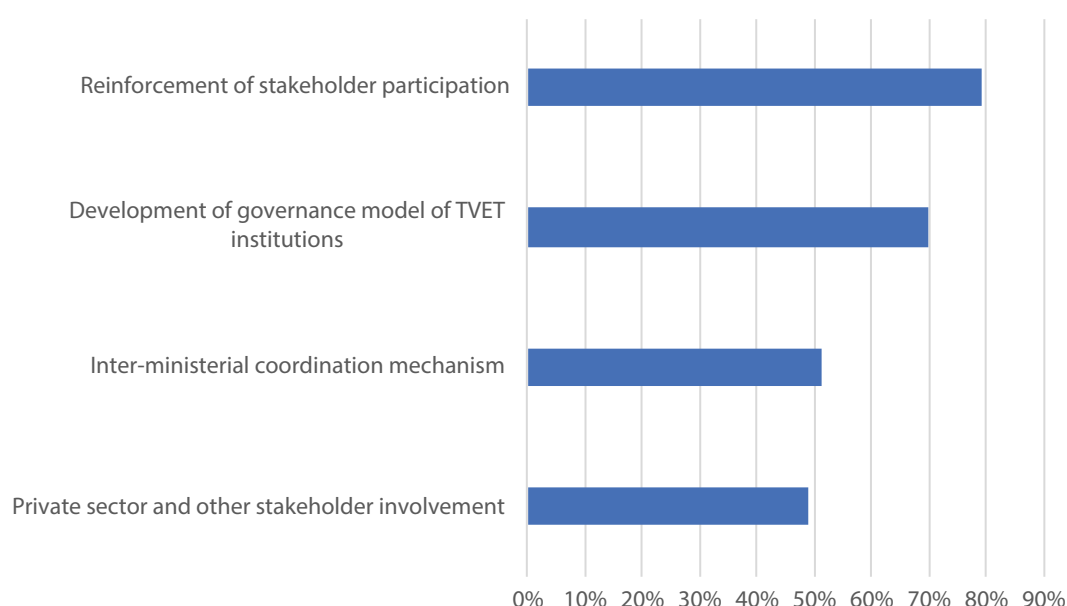
management.³⁵ In **Kenya**, the National TVET Blueprint, 2021–2025 plans to introduce a cluster model of institutional governance, in which a National Polytechnic would form the centre of a cluster in each county, with other vocational institutes in that county aligned and connected to it.³⁶ It is hoped that this model will promote the inclusive improvement of vocational institutes, while promoting vertical integration of the system and governance at a county level.

Private Sector and Other Stakeholder Involvement in TVET Institutions' Governance

Nearly half (49%) of States reported increased involvement over the past four years of private sector and other stakeholders in TVET institutions' governance. This was higher in Arab States (62%), Central Asia and sub-Saharan Africa (60%), and lower in East Asia and the Pacific (44%), North America and Western Europe (31%), and South and West Asia (0%).

In **Armenia**, public-private models of management in VET institutions are being piloted over the period 2021–2026. In **Lithuania**, VET institutions now have the status of public self-governing institutions, governed by boards, with employers able to become involved in managing these institutions' activities as shareholders. This has allowed employers to take joint responsibility alongside the Ministry of Education, Science and Sport in areas including matching VET programmes to labour-market needs; facilitating conditions for students to acquire quality practical training in companies; enabling work with the latest technology; enhancing the professional development of VET teachers and their internships; and improving employment opportunities for graduates. In **Morocco**, one of the main policy directives of the 2021 National Vocational Training Strategy was to rethink the governance and financing of public provision of vocational training better to respond to the needs of the economy; this has included delegating the management of training centres to industry federations.

Figure 3. Areas of emphasis for TVET governance and regulatory frameworks in States, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

³⁵ Kemenko PMK (The Coordinating Ministry for Human Development and Culture). 2022. *National Strategy of Vocational Education and Vocational Training*.

³⁶ Ministry of Education. 2022. *National TVET Blueprint, 2021–2025*. Nairobi: Republic of Kenya.

3.3. Social Dialogue, Private Sector and Other Stakeholder Involvement

Fostering Social Partners' Participation in TVET

The 2015 TVET Recommendation called on States to increase social partners' participation – particularly the private sector – in all aspects of TVET.

Involvement of Social Partners in TVET Policies and Social partners in TVET Programmes

Eighty-one per cent of States reported increased involvement of social partners, in particular the private sector, in the development of TVET programmes over the reporting period. States in both North America and Western Europe (63%) and South and West Asia (25%) again reported less emphasis on this issue, however.

One key example of this increased private-sector involvement in TVET programmes is the far greater emphasis on reported work-based learning. By its nature this shows a significant increase in private-sector involvement in the design and implementation of such TVET programmes (see, Section 4.1). In certain States, private-sector partners have been involved in the development of qualifications, course content, and the implementation of the programmes themselves. For example, in **Georgia**, a new methodology was introduced for processing and developing vocational qualifications that takes into account the active involvement of the private sector in the process of developing occupational and educational standards. **Oman** has seen increased cooperation with the private sector in the development of vocational training programmes, such as organization of job fairs, and increased private-sector investment in TVET providers' infrastructure.

Public-private partnerships in the delivery of TVET programmes also involve social partners (see Section 3.2). For example, in **Poland**, the creation of 120 modern Industry Skills Centres was announced in 2022 as part of the National Recovery Plan. These centres, which will be set up in existing vocational-training schools or centres and run in partnership with sectoral institutions and bodies, will specialize in a particular economic areas – such as automation, robotics, mechatronics, automotive industry, aerospace industry, renewable energy, transport, forwarding and logistics, or food processing – and will have four functions: education and training; integration and

support; innovation and development; and counselling and promotion. It was envisaged that at least 20 ISCs would be established by the end of 2023 and another 100 by the end of 2024.³⁷

3.4. Financing

Diversifying Sources of TVET Funding

Reforms related to TVET financing typically focus upon diversifying and increasing the resource envelope of skills funding. This can mean involving all stakeholders – including enterprises, local authorities, and individuals – through a variety of partnerships, including public-private partnerships.

Nearly half (49%) of all States reported increased emphasis in reform measures aimed at diversifying sources of TVET funding over the reporting period. This was particularly the case in Central Asia (80%), Arab States (69%), sub-Saharan Africa (67%), and Latin America (63%). For example, in **Bahrain**, the private sector is being encouraged by government to invest in TVET. In **Sudan**, a particular effort is being made to diversify TVET funding sources, involving all concerned parties and stakeholders in partnerships and encouraging TVET institutions to generate their own resources through production activities, technical consultations, and increasing investment and endowments.

In certain countries, in addition to public financing, innovative funding mechanisms such as cost sharing, tax deductions, and loans are being explored to increase efficiency and accountability and to stimulate demand for TVET. For example, in **Azerbaijan**, an Education Student Loan Fund was established by the Ministry of Education in 2021. In **Norway**, the skills reform for lifelong learning introduced flexible loans and scholarships as one approach to stimulating individuals and companies to invest in education and training. In **Poland**, tax exemptions were introduced for employers making donations to public schools providing vocational education. In **Sweden**, a new skills financing scheme will make it easier for people with work experience to undertake further education or training using student grants and loans that, for the vast majority, will be the equivalent to at least 80% of their wages. Professionals will be able to study for one year while receiving this new student finance, and self-employed people will also be eligible for the scheme.

³⁷ European Commission. 2024. 'Poland: National reforms in vocational education and training and adult learning'. <https://eurydice.eacea.ec.europa.eu/national-education-systems/poland/national-reforms-vocational-education-and-training-and-adult>

Incentives to Increase Investment in TVET and to Encourage Improved Performance

Different types of incentives and accountability mechanisms exist, or are being established, that aim to increase investment in TVET through a broad range of actors and by shifting the traditional input-based allocation models and resource use to more performance-based financing models.

Forty per cent of States reported an increased emphasis over the past four years on incentives and accountability mechanisms. This was more often the case for States in sub-Saharan Africa, East Asia and Arab States than those in the Caribbean, States in South and West Asia, and those in Central Asia.

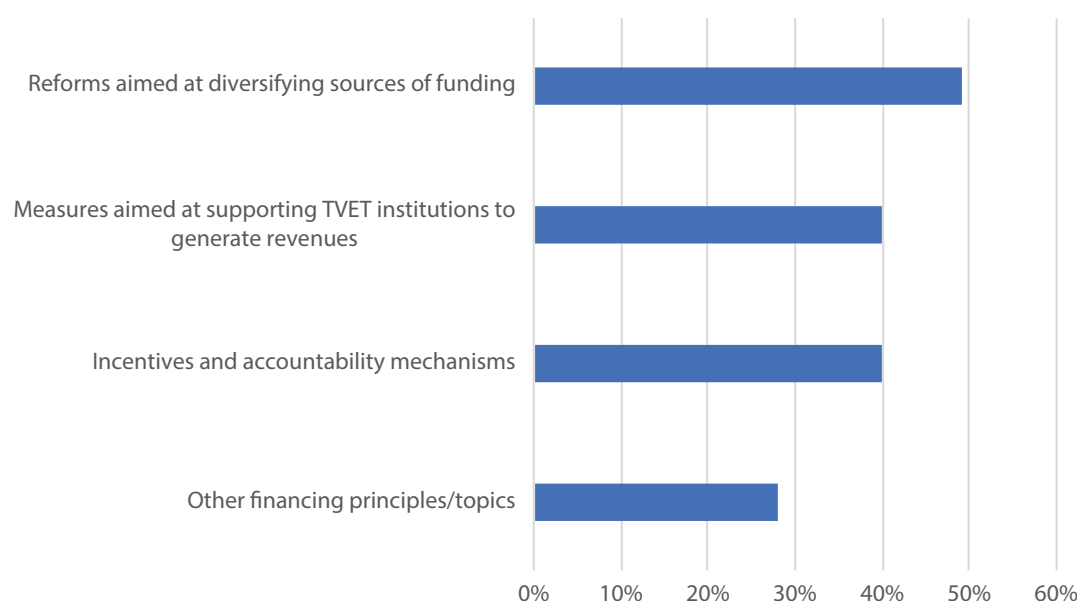
Performance-based financing for institutions – where funding formulas include financial incentives aligned to results – was reported by several States as being adopted or under development over the reporting period. For example, in **Azerbaijan**: ‘One of the strategic targets identified in the VET strategic roadmap is to build an outcome-based robust financing system. The objective is to incorporate a performance-based rewards mechanism for vocational education institutions and teaching staff to ensure the efficient use of funds and improve the quality of VET

provision.³⁸ In financial incentives have been introduced to encourage VET schools to fund apprenticeship placements for students. In **Ireland**, there are plans to reform the TVET funding model to include approaches that reflect the outcomes and performance of Education and Training Boards, and to facilitate strategic investment in long-term priorities.

TVET Institutions’ Levels of Operational and Financial Autonomy

Forty per cent of States report an increased emphasis on the establishment or reinforcement of measures aimed at supporting TVET institutions to generate revenues over the reporting period. Arab States and States in sub-Saharan Africa reported higher levels compared to South and West Asia, Central and Eastern Europe, and North America and Western Europe. For example, in **Austria**, training providers have been granted increased autonomy for the distribution of their resources based upon factors such as total number of students, school type, and students with special needs. In **Ecuador**, the Ministry of Education published instructions for the implementation of self-sustainable technical colleges in 2021.

Figure 4. Main areas of increased emphasis on TVET financing in reporting States, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

38 European Training Foundation. 2023. ‘Key Policy Developments in Education, Training and Employment – Azerbaijan 2022’. www.etf.europa.eu/sites/default/files/2023-03/Country%20Fiche_AZERBAIJAN_2022_EN_web.pdf

3.5. Equity and Access

Creating the Conditions for TVET for All

States including **Cyprus, Finland, Ghana, Hungary**, and **Saudi Arabia** reported offering free training as a means to promote TVET for all. Other States reported alternative approaches to promoting equity and access, including measures to widen access and participation; address gender-based discrimination; and make TVET more accessible to all disadvantaged and vulnerable groups.

Ensuring Quality Basic Education for All

The 2015 TVET Recommendation called on States to ensure quality basic education for all, and address the needs of out-of-school youth and low-skilled adults by developing basic literacy, numeracy, and transversal skills as a foundation for meaningful participation in TVET.

