# **Education Policy Perspectives**

Directorate for Education and Skills

OECD.

# Enhancing the evaluation of VET programmes and institutions in the Republic of Moldova

This report is an output of the project "Support to implementation of education policies in Moldova", funded by the European Union.

The Republic of Moldova (hereafter "Moldova") considers education a national priority. Since the adoption of a renewed Education Code in 2014 the country's education system has been in a process of reform and modernisation, with an increasing focus on strengthening education governance and improving the quality of education. Building on the steady progress made in recent years, the Ministry of Education and Research (MoER) launched its Education Development Strategy 2030 in March 2023.

The MoER considered that the successful implementation of the strategy would benefit from a deeper analysis on several policy domains. It therefore requested the Delegation of the European Union to the Republic of Moldova to engage the OECD to undertake a deeper analysis of selected policy domains that are central to the success of the education reform of Moldova, with a focus on understanding the potential challenges to the implementation of reform initiatives and providing concrete advice to overcome these. The MoER expressed a keen interest to learn from international research evidence and relevant international examples that could help advance its education reform agenda and where possible "leapfrog" (i.e. make non-linear, rapid progress), with a particular interest in harnessing the potential of digital technologies in education. This request and expression of interest by the MoER laid the foundation for the project "Support to the implementation of education policies in Moldova", funded by the EU.

This report is the second output of the project "Support to implementation of education policies in Moldova" and presents an analysis of one of the (three) selected policy domains: "the evaluation of Vocational Education and Training (VET) programmes and institutions in order to improve their functioning". The first report and output of the project presents an in-depth analysis of the policy domains: "professional development of teachers and other education professionals" and "curriculum and learning resources" and was developed in collaboration with the UNESCO International Institute for Education Planning (IIEP).

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# 1. Introduction

#### Background

The Republic of Moldova considers education a national priority. Since the adoption of a renewed Education Code in 2014 (Parliament of the Republic of Moldova, 2014<sub>[1]</sub>) the country's education system has been in a process of reform and modernisation, with an increasing focus on strengthening education governance and improving the quality of education. Following the conclusion of its 2014-2020 Education Development Strategy (Government of the Republic of Moldova, 2014<sub>[2]</sub>), the Ministry of Education and Research (MoER) began developing its Education Development Strategy 2030, also referred to as "Education 2030", that was published in March 2023 (Government of the Republic of Moldova, 2023<sub>[3]</sub>).

The MoER considered that the successful implementation of the new strategy would benefit from a deeper analysis on several policy domains. It therefore requested the Delegation of the European Union (EU) to the Republic of Moldova to engage the OECD to undertake a deeper analysis of three policy domains that are central to the Education Development Strategy 2030, with a focus on understanding the potential challenges to the implementation of reform initiatives and concrete advice to overcome these. The three policy domains are: 1) professional development of teachers and other education professionals; 2) curriculum and learning resources; and 3) the evaluation of Vocational Education and Training (VET) programmes and institutions in order to improve their functioning. The MoER expressed a keen interest to learn from international research evidence and relevant international examples that could help advance, and where possible "leapfrog" (i.e. make non-linear, rapid progress), its education reform agenda, with a particular interest in harnessing the potential of digital technologies in education.

Recognising its institutional capacity for effective planning and management of education sector development in low- and middle-income countries, the OECD sought a collaboration with the UNESCO International Institute for Education Planning (IIEP) to jointly undertake the project.

The overarching objective of the project "Support to implementation of education policies in Moldova" is to support Moldova in the implementation of the new Education Development Strategy 2030 and its accompanying policies and programmes, in line with national development goals and those of the EU Eastern Neighbourhood Policy and the EU regional- and bilateral programmes for education, training and youth. Furthermore, the implementation of the new Education Development Strategy 2030 is expected to be supported by substantial external aid provided by international development partners. This project therefore not only informs the actions of the Government of Moldova, but also those of development partners in support of the implementation of the country's education reform agenda.

This report is the second output of the project that presents an in-depth analysis of the policy domain "the evaluation of Vocational Education and Training (VET) programmes and institutions in order to improve their functioning" and offers concrete recommendations for action – in support of the successful implementation of Moldova's Education Development Strategy 2030.

The first project output presents an in-depth analysis of the policy domains: "professional development of teachers and other education professionals" and "curriculum and learning resources" and was developed in collaboration with IIEP-UNESCO (OECD, 2023<sup>[4]</sup>).

Following an introduction to Moldova 's education system and a description of its VET system (Section 1), this report provides an assessment of the self-evaluation and external evaluation of upper secondary VET programmes (ISCED 3) in Moldova (Section 2). Section 3 consists of an examination of several relevant areas of policy and factors of influence for strengthening the evaluation of VET programmes and for the successful implementation of the Education Development Strategy 2030 more generally. At the end of each section, the report offers concrete recommendations for action.

#### An overview of the project and methodology

The project "Support to implementation of education policies in Moldova" aims to provide an in-depth analysis on the above-mentioned policy domains, resulting in concrete recommendations for action in support of the successful implementation of the Education Development Strategy 2030.

The project team working on this report (see Annex A) has operationalised the work by undertaking an extensive desk study of policy documents and studies, and conducted a series of semi-structured online interviews and focus group discussions with key stakeholders from different levels of the Moldovan education system, consisting of directors and teachers working in VET institutions, the MoER, the National Agency for Quality Assurance in Education and Research (ANACEC), the National Agency for Curriculum and Evaluation (NACE) and development partners active in VET in Moldova, included several meetings with the European Training Foundation whose reports were also richly drawn from in support of this review.

In May 2023 the team returned to Moldova to facilitate a 1½-day stakeholder workshop, of which the second day was devoted to the project team's preliminary findings and recommendations for strengthening the evaluation of upper secondary VET programmes and institutions. During the workshop the preliminary findings and recommendations were discussed with key stakeholders and where needed further developed (Annex B).

These activities have allowed the project team to gain an in-depth understanding of the policy domain under examination, as well as of the broader education and training context, granting the formulation of concrete recommendations for action. These are – as requested by the MoER – aimed to be as concrete as possible in terms of "what to do" and "how to do", with a particular interest in exploring opportunities for "leapfrogging" including by harnessing the potential of digital technologies in education. The international examples that are presented throughout this report are aimed to serve as a source of inspiration and offer guidance to the MoER for advancing the proposed recommendations.

#### The Republic of Moldova context

Moldova is a small country (33 850 km<sup>2</sup>) lying in the north-eastern corner of the Balkan region of Eastern Europe. The country is bordered by Ukraine in the north, east and south, while the Prut River in the west defines the boundary with Romania. The capital city Chisinau is located in the south-central part of the country. Moldova declared its independence after the dissolution of the Soviet Union in 1991, becoming a member of the United Nations in 1992. The current Constitution of Moldova was adopted in 1994 (Republic of Moldova, 2022<sub>[5]</sub>; European Committee of the Regions, n.d.<sub>[6]</sub>).

#### Population

In 2021, Moldova had just over 2.6 million inhabitants with about 43% of the population living in urban areas and 57% in rural areas (Data Commons, 2021<sub>[7]</sub>; National Bureau of Statistics, 2022<sub>[8]</sub>). Moldova's population has declined rapidly during the last decade (by 9.3% since 2014) as a result of decreasing birth rates and high emigration (National Bureau of Statistics, 2022<sub>[9]</sub>). The declining population is greatly impacting the provision of education (and other public) services as will be discussed below. In addition, Moldova has been severely impacted by Russia's war of aggression against Ukraine. Over 678 000 refugees from Ukraine – mostly women, children and senior citizens – have travelled to Moldova since February 2022. While many have moved on to Romania and other EU Member States, approximately 102 000 remained in Moldova as of January 2023 (United Nations Refugee Agency (UNHCR), 2023<sub>[10]</sub>; OECD, 2022<sub>[11]</sub>).

#### Economy

Moldova is a small lower-middle income country with a high Human Development Index<sup>1</sup> (0.767) (United Nations Development Programme, 2022<sub>[12]</sub>). Economic expansion during the past two decades and moderate growth in recent years were not sufficient to improve living standards to a significant degree. In 2021, close to a quarter (24.5%) of the population lived in absolute poverty (International Monetary Fund, 2022<sub>[13]</sub>). The national economy has been affected by systemic issues such as a population decline, limited industry (market) competition and corruption (OECD, 2022<sub>[14]</sub>; National Bureau of Statistics, 2022<sub>[15]</sub>; OECD, 2022<sub>[16]</sub>).

Economic activity and qualified workers are concentrated in the capital while the socio-economic development of rural areas is considered as weak. Labour market challenges include unemployment (5.5% in the first quarter 2023) (National Bureau of Statistics,  $2023_{[17]}$ ), a high number of young people who are neither in employment nor in education or training, a significant share of workers in jobs of poor quality, high levels of informal employment, poor access to jobs for persons with disabilities and those with low levels of educational attainment – particularly in rural areas-, and a high propensity for skills mismatch (International Labour Organisation,  $2020_{[18]}$ ).

There are some variations in unemployment and labour market participation by gender, geographic location and age. Official figures indicate relatively low gender disparities, with males slightly more affected by unemployment (57% of total unemployed in quarter 1 of 2023) (National Bureau of Statistics,  $2023_{[17]}$ ). Women are more likely to accept low-paid jobs, while men are more likely to wait or travel abroad in search of better opportunities (International Labour Organisation,  $2020_{[18]}$ ). The unemployment rate in the first quarter of 2023 was also lower in urban areas than in rural areas (4.9% compared to 6.2%, respectively). The highest unemployment rate is recorded among young people aged 15-24 (10.3%) (National Bureau of Statistics, 2023\_{[17]}).

In recent years, the COVID-19 pandemic and Russia's war against Ukraine have severely impacted Moldova's economic growth and performance (OECD, 2022[14]). In 2022, the inflation rate stood at 30% (National Bureau of Statistics, n.d.[19]), while approximately 63% of Moldovans were deemed to be in energy poverty (UNDP, 2022[20]). The Government of Moldova has demonstrated strong leadership in responding to the needs of refugees from Ukraine, promoting employment opportunities and ensuring access to public services such as education, employment, housing, security, food, health and other social

<sup>&</sup>lt;sup>1</sup> The Human Development Index (HDI) is the United Nations Development Program's summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living (United Nations Development Programme, 2022<sub>[12]</sub>).

services (United Nations Refugee Agency (UNHCR), 2023[10]; European Commission, 2022[21]; OECD, 2022[11]; OECD, 2022[11]).

The Government aims to respond to these and other challenges through the implementation of its multisectoral National Development Strategy Moldova 2030 (Government of the Republic of Moldova, 2022<sub>[22]</sub>). This strategic vision document indicates the direction of development for the country and society in the next decade based on the principle of the human life cycle, human rights and quality of life, and includes the following four pillars of sustainable development: a sustainable and inclusive economy, reliable human and social capital, respected and effective institutions, and a healthy environment.

#### National, regional and local governance

Moldova became a sovereign state in 1991. The Constitution of 1994 provides for a single-chamber Parliament consisting of 101 members who elect a President. The members of Parliament are elected every four years by citizens on the basis of proportional representation. The Government is formed by the Prime Minister, the Deputy Prime Minister and ministers after consultation with the parliamentary majority (OECD Development Centre, 2018<sub>[23]</sub>; European Committee of the Regions, n.d.<sub>[6]</sub>).

In Moldova, public administration is based on the principles of local autonomy and decentralisation of public services. Administratively, the country is organised in Administrative Territorial Units (ATUs) consisting of two levels of local government that each are responsible for delivering a range of key public services.

ATUs at the lower level, "Level 1" ATUs, consist of 896 villages ("communes"), towns and cities ("municipalities"). These Level 1 public authorities have elected local councils and mayors. Within education they are responsible for the delivery of early childhood education and care services (see below) (Beschieru et al., 2018<sub>[24]</sub>; European Committee of the Regions, n.d.<sub>[6]</sub>; UNICEF, 2019<sub>[25]</sub>; World Bank, 2018<sub>[26]</sub>).

The "Level 2" ATUs are made up of 32 districts ("rayons"), the municipalities of Chisinau and Balti, and the territorial autonomous unit of Gagauzia (35 in total). At the district level there is an elected district council and district president. Within education, the Level 2 public authorities are responsible for the construction, operation and maintenance of primary, lower and upper secondary educational schools (Beschieru et al., 2018<sub>[24]</sub>; European Committee of the Regions, n.d.<sub>[6]</sub>; UNICEF, 2019<sub>[25]</sub>; World Bank, 2018<sub>[26]</sub>).

Upper secondary Vocational Education and Training (VET) and post-secondary VET are the responsibility of the Ministry of Education and Research (MoER) and other ministries, as will be elaborated on below (UNICEF, 2019<sup>[25]</sup>; ETF, 2020<sup>[27]</sup>).

The MoER is also responsible for the development and implementation of education policies related to tertiary education. It collaborates with universities and other tertiary education institutions to develop and implement policies, provides funding for research projects and supports the development of curricula and educational materials related to tertiary education (Parliament of the Republic of Moldova, 2014<sub>[1]</sub>).

#### On the path towards EU membership

In June 2022 the European Council granted Moldova candidate status for EU accession (European Council, 2022<sub>[28]</sub>). In April 2023 the European Council reaffirmed that the EU would continue to provide all relevant support to Moldova to strengthen the country's resilience, security, stability and economy and help it on its path to EU accession (European Parliament, 2023<sub>[29]</sub>).

#### The Moldovan education system – a brief overview

The Moldovan school system is relatively small. In 2021/22 it was made up of 1 232 schools, serving around 331 000 students in primary-, lower secondary- and upper secondary education. Education is compulsory for six- to sixteen-year-olds, yet many children begin their education at an earlier age. Moldova has an extensive network of early childhood education and care institutions. Early childhood education and care comprises two stages: early childhood educational development that is available for children from birth to age two; and preschool education that is available to children aged three- to six-years, of which the final year is compulsory (see Table 1.1).

Educational phases	Grades	Ages	Years	ISCED levels
Early childhood education and development	0	1-2	Up to 2 years	0
Preschool education (final year is compulsory)	0	3-6	Up to 4 years	0
Primary education (compulsory)	1-4	7-10	4	1
Lower secondary (gymnasium) (compulsory)	5-9	10-15	5	2
Upper secondary education (lyceum)	10-12	15-18	2-3	3
Upper secondary vocational education and training	10-12	15-18	1-3	3
Post-secondary vocational education and training			2-5	4
Post-secondary non-tertiary vocational education and training			2-3	5
Tertiary education				5-8

#### Table 1.1. Overview of the education system

Source: Nuffic (2019<sub>[30]</sub>), The education system of Moldova described and compared with the Dutch education system, https://www.nuffic.nl/sites/default/files/2020-08/education-system-moldova.pdf (accessed 01 August 2023); Parliament of the Republic of Moldova (2014<sub>[1]</sub>), Education Code of the Republic of Moldova, <u>https://mecc.gov.md/sites/default/files/education\_code\_final\_version\_0.pdf</u> (accessed 02 February 2022).

Primary education in Moldova starts at the age of 7 and lasts for 4 years (Grades 1-4). Classes are taught by generalist teachers. Secondary education comprises two phases: lower secondary education starts at the age of 11 and lasts for five years (Grades 5-9); and upper secondary education (ISCED level 3) starts at the age of 16 and lasts for three years (Grades 10-12).

Students receive lower secondary education at a gymnasium. There students follow a wide variety of subjects, ranging from mathematics to languages and social and scientific subjects. 80-85% of the subject cluster consists of compulsory subjects, the rest are elective subjects. At the end of this phase, students sit a national exam (UNICEF, 2019<sub>[31]</sub>; Nuffic, 2019<sub>[30]</sub>).

Upper secondary education (ISCED 3) is divided into two main strands: (general) upper secondary education and upper secondary VET. Students receive (general) upper secondary education at a lyceum. At the end of this phase, students sit the national baccalaureate exam. Students who pass the exam are awarded the baccalaureate diploma, which provides access to tertiary education. If students do not sit the exam or fail it, they are awarded a certificate of completed upper secondary education. This does not grant admission to tertiary education but does give access to VET (see below).

Programmes in upper secondary VET take two or three years to complete. At the end of these two or three years, students are awarded a qualification certificate that grants the student access to post-secondary vocational education and training. This certificate does not grant admission to tertiary education, but upon completion students can transfer to Grade 12 of a school that offers general upper secondary education (i.e. a lyceum) (UNICEF, 2019<sub>[31]</sub>; Nuffic, 2019<sub>[30]</sub>).

Programmes in post-secondary VET (ISCED level 4) can take three, four or five years, depending on the content of the programme and the student's previous education and require full-time participation. At the end, students are awarded a diploma of vocational education that grants admission to tertiary education, only to study programmes in the related fields, however. If they so desire, students awarded a diploma of vocational education the baccalaureate diploma, which grants access to all tertiary education programmes. We will elaborate on upper secondary VET and post-secondary VET in the text below.

In addition, students can follow post-secondary non-tertiary programmes (ISCED level 5) that may be organised full- or part-time. These are provided by VET institutions and consist of short-cycle specialised courses in agriculture, teacher training, arts, mechanics, construction, industrial wood processing, economics and others. The duration of the study programme varies from two to three years, depending on the field of study.

Tertiary education in Moldova is provided at universities, academies and institutes. Universities offer a wide spectrum of study programmes and levels. Academies offer study programmes in a single broad field, such as economics, the arts and public administration. Institutes focus on a specific field, such as management or criminology. Many study programmes can be studied full-time or part-time (Nuffic, 2019<sub>[30]</sub>).

The Moldovan education system has seen a significant decline in its student population during the last two decades as a result of emigration and a decline in birth rates. The student population in primary-, lower secondary- and upper secondary education decreased by almost 9% between 2012/13 and 2021/22 (from 367 200 to 334 500) with schools in rural areas most impacted (OECD, 2022<sub>[11]</sub>; United Nations, 2021<sub>[32]</sub>). This trend is expected to continue. According to demographic projections, by 2035 Moldova's population aged under 24 is likely to have decreased by almost 33% compared to 2014 estimates (Centre for Demographic Research, 2016<sub>[33]</sub>). A steep decline is anticipated in the student population during these years, as high as 50% for the preschool population.