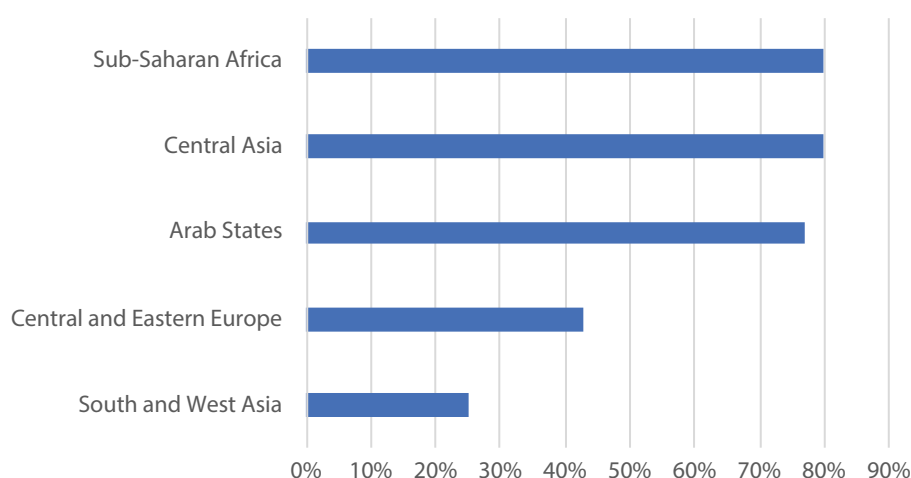
As with the First Consultation, States reported little about connections between investments in basic education and

investment in TVET. Most formal TVET systems require some type of prior formal education. Ignoring this connection is unconducive to promoting equitable access to formal TVET. Most concerningly, States reported almost no initiatives for out-of-school children and adolescents or the role that non-formal education and skills training could play in supporting their transition to work or (back into) formal education and training. In the Second Consultation, only **Gambia** reported recent investments in support for programmes for out-of-school youths.

Measures Taken Against Gender-Based Discrimination

Two-thirds (66%) of States reported increased emphasis over the reporting period on measures to promote equal access and participation of women and girls. This incidence was notably higher in Central Asia and sub-Saharan Africa (80%) and the Arab States (77%), but lower in Central and Eastern Europe (43%) and South and West Asia.

Figure 5. States adopting measures against gender-based discrimination by UIS region, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Such measures typically include multi-pronged efforts to address gender-discrimination. For example, in **Bangladesh**, a National Strategy for the Promotion of Gender Equality in TVET has established a framework of initiatives to increase female participation in the sector, including admission quotas for women; stipends for female students; developing female-friendly culture and infrastructure (separate washrooms, for example); and establishing separate institutions for female students. Additionally, the Government has plans to incorporate childcare centres into every TVET institute to support women with children. In **Gambia**, women's participation is actively promoted

in traditionally male areas, including in solar installation, electrical and electronics, construction, and auto-mechanics. In **Georgia**, a gender action plan was developed in 2021 to mainstream gender into VET policy.

Making TVET More Accessible to All Disadvantaged and Vulnerable Groups

Seventy-eight per cent of States reported an increased emphasis on measures to widen overall access and participation of individuals and groups in TVET over the period 2019–2022. Almost exactly the same percentage

(77%) of States mentioned a stronger emphasis on promoting equal access and participation of disadvantaged or vulnerable groups of individuals, an extremely heterogeneous group that can include marginalized rural and remote populations; learners with disabilities; indigenous people; nomadic populations; ethnic-minority groups; socially excluded groups; migrants, refugees, stateless people and populations affected by conflict or disaster; and unemployed people and vulnerable workers. The emphasis given to disadvantaged or vulnerable groups and individuals was particularly high in sub-Saharan Africa (93%), East Asia (88%), Central Asia (80%), Arab States (77%), and North America and Western Europe (75%), but lower in South and West Asia (25%).

The 2015 TVET Recommendation called on States to consider information and communication technologies ‘as a means to widen access and participation, according to context’. In the Second Consultation, 41% of States reported specific technologies being used to improve marginalized groups’ access to, participation in, or completion of TVET in their country.

Several States noted making TVET more accessible for people with disabilities. For example, in **Andorra**, general training approaches are being adapted and training in sign language is being prepared. In **Austria**, VET students with special needs have access to personal assistants, as well as technical devices – such as computers for the visually impaired – according to their needs. In **Bangladesh**, a disability-inclusive strategy, supported by several campaigns, has been rolled out; this includes an admission quota of 5% for people with special educational needs, and each public TVET institute having infrastructure to support students with special needs, such as ramps and user-friendly toilets. In **Cameroon**, people with disabilities are exempt from tuition fees in TVET institutions. In **Georgia**, Skills Agency Georgia developed a digital career-guidance platform targeted at persons with special educational needs and disabilities wishing to enter TVET institutions to help them make more informed choices about skills and work opportunities. In **Mongolia**, some TVET schools offer special programmes for people with disabilities. In **Morocco**, efforts have been made to improve the infrastructure of TVET institutes to make them more disability-friendly. In **Croatia** and **Estonia**, assistive technologies are being used more to support TVET students with disabilities.³⁹ For example,

in **Estonia**, schools have made investments to include technologies for improving access to education for the hearing and vision impaired.

A second group of disadvantaged and vulnerable learners mentioned by States included unemployed persons, especially those who are also young and/or additionally disadvantaged. In **Bulgaria**, changes were made to the country’s Vocational Education and Training Act in June 2022 that reduced the minimum educational level required of persons over sixteen to undertake training for the lowest level of vocational qualification, on condition that vocational education was combined with literacy training. This aimed to improve the employability and labour-market integration of unemployed persons from disadvantaged groups in the labour market.⁴⁰ In **Morocco**, the 2021 National Vocational Training Strategy aims to increase the provision of short-term training in order to increase the chance of unemployed youth successfully integrating into the formal sector and working life.

A third group of disadvantaged and vulnerable learners referred to by States were adult learners. In fact, the 2015 TVET Recommendation specifically calls on States to support the continuing training and professional development of adult learners. States including **Antigua and Barbuda, Croatia, Cyprus, Finland, Georgia, Germany, Luxembourg, Myanmar, Norway, Republic of Macedonia, Slovenia, Spain**, and **Sweden** referred to this in the Second Consultation.

Cyprus reported providing more learning opportunities to adults in order to either improve their skills or acquire new skills in demand by the labour market. In **Georgia**, financial incentives were introduced to encourage the involvement of the private sector in adult education. **Norway** focused on offering flexible training options tailored to adult learners’ needs to enable them to combine training with work and caring responsibilities. Modular VET curricula for adults are being piloted in 13 subjects targeting those who have completed lower secondary education or equivalent, and is mainly delivered in businesses. In **Slovenia**, the National Programme of Adult Education, 2022–2030, a strategic resolution based upon the 2018 Adult Education Act aims to provide every adult resident of Slovenia with equal opportunities and incentives for quality learning and education at all stages of life.

39 UNEVOC. 2021. *Assistive technologies for TVET students and employees with disabilities. Promising Practice 2021*. https://unevoc.unesco.org/pub/promising_practice_uwi.pdf

40 European Commission. 2023. ‘Bulgaria: National reforms in vocational education and training and adult learning’. <https://eurydice.eacea.ec.europa.eu/national-education-systems/bulgaria/national-reforms-vocational-education-and-training-and-adult>

Another group of disadvantaged and vulnerable learners mentioned by two States (**Austria** and **Luxembourg**) were those who find participation in apprenticeship programmes challenging. In **Austria**, at-risk young people are now helped to obtain a qualification by apprenticeships being extended by one year (in exceptional cases by up to two years) to allow for their completion, and training contracts that can specify the delivery of certain partial qualifications. Individuals supported in this manner can include, for example, teenagers with or without a lower secondary school certificate, people with special needs according to the Disability Employment Act, or those unable to complete an apprenticeship for ‘personal reasons’ such as ill health. In **Luxembourg**, all learners who cannot enrol in regular apprenticeship programmes are directed to the Fit4 Apprenticeship programme offered at National Training Centres, a preparatory year that allows them to improve their soft skills and general education and benefit from career guidance in order to find a regular apprenticeship or in-company training position the following year.

TVET learners living in remote areas, as well as the digitally disconnected due to a lack access to internet or devices are another group of disadvantaged and vulnerable learners referred to by several States (**Belgium, Bulgaria, Estonia, Gambia, Georgia, Ireland, Malaysia, New Zealand, Nicaragua, Republic of Moldova, United Arab Emirates, and Thailand**). Online and distance-learning platforms were used worldwide during the COVID-19 pandemic to better support students who had difficulty accessing TVET in person because of where they lived and/or because of TVET-school closures. A majority of TVET providers around the world, especially those in low-income countries, have been unable to offer online learning alternatives. In countries and contexts with the necessary infrastructure, online learning platforms have also been used to support access to TVET among students facing different kinds of access barriers, for example, geographical location, unavailability due to family responsibilities, or a need to work full time while taking part in training (**Belgium, Gambia, Georgia, Malaysia, Nicaragua, and United Arab Emirates**). Over the reporting period of the Second Consultation, States including **Bulgaria, Estonia, Ireland, Malaysia, Nicaragua, and Republic of Moldova** reported providing devices, such as tablets and laptops, and/or data bundles to marginalized groups.

Lastly, **New Zealand** noted its approach to supporting TVET learners who had difficulty in school previously, and learners from ethnic-minority groups.

Financing Measures to Promote Social Inclusion in Skills

The 2015 TVET Recommendation called on States to promote equity and access in TVET, including the use of financial incentives to influence admissions practices and reduce the direct and indirect TVET costs for disadvantaged and vulnerable groups. While the Second Consultation did not address this issue specifically, several States provided examples of their approaches. Financial instruments to promote social inclusion in skills fall into three broad financing categories: mechanisms for individuals, such as grants, tax incentives, subsidized loans, tuition-fees measures, and education and training leave; mechanisms for training providers, including contracted training provision, targeted procurement, performance-based contracts, and one-off funding; and mechanisms for enterprises, which include training levies, grants, subsidies, and tax incentives to enterprises, targeted public procurement, and funding to intermediary organizations.⁴¹

Several concrete examples given in response to the second Consultation relate to financing mechanisms for individuals. **Armenia** provides a certain number of free training places and stipends to help to cover indirect training costs like transportation and accommodation. In **Cambodia**, scholarships are provided to certain ethnic groups, as well as other vulnerable and disadvantaged individuals. In **Croatia**, a voucher system was introduced in 2021 to promote lifelong learning among both employed and unemployed persons, with an emphasis placed on acquiring skills related to the green and digital economies. In the **Republic of Moldova**, a quota system sees the Ministry of Education and Research offer 15% of the total annual number of places to specific categories of candidates: Roma children; children with severe, accentuated, and medium disability; children without parental care and support; children whose parents have severe disabilities; and children from families with four or more children.

Only one example in response to the Second Consultation related to financing mechanisms for companies.

Luxembourg noted the one-off financial incentive it

41 International Labour Organization. 2023. Financing mechanisms for promoting social inclusion in skills and lifelong learning systems: Global overview of current practices and policy options, ILO: Geneva. www.ilo.org/media/361331/download

offered to training companies in late 2022 to promote their participation in apprenticeships during the COVID-19 crisis.

While a large number of recent examples of financing measures have been adopted by States to promote social inclusion in skills and lifelong learning, only a handful were specifically referenced by States in the Second Consultation of the 2015 TVET Recommendation.⁴²

4. Quality and Relevance

4.1. Learning Processes

Changes to the Types of Skills Delivered Through Initial TVET Programmes

The 2015 TVET Recommendation, in alignment with the United Nations' Agenda 2030,⁴³ acknowledges that students need to acquire a range of knowledge and skills for productive and fulfilling work and full participation in society. The Recommendation notes that in addition to knowledge, skills and competencies relating to occupational fields, learning processes should build on foundation skills, develop transversal and entrepreneurial skills, skills for health and work safety, cultural development, responsible citizenship, and sustainable development.

Job-Specific Skills

A majority of States (67%) indicated an increased emphasis on job-specific skills in initial TVET programmes over the reporting period. This was particularly pronounced among States in Central Asia (80%), Arab States (77%), and sub-Saharan Africa (73%), and lower among States from Latin America (50%) and South and West Asia (25%).⁴⁴

Foundation Skills

For foundation skills in initial TVET programmes, 51% of States signalled an increased emphasis over the reporting period compared to the global average. This was highly pronounced in Central Asia (100%), Caribbean (67%), sub-Saharan Africa (67%), Latin America (63%), and Arab States (62%). None of the four responding States in South and West Asia (Afghanistan, Bangladesh, Nepal, Pakistan) indicated an emphasis on this issue, however. Few concrete

examples of how foundational skills have been better integrated into TVET programmes were provided by States in the Second Consultation. However, **South Africa** did note that literacy and numeracy have been strengthened as part of its pre-vocational learning programme.

Transversal Skills, Including Entrepreneurial Skills

A majority of responding States (68%) indicated an increased emphasis over the reporting period on transversal skills in initial TVET. This was most pronounced in the Caribbean (100%), sub-Saharan Africa (93%), Central Asia (80%) and Arab States (77%), and least pronounced among responding States in South and West Asia (0%). A number of States reported promoting entrepreneurial skills as one of their key TVET policy objectives (see Section 3.1).

Other transversal skills being given more attention, include life skills (**Mauritius, Myanmar, and Yemen**); '21st century' or 'soft' skills, such as communication, collaboration, teamwork, creativity, critical thinking, and problem-solving (**Bahrain, Croatia, Cyprus, Republic of Moldova, Sudan, and Thailand**); and transferable skills such as first-aid skills (**Luxembourg**).

Green and Sustainable Skills

Almost six in ten (58%) States reported an increased emphasis on green and sustainable skills over the reporting period. The percentage of States was higher in Central Asia (100%), sub-Saharan Africa (67%), East Asia (63%), Latin America (63%), North America and Western Europe (63%), and Arab States (62%), than in South and West Asia (0%).

The increased emphasis on green and sustainable skills was focused on new training programmes or greening existing programmes. In **Austria**, the entire apprenticeship offer was reviewed in 2022 to better address large-scale trends such as climate-change and TVET competence centres for 'green skills' were established. **Botswana** introduced a TVET programme in renewable energy. **Burkina Faso** introduced an environmental-protection module in its training programmes. In 2021, **Hungary** introduced a new Green Planet Sustainability programme designed for TVET, which provides a new foundational subject about sustainability for 9-10 graders; it has also integrated sustainability concepts across its training offer⁴⁵. In **Latvia**, the green transition

42 Further examples can be found in, International Labour Organization. 2023. *Financing mechanisms for promoting social inclusion in skills and lifelong learning systems*. www.ilo.org/media/361331/download

43 United Nations. 2015. 'Transforming our World: the 2030 Agenda for Sustainable Development'. (A/RES/70/1). www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf

44 See also Section 4.5.

45 The approximate age 15-16 years old.

is part of the TVET curriculum, which now includes environmental core modules and sector- or occupation-specific courses. **Luxembourg** has introduced new initial and continuing green TVET courses, such as 'Smart Buildings and Energies', 'Waste and Resource Management', and the 'Path to a CO₂-Neutral Organization'. **Mauritius** has introduced a common module on sustainability in all TVET programmes, as well as introduced a new course on renewable energy. **Romania** has also place new emphasis on the development of new qualifications to support greening and sustainable development, especially in the field of renewable energy. **Saudi Arabia** has introduced new courses related to electric vehicles and renewable energy.

The development of green TVET strategies and plans, and the greening of TVET infrastructure, were also highlighted by States as concrete actions taken during the reference period of the Second Consultation. In **Bangladesh**, a draft Green TVET guideline has been developed that provides guidelines for understanding greening TVET; developing and implementing a green action plan; developing green skills and jobs; and greening TVET institutes. In **Ireland**, greening campuses is a specific goal for the Future FET Transforming Learning strategy 2020-2024. In **Latvia**, greening is also part of the national skills strategies, as well as regional or sectoral strategies. In **Malta**, the 2022-2027 strategic plan of the Malta College of Arts, Science and Technology (MCAST), the country's leading TVET institution, makes greening and sustainability a focus of all stages of teaching and learning. In **Sudan**, Sudan Technological University has adopted goals that focus on greening curricula.

Digital Skills

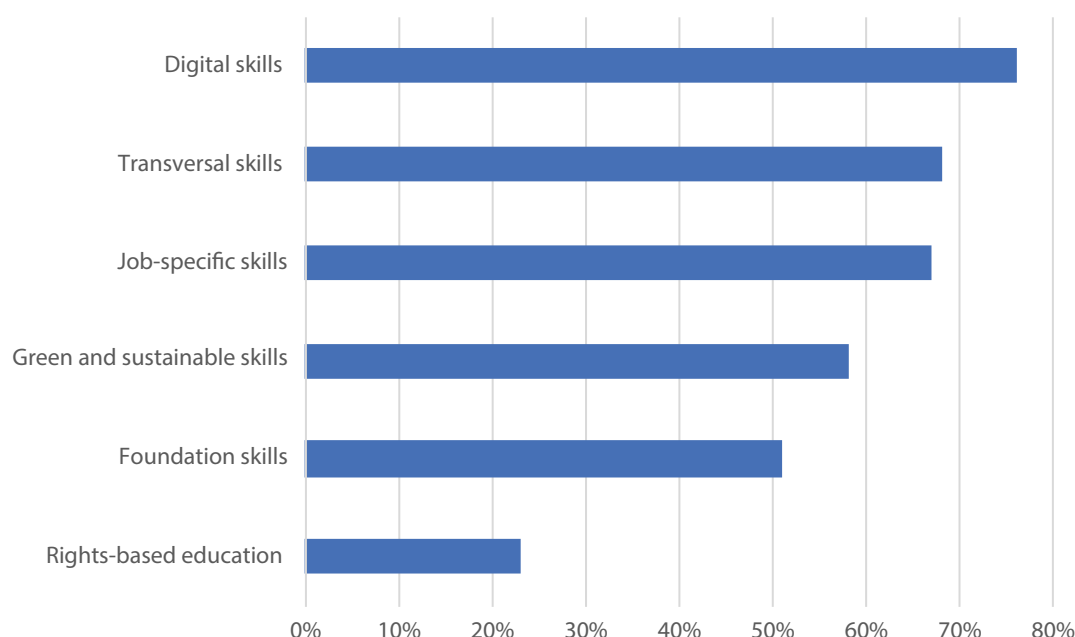
Just over three-quarters (76%) of States signalled an increased emphasis on digital skills in initial TVET programmes over the reporting period. Given the COVID pandemic and shift to online learning, it is perhaps surprising that this percentage is not even higher. This incidence was highest among States in Central Asia and the Caribbean (100%), as well as East Asia (88%), North America and Western Europe (88%), and Africa (80%). Again, none of the four responding States in South and West Asia indicated greater emphasis on this skill area over four-year reporting period.

Cyprus, for example, has identified an urgent need to develop students' digital skills, including information and data literacy, communication and collaboration, digital-content creation, safety, and problem solving. To achieve this goal, the Ministry of Education, Sport and Youth intends to provide digital equipment for the creation of e-classes, transform the curriculum, and provide teacher training to support the enhancement of digital skills throughout school education.

Rights-Based Education for Global and Citizenship

Less than a quarter (23%) of States reported an increase in emphasis on rights-based education in initial TVET programmes over the reporting period. This was most pronounced in Central Asia (40%) and Latin America (37%). States including **Armenia, Austria, Bulgaria, Burkina Faso, Burundi, Bosnia and Herzegovina, Cyprus, Estonia, Georgia, Guatemala, Jordan, Latvia, Libya, Morocco, Panama, and Slovenia** all reported mainstreaming civic education into their curricula (either as a separate module or integrated across the curriculum), though it is unclear if in all cases these changes happened over the reporting period of the Second Consultation. In **Armenia**, all TVET institutions were instructed to develop a curriculum around the Fundamentals of Anti-Corruption Policy for the 2020-2021 academic year. In **Azerbaijan**, extracurricular activities are carried out at public vocational schools related to the rule of law, rights of children and other social issues. In **Bosnia and Herzegovina**, civic education has been introduced as a compulsory subject in all primary and secondary schools, including vocational schools. In **Burundi** and **Guatemala**, the curriculum introduces aspects related to human rights, while **Jordan** and **Libya** report integrating rights-based education for global and participatory citizenship into their TVET curricula. In **Georgia**, every VET programme includes a mandatory module on civic education. In **Lithuania**, TVET schools reportedly have more local autonomy to decide how civic-education competences should be developed, such as, for example, a separate module integrated into the curriculum through non-formal training, volunteering, and project activities. In **Slovenia**, TVET programmes at the upper secondary education level were amended in 2020 to include citizenship education. **Tunisia** has a UNESCO school-based project related to the promotion of human rights, global-citizenship education, and media and information literacy.

Figure 6. Different types of TVET learning processes reported by States, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Work-Based Learning

The 2015 TVET Recommendation calls for the promotion of work-based learning, for its quality to be enhanced, and when relevant for it be complemented by institution-based or other forms of learning.

Work-based learning refers to all forms of learning that take place in a real work environment. It provides individuals with the skills needed to successfully obtain and keep jobs and progress in their professional development. Apprenticeships, internships, traineeships, and on-the-job training are the most common types of work-based learning. These types usually – but not always – combine elements of learning in the workplace with classroom-based learning.⁴⁶

Nearly half (47%) of States reported an increased emphasis on work-based learning over the reporting period, in particular through apprenticeships or attachments with institution-based learning, sometimes more formalized as a ‘dual system’ or otherwise through partnership agreements with companies.

Apprenticeships, Traineeships, and Internships

Several States reported on developments over the reporting period in apprenticeships, traineeships,

and internships, also referred to as student industry attachments or placements. These included: **Antigua and Barbuda, Botswana, Brunei Darussalam, Cyprus, Finland, France, Gambia, Hungary, Lesotho, Lithuania, Malaysia, New Zealand, Poland, Qatar, Saudi Arabia, Slovenia, and United Arab Emirates.**

Antigua and Barbuda, Cyprus, Denmark, Ireland, New Zealand, and Poland noted efforts made over the Second Consultation reporting period in promoting better relationships between training providers and industry partners to support apprenticeships, traineeships, and internships. In **Cyprus**, for example, a Memorandum of Cooperation was signed in 2019 between the Ministry of Education, Sport, and Youth, the Cyprus Chamber of Commerce and Industry, and the Cyprus Employers and Industrialists Federation, with the purpose of further enhancing employers’ engagement and cooperation with the work world, including measures to support and facilitate TVET students’ industrial placement or work-based learning in enterprises. In **Denmark**, tripartite agreement in November 2020 aimed at increasing the completion rate of internships through early agreements about internships that provide a more coherent education programme and so⁴⁷ increase the likelihood of completion. In **New Zealand**, a key aim of the Reform of Vocational Education project,

46 Inter-agency Group on Technical and Vocational Education and Training. 2017. *Investing in Work-Based Learning*. Paris, UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000260677>

47 European Commission. 2023. ‘Denmark: National Reforms in Vocational Education and Training and Adult Learning’. <https://eurydice.eacea.ec.europa.eu/national-education-systems/denmark/national-reforms-vocational-education-and-training-and-adult>

which commenced in 2020, has been to make it easier for learners to move between workplace-based learning and provider-based learning, and to make it easier to engage with learning while working. In **Poland**, student internships in industry are being promoted through an agreement concluded between the student and the employing entity: a student in an internship receives a monthly cash benefit, unless the parties to agreement decide otherwise.

In other States, new policies, regulations, and strategies have been adopted that aim to strengthen apprenticeships, traineeships, and internships. In **Botswana**, an Apprenticeship Training and Student Internship Policy has been developed to guide the inclusion of work-based learning through a newly developed curriculum. In **Iceland**, new regulations give schools greater responsibility for the organization of work-based learning. In **Lithuania**, new apprenticeship regulations were adopted in 2019 related to the rights, duties and responsibilities of TVET providers and employers, as well as quality assurance issues. In the United Kingdom, the Scottish government's Skills for a Changing World Strategic Plan, 2022-2027 includes the reform of formal apprenticeships to reflect the changing world of work, and offers greater flexibility and customizable, modular content.⁴⁸

New types of apprenticeship, traineeship, and internship have also been introduced by several States. **Brunei Darussalam** has introduced full-time apprenticeship programmes. **Finland** has introduced new forms of work-based learning; for example, studying in the workplace can now cover an entire degree, a module, or a smaller part of the studies. In **Hungary**, a new training structure has been introduced that provides students the possibility of block training to support and allow them to spend a longer, continuous time in real working environments. An important change is that while previously only practical skills could be obtained in a dual framework with an apprenticeship contract, the new regulation gives students the chance to receive their full vocational training in a professional environment, learning all necessary skills uniformly.