#### Vocational education and training (VET) in Moldova

#### The network of VET institutions and student population

After nine years of primary and lower-secondary education, students may choose to pursue vocational education which is offered in a vocational school, college or centre of excellence (Nuffic, 2019<sub>[30]</sub>). There are three types of VET institutions in Moldova:

- VET schools providing only upper secondary VET (ISCED 3)
- VET colleges providing upper secondary and post-secondary VET (ISCED 3 and 4)
- Centres of excellence providing upper secondary and post-secondary VET (ISCED 3, 4 and 5) (ETF, 2020<sub>[27]</sub>; National Bureau of Statistics, 2023<sub>[34]</sub>; UNESCO Institute of Statistics, n.d.<sub>[35]</sub>).

VET schools are defined as those that provide secondary vocational education and training at ISCED level 3 (Parliament of the Republic of Moldova, 2014[1]). VET colleges offer post-secondary and post-secondary

non-tertiary technical and vocational education and training (ISCED levels 3 and 4) (Parliament of the Republic of Moldova, 2014[1]).

A centre of excellence refers to a VET institution with high potential in its specific area of competence or specialisation, having responsibilities both in the organisation of VET programmes (ISCED levels 3, 4 and 5) and in the development of capacities in the VET sector (Parliament of the Republic of Moldova, 2014<sub>[1]</sub>). The centres of excellence are intended to act as regional hubs for developing closer relationships with employers, provide high-quality vocational education for students (youth and adults), and develop pedagogical support for other VET institutions. Their tasks include providing continuous professional development of teachers and directors of VET institutions, certifying professional competences, and supporting the development of formal, informal and non-formal learning environments in the VET sector (International Labour Organisation, 2022<sub>[36]</sub>)

A clear difference between each type of institution lies in the types and levels of programmes they offer, the associated entry requirements, and the award students receive upon graduation. Furthermore, VET colleges offer only full-time education, while VET schools and centres of excellence offer both full-time and part-time programmes (see below).

In the 2022/23 school year, Moldova had a total of 90 VET institutions: 41 VET schools, 36 colleges, and 13 centres of excellence. Of these, 83 institutions were public institutions (41 vocational schools, 30 colleges, and 12 centres of excellence). There were six private colleges and one private centre of excellence (National Bureau of Statistics, 2023<sub>[34]</sub>). The largest proportion of VET students were enrolled in colleges, followed by students in vocational schools and centres of excellence (see Table 1.2). A total of 3 310 students were enrolled in private colleges and 516 students in private centres of excellence (National Bureau of Statistics, 2023<sub>[34]</sub>). Table 1.2 illustrates the total number of VET institutions, the number of students, and the number of teaching staff, administrative staff and school leaders – hereafter referred to as "directors" in 2022/23.

Institution type	No. of institutions	No. of students	No. of staff
Vocational schools	41	13 186	1 276
Colleges	36	19 994	1 558
Centres of excellence	13	12 751	937
Total	90	45 931	3 771

#### Table 1.2. Total number of public and private VET institutions, students, and staff (2022/23)

Notes: Six private colleges and one private centre for excellence are included in the figures above, which account for a total of 3 310 and 516 private students respectively. Students may be state funded or funded via scholarships. Staff includes teaching staff, directors and administration staff.

Source: National Bureau of Statistics, (2023<sub>[34]</sub>), Education in the Republic of Moldova 2023, <u>https://statistica.gov.md/en/the-statistical-publication-education-in-the-republic-of-moldova-12 60486.html</u> (accessed on 29 July 2023).

#### Upper secondary VET

As mentioned above, admission to upper secondary VET (ISCED level 3, European Qualification Framework level 3) is based on successful completion of lower secondary education (gymnasium) (Nuffic, 2019<sub>[30]</sub>). Depending on the programme and the point of entry, the duration of upper secondary VET programmes is one to three years. Programmes lasting two years are the most popular, with about 70% of students enrolled in these programmes (ETF, 2016<sub>[37]</sub>). Upper secondary VET students may learn through the medium of Romanian or Russian. In 2022/23, 87% of VET students had Romanian as their

language of instruction, and 13% were instructed in the Russian language (National Bureau of Statistics, 2023<sub>[34]</sub>).

As outlined in Table 1.3, the total number of students in upper secondary VET in the 2022/23 school year was 14 357, of whom 3 815 (26.6%) were female. The majority of students were enrolled in programmes in the field of engineering, manufacturing and construction (76.6%), followed by programmes in services (e.g. health and beasty services, sports, travel tourism and leisure) (19.4%). A very small proportion of students were enrolled in humanities and arts (1.5%), agriculture, forestry, fisheries and veterinary care (1.4%), business, administration and law (1.0%) or health and welfare (0.2%) (National Bureau of Statistics,  $2023_{[34]}$ ).

Students may either finish their schooling upon completion of upper secondary VET or continue their education and training in post-secondary VET (ETF, 2016<sub>[37]</sub>; UNICEF, 2019<sub>[25]</sub>).

VET field	Total	Female	Male
Humanities and arts	212	37	175
Business, administration and law	141	110	31
Engineering, manufacturing and construction	10 991	2 308	8 683
Agriculture, forestry, fisheries and veterinary care	199	47	152
Health and welfare	25	17	8
Services	2 789	1 296	1 493
Total	14 357	3 815	10 552

#### Table 1.3. Number of students in upper secondary VET by field and gender in 2022/23

Source: National Bureau of Statistics, (2023<sub>[34]</sub>), Education in the Republic of Moldova 2023, <u>https://statistica.gov.md/en/the-statistical-publication-education-in-the-republic-of-moldova-12 60486.html</u> (accessed on 29 July 2023).

#### Post-secondary VET

At the post-secondary VET level (ISCED 4, European Qualification Framework level 4) programmes are normally three to five years of duration, depending on the content of the programme and the previous education of the student. Post-secondary VET programmes end with the student voluntary taking the baccalaureate exam and compulsory taking the qualification exam and/or diploma thesis that confers the right to be employed according to the obtained qualification (Parliament of the Republic of Moldova, 2014[1]). A key difference between upper secondary VET and post-secondary VET is that the latter, in principle, develops students' skills to more advanced levels and may also lead to a higher-level qualification (ETF, 2021<sub>[38]</sub>; Nuffic, 2019<sub>[30]</sub>).

In the school year 2022/23, a total of 31 574 students were enrolled in post-secondary VET programmes, of whom 17 090 (54.1%) were female (see Table 1.4). Similar to upper secondary VET, the majority of post-secondary VET students were enrolled in the field of engineering, manufacturing and construction (24.3%), but closely followed by students enrolled in the fields of business, administration and law (21.4%) and health and social science (17.9%) (National Bureau of Statistics, 2023<sub>[34]</sub>).

Participation in post-secondary VET programmes can be full- or part-time. In 2022/23, only 181 students enrolled in part-time programmes, however (National Bureau of Statistics, 2023<sub>[34]</sub>). Post-secondary VET students may learn through the medium of Romanian, Russian, or another language. In 2022/23, 88% had

Romanian as their language of instruction, and 12% were instructed through Russian. Less than 1% learned through another language (National Bureau of Statistics, 2023<sub>[34]</sub>).

VET field	Total	Female	Male
Education	2 311	2 184	127
Humanities and arts	1 415	849	566
Journalism and information	75	63	12
Business, administration and law	6 745	4 417	2 328
Mathematics and statistics	500	261	239
Communication technologies	3 517	624	2 893
Engineering, manufacturing and construction	7 672	1 915	5 757
Agriculture, forestry, fisheries and veterinary care	615	191	424
Health and social assistance	5 649	4 557	1 092
Services	3 075	2 029	1 046
Total	31 574	17 090	14 484

#### Table 1.4 Number of students in post-secondary VET by field and sex in 2022-2023

Source: National Bureau of Statistics, (2023<sub>[34]</sub>), Education in the Republic of Moldova 2023, <u>https://statistica.gov.md/en/the-statistical-publication-education-in-the-republic-of-moldova-12</u> 60486.html (accessed on 29 July 2023).

#### Trends in the student population

As for other levels of education, the student population in upper secondary VET has decreased significantly, however, the population in post-secondary VET has not followed this trend, increasing slightly in recent years. Between 2012/13 and 2022/23 the student population in upper secondary VET decreased by 27% (from 19 581 to 14 357 respectively) (National Bureau of Statistics, n.d.<sub>[39]</sub>). During the same period the student population of post-secondary VET increased by 2.8% (from 30 725 to 31 574 respectively) (National Bureau of Statistics, n.d.<sub>[39]</sub>). This increase may in part be attributed to the MoER's efforts to enhance VET participation and the support provided by international development partners (National Bureau of Statistics, n.d.<sub>[39]</sub>).

Nonetheless, the decline in the overall student population is expected to continue and may put further pressure on an already fragmented network of VET institutions. In response, the Education Development Strategy 2030 has made the reorganisation of the network of schools and VET institutions a policy priority (Government of the Republic of Moldova, 2023<sub>[3]</sub>).

#### Work-based learning and dual VET

In Moldova, work-based learning (WBL) is mandatory for VET programmes i.e. upper secondary VET-, post-secondary VET-, and post-secondary non-tertiary VET programmes, including both initial and continuous VET (ETF, 2020[40]; UNESCO, 2021[41]). VET qualifications in Moldova can be obtained through a dual (apprenticeship) pathway – dual VET programmes, with a duration of two- to three-years. The

Education Code defines dual education as consisting of theoretical education and training being completed at the educational institution and practical training at the company or enterprise (Parliament of the Republic of Moldova, 2014<sub>[1]</sub>). Students in these dual education programmes spend 20% to 30% of their time in VET institutions and the rest in companies (Government of the Republic of Moldova, 2018<sub>[42]</sub>). WBL is a key element of dual VET, and it should be systematically provided to all VET students without previous relevant work experience.

VET institutions are responsible for the dual VET programme and the organisation of work opportunities for their students. They are required to prepare agreements and contracts to allow companies to provide work placements for students. In practice, however, VET institutions and companies work together by arranging places for internships, organising dual education, and supporting graduates to find suitable employment (ETF, 2020<sub>[40]</sub>). VET teachers are expected to regularly visit the companies to monitor students during their trainings. The student assessment procedure in VET programmes is specified in legislation, and it should be organised by VET institutions with the involvement of the employer. The assessment would typically involve a written test that can be carried out at the institution or company, and a practical test that would take place in the workplace (Government of the Republic of Moldova, 2018<sub>[42]</sub>; ETF, 2020<sub>[40]</sub>).

Dual VET in Moldova has seen a gradual positive trend in increasing student numbers in recent years partly due to the support from the international development partners. However, training and learning environments have significant variation, depending on the sector and the geographical area. Small companies may face challenges in delivering on agreed requirements, often due to their more limited capacity to mentor and support students (ETF, 2020[40]).

Further structure is required to determine the governance and coordination of dual VET in Moldova. Dual VET activities are said to be coordinated mainly by development partners in the country. Therefore, further clarity on the roles and responsibilities of all stakeholders is needed to enhance the sustainability of dual VET (ETF, 2020<sub>[27]</sub>).

#### Governance and financing

#### VET governance

The Moldovan VET system is complex in that it involves a relatively large number of often small public and non-public institutions that are under the responsibility of different ministries. The main actor for VET governance and policy making is the MoER. It is responsible for the majority of VET institutions (i.e. 83 out of 90 VET institutions in 2022/23) (National Bureau of Statistics, 2023<sub>[34]</sub>). The Ministry of Health, Labour and Social Protection, the Ministry of Agriculture, Regional Development and Environment, and the Ministry of Internal Affairs are in charge of VET institutions that provide VET programmes relevant to their area of expertise. These ministries are directly responsible for VET governance and are accountable to the Prime Minister's Office. The Ministry of Finance participates in the VET governance through the provision of funding, in close consultation with the MoER (Cedefop, 2009<sub>[43]</sub>; ETF, 2020<sub>[27]</sub>).

VET governance can be described as "hybrid", i.e. centralised, yet moving towards greater decentralisation (ETF, 2017<sub>[44]</sub>). The MoER, aforementioned ministries and other bodies such as ANACEC (see below) are the key actors involved in VET policy making and in the main governance functions. Social partners, civil society associations and VET institutions are often consulted in the design and implementation of policies and projects. Among the social partners, the Chamber of Commerce and Industry has mainly a consultative role. Moldova has also created specific bodies, known as sectoral committees, that are established voluntarily by the corresponding employers' associations and trade unions at the level of economic sectors. They are in charge of reviewing existing occupational standards and developing new ones. The sectoral committees have two specific goals:

- Develop social partnerships in the field of vocational training at the level of the economic sectors in order to support vocational, technical and continuing education, as well as ensure the alignment of the workers' and specialists' training with the labour market requirements.
- Based on the needs of the labour market, participate in the creation of a system of information and analytical support in the field of vocational education (ETF, 2020[27]).

In total, 12 sectoral committees are to be functioning. Since 2008, however, (only) nine sectoral committees have been established. Of these, eight have been registered as legal entities and one is non-active. Through its stakeholder interviews, the OECD team formed the view that the sectoral committees are not yet effective and have not made any considerable impact to date. To improve the situation, there are proposals to include representatives of the MoER and the corresponding line ministries in the committees, as well as representatives from the VET institutions. This, however, would require further changes to the legislation (ETF, 2020<sub>[27]</sub>).

#### National Agency for Quality Assurance in Education and Research

An important body of the Moldovan education system (that will be discussed in the following sections of this report) is the National Agency for Quality Assurance in Education and Research (ANACEC). ANACEC is the legal public body responsible for quality assurance in the field of education and research. The Agency's core duties and responsibilities concerning VET include:

- The elaboration of national reference standards and accreditation standards
- The elaboration of the evaluation methodology of the curriculum, of the educational process and of the school results in vocational education and training
- The elaboration of the methodology for quality evaluation in vocational education and training
- The evaluation of study programmes and institutions the central policy topic or policy domain of this report, as well as the evaluation of VET teaching/auxiliary/management staff
- The elaboration of evaluation methodologies of continuous professional training programmes
- Exercising other tasks deriving from the provisions of the normative framework (ERI SEE, 2022<sub>[45]</sub>; ANACEC, 2018<sub>[46]</sub>; ANACEC, 2020<sub>[47]</sub>).

Later in this section a brief description is provided of the self-evaluation and external evaluation of VET programmes and institutions in Moldova, including ANACEC's roles and responsibilities in these.

#### VET financing

In 2021, Moldova's total government expenditure on education as a percentage of GDP amounted to 5.5% - which is higher than many OECD Members and EU Member States. Average EU expenditure in 2021 represented 4.8% of GDP (in 2021) and 4.9% of GDP on average across OECD Members (in 2019) (Eurostat, 2023<sub>[48]</sub>; OECD, 2022<sub>[49]</sub>). Moldova's expenditure as a percentage of GDP has, however, steadily declined in recent years and was as high as 9% of GDP in 2009 (National Bureau of Statistics, 2023<sub>[34]</sub>). This reduction may be attributed to the recent decline in the overall student population and the introduction of the per-student financing model. On this, however, further long-term monitoring and research is required (World Bank, 2018<sub>[26]</sub>).

In 2019, the largest share of Moldova's education expenditure went to secondary education at 45% (MDL 5.47 million), followed by 30% for early childhood education and care and primary education (MDL 3.61 million), 9% to VET (MDL 1.06 million), and 8% to tertiary education (MDL 1.05 million) (Government of the Republic of Moldova, 2023<sub>[3]</sub>).

All public VET institutions receive allocations from the national budget to fund their operations each year based on a per student funding model that was introduced in 2017. The VET institution funding model is mainly input driven and based on the number of students who attended in the previous school year relative to each specific programme. The per student formula is typically adjusted depending on the programme, with some being more expensive than others (ETF, 2020<sub>[27]</sub>). However, the limited public budget available restricts the amount that can be allocated to VET institutions for each student. This is particularly challenging for smaller VET institutions that cannot benefit from "economies of scale" and can be at risk of closure (International Labour Organisation, 2022<sub>[36]</sub>).

Tuition fees are set by VET institutions following a pre-established cost-effectiveness ratio. For certain disadvantaged groups, e.g. unemployed or disabled persons, preferential financial arrangements are said to be available. However, the respective mechanisms are yet to be developed and established (International Labour Organisation, 2020<sub>[18]</sub>). Scholarships are available, for example, to orphans and for proven academic merit in post-secondary VET. Study scholarships are also available for post-secondary VET students (International Labour Organisation, 2020<sub>[18]</sub>).

In 2022/23, almost 97% of public upper secondary VET students were funded through the national budget (National Bureau of Statistics,  $2022_{[50]}$ ). The remaining students were financed through the allocation of funds for study scholarships.

In 2022/23, 43% of public post-secondary VET students were funded through the national budget. Of these, just over 62% received a scholarship (National Bureau of Statistics, 2023<sub>[34]</sub>). The remaining students (57%) paid tuition fees (National Bureau of Statistics, 2023<sub>[34]</sub>) that may also be subsidised by employers or donors (ETF, 2017<sub>[44]</sub>). Since October 2018, VET institutions are expected to self-manage their finances (International Labour Organisation, 2022<sub>[36]</sub>). The institutions may also finance their activities through service contracts to obtain additional funds. Concerns have been expressed by VET institutions that have difficulty managing this degree of autonomy and coping with the necessity of generating additional income to deal with the risk of insufficient funds (ETF, 2020<sub>[40]</sub>). Furthermore, VET funding does not take into consideration current institution requirements or performance, which may not promote efforts to enhance the efficient use of resources and improve performance (International Labour Organisation, 2020<sub>[18]</sub>).

With regard to dual VET, certain financial measures have been taken in recent years. For example, most of the financial expenditures and investments in dual education incurred by employers are eligible for tax deductions and exemptions, including the salaries of trainers in businesses (or enterprises) and the salaries of students participating in dual VET, the procurement of pedagogical materials for students (e.g. equipment and tools) and the provision of work areas for students. Regarding the salaries of students involved in dual VET, they may earn up to two-thirds of the national average salary. Students can also benefit from various compensation schemes, such as costs related to transportation, food and accommodation (ETF, 2020<sub>[40]</sub>).