Dual Systems

States retain a reasonable interest in dual-system apprenticeship models. Indeed, about one in five reported the dual system as the dominant mode of initial TVET provision in their country with its incidence still highest among those in Western European. Like other apprenticeship modes, dual systems combine institution-

based learning and work-based training. However, one fundamental characteristic of the dual system that differentiates it from other apprenticeship methods is the institutionalized dialogue and co-determination between industry and government.

Several States that have introduced dual systems noted the continued focus on this learning process during the reference period of the Second Consultation. For example, **Azerbaijan**, which has been piloting a dual system since 2015 noted that within reporting period the number of occupations and regions implementing it has significantly increased. In **Georgia**, the introduction of dual systems began in 2016 and the number of dual systems has been increasing year on year; as of 2022, more than 130 private companies were involved in their implementation.

Other States that more recently introduced the dual system include **Croatia** where it was introduced as a pilot in the 2018–2019 school year for four qualifications (sales, beauty therapy, chimney sweeping, and glazing), and **Armenia**, which experimentally introduced it in 13 VET educational institutions in 2022. **Panama** reported work on the presentation of a legal framework for the dual system, while the **Republic of Moldova** approved a Law on Dual VET in April 2022.

On-the-job training

The 2015 TVET Recommendation specifically calls on States to support the continued training and professional development of adult learners, including by encouraging enterprises, of all sizes, to invest in their workers. On-the-job training refers to learning that takes place in the normal work environment; it is the most common type of work-based learning throughout an individual's working life.

A number of States reported on policies adopted in the reporting period to encourage this form of in-work learning. In 2018, **Ireland** launched Skills to Advance, a policy framework for employee development that targets low-skilled adults in employment who need to upskill or reskill for their current employment or career progression; in 2021, the programme expanded to include developing green skills for small and medium enterprises. In **Luxembourg**, the Future Skills programme, which was originally set up to develop digital and managerial skills among job seekers, has also been open to adults in employment since 2020.

⁴⁸ Skills Development Scotland. 2022. *Skills for a Changing World, Strategic Plan, 2022-2027*. www.skillsdevelopmentscotland.co.uk/media/49796/sds-strategic-plan-2022-27.pdf

TVET in the Informal Economy

In many low- and middle-income countries, the dominant mode of training remains on-the-job learning in the informal economy, including through informal or traditional apprenticeships. Traditional apprenticeships are particularly common in large parts of sub-Saharan Africa and South and West Asia, but many other countries have such an informal enterprise-based learning systems. The 2015 TVET Recommendation specifically notes that: ‘TVET in the informal economy should be promoted, including through quality traditional apprenticeships.’

A persistent gap in the Second Consultation was the almost complete lack of mention of this mode of informal teaching and learning, including of any progress made over the reporting period to promote and strengthen it, as called for in the 2015 TVET Recommendation. This gap was flagged up in the report of the First Consultation but not addressed.

As part of the Second Consultation, only **Gambia** made reference to its large system of informal apprenticeships, reporting that more emphasis was now being given to formalizing training programmes in the informal sector, including traditional apprenticeship, as a means to increase the uptake of technical and vocational skills among the young.

Other reporting countries, such as **Kenya**, are known to have been giving policy attention to informal apprenticeship over the reporting period, but did not refer to this in their reporting on the TVET Recommendation.

Information and Communication Technologies in TVET

The 2015 TVET Recommendation called on States to ‘fully exploit’ the potential of information and communication technologies in TVET, including using technology ‘to promote distance and online delivery, including through blended models and the development and use of open educational resources’.

Eighty-five per cent of States have introduced or adopted policies or practices to facilitate the digitalization of their TVET system over the past four years, for example, by introducing new digital resources; upgrading digital administrative infrastructure and physical digital infrastructure; and/or strengthening the capacity of TVET staff.

The Development of Digital Resources

Just over half (51%) of States reported now using open educational resources (OER) in initial TVET teaching and learning. This is likely to be an underestimate of actual use, since an additional 30% of responding States indicated having ‘no information’ on their use of OER. E-learning platforms with digital resources have proliferated over the reference period of the Second Consultation, with much of the increased focus clearly driven by the COVID-19 pandemic.

Upgrading Digital Administrative Infrastructure

Several States reported improvements in their digital administrative infrastructure within TVET institutions. In **Austria**, a Digital School portal (<https://bildung.gv.at>) has been introduced to improve communication between pupils, teachers and parents; as a single point of entry, it makes available the most important educational and public-administration applications, such as Socrates, Eduthek, Moodle, LMS, and MS Teams. In **Bangladesh**, an online procurement platform (www.eprocure.gov.bd) has been introduced to all TVET institutes.

Upgrading Physical Digital Infrastructure

Investment in the physical digital infrastructure of TVET institutes was also reported by several States. For example, **Benin** reported more investment in the installation of fibre-optic cables throughout the country, while **Botswana** reported that all TVET institutes had seen improvement in digital resources, including internet connectivity and provision of devices.

Strengthening Digital Literacy Among TVET Staff

States reported a number of new skills having been introduced in TVET teaching due to digitalization, including communication and collaboration skills to enable interaction, such as sharing, engaging, and collaborating, through digital technologies (72%); skills related to digital hardware and tools (66%); information and data-literacy skills, including browsing, searching, filtering, evaluating and managing data and digital content (64%); digital-content creation skills, including developing, integrating and re-working digital content, copyrighting and licensing, and programming (53%); digital problem-solving skills, including solving technical problems, identifying needs and technological responses, creatively using digital technologies, and identifying digital competency gaps (48%); and, digital safety and cybersecurity skills, including

protecting devices, personal data, privacy, health and well-being, and the environment (32%).

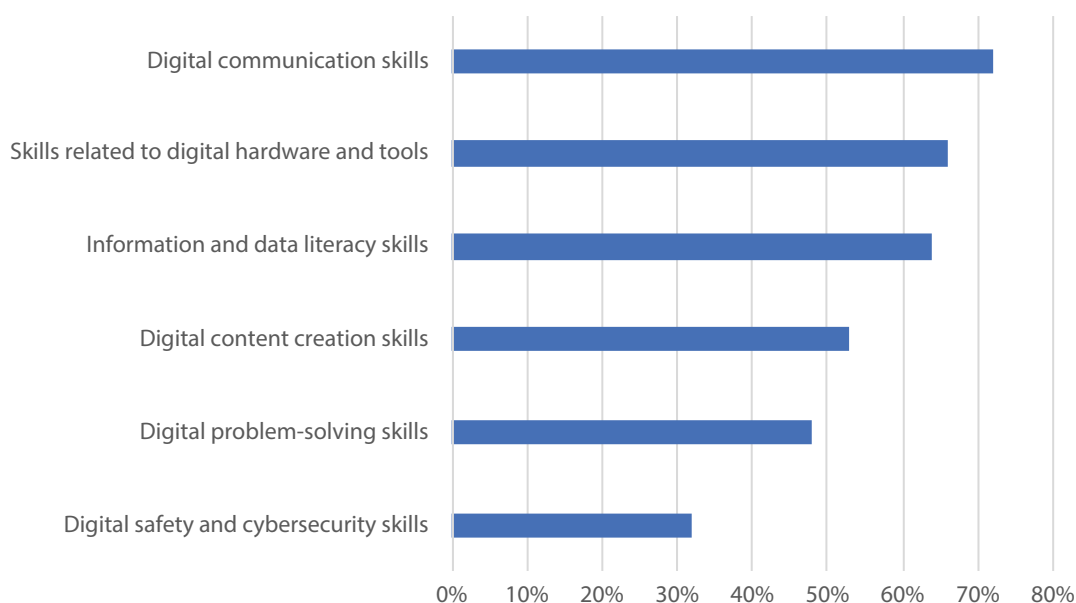
Nearly two-thirds (65%) of States reported that, over the past four years, their TVET staff have been equipped with the relevant skills to facilitate the introduction of digital tools in the teaching process and to introduce digital-related topics. It is likely that much of this TVET teacher training took place as a response to COVID-related TVET institute closures (mainly through 2020–2022) and the need to try to improve online delivery of courses, rather than being initiated pre-COVID-19.

Digital literacy training among TVET teachers has covered a wide range of areas, including creating e-courses and content (**Austria, Bangladesh, Cambodia, Cyprus, and Madagascar**); improving use of e-learning tools and platforms, such as Google Classroom, Moodle, MS Teams, and Zoom (**Andorra, Austria, Chile, Cyprus, Lao People's Democratic Republic, Macao, China, Mauritius, Mongolia, and United Arab Emirates**); providing blended

vocational training delivery and assessment (**Cambodia**); and using digital technologies in vocational education (**Denmark, Egypt, France, Gambia, Georgia, Hungary, Ireland, Lithuania, Malaysia, Malta, and Trinidad and Tobago**).

Technology has also been used to deliver much of this TVET teacher training, including through online-learning management systems (such as Moodle); online platforms (Google Meet MS, Teams, Zoom); and mobile messaging apps (WhatsApp). For example, in **Botswana**, the Future Teacher Kit initiative is a low-tech, mobile-based teacher-training solution that piggy-backs on messaging apps such as WhatsApp. Under this initiative, teachers receive training snippets and hands-on activities on their phones, and also join tutored messaging Enger groups where they can find mutual support and share learning content.⁴⁹

Figure 7. Types of digitalization skills introduced to TVET teaching, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Online, Hybrid and Distance Learning

The use of online, hybrid, and distance learning in TVET was reported by a number of States, including **Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Benin, Cambodia, Cameroon, Côte d'Ivoire, Cyprus, Cuba, France, Guyana, Ireland, Latvia, Malaysia, Malta,**

Mauritius, Qatar, Republic of Moldova, Sweden, Trinidad and Tobago, and Tunisia, though the actual number adopting such practices is likely much higher in light of known responses to COVID-19. For example, **Austria's** EdutheK (www.eduthek.at) e-learning platform has offered in-depth instructional materials for all types of schools

49 UNESCO. 2022. *United Nations Transforming Education Summit 2022. Knowledge hub: Collection of best practices*. https://transformingeducationsummit.org/sdg4education2030.org/system/files/2023-04/AT3GP69_Future_Teacher_Kit.pdf

and subjects since the start of the COVID-19 crisis; it pools digital educational content and instructional materials using a standard catalogue system. **Cambodia** has a national TVET e-learning platform (www.tvet-elearning.com), while in **France**, the Étincel platform (www.reseau-canope.fr/etincel), developed by the Ministry of Education's Réseau Canopé, has been offering students and teachers digital resources for vocational and technological education since March 2019. Similarly, in the **Republic of Moldova**, a repository for digital learning materials for TVET teachers and students has been developed (www.iptdigital.md). **Tunisia** reported that work is underway to set up a distance training platform at the Tunisian Agency for Professional Training.

4.2. TVET Staff

Sections 35–38 of the 2015 TVET Recommendation deal with the importance of developing policies and frameworks to ensure qualified and high-quality TVET staff, including teachers, instructors, trainers, tutors, managers, administrators, extension agents, guidance staff, and others.

TVET Staff Policies

Just over half (57%) of States reported having policies to accommodate TVET teachers (although not all are dedicated TVET-teacher policies). Dedicated policies include a TVET Teachers' Recruitment and Promotion Policy in **Bangladesh**, and TVET Teachers Standards developed in **Brunei Darussalam** to provide a common understanding of TVET teachers' competencies. In **Chile**, TVET teachers have historically been included in the overall Teacher Professional Development Policy, but in 2022 separate standards for the initial training of TVET teachers were developed. In **Georgia**, a TVET policy covering teacher standards, recruitment, professional development, and career progression was developed in 2023. In **Lao People's Democratic Republic**, a dedicated TVET-teacher policy manual was issued by the Department of Technical and Vocational Education and Training of the Ministry of Education and Sports, in 2020. **Latvia** has had specific regulations regarding TVET teachers' competencies since 2018. In **Malaysia**, the Malaysian Qualifications Agency has developed specific guidelines about TVET-teacher competencies.

Other countries' policies for TVET teachers are integrated into a national TVET policy. For example, in **Guyana**, TVET teacher-related policies are part of the country's overall TVET policy document. Additionally, the CARICOM Regional

TVET strategy is used to guide policy implementation for TVET pedagogy. Similarly, in **Switzerland**, the policy relating to vocational teachers and trainers is an integral part of the general vocational training policy; the legal bases at national level are the same, while certain elements are regulated at a canton level.

Other states have general civil-service policies that apply to all civil servants, including public-sector TVET teachers. For example, in **Bahrain**, all civil-service employees, including teachers, are subject to the policies adopted by the Bahrain Civil Service Bureau. In **Cameroon**, specific provisions applicable to TVET teachers are part of the overall policy of civil servants working for national education bodies.

Other States have integrated TVET teachers into general teacher policies. For example, in **Estonia**, the TVET-teacher policy exists as part of the general Estonian Education Strategy 2021–2035 (adopted in November 2021) and implementation plans; TVET teachers' qualification requirements are, however, regulated by the 1998 Vocational Educational Institutions Act. Similarly, in **Cyprus**, TVET-teacher policy is part of various policies developed for secondary-education teachers in Cyprus, such as the New Appointment System in Education.

Policies are also defined at the provider level for private providers, as well as for public providers in more decentralized contexts.

Major Areas Targeted by TVET Staff Policies and Strategies

Among the areas of TVET policies and strategies for teaching staff that responding States have been trying to address most over the reporting period are (in descending order of importance): initial training; recruitment and retention; career structure and path; standards; reward and remuneration; employment and working conditions; deployment; and accountability.

Initial Teacher Training

The 2015 TVET Recommendation was clear about the need for initial teacher training to ensure TVET staff in educational institutions and the workplace obtain the necessary competencies to undertake their jobs successfully. Just over half (55%) of States indicated initial teacher training as an area they had addressed over the reporting period. For example, in **Egypt**, a technical-education teacher-training academy (TEVETA) was established, while in **Morocco**, the National Institute for

the Training of Trainers and Tutors (INFFT) was established in Tamesna, near Rabat, in 2021 to strengthen initial and continuing professional development.

Teaching-Staff Recruitment and Retention

Just over half (51%) of States indicated efforts to improve teaching-staff recruitment and retention through TVET-teacher policies and strategies over the reporting period. These were highest in Arab States (62%), North America and Western Europe (63%), East Asia and the Pacific (56%), Central and Eastern Europe (57%), and Latin American and the Caribbean (55%); the lowest rates were in sub-Saharan Africa (20%). Despite the apparent attention being given to this issue, almost none of the respondents provided any actual examples of their efforts. In **Ethiopia**, respondents did note that a merit-based system has been established to recruit, deploy, and retain competent leaders, such as TVET advisors and institutional deans, capable of effectively and efficiently managing their institutions.

Career Structure and Path

The 2015 TVET Recommendation noted that TVET staff should be offered adequate career opportunities. Just under half of States (49%) reported policies and strategies over the reporting period that have tried to address this issue, with States in sub-Saharan Africa (27%) and South and West Asia (0%) reporting the lowest rates. States in Central and Eastern Europe (71%) and North America and Western Europe (63%) were most likely to report this as a major concern over the Second Consultation's reference period.

Teaching-Staff Standards

Teaching-staff standards were reported by less than half (44%) of States as an area of interest. For example, compliance with national laws concerning the minimum level of qualifications for TVET teachers is not strong. While States in North America and Western Europe and Central and Eastern Europe reported highest compliance with minimum-qualification laws, just under half (48%) of States reported that 81% to 100% of their TVET teachers had only the minimum level of qualifications required by law. Six out of fifteen reporting Sub-Saharan African States (**Benin, Botswana, Burundi, Gambia, Lesotho, and Mali**), reported that 60% or of their TVET teachers with the minimum qualifications, while six States (**Armenia, Botswana, Cuba, Ecuador, Estonia, and Poland**) reported less than 20% of TVET teachers with the minimum legal level of qualifications.

Teaching Staff Reward and Remuneration

The 2015 TVET Recommendation notes that TVET staff should be adequately remunerated. Yet just 39% of reporting States indicated teaching staff reward and remuneration as an area of interest over the reporting period, with levels highest in Arab States (62%) and lowest in sub-Saharan Africa (20%) and South and West Asia (0%).

Teaching Staff Employment and Working Conditions

The 2015 TVET Recommendation stated that TVET staff should have decent working conditions. Just over one-third of States (35%) reported policies and strategies over the reporting period that have tried to address this issue. The figure was 20% for States in sub-Saharan Africa, and 25% for those in South and West Asia, and Latin America and the Caribbean.

Continuing Professional Development

The 2015 TVET Recommendation was equally clear about the role of continuing training and professional development for TVET staff, including work experience in enterprises. Although a subject not directly addressed in the Consultation, several States referred to such measures adopted over its reporting period. In **Tunisia**, the implementation of the Reform of the National Vocational Training System 2014–2020 has seen the promotion of trainer skills to improve the quality of the training offer and enable learners to acquire the necessary skills to meet business expectations. In **Morocco**, the Department of Vocational Training has worked to establish a National Institute for the Training of Trainers and Tutors, which opened in 2021.

4.3. Qualifications Systems and Learning Pathways

The 2015 TVET Recommendation called for the establishment, in consultation with stakeholders, of 'well-articulated outcome-based qualifications frameworks or systems' based upon identified needs.

Qualifications-System Reforms

Three-quarters of all reporting States indicated having implemented specific reforms of qualifications systems over the reporting period of the Second Consultation. All States in Central Asia indicated this, while 86% of States in Central and Eastern Europe did; 81% in North America and Western Europe; 78% in East Asia and the Pacific; 69% of Arab States;

67% in sub-Saharan Africa; and 60% in Latin America and the Caribbean. The most common reforms related to the establishment or revision of national qualifications frameworks (55%); followed by the establishment of a system for the recognition, validation and accreditation of prior learning (49%); the development of quality assurance of qualifications (48%); the establishment of regulatory mechanisms for flexible learning pathways (43%); the development of a system of credit transfer and accumulation (24%); and the establishment and/or recognition of micro-credentials (18%).

National Qualifications Frameworks

Over half (55%) of States reported having established or revised national qualifications frameworks (NQF) over the reporting period of the second Consultation; 64% of responding States in Central and Eastern Europe, 63% in North America and Western Europe, and 60% in sub-Saharan Africa reported NQFs being in place or being established. States in Latin America and the Caribbean were least likely to indicate a focus on NQFs over the reporting period.

Benin reported that its latest National Strategy recommends a revision of the qualification levels to meet the labour market's real skills needs and the national economy's priority sectors; at the time of the Consultation, this ongoing work was part of the National Certification and Qualification Framework. In **Botswana**, a new National Credit Qualifications Framework was developed during the reporting period. Similarly, in **Ethiopia**, the Ethiopian TVET Qualifications Framework was developed. **Bangladesh** reported the development of a National Qualification Framework approved by the Ministry of Education and establishing lateral qualifications transfer between different levels and streams of education.

Georgia reported on revisions to its vocational qualifications in 2021 that aimed to bring the country's TVET system closer to international standards, popularize and modernize vocational education, and promote its integration into the common European space. In Central and Eastern Europe, **Latvia** reported new developments in its continuous VET programmes at NQF/EQF level 5.

Trinidad and Tobago reported updates to its NQF, while **Finland** reported updating its NQF while reducing the number of available qualifications (from 351 to 160) to have fewer and more broad-based vocational qualifications.

Mechanisms Supporting Horizontal and Vertical Progression

Forty-three percent of reporting States indicated establishing or revising a regulatory mechanism for flexible learning pathways over the reporting period of the second Consultation. These were 62% of responding Arab States; 50% of States in North America and Western Europe; 44% of States in East Asia and the Pacific; and 43% of States in Central and Eastern Europe. Least focus on this issue was reported by States in sub-Saharan Africa (33%), Latin America, the Caribbean (27%), and South and West Asia (25%). Examples of action were noted by certain responding States. **Cyprus** has linked the apprenticeship system to formal programmes offered by Evening Schools of Technical and Vocational Education (ESTEE), which operate as second-chance schools for adult learners. As apprenticeship graduates are entitled to attend ESTEE with part of their education and training being recognized and transferred, they are able to complete upper-secondary TVET in two rather than three years. This has made the apprenticeship system a gateway to further studies for apprenticeship graduates.

In **Bangladesh**, a new NQF allows a graduate of level X to move forward to level Y to pursue further learning, or to switch streams of education from one to another. In **Ireland**, significant work has been done to create a more coordinated and consistent approach to transitions from FET or TVET to higher-education. In **New Zealand**, as part of the 2020 Vocational Education and Training Reform, the New Zealand Institute of Skills and Technology (NZIST/Te Pūkenga), which was established in April 2020, now provides work- and campus-based and online vocational learning and training across New Zealand. The result of the merger of 16 Institutes of Technology and Polytechnics, the organization has created a unified vocational and training system that allows earners to move more easily between regions and between work-based and provider-based training, while simplifying continuing training if their employment situation changes.

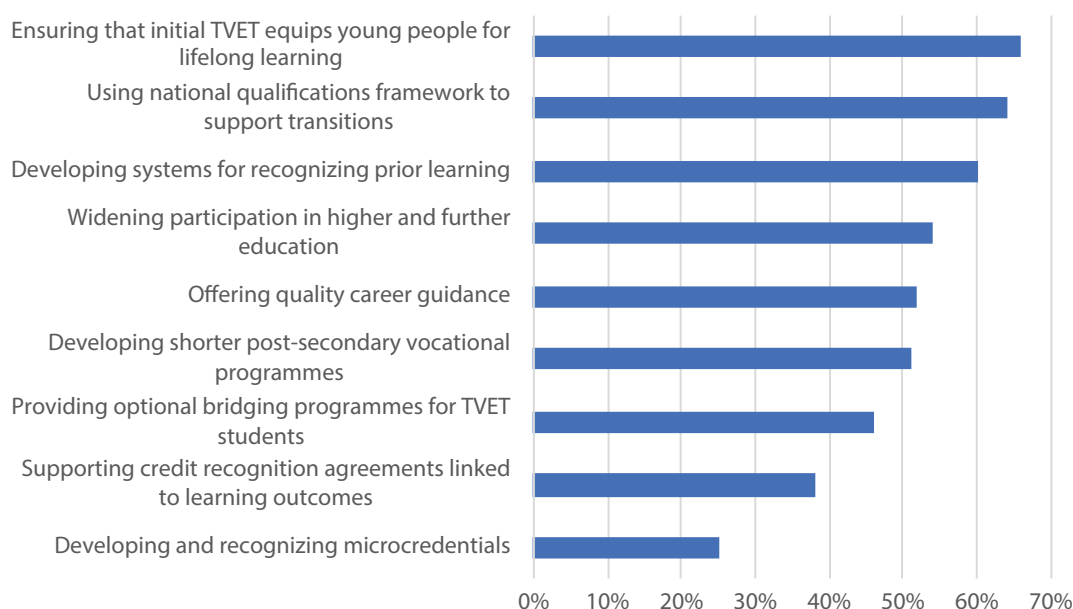
TVET Graduates' Progression into Further and Higher Education, and Training Programmes

Responding States reported practical measures adopted to help TVET graduates progress into further and higher education, and training programmes. These included ensuring that initial TVET equips young people for lifelong learning (66% of States); using national qualifications framework to support transitions (64%); developing systems for recognizing prior learning (60%); widening

participation in higher and further education to allow improved access for TVET graduates (54%); offering quality career guidance (52%); developing shorter post-secondary vocational programmes (51%); providing optional bridging

programmes for TVET students (46%); supporting credit-recognition agreements linked to learning outcomes (38%); and developing and recognizing micro-credentials (25%).

Figure 8. Practical Measures to Encourage TVET Graduates' Progression into Further and Higher Education, and Training Programmes, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022-2023).

Responding States' examples of initiatives to help TVET graduates progress into further and higher education and training programmes include efforts to recognize, validate, and accredit prior learning. For example, **Bangladesh** plans to establish Recognition of Prior Learning (RPL) Centres in countries with large populations of Bangladeshi migrants, while raising investment at home to recognize acquired skills and knowledge and so provide enhanced pathways into further education and training. In **Croatia**, a coherent system of recognition of informally acquired knowledge and skills will be established to ensure greater accessibility to lifelong learning. In **Germany**, RPL was included in the amendments to the 2020 Vocational Training Act; the changes to the 2005 act included the testing of an RPL framework (ValiKom) to validate non-formally and informally acquired occupational skills and competences before nationwide implementation. In the **Republic of Moldova**, lifelong-learning policies have been oriented towards the validation of non-formal and informal education. The National Qualifications Centre in the **United Arab Emirates** published a RPL policy in 2021 that supports the enhancement of lifelong learning in collaboration with relevant industry sectors.