Investment in VET is recognised as insufficient. Additional funding is needed for infrastructure, equipment and teacher professional development, among others (ETF,  $2020_{[27]}$ ). The Education Development Strategy 2030 recognised that the VET system is underfunded and has set out to improve its financing by 2025, based on the further development of the per student funding model and performance indicators (Government of the Republic of Moldova,  $2023_{[3]}$ ). The success of this reform partially depends on the MoER's success in realising the much-needed efficiency gains across the education system, including the planned reorganisation of the fragmented network of schools and VET institutions.

#### The VET workforce

Table 1.2 shows that in the 2022/23 school year a total of 3 771 teachers, directors and other management staff and administrative staff were working in VET institutions, distributed across vocational schools (1 276 staff), colleges (1 558 staff) and centres of excellence (937 staff). From these staff the majority in all types

of institutions was made up of women: 56% in vocational schools, 73% in colleges and 72% in centres of excellence. Also, the VET workforce is aging with many nearing retirement<sup>2</sup>. A 2018 survey<sup>3</sup> by the European Training Foundation (ETF) revealed that just 13% of VET teachers were under the age of 29. More than half of VET teachers were aged between 30- to 49-years. Teachers aged from 50-59-years constituted 18% (ETF, 2020<sub>[51]</sub>).

Moldova does not currently have a system in place for the initial education of VET teachers, however, this situation is to change in the near future. Usually, VET teachers are recruited from among fresh graduates from technical colleges and universities, thus lacking pedagogical training, teaching experience and industrial experience (Vodita, Ionascu-Cuciuc and Hincu, 2022<sub>[52]</sub>). As a result, most VET teachers have little or no experience working in the fields they are teaching: 68% had no experience according to a survey (ETF, 2020<sub>[51]</sub>). A model for an initial education programme for VET teachers is in the process of development by experts of the Technical University of Moldova and other relevant stakeholders with the support of German experts.

There is an expectation that VET teachers engage in continuous professional development. Most continuous professional development programmes and courses for VET teachers are provided by the professional development centres of tertiary education institutions. Most of the programmes available are, however, not tailored to the specific needs of VET teachers and instead are often developed for teachers in general education. Furthermore, the professional development is not clearly defined. Thus professional development is not clearly linked to career development, hence, rather than participating in professional development teachers may be more inclined to take on additional responsibilities to advance their careers (ETF, 2020<sub>[51]</sub>; ERI SEE, 2020<sub>[53]</sub>).

#### The leadership and governance of VET institutions

VET institutions are led by a director, sometimes referred to as "executive manager". The director is recruited and hired by the MoER or the ministry responsible for the VET institution (see above). The directors of the VET institutions are selected by competition, organised by the MoER or other relevant ministries. The directors are appointed for a period of five years, for (at most) two consecutive mandates. The directors may be dismissed before the expiration of the individual employment contract under the provisions of the labour legislation, for reasons such as committing financial violations, violation of student-, employee- or parents' rights, or external evaluations by ANACEC that result in a negative external evaluation of more than 30% of the study programmes (Parliament of the Republic of Moldova,  $2014_{[1]}$ ).

The administrative and consultative bodies of the VET institution are composed of the Administration Council, Teachers' Council and Methodical-Scientific Board (except upper secondary VET schools), and the Artistic Board (in case of the educational institution with an art profile). The duties of these administrative and consultative bodies were established in the normative acts developed by the MoER and by the VET institutions themselves.

The Administration Council's responsibilities include the approval of the institution's budget and plan for institution development. The Administration Council is composed of the director, deputy director(s), one representative from the MoER, representatives of parents, teaching staff and companies. The Teachers'

<sup>&</sup>lt;sup>2</sup> The standard retirement age for men in Moldova is 63 years and for women 60.5 years. Moldovan legislation foresees that by 2028 the retirement age for women will gradually increase to 63 years.

<sup>&</sup>lt;sup>3</sup> The survey sample included all eligible VET institutions, of which 88 institutions responded. 661 VET teachers and 63 directors responded (a response rate of 15.1% and 72% respectively) (ETF, 2020<sub>[51]</sub>).

Council is the collective management body of the VET institution composed of all teaching staff and chaired by the director, with a role of decision making in the educational area. The director of the VET institution is to submit an annual activity report to the MoER or other relevant ministries, that is to be approved by the Teachers' Council and published on the institution's web page (Parliament of the Republic of Moldova, 2014<sub>[1]</sub>).

The evidence suggests, however, that the distribution of the tasks between the Administrative Council and the Teachers' Council is not well established and differs by VET institution (ETF, 2020<sub>[27]</sub>). Also, formal mechanisms are to be in place to ensure that key stakeholders participate in school decision making, for example in the Administration Council. However, about 50% of directors of VET institutions that participated in the mentioned 2018 ETF survey noted that employers are not formally represented in the governance of the institution. Further questions may be raised about the governance of VET institutions, as again about half of the directors surveyed reported that they often take key decisions on their own and without further consultation, which is somewhat concerning given the reported variable capacities of directors (ETF, 2020<sub>[51]</sub>).

Further, the directors that responded to the survey reported that they spend 22% of their time interacting with students, 24% interacting with the wider community and 22% communicating with parents. Only 8% of their time is dedicated to administration and management tasks. Around 81% of directors responded that they have used student performance and student assessment results to develop the institution's educational objectives and programmes. Almost all directors (97%) reported that they have worked on a development plan for their institution (ETF, 2020<sub>[51]</sub>). However, obtaining a comprehensive and transparent picture of how institutions are managed across the country is challenging, in part due to the weaknesses in external evaluations (see below) (ETF, 2020<sub>[27]</sub>).

#### Moldova's National Qualifications Framework

A qualifications framework classifies qualifications according to a set of criteria for specified levels of learning achieved. It aims to integrate and coordinate qualifications, as well as improve the transparency, accessibility and quality of qualifications in relation to the labour market, the education and training system, and civil society (European Commission,  $2018_{[54]}$ ). In 2017, the MoER adopted the Moldovan National Qualifications Framework (NQF), the levels of which are determined on the basis of professional knowledge, skills and competencies, with the structure of the level descriptors similar to the structure of European Qualifications Framework (ETF,  $2020_{[27]}$ ).

In Moldova, the sectoral committees are expected to develop the occupational standards, which are then validated and approved by the MoER or the ministry in charge of the specific VET programmes. The development of occupational standards is coordinated by the Ministry of Labour, Social Protection and Family. These occupational standards are to inform the development of national qualifications that are defined in terms of the qualification standards. These in turn inform the development and implementation of a VET programme's curriculum (ETF, 2021<sub>[38]</sub>).

Any interested party can initiate the development and/or update of existing qualification standards, however, most of the initiatives emanate from the MoER or other relevant ministries. Qualification standards must meet the requirements of the relevant NQF level descriptors, be validated by the corresponding sectoral committee and the ministry in charge of the VET programme, and approved by the MoER based on the decision of the National Council for Qualifications (ETF, 2021<sub>[38]</sub>).

The Government of Moldova set the target of developing about 200 national qualifications and 200 occupational standards by 2020 (ETF, 2016<sub>[37]</sub>). By 2021, however, there were (only) 51 qualification standards published, 26 for VET and 25 for tertiary education (ETF, 2021<sub>[38]</sub>). The slow progress in developing the occupational standards, national qualifications and corresponding curricula of (new or updated) VET programmes has several reasons. These include the slow establishment of sectoral

committees (of which several are yet to be established), a complicated formal procedure and the involvement of many different actors which makes this process costly and lengthy (up to three years). Also, VET institutions often have limited capacity to adapt the curricula or create new VET programmes by themselves (ETF, 2020<sub>[27]</sub>). Most of Moldova's VET study programmes and qualifications are therefore not yet based on national qualification standards.

#### Self-evaluation and external evaluation of VET programmes – a brief overview

As in many OECD Members and EU Member States, VET institutions in Moldova are required to selfevaluate their programmes once a year against quality standards to identify areas for improvement as part of their ongoing quality assurance management. The self-evaluation against the quality standards is undertaken by the VET institution's Internal Evaluation and Quality Assurance Commission which consists of a coordinator (designated by the director), teachers elected through secret ballot during the meeting of the Teachers' Council, and parent and student representatives (Centre of Excellence in Artistic Education 'Stefan Neaga', 2019<sub>[55]</sub>).

The self-evaluation is to inform the development of an improvement plan that identifies underperforming areas and in response includes specific improvement objectives and explains how these can be achieved (i.e. by whom, in which way and at what cost). To support VET institutions in this process, an internal quality assurance guide has been developed by ANACEC of which the latest version was released in 2017 (Government of the Republic of Moldova, 2017<sup>[56]</sup>).

As will be elaborated on in Section 2, there is scope for updating the quality standards to help enhance the quality and relevance of VET programmes. They among others insufficiently focus attention on the final results or outcomes of VET programmes and, as some have argued, may be primarily considered an "input tool" (ETF, 2020<sub>[27]</sub>).

In addition to these self-evaluations, the Internal Evaluation and Quality Assurance Commission carries out the external evaluation of VET programmes, building on the self-evaluation (ERI SEE,  $2022_{[57]}$ ; Government of the Republic of Moldova,  $2016_{[58]}$ ). As such, these external evaluations are based on the same quality standards that are used for the self-evaluation of VET programmes.

Similar to many OECD Members and EU Member States, external evaluations by ANACEC concern two cases:

- The provisional "authorisation" of a new VET programme. When a new VET institution or programme is established, the institution requests ANACEC to undertake an external evaluation for a provisional authorisation which is either granted or not.
- The "accreditation" of existing VET programmes. These external evaluations for the purpose of accreditation are to be carried out once every five years and result in either a "pass" or a "fail". The accreditation of the whole VET institution is also possible on the request of the VET institution if at least 50% of its programmes are to be accredited (ANACEC, 2022<sub>[59]</sub>; Government of the Republic of Moldova, 2017<sub>[56]</sub>; Government of the Republic of Moldova, 2017<sub>[56]</sub>.

The external evaluation process of new and existing programmes, as well as of the whole VET institution involves the following seven steps:

- 1) The establishment of an external evaluation commission by ANACEC (see below).
- 2) The analysis of the self-evaluation report by the external evaluation commission.
- 3) After having analysed the self-evaluation report, the Commission conducts an evaluation visit to the VET institution and completes the "visit form". A typical visit lasts between one- to three days.

- 4) Following the evaluation visit, the Commission prepares an External Evaluation Report that is shared with the institution.
- 5) Based on the shared report, the institution prepares or updates its improvement plan.
- 6) The ANACEC Governing Board shares its judgement on the VET programme(s), i.e. a "fail" or "pass" with the MoER.
- 7) The final step in the external evaluation process is if the evaluation is positive the granting of the provisional authorisation in case of a new programme or accreditation for a period of five years in case of an existing programme (Government of the Republic of Moldova, 2016<sub>[58]</sub>).

These steps confirm the central role of the external evaluation commission in the external evaluation process. Commission members are to be made up of individuals with a background in education, and in education and management, such as teachers and representatives from tertiary education. The Commission is to also include students and employer representatives.

Apart from the examination of the quality of VET programmes, external evaluations by ANACEC also look into the institution's capacity, i.e. the educational efficiency; the quality of management; and the consistency between the self-evaluations and the external evaluations.

In Section 2 we will elaborate in detail on the process, strengths and challenges of the self-evaluation and external evaluation of VET programmes in Moldova, offering concrete recommendations for improvement.

#### Quality and relevance of VET

To ensure that VET programmes remain relevant for students and employers in a changing world of work, they need to be aligned with labour market needs. The use of high-quality information on skill needs, based on a range of data sources and stakeholder inputs, is crucial in the design of responsive VET systems. Moreover, strong engagement with social partners in the different phases of VET policy can contribute to ensuring that relevant and up-to-date programmes are provided (OECD, 2023[60]).

In Moldova there are well-reported concerns about the quality and relevance of its VET programmes (Midari,  $2019_{[61]}$ ; ETF,  $2020_{[27]}$ ; Government of the Republic of Moldova,  $2023_{[3]}$ ). Several studies have identified a mismatch between VET programmes and the labour market needs, as well as the poor preparedness of some VET graduates for jobs. According to employers there is a mismatch between the knowledge and skills that graduates have acquired through VET and those actually needed. A lack of reliable labour market forecasts and incapacity of VET institutions to plan for future needs are among the factors contributing to this situation (ETF,  $2016_{[37]}$ ; Midari,  $2019_{[61]}$ ; ETF,  $2020_{[27]}$ ; Government of the Republic of Moldova,  $2023_{[3]}$ ).

The MoER is aware of these challenges and in recent years has implemented a number of important reforms with further reform initiatives planned to strengthen the quality and relevance of VET programmes (OECD, 2023<sub>[60]</sub>); an effort this report aims to contribute to.

#### Moldova's new education sector strategy

Moldova has in recent years implemented, or better said, started the implementation, of several important reform initiatives to improve the quality and relevance of VET. These include the implementation of a new Education Code; the development of the National Qualifications Framework; promoting employer engagement by establishing sectoral committees; and creating centres of excellence to drive innovation and improve the quality of VET (ETF, 2016<sub>[37]</sub>). The successful implementation of these reforms will take further time and effort, however, as there is a need for responding to (other) identified challenges. These include the increasingly fragmented and large network of VET institutions and the need for better forecasting of labour market needs.

Building on the progress made and responding to identified challenges, the Moldovan Government in March 2023 approved a new education sector strategy, the Education Development Strategy 2030 (Government of the Republic of Moldova, 2023<sub>[3]</sub>). The strategy sets out a long-term vision for the development and transformation of the education sector, covering early childhood education and care, primary-, secondary-, tertiary education and VET, also including non-formal education, as well as adult literacy and lifelong learning. It aims to realise the following strategic objectives:

- Connecting education to the requirements and needs of the labour market from the perspective of sustainable development by restructuring the mechanisms for the development of human capital.
- Ensuring access to quality education for all throughout their lives.
- Providing the educational system of all phases and forms of education with qualified, competent, motivated and competitive teaching, scientific-didactic and managerial staff.
- Strengthening socio-educational cohesion for quality education by combining the efforts of all actors of the educational process.
- Creating new, effective, and motivating environments for the development and lifelong learning of all citizens.
- Improving the functionality, quality and sustainability of the education system through the efficient implementation of digital technologies.
- Ensuring for all citizens, throughout their lives, opportunities for learning and education in a formal, non-formal or informal context.
- Promoting innovations and changes in education through the development of scientific research.
- Increasing the performance of the educational system by streamlining the network of educational institutions, modernising the infrastructure, strengthening the managerial capacity and developing a culture focused on quality.

The strategy calls for a continuation of reform initiatives in VET and emphasises the realisation of a number of objectives. These (among others) include:

- the further development of the National Qualifications Framework, qualification standards and occupational standards
- the improvement in forecasting future labour market needs
- the improvement of career guidance services
- the further development (and reorganisation) of the network of VET institutions, including the provision of dual education
- the promotion of (stronger) partnerships between VET institutions and employers and the strengthening of the involvement of social partners in VET policy
- the improvement of teaching quality in VET.

The analysis and concrete recommendations presented in the following sections of this report are aimed to support Moldova in the successful implementation of the Education Development Strategy 2030.

# 2. The evaluation of upper secondary Vocational Education and Training (VET) programmes

This section provides an analysis of the current system and practices of evaluation of upper secondary vocational education and training (VET) programmes and institutions to improve their functioning – the section as such focusses on the evaluation of upper secondary VET programmes (ISCED 3). It starts by examining the need for further strengthening the evaluation of VET programmes in Moldova (i.e. "the why"). The section continues with a reflection on the strengths, challenges and opportunities for further strengthening the self-evaluation and improvement planning of upper secondary VET programmes. This is followed by a similar reflection on the external evaluations of VET programmes. The section concludes by arguing for and giving concrete guidance for matching the proposed strengthening of evaluation and accountability arrangements with the provision of additional support and incentives to support VET institutions in the improvements of their programmes.

#### The need for further strengthening the evaluation of VET programmes

Across OECD Members the evaluation of education institutions and their programmes is increasingly considered a potential lever of change that could assist with, among others, decision making, resource allocation and improvement strategies. Education institutions benefit from feedback on their performance to inform their internal quality assurance processes and improvement efforts, as does it offer an important means for holding them accountable for their performance (Wiesner and Yuniarti, 2018<sub>[62]</sub>; Cedefop, 2011<sub>[63]</sub>; OECD, 2013<sub>[64]</sub>). The evaluation of VET programmes in Moldova is similar to that of many OECD Members and EU Member States. It starts with self-evaluations of the programmes that are undertaken by the VET institutions themselves, based on nationally established common standards and guidelines (Government of the Republic of Moldova, 2017<sub>[56]</sub>). The findings of the self-evaluations of existing programmes and resulting improvement plans in turn inform the external evaluations that are overseen by ANACEC to ensure their guality and relevance.

Although the quality standards, self- and external evaluation processes, and supporting guidelines are clear strengths to build on, the MoER and ANACEC recognise there is scope for further strengthening the self-evaluation and external evaluation of VET programmes in Moldova (Government of the Republic of Moldova,  $2023_{[3]}$ ). The evidence from this review supports that view. The interviews conducted by the OECD team with officers from ANACEC, the MoER and other education stakeholders for example pointed to the variable capacity of VET institutions to conduct quality self-evaluations and use these findings for improvement planning.

In addition, the findings from the desk study and interviews corroborated earlier findings that showed there is scope for expanding the quality standards that are used for self-evaluations and external evaluations. Arguably, these currently insufficiently emphasise the quality, relevance and outcomes of VET programmes. The standards and quality assurance processes (i.e. evaluation and improvement

processes) also do not seem to provide sufficient guidance and incentives for VET institutions to make further improvements to their programmes, strengthen the connections with companies, and better respond to labour market needs (ETF, 2020[27]).