An example of a national qualifications framework supporting transitions and providing bridging programmes for TVET students is **Bangladesh's** newly established NQF, which provides flexible qualifications acquisition through vertical and horizontal pathways, lifelong learning, credit transfer, and bridging mechanisms.

Examples of establishing and recognizing micro-credentials in TVET in responding States included **Croatia's** concept of micro-credentials introduced in the 2022 Adult Education Act, and **New Zealand's** inclusion of micro-credentials in the recently renamed national New Zealand Qualifications and Credentials Framework.

Continuing Training and Professional Development for Adult Learners

Three States reported on measures adopted in the period 2019–2022 to improve support the continuing training and professional development of adult learners, as called for in the 2015 TVET Recommendation. In **Cyprus**, one of the five priorities of the national Strategic Plan for the System of TVET, 2022–27 is to further promote a lifelong-learning culture, by providing adults with more learning opportunities to either improve their skills or acquire new

in-demand skills. In **Botswana**, Rapid Skills Training centres have been established across the country to offer short-term training for people of all ages and promote lifelong learning. In **Georgia**, since 2019, the Ministry of Education and Science has developed the formal adult-vocational education system to offer vocational training and retraining programmes.

4.4. Quality and Quality Assurance

A High-Quality Learning Environment

States' responsibility to ensure a high-quality learning environment is specifically mentioned in the 2015 TVET Recommendation. This can be separated into two parts: quality physical teaching and resource materials, and a system's capacity for quality enhancement.

Table 5. Reporting States' ability to deliver adequate teaching and resource materials according to skill types, 2019–2022

	Foundation skills	Transferable skills	Job-specific skills	Green and sustainable skills	Digital skills
To no extent (not at all)	7%	2%	3%	8%	6%
To a little extent	11%	15%	13%	23%	13%
To some extent	14%	25%	18%	23%	16%
To a large extent	36%	28%	29%	21%	36%
To a very large extent	18%	15%	24%	8%	14%
Missing data / no response	14%	15%	13%	17%	16%

Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Note: Missing data refers to countries not specifying information; numbers have been rounded to the nearest significant figure.

Teaching and Resource Materials for TVET

The availability of teaching and resource materials (including information and communication technology – ICTs – and audiovisual materials) to teach and deliver foundation skills was reported by 54% of responding States, 'to a very large extent' by 18% and to a large extent by 36%. However, 18% of responding States indicated inadequate teaching and resource materials,⁵⁰ including **Albania, Antigua and Barbuda, Benin, Botswana, Burkina Faso, Chile, Egypt, Iceland, Libya, Madagascar, Mali, Nepal, Republic of North Macedonia, Romania, South Africa, and Tunisia**.

The availability of teaching and resource materials (including ICTs and audiovisual materials) to teach and deliver transferable skills was reported by 43% of States (15% 'to a very large extent'; 28% 'to a large extent'). However, 17% indicated inadequate teaching and resource materials⁵¹ including **Antigua and Barbuda, Benin, Botswana, Burkina Faso, Chile, Egypt, Gambia,**

Iceland, Kyrgyzstan, Libya, Nepal, Republic of Moldova, Romania, Tunisia, and Yemen.

The availability of teaching and resource materials (including ICTs and audiovisual materials) to teach and deliver job-specific skills was reported by 53% of States (24% 'to a very large extent'; 29% 'to a large extent'). However, 16% of ⁵² indicated inadequate teaching and resource materials, including **Albania, Andorra, Antigua and Barbuda, Benin, Botswana, Burkina Faso, Burundi, Egypt, Gambia, Iceland, Libya, Nepal, Tunisia, and Yemen**.

The availability of teaching and resource materials (including ICTs and audiovisual materials) to teach and deliver green and sustainable skills, was reported by only 29% of States (8% 'to a very large extent'; 21% 'to a large extent'). However, 3⁵³ responding States indicated inadequate teaching and resource materials, including **Antigua and Barbuda; Azerbaijan; Benin; Botswana; Brunei Darussalam; Burkina Faso; Burundi; Cambodia;**

⁵⁰ Defined as either reporting 'not at all' or 'to a little extent'.

⁵¹ Defined as above.

⁵² Defined as above.

⁵³ Defined as above.

Chile; Côte d'Ivoire; Estonia; Ethiopia; Georgia; Iceland; Kenya; Libya; Lithuania; Luxembourg; Macao, China; Madagascar; Mongolia; Morocco; Nepal; Romania; State of Palestine; Tunisia; and Yemen.

The availability of teaching and resource materials (including ICTs and audiovisual materials) to teach and deliver digital skills was reported by 50% of States (14% 'to a very large extent'; 36% 'to a large extent'). However, 19% of⁵⁴ indicated inadequate teaching and resource materials,

including **Antigua and Barbuda, Benin, Botswana, Burkina Faso, Cambodia, Ethiopia, Gambia, Georgia, Iceland, Libya, Madagascar, Myanmar, Nepal, Romania, Tunisia, and Yemen.**

Several responding States indicated inadequate teaching and resource materials across multiple skill areas, with States indicating inadequacies across at least four of the five skill areas including **Antigua and Barbuda, Benin, Botswana, Burkina Faso, Iceland, Libya, Nepal, Romania, Tunisia, and Yemen.** Obviously, these gaps are both subjective and relative, and do not suggest that the resource context in Iceland and Yemen are in any similar in absolute terms.

Quality Assurance in TVET

The 2015 TVET Recommendation noted that, 'States should establish a system for quality assurance in TVET based on participation by all relevant stakeholders. Two-thirds (66%) of responding States indicated that there have been specific reforms or legislation on quality assurance over the reporting period: 100% in Central Asia; 88% in East Asia and the Pacific; 69% of Arab States; 67% in sub-Saharan Africa and Central and Eastern Europe; 60% in Latin America and the Caribbean; and 50% in North America and Western Europe. The most common measures reported include establishing clear and measurable objectives and standards (49%); introducing regulation of private TVET providers (32%); and making TVET system evaluation and performance data accessible (30%).

Leadership and Management of TVET Institutions

The 2015 TVET Recommendation noted that, 'States should seek to improve the leadership and management of TVET institutions' to improve their quality. Over half (53%) of States reported having specific policy measures dealing with the treatment of TVET teachers by TVET institution leaders. This was highest among responding

States in Central Asia (80%), Arab States (77%), Central and Eastern Europe (57%), and lowest among States in East Asia and the Pacific (22%) and South and West Asia (0%). Such policy measures include specific requirements to becoming a leader of a TVET institute (**Austria, Azerbaijan, Croatia, Cyprus, Estonia, Finland, Gambia, Jordan, Kyrgyzstan, Lesotho, Libya, Qatar, and Republic of North Macedonia**); and measures to attract and retain good TVET institute leaders, such as **Ethiopia's** merit-based system established to recruit, deploy, and retain competent institutional TVET leaders.

States without dedicated TVET-teacher policies, noted other ways in which they have sought to improve the leadership and management of TVET institutions. For example, **Bangladesh** indicated it has instigated training of TVET leaders on institutional governance and management.

4.5. Relevance to Labour Markets and Work

Encouraging Entrepreneurship

Several States have made the promotion of entrepreneurship one of their key objectives. For example the development of entrepreneurial skills for TVET students was noted by **Andorra, Armenia, Austria, Bahrain, Bangladesh, Bosnia and Herzegovina, Burkina Faso, Burundi, Croatia, Egypt, Ethiopia, Gambia, Luxembourg, Madagascar, Malaysia, Morocco, Nicaragua, Oman, Republic of Moldova, South Africa, Spain, Sudan, Tunisia, Yemen.** Similar programmes for TVET teachers were reported by **Armenia, Bangladesh, and Germany,** while **Georgia** noted its promotion of the wider concept of an entrepreneurial ecosystem within TVET institutions.

Armenia reported providing online courses on entrepreneurship during the COVID-19 pandemic. In **Bangladesh,** entrepreneurship development courses have been incorporated into every level of TVET, and entrepreneurship training is also being provided to TVET teachers. In **Georgia,** the promotion of entrepreneurial ecosystems includes understanding the organizational culture of institutions and forming broad visions of TVET institutions, as well as the development and implementation of new approaches and models for institution management, organization restructuring, staff development, developing entrepreneurial competencies, and developing and implementing flexible mechanisms for conducting economic activities. TVET institutions are encouraged to transform themselves into more agile and

⁵⁴ Defined as above.

entrepreneurial institutions, with specific activities to promote this; for example, a manual, *Internal Institutional Entrepreneurship in Vocational Education Institutions*, was developed, institutional development plans were drafted, and self-directed training on entrepreneurship in vocational education institutions was completed. In **Luxembourg**, the Jonk Entrepreneuren initiative, created in 2015 and part of JA Worldwide, has rolled out projects in secondary schools, such as an annual national competition that encourages values, schools to develop entrepreneurial initiatives for learners and teachers.⁵⁵ In **Malaysia**, entrepreneurial education is embedded across the curriculum in addition to special courses on entrepreneurship within TVET. In **Nicaragua**, Hackathon and Innovatec conferences are held for the development of innovation and entrepreneurship skills.

TVET and Industry 4.0

While not referring directly to Industry 4.0, the 2015 TVET Recommendation fully acknowledged a context of rapid technological change. Fifty-six per cent of States reported developing specific TVET policies to prepare for or respond to the changing labour and manufacturing markets of Industry 4.0 during the period 2019–2022. Such policies were significantly more prevalent in North America and Western Europe (80% of States), East Asia (75%), and Central and Eastern Europe (75%), than in Latin America and the Caribbean (40%) and sub-Saharan Africa (33%). Examples of policies given included **Cyprus** where the Department of Secondary Technical and Vocational Education and Training has developed close cooperation with employers' organizations and specific specialized professional associations, including the Association of Cyprus Tourist Enterprises, the Cyprus Shipping Chamber, the Cyprus Cheesemakers' Association, and the Cyprus Furniture and Woodworking Association, to ensure that offered TVET programmes are in demand in the labour

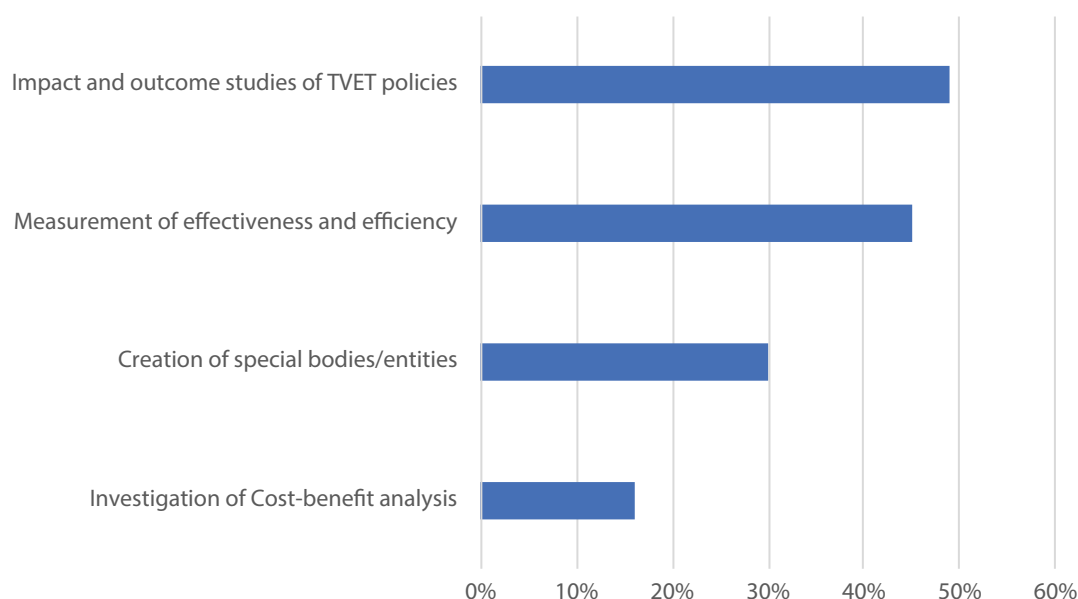
market and that TVET graduates will be able to secure employment. Aiming to further enhance employer engagement, the Ministry of Education, Sport and Youth signed Memoranda of Cooperation with the Cyprus Chamber of Commerce and Industry (June 2019) and the Cyprus Employers and Industrialists Federation (July 2019), which included measures to develop new or review existing TVET specializations that align with changing labour-market needs, alongside measures to support and facilitate the industrial placement and work-based learning of TVET students in enterprises. The implementation of these measures is ongoing, with Liaison staff now appointed to support and facilitate their implementation.

In **Croatia**, as a part of ongoing TVET curricula reform more than 130 new TVET curricula are being developed based on standards of qualification and occupational standards. New modular-learning outcome-based curricula will be introduced.

TVET Management Information Systems

The 2015 TVET Recommendation calls on States to establish TVET management information systems and 83% of States reported investment in these over the 2019–2022 reporting period. The most common type of reform (72% of States) was systematic data collection on learners' registration information, such as enrolment and completion rates. Second was the systematic collection of data on learners' certificates (66% of States). Third was the systematic collection of data on teachers and instructors from TVET institutions (61% of States). TVET authorities' use of labour-market information – such as labour-force and businesses surveys, to inform evidence-based TVET policies, strategies and programmes – was employed by 52% of States. The least common reform was the collection of data on TVET institutions' infrastructure and equipment (45%).

⁵⁵ <https://jonk-entrepreneuren.lu>

Figure 9. States' reforms to strengthen TVET management information systems, 2019–2022, percentage

Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

Labour-Market Information Systems

The 2015 TVET Recommendation called on States to develop labour-market information systems for the TVET sector, in order to ensure the relevance of TVET to current and evolving labour needs, nationally, regionally and internationally, including those created by the transition to green occupations, economies, and societies.

Over half (53%) of States reported specific investment in TVET management-information systems to include labour-market data over the reporting period. The reported incidence of this was highest in North America and Western Europe (67%), East Asia and the Pacific (63%), Central and Eastern Europe (62%), and Latin America and the Caribbean (60%).

In **Albania**, the National Employment and Skills Strategy 2019–2022 aimed to improve the quality and gender sensitivity of labour-market information, develop information-sharing instruments for labour-market data, and establish sectoral-skills forecasting mechanisms. In **Indonesia**, the 2022 National Strategy of Vocational Education and Vocational Training included the objective of developing an effective system to monitor labour-market demand.

Tracer Studies

The most common measure adopted in the reporting period (30% of States) was the use of tracer studies. For

example, **Georgia's** national Skills Agency is supporting TVET institutions' efforts to gather and analyse graduate feedback using a uniform survey instrument and procedures developed by ETF and ILO. TVET institutions play the main role in the data collection and data-analysis process, with additional technical support from skills agencies, using a specially designed electronic platform. Findings are used in the decision-making process on three levels: on the micro level (for example, to evaluate TVET programmes); on the meso- level (to improve services provided by TVET institutions); and on the macro level (to analyse skills mismatch patterns and to improve education and employment policies).

Malaysia has developed a TVET Graduate Tracer System (Sistem Kajian Pengesanan Graduan TVET), while **Pakistan** is investing more in tracer studies conducted by third parties. In **Spain**, statistics from tracer studies of vocational-training graduates have been collected annually since 2020.

Establishing Special Bodies and Entities

Over a fifth (21%) of responding States established special bodies and entities, such as observatories or skills councils, over the reporting period. Many such arrangements were public-private partnerships, as recommended in the 2015 TVET Recommendation. In **Albania**, a Sector Skills Council was established for the ICT sector and initial activities were launched in 2022.⁵⁶ In **New Zealand**, six industry-led Workforce Development Councils (WDC) were established

56 European Training Foundation. 2023. 'Key Policy Developments in Education, Training and Employment – Albania 2022'. www.etf.europa.eu/en/document-attachments/key-policy-developments-education-training-and-employment-albania-2022

in October 2021 to ensure the vocational education system met industry needs and gave a stronger voice to Māori business development. WDC now set standards, develop qualifications, and help shape the curriculum of vocational education.

Impact Studies and Measures to Use Open and Real-Time Labour-Market Data

Seventeen per cent of responding States reported investing in impact studies, while 16% reported measures to use open and real-time labour market data. Few illustrative examples were provided by States about impact studies: **Malta** noted that the Malta College for Art, Science and Technology has promoted impact research at vocational and professional levels, while **Pakistan** noted greater investment in third-party impact evaluation studies.

4.6. Information and Guidance

The 2015 TVET Recommendation advised that States ‘should facilitate, in cooperation with relevant stakeholders, the development and regulation of public and private information and guidance services’. Eighty-five per cent of States reported having taken specific measures to improve information and guidance services for learners in the period 2019–2022.

Counselling and Guidance at TVET Institutions

The establishment of counselling and guidance services at TVET institutions, reported by 54% of States, was the most common reported measure. Just under a quarter (24%) of States also reported the setting up of special bodies or entities, such as guidance and counselling centres.

In **Austria**, a new educational and career-orientation process called BBO Tool was introduced. By enabling a closer look at basic career planning skills, school subject interests, and selected aspects of school success, the BBO Tool aims to ensure that pupils, legal guardians, and teachers are aware of the next necessary steps in the career-orientation or educational career-planning process. In **Azerbaijan**, seven new career centres have been established at TVET providers and capacity building provided for career counsellors within international and national projects. A particular focus on integrating digital technologies to improve access, mobility, and inclusion in career guidance has made the service more accessible to those in remote rural areas who are otherwise without access to career centres or counsellors. In **Chile**, optional vocational guidance workshops have been incorporated into vocational technical high schools. In **Georgia**, the

VET system is actively working towards the development of lifelong career-guidance services. The new strategy for the development of career-management services at all levels of formal education (2023–2026) is focused on the development of continuous services between these levels. At the vocational-education level, career-guidance services have been divided into interventions aimed at pre-students, students, and graduates. In **Germany**, lifelong vocational guidance is being implemented in the context of the Federal Employment Agency’s 2025 Strategy (*Strategie 2025 der Bundesagentur für Arbeit*). Lastly, in **Poland**, the Regulation of the Minister of National Education of 12 February 2019 introduced 10 hours a year of compulsory vocational counselling classes into secondary schools, including those providing vocational education. The measure defines the career-guidance programme, the methodology of career advice in secondary-level vocational training, and vocational counsellors’ tasks.

Information Gateways

Forty-seven per cent of responding States indicated using information gateways to reach TVET learners with advice during the reporting period. For example, in **Lithuania** has designed and introduced a ‘one-stop’ information platform for adult education.

Jobs Fairs

Forty-four per cent of States reported using jobs fairs over the reporting period as a means to improve information and guidance services for learners.

5. Monitoring and Evaluation

Monitoring and Evaluation of TVET Policies and Programmes

The 2015 TVET Recommendation called on States to evaluate their TVET policies and programmes. Seventy-nine per cent of States reported specific measures to improve the monitoring and evaluation of TVET. The most common measures – adopted by about half of States – included studies of impact and outcomes of TVET policies, as well as the measurement of effectiveness and efficiency. Another measure, reported by 30% of States, was the establishment of special bodies or entities, while 16% reported examining cost-benefits.

Studies of Impact and Outcomes of TVET Policies

Overall, 49% of States reported having undertaken impact and outcome studies of TVET policies over the reporting period. This was true for a significantly higher proportion of States in East Asia and the Pacific (66%) and Central and Eastern Europe (64%) than other regions, such as Latin America and the Caribbean. For example, in **Lithuania**, the government's Strategic Analysis Centre publishes an annual VET monitoring report *Vocational Education and Training in Lithuania*.⁵⁷ Since 2020, evaluation of VET providers' activities has been based on external performance indicators, self-assessment, and VET monitoring data.

Measuring Effectiveness and Efficiency

Overall, 45% of States reported that measuring effectiveness and efficiency was an area of attention in the period 2019–2022. For example, in **Armenia** the government programme for 2021–2026 envisaged integrating a monitoring and evaluation system into VET institutions to measure effectiveness and efficiency. At the time of the Second Consultation, however, no specific schemes and mechanisms allowing VET institutions to report to the Ministry of Education had been established, except for quarterly financial reporting. In **Hungary**, a

process to develop a quality- and institutional-management system was launched in June 2021, in the framework of a working group, for which the European Quality Assurance in VET framework was incorporated as much as possible. This saw the creation of a self-evaluation manual for VET institutions and a method for performance evaluation of VET trainers and institution heads. In **Morocco**, at the time of the second Consultation, the Department of Vocational Training was in the process of generalizing the adoption of a national self-evaluation system for public and private training establishments.

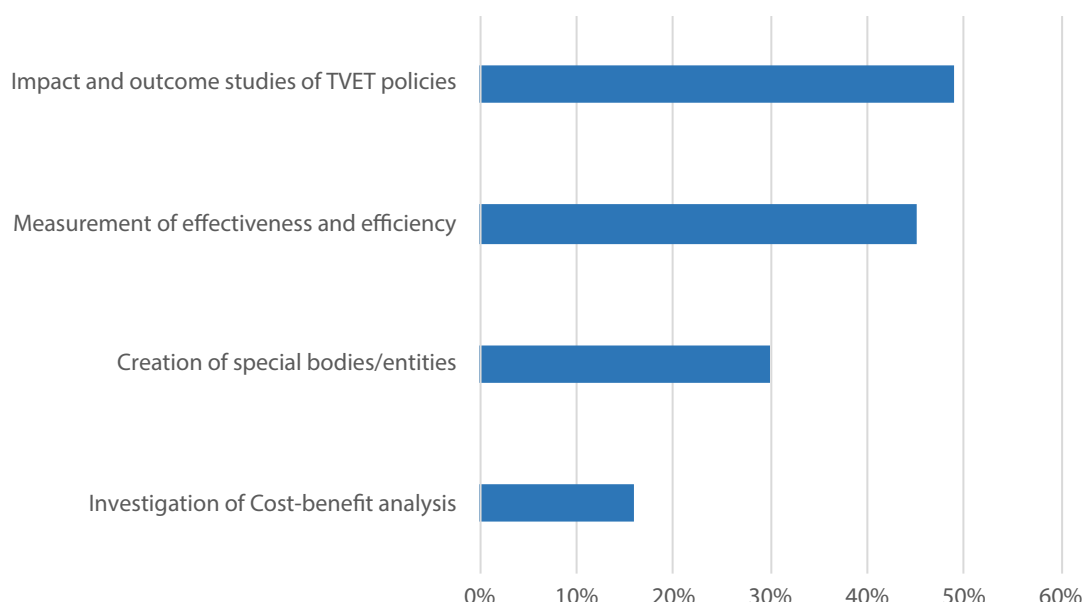
Creation of Special Bodies and Entities

Overall, 30% of States reported measures to improve the monitoring and evaluation of TVET over the reporting period, including establishing special bodies and entities. No examples were provided.

Investigation of Cost Benefits

Cost-benefit analysis was among the least common measures reported by States to improve TVET monitoring and evaluation; reported by only 16% of States (see Figure 10). No States in the Second Consultation provided any examples of this.

Figure 10. Areas of increased TVET monitoring and evaluation reported by States, 2019–2022, percentage



Data Source: 2nd consultation on the Implementation of the 2015 Recommendation concerning TVET (2022–2023).

⁵⁷ See, for example, Government Strategic Analysis Center. 2021. *Vocational Education and Training in Lithuania 2020*. <https://strata.gov.lt/wp-content/uploads/2024/01/20211118-vocational-education-and-training-in-Lithuania-2020.pdf>

6. Research and Knowledge Management

The 2015 TVET Recommendation called on States to deepen their knowledge bases for TVET through sustained investment in interdisciplinary research. Nevertheless, only 45% of States reported invested in this area over the reporting period.

The most common measures were increased academic and applied research in TVET (29% of States), as well as better promotion of its dissemination (28%), for example, through the creation of TVET research institutes, journals, and research forums. Measures to support interdisciplinary research on TVET were reported by 16% of States. For example, in **Chile**, more funds were made available to higher TVET institutions in the reporting period to develop institutional capacities in subjects including the environment, entrepreneurship, innovation, and transfer technology, especially in terms of applied innovation. In **Georgia**, a research team was formed within the framework of the Skills Agency to implement evidence-based policies and to develop research competencies in professional educational institutions. In **Saint Lucia**, one of the policy objectives in the National TVET Policy and Strategy 2019–2025 has been to provide a framework to ensure that TVET decision-making is knowledge-driven and evidence-based; this includes more investment in research and monitoring and its required use in TVET decisions and activities to foster a culture of evidence-based decision-making.⁵⁸ In the United Kingdom, the Scottish government's *Skills for a Changing World*, a strategic plan for 2022–2027, notes an intention for 'enhanced use of data and intelligence to inform collaboration and learning provision, creating a more agile and responsive skills system'.⁵⁹ In **South Africa**, a national list of occupations in high demand is compiled every two years to support planning processes in the post-school education and training sector, and improve system responsiveness to the needs of the economy and the country's broader developmental objectives.⁶⁰

7. International Cooperation

The 2015 TVET Recommendation noted that, 'States should consider sharing knowledge, experiences and promising practices, reinforce international TVET data collection and make use of international and regional networks, conferences, and other fora'.