Furthermore, the data showed that almost all the VET programmes that have been externally evaluated in recent years have been accredited. In 2021, out of the 132 VET programmes that were externally evaluated 124 were accredited, and only eight did not successfully pass the external evaluation (i.e. a 96% pass rate) (ANACEC, 2022<sub>[65]</sub>). In the same year provisional authorisation was requested for 8 new VET programmes and all were granted the status. In comparison to other countries, Moldova has a high rate of acceptance of new VET programmes. In Denmark, for example, out of 30 applications for new VET programmes submitted in 2008, 20 (67%) were approved and 10 (33%) were rejected (Cedefop, 2011<sub>[63]</sub>). In Estonia, three new VET programmes were submitted for authorisation in 2021. The Estonian Higher and Vocational Education Quality Agency judged that two programmes did not meet the requirements and only one programme was granted a conditional right to operate (Estonian Higher and Vocational Education Quality Agency, 2022<sub>[66]</sub>).

Importantly, this high authorisation and accreditation rate for VET programmes in Moldova stands at odds with the well-reported concerns about the quality and relevance of VET programmes (Midari, 2019<sub>[61]</sub>; ETF, 2020<sub>[27]</sub>; Government of the Republic of Moldova, 2023<sub>[3]</sub>). Several studies have identified the mismatch between VET programmes and the labour market needs and poor preparedness of some VET graduates for jobs in Moldova. According to employers there is a mismatch between the knowledge and skills graduates have acquired through VET and those actually needed. A lack of reliable labour market forecasts and the limited capacity of VET institutions to plan for future needs contributes to this situation (Midari, 2019<sub>[61]</sub>; ETF, 2020<sub>[27]</sub>; ETF, 2016<sub>[37]</sub>; Government of the Republic of Moldova, 2023<sub>[3]</sub>). These findings were reiterated by various education stakeholders interviewed by the OECD team. Several stakeholders explicitly pointed to the need for further strengthening of the quality standards and self-evaluations and external evaluation processes for enhancing the quality and relevance of VET programmes. The text below elaborates on these and other challenges and offers concrete suggestions for improvement.

# Strengthening the self-evaluation and improvement planning of upper secondary VET programmes

In many educational systems, self-evaluation has become a key strategy, next to external evaluation, to ensure the quality of education institutions and their programmes (OECD, 2013<sub>[64]</sub>; Watters, 2015<sub>[67]</sub>; European Commission, n.d.<sub>[68]</sub>). As in many OECD Members and EU Member States, VET institutions in Moldova are required to self-evaluate the performance of their programmes once a year to identify areas for improvement planning as part of their ongoing quality assurance management. As mentioned earlier, to support VET institutions in this process, an internal quality assurance guide has been developed of which the latest version was released in 2017 (Government of the Republic of Moldova, 2017<sub>[56]</sub>). This comprehensive guide or guidelines promotes a formative approach to the quality assurance process and aims to support VET institutions in their efforts to provide high quality education and training programmes (Government of the Republic of Moldova, 2017<sub>[56]</sub>).

The internal quality assurance guidelines are aimed to support all stakeholders with internal quality assurance processes and improvements. The guidelines explain the process of self-evaluation, including the roles and responsibilities of all actors and beneficiaries, to identify strengths and weaknesses that are used to inform improvement planning. The self-evaluation is intended to be as inclusive as possible, i.e. involve all the relevant actors, including institution directors, teachers, employers and students, but allocates a key role to the Commission for Internal Evaluation and Quality Assurance. This commission carries out the self-evaluation of the programme offered by the institution. It aims to evaluate the

institution's ability to meet the requirements and to improve the capacity of the institution to provide high quality educational and training programmes. The Commission should consist of the coordinator designated by the director, teachers elected through secret ballot during the meeting of the Teachers' Council, and parent and student representatives (Centre of Excellence in Artistic Education 'Stefan Neaga', 2019<sub>[55]</sub>). The Commission reports to the VET institution's Administration Council (see Section 1).

The internal quality assurance guidelines also present the quality standards that are used as a basis for self-evaluation and support the completion of a self-evaluation report and help prepare the VET institution for external evaluation (Government of the Republic of Moldova, 2017<sub>[56]</sub>). An effective self-evaluation would allow VET institutions to identify the strengths and weaknesses of their programmes in relation to the quality standards, and (in principle) allow for comparison of their performance with that of VET programmes offered by other institutions. The intended comparison with, or benchmarking against, other VET programmes may be challenging in practice, however. Although ANACEC publishes all external evaluation reports on its website these do not lend themselves for easy comparison. We will return to this issue later.

Currently there are 10 quality standards (see Table 2.1) with 49 underlying performance indicators to support the Commission for Internal Evaluation and Quality Assurance in undertaking an analysis of programmes' strengths, weaknesses, opportunities and threats (i.e. a SWOT analysis) that, as mentioned earlier, should be used to inform the development of an improvement plan for the programme. This improvement plan should identify underperforming areas and in response include specific improvement objectives and explain how these can be achieved (by whom, in which way and at what cost) (Government of the Republic of Moldova, 2017<sup>[56]</sup>).

# Table 2.1. Quality standards used for self-evaluation and external evaluation of VET programmes in Moldova

#### Current standards for self-assessment

1. Quality assurance policies are part of strategic management.

2. VET programmes meet their objectives: academic and labour market performance.

3. Qualifications delivered by the institution refer to the National Qualifications Framework/European Qualifications Framework.

4. Teaching and assessment methods encourage students to play an active role in the learning processes.

5. Institutions apply relevant regulations throughout education and training, e.g. in admission, delivery of training. Institutions provide counselling and career guidance to students.

6. The teaching staff have the relevant and up-to-date competences.

7. Students have access to appropriate learning environment, resources and support services.

8. Institutions publish information on their work.

9. Institutions collect, analyse and use information relevant to the effective management of their programs and other activities.

10. Institutions shall regularly monitor and evaluate the programmes they offer.

Source: Government of the Republic of Moldova, (2017[56]), Internal quality assurance in VET in Moldova, Government of the Republic of Moldova, Chisinau.

The discussions the OECD team had with ANACEC and MoER officers revealed a keen interest to take stock of the standards and self-evaluation process that have been in place since 2017 and make the necessary improvements and innovations. This includes an interest to "leapfrog" by learning from the experiences of other countries and harnessing the potential of digital technologies for innovation. The text below aims to provide concrete recommendations for doing so. We will start with a reflection on the current quality standards.

## *Review the quality standards to emphasise VET programmes' quality and relevance to the labour market*

As mentioned above, the desk study and interviews showed there is scope for expanding the quality standards that are used for self-evaluations and external evaluations. Drawing also from the discussions during a stakeholder workshop that was organised in May 2023 (see Annex B), Moldova should consider the following changes to the quality standards.

First, considering the well-reported mismatch between the supply of VET programmes and VET graduates' skills and actual labour market needs, it would seem vital to consider adding a standard that emphasises the relevance of new and existing VET programmes for meeting local/regional and national labour market needs. Data on VET graduates' labour market outcomes, as well as feedback from employers on the quality of graduates, would be particularly helpful regarding the decision to authorise new VET programmes, as well as to assess the continued relevance of existing programmes. Such a decision would draw not only on the VET institutions' capacity to deliver the programme, but also on a thorough evaluation of the labour market needs for the knowledge and skills that students would learn through the programme.

To support VET institutions in the analysis of such data Moldova may look towards the examples of other OECD Members, such as Australia that has established an independent agency "Jobs and Skills Australia"<sup>4</sup>. This agency is responsible for providing advice to the Australian Government to underpin Australia's response to current, emerging and future labour market and workforce skills and training needs. The agency helps the Australian Government improve employment opportunities and economic growth, and advises on Australia's current, emerging, and future workforce needs, and the development of the VET system (Australian Government, 2023<sub>[69]</sub>). Drawing on a range of available data sources, including online job vacancies, Jobs and Skills Australia keeps track of labour market dynamics, identifies areas of skills shortages and forecasts future needs. This information feeds into a career website informing potential students about labour prospects associated with various VET programmes (Australian Government, 2023<sub>[70]</sub>). It importantly also guides VET institutions in defining programmes on offer.

In Moldova, labour market data could greatly support VET institutions in the self-evaluation and planning of programmes on offer (e.g. how many student places to offer, staffing needs, etc.), as well as the work of ANACEC in evaluating and authorising existing and new programmes. The use of labour market data in these self-evaluation and improvement planning processes is arguably particularly important for Moldova as the sectoral committees are not fully functional yet and social partners' input into planning and evaluation of VET programmes is still limited. That said, the sectoral committees could in due time (i.e. once established for all sectors and strengthened) take on a similar role in helping ensure the relevance of new VET programmes as is done in other OECD Members and EU Member States such as Denmark, the Netherlands, Latvia and Switzerland (SERI, 2015<sub>[71]</sub>; OECD, 2016<sub>[72]</sub>; OECD, 2023<sub>[73]</sub>).

Second, although one of the quality standards determines that teaching staff need to have relevant and up-to-date competences, Moldova should consider giving more weight to VET teachers having to demonstrate relevant and up-to-date professional experience and skills in the quality standards. The

<sup>&</sup>lt;sup>4</sup> Jobs and Skills Australia replaced the National Skills Commission in November 2022.

quality and attractiveness of VET partly depends on the quality of its teachers, and their capacity to teach occupation-relevant skills and to motivate and inspire young people (OECD, 2021[74]).

In several OECD Members the recruitment of VET teachers is often difficult as they need to be acquainted with the area of specialisation (e.g. construction, electronics, hairdressing) and at the same time be able to effectively transfer their knowledge and skills to young people. VET teachers as such need to possess specific technical competencies in their professional areas and have the pedagogical competencies to support students in their education and training which is a combination of competencies that is to always easily found in sufficient numbers (OECD, 2021<sub>[74]</sub>).

In Moldova, the majority of VET teachers (90%) have completed pedagogical training either during their initial education or subsequently, which is more than in many other EU Member States and OECD Members (OECD, 2021<sub>[74]</sub>; ETF, 2020<sub>[51]</sub>). VET teachers in Moldova are also relatively highly educated. According to a survey carried out by the European Training Foundation (ETF) in 2018, 81% of VET teachers had completed a tertiary education as their highest level of education, 4% had completed a post-secondary non-tertiary education, 3% a post-secondary VET, 5% upper secondary VET and 7% indicated that they had undertaken other studies (ETF, 2020<sub>[51]</sub>).

However, a clear challenge lies in the lack of professional experience among many of Moldova's VET teachers. VET teachers are not required to demonstrate professional experience. The ETF survey showed that 68% of VET teachers had no work experience relevant to the VET area they were teaching (ETF, 2020<sub>[51]</sub>). This is potentially a serious issue as it implies that many teachers may not be sufficiently equipped with the desired knowledge and skills to prepare students for specific professions.

The requirements for VET teachers vary across OECD Members. Some countries such as Austria, Finland, Norway and Slovenia require VET teachers to complete formal teacher training and also demonstrate relevant industry knowledge, skills and experience, while in countries such as Korea and Japan this is not the case. Here entry requirements into the teaching profession are only related to qualifications and not to professional experience (OECD, 2021<sub>[74]</sub>).

Therefore, Moldova should consider expanding the quality standards by adding a requirement for all VET teachers (teaching vocational subjects) to demonstrate relevant and up-to-date professional experience and skills. That said, it is important to provide some flexibility to avoid teacher shortages – which may be achieved by permitting a combination of teaching and industry work (see below). There are differences between sectors in the speed with which professional knowledge, skills and experience are likely to "be outdated". Therefore, the MoER, together with the social partners (e.g. the established sectoral committees), ANACEC, continuous professional development centres and other key stakeholders, should decide on the necessary frequency of the updating of professional experience and skills. In the text below we will elaborate on the needed expansion of professional development of VET teachers to support this measure.

Third, as mentioned above the current quality standards insufficiently focus attention on the final results or outcomes of VET programmes and, as some have argued, may be primarily considered an "input tool" (ETF, 2020<sub>[27]</sub>). Therefore, one or more additional standards should emphasise the systematic and critical use of data for measuring both the levels and trends in:

- Students' educational outcomes. For example, dropout rates, graduation rates, transition to postsecondary education and student satisfaction surveys – by programme.
- Labour market outcomes i.e. graduates' performance in the labour market (see Box 2.1). For example, job placement rates, mismatch indicators, or employer satisfaction surveys.

So rather than merely having the requirement for having processes in place and undertaking the analysis of data (as is currently the case for the quality standards and underlying indicators) the standard(s) should call for a critical reflection on these data and drawing a judgement on these. For example, low and/or

decreasing job placement rates or low scores on employer satisfaction surveys would translate in a negative judgement of the VET programme's performance against this standard.

Recognising the variable capacity of VET institutions to collect and analyse data on their graduate's performance on the labour market (ERI SEE, 2022<sub>[57]</sub>; ETF, 2020<sub>[27]</sub>), the MoER and/or ANACEC should support VET institutions in the collection and analysis of these data. Data collection and analysis can possibly be carried out by and/or with the support of the National Bureau of Statistics or other state agency. The Government may also opt for developing further capacity in this area by providing grants for research projects. In both cases, building evidence on labour market outcomes from VET graduates will require channelling some additional funding. However, these costs would arguably (in due time) be offset by a more efficient and quality VET system.

## Box 2.1. Measuring graduates' labour market outcomes – the example of Northern Ireland's (United Kingdom) digital School Leavers Survey

In Northern Ireland (NI) (United Kingdom), the Department of Education (DoE) collects data annually on the qualifications and destination of secondary school leavers (ISCED level 2 and 3 qualifications). With the dataset being at student level and the home postcode of each student being recorded, spatial analysis can be undertaken on NI school leavers. In addition to the qualifications and destination data, items such as year group, sex, ethnicity, religion, free school meal entitlement, special educational needs and the student address are collected. Other items such as the school management type (i.e. public-, Catholic-; Voluntary-, Integrated-, Irish medium-, Independent school) are also included in the dataset.

A data request is emailed to each secondary school in October of each year, asking each school to coordinate their school leavers' return and address any of the errors the report identifies. Reminder emails are sent to those schools who fail to meet the deadline. Once all data returns are made by schools, data are extracted and aggregated into a central leavers database. It is at this point that validations are run and the individual VET institutions are contacted with queries for them to investigate. This exercise continues until all queries have been resolved after which the database is closed, usually before the end of March.

The School Leaver Survey data not only supports VET institutions in the self-evaluations and improvement planning of their programmes, it also informs a wide range of policy areas aimed at raising standards and tackling educational underachievement. These data are for example used by the DoE and other stakeholders such as the Education and Training Inspectorate and Northern Ireland's Education Authority for monitoring the quality and relevance of schools and their programmes. The data are used to respond to national assembly questions and are included in the Ministry's accountability and performance management processes. In sum, the digital School Leaver Survey serves several purposes and supports the monitoring and improvements efforts of various stakeholders across different levels of Northern Ireland's education system.

Source: Department of Education, Northern Ireland, (2023<sub>[75]</sub>), School Leavers Survey Procedural Guidance (Version 6), <u>https://www.education-ni.gov.uk/publications/school-leavers-data-collection-and-validation</u> (accessed 1 May 2023); Education Authority Northern Ireland, (2023<sub>[76]</sub>), Types of School, <u>https://www.eani.org.uk/parents/types-of-school</u> (accessed 7 June 2023).

Furthermore, these data should be analysed taking into account student characteristics that are associated with students' education and labour market outcomes (e.g. their socio-economic backgrounds, previous student performance, etc.). Failing to do so could unintentionally negatively affect the self-evaluations and external evaluations of VET programmes of institutions in socio-economically disadvantaged areas and/or with considerable proportions of disadvantaged students. This in turn could have the unintended consequence of VET institutions refusing admissions of certain student groups. This example also shows the importance of a careful consideration and monitoring of possible unintended consequences of changes to the quality standards.

In addition, taking into consideration the data collected through the Moldovan Labour Force Survey and to further assess graduates' performance on the labour market, Moldova should consider mandating VET institutions to collect data on graduates/school leavers using a standardised digital survey, as is done in Northern Ireland's (United Kingdom) for example (see Box 2.1). The internal quality assurance guide already includes such an (optional) questionnaire (Government of the Republic of Moldova, 2017<sub>[56]</sub>) that could be further developed into a digital survey. The benefit of such a mandatory digital survey, with potential automated (rapid) feedback reporting, is that it would not only support VET institutions in their self-evaluations and improvement planning, but could also provide the MoER, ANACEC, (future) students, parents and other stakeholders with valuable additional information about the quality and relevance of different programmes in VET institutions in Moldova.

## Innovate the self-evaluation and improvement planning process through the development of a digital tool

In many OECD Members and EU Member States digitalisation is transforming education, as is the case in other sectors of society. Technological devices and solutions, sometimes powered by Artificial Intelligence (AI), are increasingly used to assist teachers in the classroom or students in their learning at home. These smart technologies also allow for better use of data to manage education systems and institutions, and to better target policy interventions and drive innovation (Minea-Pic, 2020[77]; OECD, 2023[78]; Van der Vlies, 2020[79]). As mentioned above, the discussions with ANACEC and MoER officers revealed a keen interest to exploring ways to further strengthen and innovate the self-evaluation and improvement planning process of VET programmes, including through the use of digital technologies.

Therefore, responding also to the variable capacity of VET institutions for undertaking quality selfevaluations and the directions set out in the Education Development Strategy 2030 (Government of the Republic of Moldova, 2023<sub>[3]</sub>), the OECD team in its discussions with ANACEC officials proposed the option of developing a digital self-evaluation and improvement planning tool to facilitate the work of the Commission for Internal Evaluation and Quality Assurance. The OECD team pointed to the examples of education systems such as Estonia, Romania and New South Wales (Australia) that has developed such a digital tool to support its public schools in the school self-evaluation and improvement planning process and sharing of these data (OECD, 2023<sub>[80]</sub>; The Inspectorate of Education of Estonia, 2016<sub>[81]</sub>; European Commission/EACEA/Eurydice, 2015<sub>[82]</sub>). In Romania, for example, starting from the school year 2014/15, schools must upload their annual self-evaluation reports on a centralised electronic platform (European Commission/EACEA/Eurydice, 2015<sub>[82]</sub>). A similar platform is used in New South Wales where all public schools use the School Planning and Reporting Online (SPaRO) software platform (NSW Government, 2023<sub>[83]</sub>) (see Box 2.2).

ANACEC officers were quick to note that this suggestion resonated well with their own ideas and plans for further strengthening the self-evaluations and improvement planning of VET programmes by VET institutions. The digital tool could be designed to allow for replacing the current need for a (paper-based) self-evaluation report and improvement plan.

Another option to consider is to link this digital tool to the MoER education management information System (EMIS) to allow for easy sharing of – a selection of – the self-evaluation data and the improvement plan with the MoER. The easy sharing of these data, in a standardised format, could support the MoER in its capacity for monitoring progress, as well as possible targeting of support to VET institutions to help them in their improvement efforts. This measure could help respond to the by several MoER officers and other stakeholders noted limited insight into the quality and capacity of VET institutions to improve their programmes.

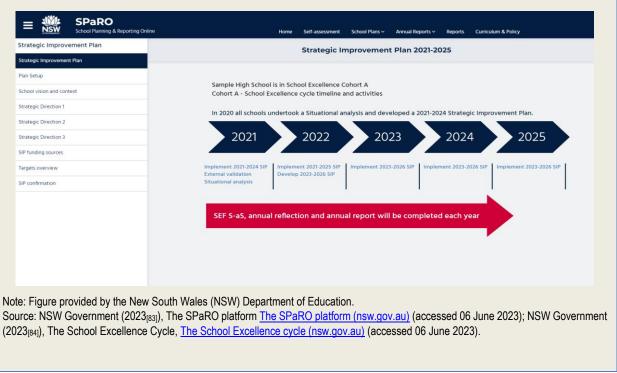
It is vital however that such possible measure does not unintentionally undermine the formative function of the self-evaluation and improvement planning process. The Commission for Internal Evaluation and

Quality Assurance should be able to critically reflect on VET programmes, being honest about strengths and weaknesses, without any fear of punishment. To create such a safe space and establish a learning culture or quality culture that is advocated for in the Education Development Strategy 2030 (Government of the Republic of Moldova, 2023<sub>[3]</sub>), it would be advisable to decide on what self-evaluation data and information is vital for sharing, and what is not. In addition, to limit the risk of unintended consequences, such as the deliberate hiding of some weaknesses of VET programmes, it is recommended to not make these self-evaluation data publicly available.

# Box 2.2. The School Planning and Reporting Online (SPaRO) platform, New South Wales (Australia)

In New South Wales (Australia) all public schools use the School Planning and Reporting Online (SPaRO) software platform for their self-evaluation and the development of their four-year Strategic Improvement Plans, for their implementation and monitoring of progress, annual reporting and in support of external evaluations (i.e. external validations). SPaRO is focusing on key areas for improvement determined by the school in consultation with its community to help ensure a profound difference to the ongoing growth and development of the school.

The SPaRO tool is accessed through the New South Wales Department of Education staff portal. School principals manage SPaRO access levels for staff in their school and can assign contributor access (editing rights) or staff access (read-only rights). The principal is the only user with rights to work on and publish the school's Strategic Improvement Plan, self-assessment survey and annual report. The SpaRO software as such provides school principals and other staff involved with an online integrated process to efficiently self-evaluate, plan, report and monitor progress.



#### Figure 2.1. Snapshot of the SPaRO platform

The selected self-evaluation data could be added to the data of the VET institution that are already available in EMIS. When presenting these data in, for example, a dashboard or report consideration should be given to adding comparable, but anonymised and aggregated, data and information (e.g. at district- or

national levels) from other VET programmes to allow for the envisaged benchmarking (Government of the Republic of Moldova,  $2017_{[56]}$ ) – something that at present is challenging. Again, consideration should be given to decide on what data is to be made available to VET institutions to help them in their benchmarking.

The development and piloting of such a digital self-evaluation and improvement planning tool, and the data presentation format (i.e. dashboard or report) in EMIS with the involvement of its key "end users", including representatives of Commissions for Internal Evaluation and Quality Assurance, ANACEC, the MoER and other line ministries would help ensure their relevance and user-friendliness (OECD, Education International, forthcoming<sub>[85]</sub>; OECD, 2020<sub>[86]</sub>). The involvement of these end users would also be most useful for informing the necessary updating of the internal quality assurance guidelines and the development of additional resources (such as online tutorials) to support capacity development efforts (see below).

#### Further enhancing external evaluations of VET programmes and institutions

#### Strengthening the vocational expertise among external evaluation commissions

Similar to many OECD Members and EU Member States, the external evaluation of VET programmes builds on the self-evaluation process (ERI SEE, 2022<sub>[57]</sub>; Government of the Republic of Moldova, 2016<sub>[58]</sub>; Government of the Republic of Moldova, 2017<sub>[56]</sub>). As mentioned earlier, the external evaluation is based on the same quality standards that are used for the self-evaluation of VET programmes. This can be considered a clear strength as it helps in providing clarity on and creating "a common language" about what matters in terms of quality VET programmes. This may help professional dialogue and exchange based on reliable and comparable data and evidence (OECD, 2013<sub>[64]</sub>; European Commission, n.d.<sub>[68]</sub>).

Furthermore, apart from the examination of the quality of VET programmes, external evaluations by ANACEC also look into the institution's capacity, i.e. the educational efficiency; the quality of management; and the consistency between the self-evaluations and the external evaluations.

Similar to many OECD Members and EU Member States, external evaluations by ANACEC concern two cases, as mentioned earlier. First, the external evaluation could concern the examination of a new VET programme. When a new VET institution or programme is established, the institution requests ANACEC to undertake an external evaluation for a provisional "authorisation". As mentioned earlier, the data suggest that in many cases this authorisation is granted.

Second, the external evaluation serves the purpose of deciding on the "accreditation" of existing VET programmes which is granted or not; following a "pass" or "fail" score, respectively. The external evaluations of existing programmes are to be carried out once every five years. In addition, it is also possible to externally evaluate the whole VET institution for the purpose of accreditation on the request of the institution if at least 50% of its programmes are to be accredited (ANACEC, 2022<sub>[59]</sub>).

As mentioned earlier, the external evaluation process of existing programmes involves the following seven steps:

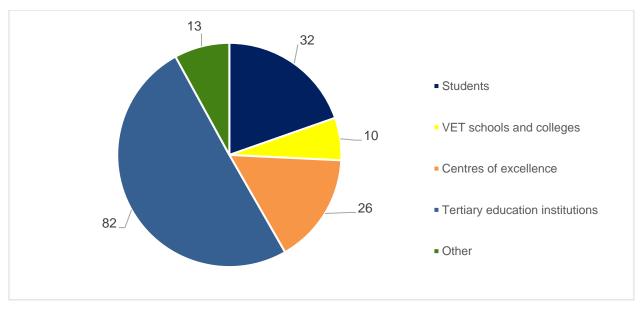
- 1) The establishment of an external evaluation commission by ANACEC (see below).
- 2) The analysis of the self-evaluation report by the external evaluation commission.
- 3) After having analysed the self-evaluation report, the Commission conducts an evaluation visit to the VET institution and completes the "visit form". A typical visit lasts between one to three days.
- 4) Following the evaluation visit, the Commission prepares an External Evaluation Report that is shared with the institution.
- 5) Based on the shared report, the institution prepares or updates its improvement plan.

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- 6) The ANACEC Governing Board shares its judgement on the VET programme(s), i.e. a "fail" or "pass" with the MoER.
- 7) The final step in the external evaluation process is if the evaluation is positive the granting of the provisional authorisation in case of a new programme or accreditation for a period of five years in case of an existing programme (Government of the Republic of Moldova, 2016[58]).

These steps confirm the central role of the external evaluation commission in the external evaluation process. Commission members are to be made up of individuals with a background in education, and in education and management, such as teachers and representatives of tertiary education. The Commission should also include students and employer representatives.

In 2021, there were 32 external evaluation commissions established by ANACEC to undertake the external evaluation of 140 VET programmes (8 new and 132 existing programmes) at ISCED levels 3 to 5 and bringing together 163 evaluators (ANACEC, 2022<sub>[65]</sub>). Figure 2.2 provides a breakdown of the members of the External Evaluation Committees by their affiliation in 2021. These data suggest that the selection process of these commission members strongly favours individuals working in tertiary education institutions (i.e. 50% of evaluators are working in tertiary education institutions). Less than a quarter (22%) of evaluators worked in VET schools, VET colleges and centres of excellence. Also, students contributing to the work of the external evaluation commissions come primarily from tertiary education institutions, thereby further reinforcing the tertiary education bias in the composition of the commissions. Employer representatives are also not strongly represented on the committees. The strong focus on commission members with a tertiary education profile, rather than a vocational profile, may result from the fact that until recently in Moldova VET was primarily school-based, with little involvement of employers and emphasis on work-based learning.





Note: The category "other" includes individuals from private and state companies, and upper secondary general schools. Source: ANACEC (2022<sub>[65]</sub>), Activity Report for the year 2021, ANACEC, Chisinau, <u>https://www.anacec.md/files/Raport\_ANACEC\_2021\_site.pdf</u> (accessed 1 May 2023).

As was also noted by several stakeholders the OECD team interviewed, the overrepresentation of commission members with a tertiary education profile may present a challenge in that these evaluators,

with the exception of those working in professionally oriented tertiary education programmes, may not always have a good understanding of the vocational profession that the programme is preparing students for, including the work-based learning of students.

Therefore, ANACEC should consider strengthening the vocational expertise of its external evaluation commissions by reviewing the membership criteria. Better representation of VET teachers and school directors, and importantly also trainers from companies (that are supporting the work-based learning of VET students) and other representatives of companies in evaluation commissions would most likely allow for a better evaluation of the quality and relevance of VET programmes. In recruiting the members of external evaluation commissions ANACEC may also draw from the network supporting dual education such as the Chamber of Commerce and employers providing dual education. Also, the use of highly credible directors and leading practitioners in external evaluations would both heighten the credibility of the external evaluation commissions and could help build capacity in the VET system as a whole (OECD,  $2013_{[64]}$ ).

ANACEC may look towards the example of OECD Members such as Denmark, Estonia and the Netherlands for reviewing the criteria of external evaluators to ensure these can fully appreciate the vocational specificity of the programmes they are to evaluate (OECD, 2022<sub>[87]</sub>; Field et al., 2012<sub>[88]</sub>). For example, in Estonia members of an external evaluation commission should meet the following criteria:

- Knowing the functioning of the VET system, be familiar with trends and organisational principles of VET
- Having management and/or development experience in the field of the study programme group under evaluation and/or in the field of VET
- Preferably, having experience in teaching and/or supervision (including traineeship supervision) in the field of VET
- Preferably, having completed a study on programme development, self- and/or external evaluation or quality management training, and preferably also have self- and/or external evaluation experience
- Being independent in their work and not represent the interests of the organisation they belong to (Estonian Quality Agency for Education, 2019<sub>[89]</sub>).

# Using a risk-based approach to prioritise programmes and institutions for external evaluations

Several authorities within OECD Members and EU Member States, such as Australia (Australia Skills Quality Authority, n.d.<sub>[90]</sub>; Australian Skills Quality Authority, 2023<sub>[91]</sub>), Bulgaria (Guthrie et al., 2022<sub>[92]</sub>), Estonia (Gray, 2014<sub>[93]</sub>), England (Allen and Burgess, 2012<sub>[94]</sub>), the Netherlands (Education Inspectorate of the Netherlands, 2021<sub>[95]</sub>), and Scotland (United Kingdom) (Skills Development Scotland, 2023<sub>[96]</sub>) have adopted such a risk analysis approach to identify underperforming education institutions and/or programmes to be able to more rapidly respond and prioritise the institutions and programmes that could benefit from an external evaluation in the form of additional guidance on improvements and recommendations provided by ANACEC and follow-up support provided together with the MoER.

ANACEC should consider adopting a similar approach, for example, on the basis of student assessment data, i.e. data from the baccalaureate exam, results of previous external evaluations, possible other data available in EMIS, including selected self-evaluation data. The limited public budget available and the constrained capacity of ANACEC (see below) provide further reasons for considering this option and diverting from the current five-year external evaluation cycle.

Similarly, ANACEC may also use the data and information to identify strong performing VET programmes and good practices. The identification and dissemination of such strong performing programmes and good practices (e.g. through case studies) could inspire and offer the necessary guidance to other VET institutions that are keen to improve and innovate their programmes.

## Presenting and disseminating the results of external evaluations in more informative and targeted ways

The external evaluation of VET programmes in Moldova is transparent and open to public scrutiny. All external evaluation reports are available online and ANACEC each year publishes a report presenting its activities (ANACEC, 2018[97]; ANACEC, 2021[98]). This is a clear strength to build on. However, as also noted by several stakeholders that the OECD team interviewed, students, parents and employers may not always be aware of this available information. Its use may also be limited because of the way in which the information is presented, i.e. in the form of a report.

Therefore, ANACEC should consider investing in a (more) comprehensive communication strategy to present and disseminate the external evaluation results through various means and targeted to the needs of different stakeholder groups (e.g. students, parents, employers and the MoER). One such means could be offered by a VET dashboard/report in EMIS that could include a link to the external evaluation report, as done for example on the "My local schools" website in Wales (United Kingdom) that presents selected school data for parents and all others with an interest in their local school (Welsh Government, 2023[99]).

Furthermore, ANACEC could consider organising regular peer learning workshops that allow participants of VET institutions to exchange knowledge, lessons learned and discuss their approaches to meeting the quality standards and innovating their VET institutions and programmes.

Another option is to post key information on the quality and relevance of VET programmes on career guidance platforms. Here Moldova could build on the work of the National Agency for Employment (ANOFM) that has developed career guidance services including for young people. For example, ANOFM has developed the Cariera platform to guide youth and adults in the choice of their profession by providing information on a range of occupations in an accessible way (National Agency for Employment, 2023<sub>[100]</sub>). The Cognitrom Career Planner (CCP) platform provides another option to disseminate key information on the quality and relevance of VET programmes (CCP Online, 2023<sub>[101]</sub>). This platform supports young people in identifying their vocational interests and making career decisions by selecting among the 1 150 occupational profiles available. The platform contains materials for teachers, school psychologists and parents, 350 films about professions and educational institutions from upper secondary education and tertiary education from Moldova and Romania (International Labour Organisation, 2022<sub>[36]</sub>). This platform could arguably benefit from additional information on the quality and relevance of VET programmes as determined by ANACEC through its external evaluations.

Furthermore, ANACEC should ensure that the information on how VET institutions and programmes are performing is available and presented in an accessible way to inform students and parents in their choices. This includes ANACEC informing the Minister, the district in which the VET institution is located, as well as current and prospective students (and their parents) if a programme is below standard.

## Consider making the grading of external evaluations more nuanced to incentivise improvements and better acknowledge the quality of programmes

As in many OECD Members and EU Member States, external evaluation of VET programmes aims to serve development and accountability purposes, both of which are ultimately aimed to serve the improvement of programmes (OECD, 2013<sub>[64]</sub>; World Bank, 2020<sub>[102]</sub>; Wiesner and Yuniarti, 2018<sub>[62]</sub>; Thibert, 2011<sub>[103]</sub>).

As mentioned earlier, currently a VET programme is awarded with either a "pass" or a "fail" score. Passing the accreditation means that the programme meets the minimum standard. However as also noted by several stakeholders the OECD team interviewed this scoring fails to give any insight into how good the programmes actually are in terms of their quality and relevance. Several interviewees also noted that this grading often fails to motivate and incentivise VET institutions to further enhance their programmes after receiving a pass – which as mentioned earlier almost all VET programmes receive at present. Several stakeholders noted the option of further nuancing scoring, for example by adding a "conditional pass" in which a number of improvements are needed that could then be externally evaluated in a next external evaluation to get full accreditation. Such further nuancing of accreditation scores should be considered to motivate and incentivise directors, VET teachers and others involved to pursue the much-needed entrepreneurial activities and improvements of VET programmes (ETF, 2020<sub>[27]</sub>), while arguably can also help better acknowledge their quality and relevance.

## Strengthening the organisational capacity of ANACEC, the MoER and other national level agencies

The Education Development Strategy 2030 calls for the strengthening of the managerial capacity and the culture of quality at all levels of the education system. It sets out the objective of reforming the management at all levels of the education system in terms of strategic leadership, efficient and transparent management and public accountability. This includes making the work of institutions responsible for quality evaluations more efficient, making specific reference to ANACEC (Government of the Republic of Moldova, 2023<sub>[3]</sub>). The analysis of this review corroborates this call for action.

ANACEC was established in 2018 through the merger of the National Agency for Quality Assurance in Vocational Education (ANACIP), the National Council for Accreditation and Attestation and the National School Inspectorate (ANACEC, 2022<sub>[65]</sub>). Such a merger of various institutions can represent a positive development as it may consolidate and avoid overlapping of organisational mandates and allow for pooling of human- and financial resources. However, ANACEC is reported to be constrained by its organisational capacity to undertake the external evaluations of VET programmes and institutions, in addition to its other roles and responsibilities (World Bank, 2018<sub>[26]</sub>). The desk study and interviews with representatives of ANACEC, the MoER and other education stakeholders corroborated these findings and showed that ANACEC's organisational mandate and roles and responsibilities are considerable, especially when considering the staffing and financial resources to fulfil these.

In addition, the interviews revealed that investments in the utilisation of digital technologies to support external evaluations has been limited to date. Many OECD Members and EU Member States have been looking towards digital technologies to transform their education systems, including for better use of data to manage education systems and institutions, to better target interventions and drive innovations (Minea-Pic, 2020[77]; OECD, 2023[78]; Van der Vlies, 2020[79]). ANACEC shares this interest and is keen to strengthen its monitoring and evaluation by utilising digital technologies, which was also recognised in the Education Development Strategy 2030 as a priority action (Government of the Republic of Moldova, 2023[3]). The text above has proposed some options for utilising digital technologies to enhance its operations, including the development and promotion of a digital self-evaluation and improvement planning tool. These and potential other opportunities for utilising digital technologies will have implications on ANACEC's ICT infrastructure, operations, staffing and the professional development needs of its staff, among others.