7.1. Variations in Cooperation According to World Regions

Ninety-eight per cent of States reported actively promoting international cooperation and knowledge sharing in TVET.

Western Europe

States in Western Europe noted cooperation with each other through EU cooperation in vocational education and training initiatives, such as the European Qualifications Framework, European Credit System for Vocational Education and Training (ECVET), and ERASMUS+, as well as through bodies including Cedefop, Eurydice, Advisory Committee for Vocational Training, European Training Foundation, and EuroSkills. Additionally, cooperation may be through States' national institutions, as well as national development agencies, such as FCDO and GIZ, UN agencies including UNESCO and ILO, and international organizations like WorldSkills and the OECD.

Central and Eastern Europe

States in Central and Eastern Europe largely noted cooperation with European organizations, including the European Commission, European Training Foundation, and Cedefop; frameworks such as the European cooperation in education and training or ET 2020; and other European countries. International organizations referred to include UN organizations (ILO, UNDP, UNESCO, UNICEF, UNIDO) and international NGOs (World Vision). For example, in **Armenia** in 2020–2021, the Ministry of Education cooperated with GIZ to revise and upgrade the regulatory and bylaw framework of the country's TVET system. This aimed to provide a solid base for the implementation of work-based learning and the dual system, creating effective mechanisms for work-based learning, facilitating work-based learning methodology, reinforcing regulation, and improving the legal bases for cooperation with the

58 Government of Saint Lucia. 2019. TVET Saint Lucia: A Broader Perspective. Saint Lucia National Technical and Vocational Education and Training (TVET) Policy & Strategy 2019–2025. https://planipolis.iiep.unesco.org/sites/default/files/ressources/saint-lucia_tv-et-strategy-2019-2025.pdf

59 Skills Development Scotland. 2022. Skills for a Changing World: Strategic Plan, 2022–2027. www.skillsdevelopmentscotland.co.uk/media/49796/sds-strategic-plan-2022-27.pdf

60 Department of Higher Education and Training. 2019. National Skills Development Plan 2030. Pretoria, Republic of South Africa. www.merseta.org.za/wp-content/uploads/2021/04/Promulgation-of-the-National-Skills-Development-Plan.pdf

private sector. Additionally, GIZ support helped create an e-learning platform for distance education within the vocational-education system.

Central Asia

Central Asian countries reported cooperation with international organizations including UNESCO and UNEVOC, as well as with regional organizations such as the European Training Foundation, the European Union, and the Asian Development Bank. Bilateral cooperation was reported with Germany (GIZ), Japan (JICA), and Korea (KOICA). Other types of collaboration included those with WorldSkills International. For example, **Georgia** noted cooperation between its Vocational Skills Agency and GIZ on a 2021 programme called Development of the Private Sector and Vocational Education in the South Caucasus, which supported the development and revision of vocational qualifications in Georgia.

Latin America and the Caribbean

Latin American countries reported cooperation with international organizations including the European Union, FAO, ILO, OECD, UNESCO, UNIDO, and World Bank. The extent of regional South-South cooperation in Latin America was noteworthy, including with regional organizations such as the Inter-American Centre for Knowledge Development in Vocational Training (Cinterfor), the Inter American Development Bank, and the Pacific Alliance. For example, **Colombia** uses the Pacific Alliance to exchange experiences and cooperate regionally to strengthen TVET, allowing it to share knowledge with the other Alliance members (Chile, Mexico and Peru) and receive assistance from the Canadian government through Colleges and Institutes Canada. In the Caribbean, **Cuba** and **Trinidad and Tobago** noted cooperation through the UNEVOC network, as well as through projects with UNICEF and the ILO. **Trinidad and Tobago** also noted its engagement with the Caribbean Association of National Training Agencies.

East Asia

States in East Asia reported cooperation with international organizations, including ILO, UNESCO, UNIDO, UNICEF, Asian Development Bank, and World Bank, as well as regional organizations including the Association of Southeast Asian Nations, and SEAMEO-VocTech. States also reported bilateral cooperation with agencies including GIZ, JICA, KOICA, and Swiss Agency for Development and Cooperation (SDC).

South and West Asia

States in South and West Asia reported cooperation with international organizations including the ILO and KOICA.

Africa

States in sub-Saharan Africa reported cooperation with international organizations, including UNESCO, UNICEF, ILO, African Development Bank, and World Bank, and with regional organizations including the African Union, ECOWAS, Southern African Development Community, and the West African Economic and Monetary Union (WAEMU). Bilateral cooperation was reported by several African States with China, Germany (GIZ), Italy, India, Japan (JICA), Korea (KOICA), and Norway.

Arab States

In the non-GCC Arab States, the majority of international cooperation reported by responding States was cooperation with international and regional organizations (EU, European Training Foundation, ILO, UNESCO, UNIDO, UNDP, and World Bank) and bilateral overseas development-aid donors, such as Spain's AECID, France's AFD, GIZ, JICA, KOICA, and USAID. For example, in **Morocco**, several projects have been implemented within the framework of international cooperation, including the Integrated Programme of Support for the Training and Education Sector (PIAFE) with the European Union, and the Supporting the Economic Inclusion of Youth project with the World Bank. Morocco also noted cooperation with African countries, in particular for the reception of trainees and technical assistance for the development of training programmes and the creation of training centres, and participation in the African Alliance for the Development of Vocational Training, with activities including twinning, training, travel exchanges, expertise, and documentation.

In GCC Arab States, cooperation was noted with UNESCO and the ILO, in addition to bilateral partnerships, for example, between Bahrain and the UK's Scottish Qualification Authority and Engineering Construction Industry Training Board.

7.2. Cooperation with UNEVOC

The 2015 TVET Recommendation specifically notes that, the 'UNEVOC Network is a strategic resource available to States for mutual learning and advancing international cooperation in TVET'. Of the responding States, 74% reported having a member institution of the UNEVOC Network. Of these, the most common form of cooperation

was reported to be participation in the UNESCO-UNEVOC TVET Forum and virtual conferences, followed by UNEVOC capacity-building programmes, and engagement with UNEVOC publications and knowledge products. Only about 10% of States reported that their UNEVOC member-institutions had been involved in UNEVOC-funded projects.

8. Comparison Between the First and Second Consultations

While this report's primary purpose is to record the findings of the Second Consultation, it is perhaps also useful to compare these with those of the First Consultation held in 2019.

Unfortunately, several factors make it hard to compare directly the two Consultations.

1. Not all States that participated in the First Consultation in 2019 responded to the Second in 2022, while some States responded to the Second Consultation but not to the First. As such, it is impossible to make a direct comparison between all 89 responding States in the First Consultation and all 87 responding States in the Second, either overall or in terms of regional averages. Fifty-five States did participate in both Consultations and so a comparison between this sub-set of responding countries is possible.
2. The time frame between both consultations was perhaps not long enough to see any real direction of movement. When data on the 55 comparable States were compared, no major differences were observed.
3. The wording of many questions in the two Consultations does not allow for easy comparison. For example, as some questions explicitly started with the phrase 'In the last four years...', while many other questions did not, it was unclear if certain responses referred solely to the reference period of the Second Consultation or not. Indeed, many of the responses to the more open-ended questions specifically made reference to activities that had taken place outside the Second Consultation's reference period.

Many questions asked if there had 'been increased emphasis in the last four years' on a particular issue. A respondent's answer to this question may therefore simply have been responding to the notion of *increased* emphasis, rather than that of any emphasis at all.

9. The Way Forward and Specific Recommendations

The Second Consultation has led to six specific recommendations for measures and guidelines that States might consider for further realizing the principles and provisions of the 2015 TVET Recommendation.

1. More focus on the issue of resilience in TVET is needed.

Despite the forward-looking scope of the 2015 Recommendation, the number and extent of multiple (and often overlapping) crises, as well as the extremely fast pace of developments in digital technologies, could not have been envisaged at the time of its creation. These crises include armed conflict, violence and forced displacement; economic volatility; health emergencies, including the recent COVID-19 pandemic; the global climate crisis; and geophysical natural disasters. This unpredictable context demands significantly more focus on the issue of resilience in TVET, both from the perspective of strengthening TVET systems to make them better able to respond to, recover from, and prepare for crises and disruption, and the role they can play in strengthening individual and business resilience. The particular challenges in implementing the 2015 Recommendation faced by States in conflict and protracted crises continue to require greater attention.

2. States without dedicated TVET policies should consider their development, potentially with UNESCO support.

A need remains for a more holistic approach to TVET policies that combines economic growth, social equity, and sustainability concerns in a balanced and strategic manner, as suggested by the 2015 TVET Recommendation. As a large number of States do not yet have dedicated TVET policies, UNESCO could play a role. States without dedicated TVET policies include those whose TVET policies are part of other government policies (**Belgium; Brunei Darussalam; Cameroon; Croatia; Cuba; Denmark; Finland; Iceland; Japan; Kyrgyzstan; Lao People's Democratic Republic; Latvia; Macao, China; Mauritius; Mongolia; Oman; Republic of Moldova; Romania; Slovenia; Switzerland; Trinidad and Tobago; Türkiye; and United Arab Emirates**), and those currently without

TVET policies (including **Andorra, Colombia, Mali, North Macedonia, State of Palestine, and Sweden**). The latter group of States might be the initial priority for UNESCO support.

3. More attention should be given to how the 2015 TVET Recommendation could inform thinking beyond ministries of education.

Since TVET remains fragmented across multiple ministries in most countries, more attention needs to be given at the country level to how the 2015 TVET Recommendation can inform TVET policy and practice beyond ministries of education.

4. TVET in the informal economy continues to receive insufficient attention despite the promotion of TVET in the informal economy being specifically mentioned in the 2015 TVET Recommendation and the persistently large size of the informal skills system globally.

An important gap in both the First and Second Consultations on the 2015 TVET Recommendation is the almost complete lack of mention of informal TVET teaching and learning. This information gap is, in part, due to the majority of respondents from States being from Ministries of Education and so likely answering the question about the ‘most dominant mode of initial TVET’ from their ministerial perspective. For example, none of the fifteen reporting States from sub-Saharan Africa indicated that informal apprenticeship was the dominant mode of initial TVET, despite that fact being widely known in the majority of reporting countries with substantial informal economies, such as **Benin,**

Botswana, Burkina Faso, Burundi, Cameroon, Côte d’Ivoire, Gambia, Kenya, Mali, and Tanzania.

5. More attention should be given to how funds are allocated, and not just about increasing resource levels.

The 2015 TVET Recommendation referred both to a need to diversify sources of funding and to create innovative funding mechanisms, while moving from traditional input-based allocation models and resource use to more performance-based financing models. As with the First Consultation, States’ responses to the Second tended to focus on the objective of diversifying and increasing resource levels for the funding of TVET, rather than how financing mechanisms might have been used to incentivize TVET policy objectives, such as improvements in quality, relevance, and equity.

6. Improvements to the consultation process are required to close gaps in the implementation of the 2015 Recommendation’s principles and provisions.

This could be done, for example, by widening the consultation’s scope beyond ministries of education that are currently the main respondents. Additionally, room remains for improvement in the questionnaire itself; for example, by reworking questions for which it was unclear if countries’ responses related to the Second Consultation’s reporting period.

Recommendation on Technical and Vocational Education and Training (2015)

Results of the Second Consultation of Member States
on the Implementation of the UNESCO TVET
Recommendation, 2019–2022

The UNESCO Recommendation concerning Technical and Vocational Education and Training was adopted by UNESCO's General Conference in November 2015. It aims to promote technical and vocational education and training (TVET) as part of lifelong learning and to contribute to employment and decent work, inclusive and sustainable economic growth and competitiveness, social equity, and environmental sustainability.

This report presents a synthesis of the outcomes of the Second Consultation of Member States on the implementation of the 2015 TVET Recommendation, covering the period from 2019 to 2022. The report, drawing on the responses of nearly 90 Member States, presents an overview of the current state of TVET in the world, the challenges faced and the opportunities ahead.

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