Similarly, the OECD team formed the impression there may be challenges in terms of the MoER's organisational capacity. Another example is provided by the National Agency for Curriculum and Evaluation which would benefit from further investments in developing its capacity to systematically analyse national and international student assessment data so these can inform the professional

development offer for teachers and school leaders, the development of additional teaching and learning resources, and future curriculum reviews, among others (OECD, 2023<sup>[4]</sup>).

In addition, as also noted in the Education Development Strategy 2030, across different levels of the education system, the OECD team found evidence of a management model and organisational culture that is geared towards bureaucratic compliance (Government of the Republic of Moldova, 2023<sub>[3]</sub>). The interviews with senior MoER officers showed a clear desire to modernise management approaches and move towards a culture of quality. There may be other issues and opportunities for optimising the MoER's organisational capacity.

The OECD team therefore recommends strengthening the organisational capacity of ANACEC, the MoER and other national level agencies. Considering the complexity of such an exercise, the MoER may consider starting by undertaking a comprehensive organisational capacity assessment of the MoER and other national level agencies to optimise their functioning and enhance their capacity for policymaking, implementation, monitoring and evaluation, that is to result in concrete actions for realising this objective.

#### Ensuring that VET institutions follow up on the results of external evaluations

As education systems firm up their evaluation and accountability arrangements this often exposes those institutions that are doing well, while also revealing those that are doing less well and need to bring about improvements in their organisation and programmes, and ultimately in teaching and student learning (OECD, 2013<sub>[64]</sub>; UNESCO, 2017<sub>[104]</sub>; Woessmann et al., 2009<sub>[105]</sub>). The above proposed measures to strengthen the self-evaluation and external evaluation would help identify the VET programmes on both sides of this spectrum, as well as those in the middle of the spectrum. For some institutions these changes may help in initiating further improvement efforts. However, there are indications that the capacity for self-evaluation and improvement planning and the actioning on these plans is variable across VET institutions in Moldova. Directors are reported to also often lack the capabilities and motivation to initiate improvements or entrepreneurial activity (ETF, 2020<sub>[27]</sub>). These findings were corroborated through this review.

Examples from OECD Members show that a degree of external follow-up can ensure that education institutions use external evaluation results to undertake improvement actions. However, providing adequate follow-up can place significant demands on the external evaluation body's capacity (OECD, 2013<sub>[64]</sub>). Therefore, recognising also ANACEC's organisational capacity (see above), it should as mentioned earlier consider adopting a risk analysis approach to prioritising VET programmes for external evaluations and choosing to more closely supervise and follow-up on these, together with the MoER.

Furthermore, there is a need to respond to the reported limited motivation and incentives for directors to initiate improvements that seems to be rooted in several factors (ETF, 2020<sub>[27]</sub>). These include, among others, the mentioned limited motivation and incentives provided by external evaluations, an underdeveloped performance appraisal system, and the difficult funding situation of some VET institutions (as mentioned earlier), while on the other hand the funding model does not promote performance improvements (i.e. does not include a performance-based component) which may insufficiently encourage the efficient use of resources and limit ambitions for improved performance (International Labour Organisation, 2020<sub>[18]</sub>). Several interviewees noted the generally weak public accountability of VET institutions and their directors to improve the quality and relevance of their programmes.

To change this situation for the better, Moldova may look towards the examples of countries such as Denmark, Estonia and the Netherlands (Cedefop, 2021<sub>[106]</sub>) to consider making VET programmes that are judged to be underperforming because of an issue with the quality of provision (instead of an issue concerning limited labour market demand for the programme's graduates/skills, when closing down of the programme may be preferred (see below)) follow a mandatory improvement pathway for a specific period (e.g. one to three years). In Denmark, for example, an extensive support process is in place for

underperforming institutions that are aimed to help enhance the quality of its VET programmes. Once exhausted and where improvements are not evident the institution may be closed (see Box 2.3) (Cedefop, 2021<sub>[107]</sub>; Ministry of Children and Education of Denmark, 2023<sub>[108]</sub>). Moldova should consider following this example, meaning that if the quality of VET programme fails to show satisfactory improvement within a specific period – determined through a follow up evaluation by ANACEC, then the Minister could decide to deprive the VET programme from funding, thereby effectively closing it.

# Box 2.3. Targeting of support to underperforming VET institutions – An example from England and Denmark

#### England

In England, the Department for Education launched the National Leaders of Further Education programme in 2017. The programme aims to recruit a team of high-performing leaders with a track record of delivering improvement both in their own colleges and in working with others. These leaders provide specialist support to struggling Further Education colleges, identified based on their most recent official inspection report. Leaders in these institutions are mentored and supported to develop their skills by leaders recruited to the programme. More recently, in 2020, the Department also launched the College Collaboration Fund, which supports colleges to work together to share their knowledge, expertise and best practice, with an approach based on peer-to-peer support – where stronger-performing colleges help weaker-performing colleges improve.

#### Denmark

The Danish Agency for Education and Quality carries out annual screenings of the institutions' results to see if they can reach goals set for VET. Underperforming institutions that are identified in the screening process are asked for a short status report on how they envisage to improve. On the basis of the status report and the screening results, a small number of institutions are selected for inspection. VET institutions that are seen as at risk of not reaching the goals are offered counselling. Learning consultants then contact the institutions selected in the risk-based evaluation carried out by the Danish Agency for Education and Quality and offer them support and guidance adapted to the institution's challenges.

All learning consultants have experience with the VET sector in the following areas:

- Experience with pedagogy, school management, team management, school development, teaching, quality work and/or project management
- Work at a VET institution in areas where the improvement is needed, e.g. pedagogical and didactic teaching planning, guidance and transition from school, apprenticeship area, teaching environment and student well-being.

VET learning consultants contribute to quality development and capacity building at the VET institution by targeting the management practices and working with the school staff. During the counselling, the learning consultants and institutions collaborate to stimulate and implement changes based on research-based knowledge and promising practice. The learning consultants support the work of the VET institutions through:

- dissemination of promising initiatives
- theme days, workshops and webinars on reform-relevant topics and research-based knowledge
- creating and facilitating access to networks.

The learning consultant and the institution work together to develop a model that would allow the institution to reach the required objectives. This consists of a structured analysis and identification of the institution's current situation, as well as of short-term and long-term goals. The process includes implementation of the change(s) based on the change model, as well as plans allowing the institution to sustain good practices.

A counselling course can last up to a year, depending on the institution's challenges and the nature of the support. The learning consultants advise the institution throughout the process and are expected to be in contact with the institution once a month. There are always two learning consultants associated with a counselling support.

Source: Ministry of Children and Education of Denmark, (2023<sub>[109]</sub>), About the Learning Consultants, <u>https://www.uvm.dk/erhvervsuddannelser/skoleudvikling</u> (accessed 15 February 2023); OECD (2021<sub>[74]</sub>), Teachers and Leaders in Vocational Education and Training, <u>https://doi.org/10.1787/59d4fbb1-en</u>.

That said, the proposed strengthening of school evaluation and accountability arrangements should be matched with offering additional support and incentives to VET institutions to help them improve and innovate their programmes. VET institutions, in particularly those that are struggling, may benefit from hands-on capacity development support. For this, the MoER and ANACEC may look towards the examples of Denmark and England (see Box 2.3).

Furthermore, experiences from OECD Members demonstrate the importance of investing in the capacity of institutions for undertaking participatory self-evaluations and improvement planning, and for the actual implementation of improvement actions (OECD, 2013<sub>[64]</sub>). Several measures should therefore be considered. First, the proposed digital self-evaluation and improvement planning tool and other proposed recommendations call for updating of the internal quality assurance guidelines. ANACEC should consider developing other supporting resources such as online tutorials to help members of the Commission for Internal Evaluation and Quality Assurance in their work.

Second, Moldova should consider developing and piloting a capacity development course targeted at directors, other management staff and members of the Commission for Internal Evaluation and Quality Assurance in undertaking self-evaluations and improvement planning, the implementation of improvement actions and monitoring of progress. The course should aim to provide participants with practical skills, including hands-on training and support in the use of the to-be-updated internal quality assurance guidelines, the proposed digital self-evaluation and improvement planning tool and digital school leaver survey, among others. An online self-paced learning course should be considered to further optimise access and learning. The recently established National Institute for Education and Educational Leadership would seem well positioned to take forward the development of this course, in collaboration with ANACEC.

Third, VET institutions may also benefit from hands-on capacity development support. Moldova may look towards the example of Estonia that from 2006 to 2009 as part of its efforts to develop self-evaluation and improvement planning capacity among its schools and education institutions provided them with access to "counsellors" to assist them in their self-evaluations and improvement planning. This support is believed to have succeeded in its purpose but is still made available to education institutions by the Ministry of Education and Research upon request (NCEE, 2023[110]).

Fourth, as mentioned above, ANACEC and/or the MoER should consider organising regular peer learning workshops that allow participants of VET institutions to exchange knowledge, lessons learned and discuss their approaches to meeting the quality standards and innovating their programmes.

Lastly, ANACEC and/or the MoER could develop case studies of good practices in different areas or quality standards to inspire and support VET institutions in their improvements and innovations.

### Recommendations

- Strengthen the self-evaluation and improvement planning of VET programmes and institutions. Measures could include:
  - **Reviewing the quality standards used for self-evaluation and external evaluation.** For example, standards that emphasise the following:
    - VET programmes' quality and relevance to meeting local/district and national labour market needs. Labour market data and information such as employment and, unemployment rates would be particularly helpful regarding the decision to authorise new VET programmes, as well as to assess the continued relevance of existing programmes. To support VET institutions in the analysis of such data Moldova may look towards the example of Australia that has established an independent agency to provide advice on current, emerging and future labour market and workforce skills and training needs.
    - Moldova should consider expanding the quality standards by adding a requirement for VET teachers (teaching vocational subjects) to demonstrate relevant and up-todate professional experience and skills. There are differences between sectors in the speed with which professional knowledge, skills and experience are likely to "be outdated". The MoER should together with the social partners (e.g. the established sectoral committees), ANACEC, continuous professional development centres and other key stakeholders decide on the necessary frequency of the updating of professional experience and skills.
    - One or more additional standards could emphasise the systematic and critical use of data for measuring both the levels and trends in: 1) Students' educational outcomes. For example, dropout rates, graduation rates, transition to post-secondary education and student satisfaction surveys – by programme; and 2) Labour market outcomes, i.e. graduates' performance in the labour market. For example, job placement rates or employer satisfaction surveys.
  - Recognising the variable capacity of VET institutions to collect and analyse data on their graduate's performance on the labour market, the MoER and/or ANACEC should support VET institutions in the collection and analysis of these data.
  - Moldova should consider mandating VET institutions to collect data on graduates/school leavers using a standardised digital survey. For this MoER may look to the example of Northern Ireland (United Kingdom). This may support VET institutions in their self-evaluations and improvement planning while also providing the MoER, ANACEC, (future) students, parents and other stakeholders with valuable additional information about the quality and relevance of different programmes in VET institutions in Moldova.
  - Looking to the examples of countries and jurisdictions such as Estonia, Romania and New South Wales (Australia), the MoER and ANACEC should consider innovating the self-evaluation and improvement planning process through the development of a digital tool. An option to consider is to link this digital tool to the MoER education management information System (EMIS) to allow for easy sharing of a selection of the self-evaluation data and the improvement plan with the MoER to support the monitoring of progress, and possible targeting of support to VET institutions. Care should be taken however to ensure that

such a possible measure does not unintentionally undermine the formative function of the selfevaluation and improvement planning process.

- Strengthening of external evaluations of VET programmes and institutions. Measures could include:
  - Strengthening of the vocational expertise in its external evaluation commissions by reviewing the membership criteria. Moldova may look towards the example of Estonia for reviewing the criteria of external evaluators.
  - Using a risk-based approach to prioritise programmes and institutions for external evaluations. Following the examples of countries such as Bulgaria and the Netherlands, ANACEC should consider adopting a risk analysis approach to identify underperforming education institutions and/or programmes to be able to more rapidly respond and prioritise the institutions and programmes that could benefit from an external evaluation in the form of additional guidance on improvements and recommendations provided by ANACEC and follow-up support provided together with the MoER.
  - ANACEC developing a (more) comprehensive communication strategy to present and disseminate the external evaluation results through various means and targeted to different stakeholder groups (i.e. students, parents, employers, the MoER). This could include informing the Minister, the municipality in which the VET institutions is located, as well as parents and students if a VET programme is below standard.
  - Consider making the grading of external evaluations more nuanced to incentivise improvements and better acknowledge the quality of programmes. ANACEC could consider adding a "conditional pass" in which a number of improvements are needed that could then be externally evaluated in a next external evaluation to get full accreditation. Such nuancing of evaluation scores could (together with other proposed recommendations) help motivate and incentivise directors, VET teachers and others involved to pursue the much-needed entrepreneurial activity and improvements of VET programmes, while it could also help better acknowledge their quality and relevance.
  - Moldova should invest in strengthening the organisational capacity of ANACEC, the MoER and other national level agencies.
- The proposed strengthening of school evaluation and accountability arrangements should be matched with offering additional support and incentives to VET institutions to help them improve their programmes. Measures could include:
  - VET institutions and programmes that are judged to be underperforming should follow a mandatory improvement pathway within a specific period (e.g. one to three years). Should a VET institution fail to show satisfactory improvement within a specific period (e.g. one to three years) – determined through a follow up evaluation by ANACEC, the Minister could decide to deprive the VET programme funding, thereby effectively closing it.
  - Offering hands-on support to VET institutions that are struggling to help them in their improvement efforts. For this, the MoER and ANACEC may look towards the examples of Denmark's use of "learning counsellors" and England's National Leaders of Further Education programme to provide specialist support, such as mentoring and skills development, to struggling VET institutions.
  - In addition to the proposed digital self-evaluation and improvement planning tool that is aimed to help VET institutions improve and guide the work of the Commission for Internal Evaluation

and Quality Assurance, Moldova should further invest in the capacity development of VET institutions for self-evaluation and improvement planning and the implementation of actions by:

- Updating of the internal quality assurance guidelines and the development of other supporting resources such as online tutorials to help members of the Commission for Internal Evaluation and Quality Assurance in their work.
- Developing and piloting a capacity development course targeted at directors, other management staff and members of the Commission for Internal Evaluation and Quality Assurance for undertaking self-evaluations and improvement planning, the implementation of improvement actions and monitoring of progress. An online selfpaced learning course could be considered to further optimise access and learning.

The recently established National Institute for Education and Educational Leadership would seem well positioned to take forward the development and piloting of the course, in collaboration with ANACEC.

- Providing VET institutions with "hands-on" capacity development support for selfevaluation and improvement planning – and actioning these plans. For this Moldova may look towards the example of Estonia where "counsellors" assisted education institutions in their self-evaluations and improvement planning. Possibly such a role could be expanded to provide also specialist support, such as mentoring and skills development, to struggling VET institutions to help them in their improvement efforts (see examples of Denmark and England above).
- Continuing to organise regular peer learning workshops that allow participants of VET institutions to exchange knowledge, lessons learned and discuss their approaches to meeting the quality standards and innovate their programmes.
- Developing and disseminating case studies of "good practices" on specific areas or quality standards to inspire and support VET institutions in their improvements and innovations.

# 3. Creating a conducive policy context

Building on the analysis presented in Section 2, this section consists of an examination of several relevant areas of policy and factors of influence for strengthening the evaluation of upper secondary VET programmes and for the successful implementation of the Education Development Strategy 2030 more generally. The section starts with a discussion on the need for ensuring that VET teachers have relevant and up-to-date professional experience and skills, offering concrete suggestions for doing so. This is followed by a discussion on the possibilities and concrete steps for the consolidation of Moldova's fragmented network of VET institutions – a policy priority of the Education Development Strategy 2030. The section continuous with a discussion on the option of exploring the use of grant funding and subsidies to steer institutional performance and innovation, in line with policy objectives and priorities, before concluding with a reflection on the governance of the VET system. The section concludes by proposing a select number of concrete recommendations for improvement.

## Ensuring VET teachers have relevant and up-to-date professional experience and skills

Teachers in VET have an immediate and positive influence on learners' skills, employability and career development. VET teachers require a mix of pedagogical skills and occupational knowledge and experience, and need to keep these up-to-date to reflect changing skills needs in the labour market and evolving teaching and learning environments (OECD, 2021<sub>[74]</sub>). As discussed in Section 2 it is recommended that Moldova gives more weight to VET teachers having the relevant and up-to-date professional experience and skills in the quality standards that are used for the self-evaluation and external evaluation of VET programmes. Apart from changing the concerned regulations to ensure all VET teachers have relevant and up-to-date professional experience and skills, this important measure may call for some additional flexibility. Moldova could give new VET teachers without relevant professional experience a temporary exemption to obtain the relevant professional experience, for example within a four-year period as is done in Denmark (OECD, 2022<sub>[111]</sub>).

Furthermore, this requirement also calls for giving VET teachers already in the profession the necessary opportunities and support to obtain or update their working experience in the relevant sector and profession. For this Moldova may look towards the examples of countries such as England (United Kingdom), Denmark, the Slovak Republic and Spain (see Box 3.1). While industry placements, as in England (United Kingdom) and Spain, could be useful for the proposed regular "updating" of relevant professional expertise of VET teachers with past (but relatively recent) working experience in the subjects they are teaching, more intense professional experience. As mentioned earlier, data suggest that this applies to a considerable proportion of VET teachers in Moldova (ETF, 2020[51]). Moldova should encourage these teachers to acquire vocational qualifications corresponding to the area they are teaching.

### Box 3.1. Company placements and the professional development of VET teachers

### The Slovak Republic: Transnational cooperation for skills development

In the Slovak Republic the 'Step Ahead' project was initiated by the Erasmus+ programme (2015-17 and 2018-20) to provide training programmes for VET teachers in the automotive industry. The programme supported the transnational cooperation between VET institutions, private companies and non-governmental organisations. Training of Slovak Republic VET teachers was carried out in the Czech Republic and in Finland in 2019 and in Spain in 2020. These investments in the professional development of these teachers enabled them to use their new knowledge and skills to innovate their teaching.

### England (United Kingdom): The Industry Insight initiative

In England (United Kingdom) Further Education (FE) colleges are post-secondary education institutions that deliver a range of qualifications, including VET qualifications at ISCED level 3 to 5. The Industry Insight initiative of the Education and Training Foundation (a registered charity) offers work shadowing and immersive workplace placements to teachers in FE colleges to raise their awareness of current industry practices. Examples of training opportunities include one-day work shadowing, two-to-five-day placements, and workshops for teachers to meet as a group with employers or industry specialists.

### Spain: In-company training of VET teachers

In Spain, VET teachers in publicly funded institutions can take part in professional training in companies for a maximum duration of 5 days, funded by the Ministry of Education. Moreover, most regions in Spain offer subsidies for in-company training for VET teachers. Teachers are also offered two-week stays at VET institutions in different European countries.

#### Denmark: Company involvement in developing relevant skills of VET teachers

In Denmark the "Horizontal Innovation through Competence Development project" was started by a partnership between four VET institutions (secondary and post-secondary), a university research centre, and the Danish Federation of Small and Medium-sized Enterprises. This project aimed to deliver entrepreneurial and innovation competences to small and medium-sized enterprises (SMEs). The project develops VET teachers' competences to deliver entrepreneurial skills in close cooperation with the SMEs. In the context of the project, VET institutions can offer targeted advice to SMEs within their field of specialisation. Social partners in the form of professional committees have initiated a number of teacher training initiatives aimed at increasing VET teachers' professional competencies. VET teachers of carpenters, electricians and other professional groups are given the option to participate in week-long workshops, primarily to develop specific competencies in their professional areas, but also to support them in delivering more attractive and engaging teaching and training (Andersen, Gottlieb and Kruse, 2016[112]).

Source: OECD (2021<sub>[74]</sub>), Teachers and Leaders in Vocational Education and Training, OECD Reviews of Vocational Education and Training, <u>https://doi.org/10.1787/59d4fbb1-en</u>; Andersen, Gottlieb and Kruse (2016<sub>[112]</sub>), Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Denmark, Cedefop ReferNet thematic perspectives series, <u>http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet DK TT.pdf</u> (accessed on 10 January 2023); Education and Training Foundation, (n.d.<sub>[113]</sub>), Industry Insights, <u>Industry Insights - The Education and Training Foundation (etfoundation.co.uk</u>) (accessed 15 April 2023).

In addition, to attract skilled workers into the teaching profession, Moldova may also introduce more flexibility in the acquisition of teaching qualifications by these newcomers. This is vital as for those interested in pursuing a teaching career obtaining a teaching qualification through a full-time teacher education programme may be too costly (due to foregone earnings and the costs of the programme) and/or time-consuming. In many OECD Members and EU Member States, including Moldova, VET institutions address shortages of VET teachers by employing skilled employees to teach VET subjects. To facilitate entry to the teaching profession, some countries allow new VET teachers with relevant professional experience to complete a teaching qualification while in the first year(s) of teaching and in a flexible manner

(OECD, 2021<sub>[74]</sub>). Box 3.2 below outlines examples from Korea and Denmark of flexible pathways to becoming a VET teacher.

### Box 3.2. Flexible pathways into the teaching profession – Examples from Korea, Denmark and the Netherlands

#### Korea

In 2020 the Government of Korea launched the Plan for Vocational High School Support and Employment Promotion that (among others) aims to enhance the recruitment of skilled individuals in the teaching profession through a range of flexible recruitment procedures. Recruitment is targeted to those sectors and professions with a pronounced shortage of VET teachers.

In Korea, teachers are civil servants and usually acquire teaching qualifications through examinations. Similar to Moldova, entrants to the VET teaching profession in Korea do not need to demonstrate relevant industry experience. The abovementioned Plan permits individuals with relevant national technical qualifications (industrial engineer or higher) to teach vocational subjects relevant to emerging industries that do not yet have a relevant teacher qualification (e.g. sectors related to new technologies such as autonomous driving, drones or Artificial Intelligence).

A fast-track teacher training programme will be introduced for industrial experts in fields that have no established teacher training programme to meet the demand for skills in new industries. This fast-track training is aimed to allow the superintendent of education to issue teacher qualifications, which otherwise would generally be obtained through an exam. It could also allow industry experts who are specialists in emerging technologies where there are currently no qualified VET teachers (e.g. robotics) to be employed as an "industry-academic adjunct teacher" while awarding them VET teacher certifications. VET graduates who have worked more than three years in industry will be eligible to obtain VET teacher certifications. The country is also planning to allow VET institutions more autonomy in hiring qualified teachers based on labour market needs.

Through these and other measures Korea aims to reduce existing shortages and prevent future shortages of VET teachers.

#### Denmark

Similar to Korea and many other OECD Members, Denmark has been faced with a VET teacher shortage. This is due, in part, to an aging teaching workforce and increasing retirements. Individuals seeking to teach vocational subjects must demonstrate that they have relevant work experience. While a teaching qualification is not required upon entry, new VET teachers who have not received pedagogical training must begin a teacher educational programme (to obtain the diploma in VET pedagogy) within one-year after starting as a teacher. The programme lasts one year full-time and up to three years part-time. The teacher must complete the programme within a four-year period. The programme is provided through the following four modalities:

- Teachers follow the programme on a part-time basis while teaching at the VET institution. The programme is provided on the university college premises. The teachers are given a certain number of hours by their employers (i.e. the VET institutions) to follow the classes, including study and preparation time.
- 2) Teachers study on a full-time basis over a period of six weeks and three days. During this time, they are exempt from teaching by their VET institution. The teacher follows the modules on the university college premises. Institutions that release teachers for a longer period, while paying their wages, can apply for a reimbursement from the State Adult Education Support scheme. However, since 2014 financial support is only available to teachers that have not completed upper secondary education.
- 3) VET institutions have an agreement in place with university colleges that provide the diploma programme, i.e. the time of classes is agreed between VET institutions and university colleges. Classes are provided in one of the VET institutions' premises. As in modality two, teachers study full-time for a total duration of six weeks and three days, while their employer (i.e. their VET institution) continues to pay their salary.
- Classes are provided at the VET institution. The VET institution and university college agree on the study time to ensure it does not interfere with teachers' teaching responsibilities. To participate in the programme, teachers are

given eight to ten days of study time. The VET institution continues to pay the teacher's salary during this study period.

Contrary to the Korean example mentioned above, the Danish approach applies to all VET subject areas.

### The Netherlands

Upper secondary vocational education in the Netherlands, often referred to as "MBO" (the abbreviation of Middelbaar Beroeps Onderwijs), has a long history of lateral entry of VET teachers from industry and from the general education sector or those with a relevant tertiary education degree. The most common route for them to enter the VET teaching profession is the pedagogical didactic certificate (PDG) aimed at vocational subjects.

Figure 2.1 describes the process of lateral entry. In MBO, unlike in primary and secondary education, there is no suitability assessment for the PDG by the programme providing the training, but it is rather the MBO institution where the lateral entrant will work that issues a suitability statement - with which the lateral entrants can start the PDG trajectory. The statement relates to the suitability to teach, the professional competence and the expectation that the candidate will be able to obtain the PDG within two years. VET providers often have agreements with universities of applied sciences (UAS) about the PDG because several candidates from the MBO institution follow a PDG trajectory at the same time. The PDG training only contains pedagogical and didactic components, not the subject matters. As starting a new job as a teacher and following a training programme at the same time can be difficult, the lateral entrants often start the training program after six months or a year. A number of UAS indicate that they have now started processes to better prepare potential lateral entrants, including training days, introductory and orientation meetings. The PDG training can be also delivered 'in company' (i.e. at a VET school) – this is beneficial as the teachers do not need to travel and these teachers from the same VET school can take the course together in the VET school where they teach.

### Figure 3.1. Process of lateral entry for VET teachers in the Netherlands



If a candidate opts for a lateral entry for a general education subject, which usually leads to the pathway of Certificate of Competency, the rules that apply in primary and secondary education apply. A suitability study is conducted prior to the training programme for participants who have not completed (or have not completed the correct) teacher training in the past. Unlike the PDG trajectory, the responsibility for the declaration of suitability lies with the teacher training course. In the suitability test, the candidate generally prepares a portfolio, in which he must demonstrate that he or she has a higher professional education level, and it is assessed whether the candidate is suitable to teach directly, can obtain the qualification within two years and it is examined which additional training whether guidance is needed. Previous work experience is important here.

Source: OECD (2021<sub>[74]</sub>), Teachers and Leaders in Vocational Education and Training, OECD Reviews of Vocational Education and Training, <u>https://doi.org/10.1787/59d4fbb1-en</u>; Korean Government, (2020<sub>[114]</sub>), Plan for Vocational High School Support and Employment Promotion, <u>www.gov.kr/portal/ntnadmNews/2167641</u> (accessed on 21 February 2023); OECD (2022<sub>[111]</sub>), Preparing Vocational Teachers and Trainers: Case Studies on Entry Requirements and Initial Training, <u>https://doi.org/10.1787/c44f2715-en</u>.

Furthermore, the MoER may look towards the examples of OECD Members such as Denmark, the Netherlands and Australia where it is also possible to combine a (part-time) job in a company with (part-time) teaching in a VET institution (OECD, 2021<sub>[74]</sub>). In these countries, for example, professionals may teach in the evening hours or weekends in a VET institution, in addition to them working in a company. Alternatively, they may halt their work in companies to teach full-time for a semester.

### Prioritising and actioning the consolidation of the network of VET institutions

### Consolidation of the network of VET institutions in OECD Members

In several OECD Members and EU Member States such as Denmark, Estonia, Latvia, Lithuania and Portugal the reorganisation of the network of schools, including VET institutions, has become a policy priority in recent years (Ares Abalde, 2014<sub>[115]</sub>; OECD, 2022<sub>[116]</sub>; OECD, 2018<sub>[117]</sub>; OECD, 2016<sub>[72]</sub>; OECD, 2017<sub>[118]</sub>). Demographic shifts, regional economic developments and changing labour market needs are causing a mismatch between supply and demand for student places. As a result, networks of VET institutions are characterised by a relatively large number of small institutions or facilities with overcapacities. Such developments can place a significant financial burden on education systems and may risk the quality of education – as is the case for Moldova. Recognising the demographic shifts are projected to continue in the years to come and cause further inefficiencies and pressure on the public budget, the Education Development Strategy 2030 has made the consolidation of the school network (i.e. the network of primary- and secondary schools and VET institutions) a policy priority (Government of the Republic of Moldova, 2023<sub>[3]</sub>).

International research evidence suggests that the consolidation of the network of VET institutions could enhance the efficiency of VET provision, while also helping to improve the quality of VET programmes (Kuczera and Jeon, 2019<sub>[119]</sub>). For example, when two or more institutions in a relatively close geographical area are offering similar VET programmes, there may be scope for merging these institutions or consolidating some of their programmes, particularly where student numbers may be low. If the overlap concerns only certain VET programmes, then there may be an option for only one of these institutions to continue to offer these programmes. Such specialisation by VET institutions could allow for more efficient use of resources, such as not having to duplicate investments in equipment and other teaching materials, teachers, etc.

However, there is evidence pointing to the disruptive experience of relocation and increased travel distances that can negatively impact students' well-being and learning outcomes in the short term (Beuchert et al., 2016<sub>[120]</sub>). When engaging in consolidation, authorities should carefully weigh the benefits of school closures against their social and economic impact on surrounding communities, the transition costs generated in the process, and the public and private expenditure on longer commuting distances. In some cases, alternative options to school closures may be explored, such as the consolidation of two or more institutions under one governing body and management team. Such an option may be more suitable in some cases and could bring about the necessary efficiency gains by having only one governing body and management team to lead the institutions, while avoiding institution closure (Ares Abalde, 2014<sub>[115]</sub>).

Several OECD Members such as Denmark, Estonia and Latvia have consolidated their VET provision during the last decade(s) to better match the supply and demand for student places, as well as other reasons such as, for example, changing labour market demands and population decline (OECD, 2016<sub>[72]</sub>; Cedefop, 2017<sub>[121]</sub>; Bogetoft and Wittrup, 2015<sub>[122]</sub>). In Latvia for example (which has a population of 1.8 million people and where about 50% of upper secondary students are enrolled in VET programmes) the network of VET institutions has been consolidated through a series of mergers and specialisations of VET institutions, leading to a considerable reduction in the number of institutions. The number of VET institutions was reduced from 59 in 2010 to 23 in 2016 (OECD, 2016<sub>[72]</sub>). The consolidation of the network of VET institutions aimed to address the following challenges – many of which resonate with the Moldovan context: the number of places offered was larger than the number of students; in many cases VET institutions in the same area were providing similar programmes; the geographical coverage of programmes did not correspond to employers' needs; the infrastructure and equipment were outdated; and resources were allocated inefficiently (OECD, 2016<sub>[72]</sub>). To a large extent these challenges in Latvia were met through the consolidation and specialisation of VET institutions, including through the

establishment of Vocational Education Competence Centres (VECCs). These VET schools have more than 500 students and act as regional hubs for developing closer relationships with employers, provide high-quality vocational education for students (youth and adults), and develop pedagogical support for other vocational schools (OECD, 2016[72]). Moldova's experiences with its centres of excellence have shown similar benefits of having such larger and specialised institutions.

This example from Latvia and those of other countries show that considerable progress in the reorganisation of the network of VET institutions and programmes can be achieved in a relatively short timeframe.

### Undertake a geospatial analysis to identify VET institutions to be considered for consolidation

A large and growing body of geographic education policy research has been amassed in the past 25 years as researchers from a variety of disciplinary backgrounds have recognised the value of examining education phenomena from a spatial perspective (Cobb, 2020<sub>[123]</sub>; Hogrebe and Tate, 2012<sub>[124]</sub>). Geospatial analysis techniques are ever expanding, offering new perspectives on studying issues in education, including in the area of school network consolidation (OECD/EC-JRC, 2021<sub>[125]</sub>; OECD, 2022<sub>[116]</sub>).

Although beyond the original scope of this project, the OECD team agreed to conduct an initial geospatial analysis to help advance the school network consolidation at primary and secondary levels. This initial geospatial analysis explored a targeted approach to school consolidation by rethinking how different school types and grade levels could be combined and distributed across school sites. The geospatial simulation suggested there is considerable scope for consolidation of the Moldovan network of primary and secondary schools and resulted in an initial master list of schools to be considered for network consolidation. The OECD report *An assessment of the professional development of teachers and school leaders, and curriculum and learning resources in Moldova* (2023<sub>[4]</sub>) summarises the findings of the geospatial analysis and offers suggestions for further refinement of the geospatial simulation model and initiating the network consolidation – noting it is important to carefully weigh the benefits of school closures against their social and economic impact on surrounding communities and recognising that a "one-size-fits-all" solution may not be possible or desirable (Ares Abalde, 2014<sub>[115]</sub>; OECD, 2022<sub>[116]</sub>; OECD, 2018<sub>[117]</sub>; Beuchert et al., 2016<sub>[120]</sub>).

The OECD team did not undertake a similar analysis for the consolidation of the network of VET institutions considering the scope of the project and additional complexities that come with such an exercise for consolidating VET institutions. This would arguably begin with the question of what indicators to include in a geospatial simulation model and requires significant input from the MoER, other line ministries and potential other stakeholders to develop a geospatial simulation model fitting the Moldovan context.

That said, in an effort to support the MoER in initiating this important reform the OECD team proposed starting the exploration of several indicators for the development and trialling of a geospatial simulation model. Informed by the interviews with several education stakeholders, examples of indicators to consider for the development and trialling of the geospatial simulation model could be:

- The quality of VET programmes and institutions, determined by the outcomes of the external evaluations (see Section 2).
- The economic profile of the district (i.e. the economic activity by sectors).
- The demographic situation of the district, including population dynamics by age groups and migration dynamics.
- The geography/connectivity based on the presence and quality of transport infrastructure (i.e. roads).

The MoER could conduct simulation exercises to further refine the geospatial simulation model, adding, deleting and/or refining indicators as needed. These efforts could result in an initial list of VET institutions that could be considered for consolidation. This list should be carefully reviewed, however, as there may and likely will be some cases for which special circumstances apply and that argue against consolidation – as noted, a "one-size-fits-all" solution may not be possible or desirable.

Following the further review of this list of VET institutions, the MoER could possibly establish a small technical working group, including representatives of the MoER and other ministries responsible for VET, sectoral committees, the Chamber of Commerce, ANACEC and other possible stakeholders to advice on possible options for consolidation of the identified VET institutions. Again, the OECD team would like to caution against a "one-size fits all" solution. For example, in addition to closing or merging of institutions, another option may be to consolidate two or more institutions under one management team. This option may be suitable in some cases and could bring about the necessary efficiency gains by having only one director and management team to lead the institution, while avoiding the closure of institutions (Ares Abalde, 2014[115]).

In addition, there are different instruments through which authorities can create incentives for consolidation. One of the most common practices is to offer direct aid programmes for consolidating institutions, as well as providing building and transportation aid, to cover the capital investments and the changes in operating costs occurring after consolidation (Duncombe and Yinger, 2010<sub>[126]</sub>; World Bank, 2023<sub>[127]</sub>). Following the examples of OECD Members such as England (United Kingdom) and Portugal, the MoER could consider establishing a funded programme for building or renovating of VET institutions to support the network consolidation (OECD, 2018<sub>[117]</sub>). Such a programme that offers support for building and/or moving to modern, state-of-the-art buildings and facilities could serve as an attractive incentive for VET institutions.

Further incentives and support should be explored, however. For example, in the form of direct financial support for consolidating VET institutions, via one-time incentive grants or multi-year commitments to cover the immediate costs of consolidation. There is likely to be a large upward shift in per student costs during the years immediately following consolidation, followed by a gradual decline in the following years. For this reason, policies seeking to incentivise consolidation need to cover at least the costs incurred during and immediately after the consolidation process (Ares Abalde, 2014<sub>[115]</sub>; OECD, 2018<sub>[117]</sub>). Other incentives could be explored to encourage and support the consolidation of the network of VET institutions in Moldova.

Furthermore, the MoER should consider integrating the simulation model in its EMIS – though adding strict access rights to ensure these potentially sensitive data are only accessible to those with the required rights. The integration in EMIS could allow for the automatic generation of such a list of VET institutions – to consider for consolidation, at any time and based on the latest data available – though noting these data should not be made publicly available and instead are accessible to the MoER and other line ministries. This measure should be considered knowing that the optimisation of the network of VET institutions will take time and demographic changes are likely to continue, thereby providing an impetus for further network consolidation in the years to come.

# Using grant funding to steer improvement and innovation towards policy objectives

In many OECD Members the funding of VET programmes is based on inputs that feed into a funding formula and, sometimes, influenced by factors such as institutional allocations of the previous year, political influence, interest group pressure and/or the negotiating skills of the institutional actors (Ziderman, 2016<sub>[128]</sub>; OECD, 2017<sub>[129]</sub>). While the exact funding formula may vary depending on the VET programmes, geographical area or student background, input-based funding is mainly driven by institutional needs and students' choice of study programmes, but often less so by labour market needs.

The VET institution funding model in Moldova is also mainly input driven and based on the number of students from the previous year in a specific programme. While it is inevitable that some part of funding is based on input criteria for the purpose of covering core institutional expenses related to building maintenance, staff wages, etc., several stakeholders interviewed by the OECD team suggested reviewing the funding model to encourage institutions to focus more on outcomes and reaching specific policy objectives, and may explore including a competency-based funding component as has been done in countries such as Finland and the Netherlands (Ministry of Education and Culture, Finland, 2019<sub>[130]</sub>; Cedefop, 2023<sub>[131]</sub>).

However, the further development and piloting of the VET funding model may take some time, given the complexity involved. Therefore, the MoER should consider exploring alternative measures in the short term, such as the piloting of a grant mechanism to incentivise and steer specific behaviour, in line with its policy objectives and priorities. For this the MoER may look towards the examples of OECD Members such as Norway and Sweden.

In Sweden, the government is piloting a grant funding scheme (2018-2023) for small VET schools that are limited in their capacities to offer a range of VET programmes to establish collaborations with other VET schools. At the "receiving" school, the student studies the subjects that their own school cannot offer, most of the time because of the prohibitive cost of the specialised equipment. Consequently, upper secondary schools with vocational programmes can offer education in more areas with the help of these schools. The student's own school retains responsibility for the student, even for the part that the student completes at the receiving school. An agreement between the schools, among others, defines how the student's education is to be organised and what funding the receiving school will get. Small VET schools can apply for this grant funding to send their students to another school for a period of at least six weeks (Kuczera and Jeon, 2019[119]). A similar initiative could possibly be piloted in Moldova to help consolidate the overextended Moldovan network of VET institutions. Another example is provided by Norway where the government provides grants to VET schools to support them in the introduction of digital technologies in the teaching and learning of VET programmes - which is also a policy objective of Moldova (Government of the Republic of Moldova, 2023[3]). Furthermore, Moldova could pilot a grant scheme to incentivise VET institutions to establish partnerships with local companies for the updating of professional experience and skills of its VET teachers (see above).

The downside of such grant schemes is that they often require additional paperwork. Therefore, the MoER should ensure that the grant procedures are simple and not too demanding in terms of administrative burden.

### Promoting a whole of government approach to governing the VET system

In many OECD Members, the governance of VET is complex, reflecting the fact that VET caters to different student populations, i.e. young people and adults returning to education, and spans across a range of sectors (OECD, 2022<sub>[87]</sub>). Consequently, the responsibility for VET is often shared by different ministries – as is also the case in Moldova where the majority of VET institutions are subordinated to the MoER. The Ministry of Health, Labour and Social Protection and the Ministry of Agriculture, Regional Development and Environment and the Ministry of Internal Affairs are, as mentioned earlier, in charge of VET institutions that provide VET programmes relevant to their mandates.

The stakeholder interviews and feedback provided during the stakeholder workshop in May 2023 pointed to the need for enhancing the coordination between these ministries, as well as for further optimising the coordination between the MoER and development partners. The Moldovan VET system benefits from the support of several development partners, such as the European Union, World Bank, USAID, Austrian Development Agency, Lichtenstein Development Service, GIZ, Swiss Agency for Development and Cooperation, among others. Although development partners are coordinating, including through an informal working group, these working group meetings don't involve the MoER and other ministries. The MoER should therefore consider establishing a ministry-led working group that meets regularly (e.g. every quarter, in hybrid format) to better coordinate and plan the support of development partners in line with the directions set out in the Education Development Strategy 2030.

Furthermore, the coordination between the MoER and other ministries responsible for VET is often done on an ad-hoc basis, i.e. when consultations are necessary. While this approach may create less of an administrative burden, more systematic and regular consultations should be considered. For this purpose, Moldova in the past established the National Council for VET Coordination. However, the Council has not been functioning since 2017. Given also the multitude of objectives and actions defined in the Education Development Strategy 2030 for strengthening the VET system and making it more responsive to labour market needs (Government of the Republic of Moldova, 2023<sub>[3]</sub>), Moldova should consider (re-)establishing a cross-ministerial body, such as the earlier National Council for VET Coordination, to oversee and support the development of the VET sector. Such a measure is also particularly relevant for implementing the proposed measures for strengthening the self-evaluation and external evaluation of (all) VET programmes and institutions, and for overseeing and actioning on the much-needed consolidation of the network of VET institutions and programmes. The proposed development partner working group meetings could feed into the meetings of this cross-ministerial body.

### **Recommendations**

- The MoER should ensure that all VET teachers have relevant and up-to-date professional experience and skills. Measures to consider include:
  - Changing the concerned regulations to ensure all VET teachers have the relevant and up-to-date professional experience and skills.
  - New VET teachers without relevant professional experience could be given a temporary exemption to obtain the relevant professional experience.
  - VET teachers already in the profession are to be supported in obtaining or updating their working experience in the relevant sector and profession. Moldova may look towards the examples of England (United Kingdom), Denmark, the Slovak Republic and Spain.
- To attract skilled workers into the teaching profession, the MoER should consider introducing more flexibility in the acquisition of teaching qualifications by the newcomers. For this it may look towards the examples of Denmark, Korea and the Netherlands.
- Considering the overextended network of VET institutions, their variable quality and the decreasing student population, the **MoER should prioritise the consolidation of VET institutions as called for in the Education Development Strategy 2030**. For this it could consider the following actions:
  - In an effort to support the MoER in initiating this important reform the OECD team proposes developing and trialling a geospatial simulation model to inform the consolidation of the network of VET institutions. Informed by the interviews with several education stakeholders, examples of indicators to consider for the development and trialling of the geospatial simulation model could be:
    - The quality of VET programmes and institutions, determined by the outcomes of external evaluations.
    - Economic profile of the district (i.e. the economic activity by sectors).
    - Demographic situation district, including population dynamics by age groups and migration dynamics.
    - Geography/connectivity (based on presence and quality of transport infrastructure).
  - Conducting a simulation exercise to further refine the geospatial simulation model, resulting in an initial list of VET institutions that could be considered for consolidation.
  - Carefully review this list as there may and likely will be some cases for which special circumstances apply and that argue against consolidation – a "one-size-fits-all" solution may not be possible or desirable.
  - Following this further review of this list of VET institutions, the MoER could establish a small technical working group, including representatives of the MoER and other Ministries responsible for VET, Sectoral Committees, the Chamber of Commerce, ANACEC and other possible stakeholders to advice on possible options for consolidation. Again, the OECD team cautions for a "one-size fits all" solution.
  - The MoER should explore different policy instruments to create incentives for consolidation and consider defining a package of suitable and affordable incentives. The obtained master list could support the estimation of the possible costs involved. One of

the most common practices is to offer direct aid programmes for consolidating institutions, as well as providing building and transportation aid, to cover the capital investments and the changes in operating costs occurring after consolidation.

- Following the examples of OECD Members such as England (United Kingdom) and Portugal, the MoER could consider establishing a funded programme for building or renovating of VET institutions to support the network consolidation. Such a programme that offers support for building and/or moving to modern, state-of-the-art buildings and facilities could serve as an attractive incentive to VET institutions.
- Further incentives and support should be explored, such as direct financial support for consolidating VET institutions, via one-time incentive grants or multi-year commitments, to cover the immediate costs of consolidation.
- There may be other incentives to encourage and support the consolidation of the network of VET institutions in Moldova that should be explored.
- After defining the package of suitable and affordable incentives, the MoER would be well positioned to initiate the dialogues with those VET institutions that have been identified for reorganisation.
- Recognising that the consolidation of the school network will take time and demographic shifts are projected to continue and cause further inefficiencies, the MoER should consider integrating the geospatial simulation model in its EMIS though noting these data should not be made publicly available and instead are accessible to the MoER and other line ministries alone. The integration is to serve the purpose of ensuring that the MoER could benefit from an automatic generation of a "rolling master list" of VET institutions to be considered for consolidation based on the latest data available.
- Consider reviewing the VET institution funding model to encourage institutions to focus more on outcomes and reaching specific policy objectives. The MoER may explore including a competency-based funding component as has been done in countries such as Finland and the Netherlands.

The further development and piloting of the VET institution funding model may take some time, given the complexity involved. Therefore, the MoER should consider **piloting the use of grant funding to steer improvements and innovations towards specific policy objectives** in the short term. This could include supporting VET institutions to collaborate in the provision of VET programmes (i.e. encourage specialisation) as done in Sweden for example; introducing digital technologies to innovate teaching and learning as done in Norway for example; a scheme to incentivise VET institutions in establishing partnerships with local companies for the updating of professional experience and skills of its VET teachers.

 Moldova should consider (re-)establishing a cross-ministerial body such as the earlier National Council for VET Coordination to oversee and support the development of the VET sector. This is particularly relevant considering the proposed measures for strengthening the selfevaluation and external evaluation of (all) new and existing VET programmes, for overseeing and actioning on the much-needed consolidation of the network of VET institutions and programmes, and for strengthening the collaboration between VET programmes and companies.

Also, the MoER should consider establishing a ministry-led development partner working group that meets regularly (e.g. every quarter, in hybrid format) to better coordinate and plan the support of development partners – in line with the Education Development Strategy 2030. These working group meetings could feed into the meetings of the proposed cross-ministerial body.

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### Annex A. OECD Team members

**Małgorzata Kuczera** is an analyst in the Organisation for Economic Co-operation and Development (OECD) since 2006. During her work at the OECD she reviewed and analysed vocational education and training (VET) both at upper secondary and postsecondary level in many countries around the world and authored many reports on this topic. Currently, she is leading the work on VET in the context of transition to green economies. In the past, she analysed issues related to apprenticeship. This work culminated in two technical papers on Costs and Benefits of Apprenticeship and Incentives for employers to provide apprenticeship. She also conducted OECD studies of apprenticeships in England (United Kingdom) and Israel. She was responsible for 'Basic Skills' reviews drawing on evidence from the Survey of Adult Skills (PIAAC) and is the lead author of the report on basic skills in England (United Kingdom). She also worked on equity in education. Malgorzata has a PhD in Economics of Education from the University of Cambridge and an MSc in Economics from the University of London.

**Marco Kools** is a project manager and education analyst with the OECD Directorate for Education and Skills. He currently leads several implementation support/technical assistance projects, including in Ireland, Latvia, Moldova and Scotland. He has specialised in various areas of education policy, including effective policy design and implementation, assessment and evaluation, and (schools as) learning organisations. Marco in 2021 returned to the OECD after a two-year secondment with UNICEF Lao PDR where he served as Education Manager of the Partnership for Strengthening the Education System of Lao PDR Project. Before that he worked at OECD with individual countries such as the Netherlands, Latvia, Sweden and Wales (United Kingdom) in support of their school improvement reform efforts. Between 2005 and 2012, Marco worked with UNICEF in the Solomon Islands, Lao PDR and at the UNICEF Innocenti Research Centre in Italy. Before that he worked in the field of education in the Netherlands, where he in 1999 started his career as a secondary school teacher. Marco holds several degrees, including a PhD in Public Administration, MBA and a BSc in Educational Sciences.

**Barry Kenny** is working with the Implementing Education Policies Team at the OECD Directorate for Education and Skills. He is serving as a project manager and analyst for several tailored policy implementation support projects, including for the Republic of Moldova and New South Wales (Australia). Prior to joining the OECD, Barry worked with the Teaching Council of Ireland in the development and implementation of teachers' professional learning policy, also supporting teacher research engagement. Barry began his career in education as a primary teacher and he has managed numerous projects in the not-for-profit education sector. Barry holds several degrees and he is currently a PhD in Education student in Trinity College Dublin, also working towards a diploma in statistics and data science.

**Inés Sanguino** is working with the Implementing Education Policies Team at the OECD Directorate for Education and Skills. Inés is coordinating and supporting several tailored policy implementation support projects, including for Flanders. She has previously worked with organisations such as What Works for Children in Social Care and Unlocked Graduates. Most of her work has been in research, collaborating with various projects at the Junior Researcher, King's College London and The University of Oxford where she also engaged in tutoring undergraduates. Inés completed a BSc in Psychology, and an MPhil in Evidence-Based Social Intervention and Policy Evaluation as a "La Caixa" Scholar.

**Solène Burtz** is working with the Implementing Education Policies Team at the OECD Directorate for Education and Skills. Solène is serving as a project manager and analyst for several tailored policy implementation support projects, including for Ireland, Latvia and Spain. Prior to joining the OECD, Solène worked at the French National Institute for Public Service (former ENA) in Paris on international governance projects and capacity building for high-level civil servants in Europe and Africa. She previously worked for the French Ministry of Foreign Affairs, specialising in bilingual education in the United States. Solène holds a Master's in Education Policy and International Development from University College London (UCL) Institute of Education in the United Kingdom.

# Annex B. An overview of the data collection and stakeholder engagement process

The work on the project "Support to implementation of education policies in Moldova" has operationalised through an extensive desk review of policy documents and studies and by undertaking an extensive series of meetings, semi-structured interviews and focus group discussions (both online and in person) with key stakeholders from different levels of the Republic of Moldova's education system. Participants have consisted of (among others) school leaders and teachers from primary and secondary education, directors and teachers from VET institutions, representatives from the Ministry of Education and Research (MoER), district Departments of Education, tertiary education institutions providing teacher education and continuous professional development, the National Agency for Quality Assurance in Education and Research (ANACEC), the National Agency for Curriculum and Evaluation (NACE), and also several international development partners that are active in the country, such as the European Training Foundation, among others.

In an attempt to illustrate the depth and breadth of the data collection and stakeholder engagement process, key events and associated participants are outlined below.

### Scoping mission, online, 14-18 February 2022

The project team conducted an initial online scoping mission from 14 to 18 February 2022. An extensive number of semi-structured interviews was conducted with key education stakeholders, including the Minister of Education and Research; the State Secretary of General Education; the State Secretary of VET Education; the Parliamentary Committee on Education; the Presidential Advisor on Education; the heads of several district Departments of Education; the Local Education Group consisting of international development partners; the EU High-level Advisor for Education and Research; and the Programme Manager of the EU Delegation to the Republic of Moldova.

#### VET informal working group meeting, online, 23 February 2023

The project team also participated in a meeting with the VET informal working group that includes development partners, such as the European Union, World Bank, USAID, Austrian Development Agency, Lichtenstein Development Service, GIZ, Swiss Agency for Development and Cooperation, among others. This group meets at regular intervals to discuss key policy issues and coordinate their efforts in support of the Government in strengthening VET in Moldova.

#### Mission, online, 30 May-3 June 2022

The project team conducted an online mission from 30 May to 3 June 2022. A wide range of virtual meetings were held with a variety of education stakeholders, including representatives of several departments of the MoER (i.e. General Education, Lifelong Learning, VET, among others); the President and Vice-President of ANACEC; four heads of district Departments of Education; teachers and school leaders from four primary and secondary schools (in rural and urban areas); teachers and directors from three VET institutions (one VET upper secondary school, one VET college, one Centre of Excellence); several MoER representatives with responsibility for VET; representatives from teacher training institutions; representative from the National Authority for Qualifications; representatives from three sectoral committees; Chambre of Commerce representatives; representatives from the Coordination Group of the Labour Market Observatory; the EU High-level Advisor for Education and Research; and the Programme Manager of the EU Delegation to the Republic of Moldova.

### 4-day mission to Chisinau, Moldova, 6-9 December 2022

Part of the project team travelled to Chisinau, Moldova for a four-day visit in December 2022. During this visit, the team conducted additional semi-structured interviews with a wide range of education stakeholders. These included the Minister for Education and Research, officers from the MoER's departments of General Education, Lifelong learning, NACE, and ICT; the president and vice-president of ANACEC (and other colleagues); the EU High-level Advisor for Local Public Administration Reform; representatives from the European Training Foundation (ETF); the EU High-level Advisor for Education and Research; and the Programme Manager of the EU Delegation to the Republic of Moldova.

### Mission, online, 8 December 2023

On 8 December the project team conducted a series of semi-structured online interviews with a range of stakeholders. These included representatives from the National Agency for Quality Assurance in Education and Research (ANACEC), the Chamber of Commerce, the Centre of Excellence in Informatics and Information Technologies and several VET teachers.

Following this online mission, the project team also met online with the State Secretary responsible for VET and additional ETF representatives.

### Stakeholder workshop, Chisinau, Moldova, 10-11 May 2023

In May 2023, the project team returned to Moldova to facilitate a  $1\frac{1}{2}$ -day stakeholder workshop. The first day was dedicated to discussing with a broad range of education stakeholders the preliminary findings and recommendations concerning the "professional development of teachers and other education professionals" and "curriculum and learning resources". The second day focused on the third policy domain "the evaluation of Vocational Education and Training (VET) programmes and institutions in order to improve their functioning". Preliminary findings and recommendations were discussed throughout the  $1\frac{1}{2}$ -day stakeholder workshop and where needed further developed based on extensive discussions and feedback provided by participants.

These included the State Secretary for General Education and the MoER's Head of VET; the President and Vice-President of ANACEC; representatives of NACE; teachers and school leaders representing primary and secondary education schools; directors and teachers representing VET institutions; representatives of district Departments of Education; teacher educators from higher education institutions; higher education representatives; industry representatives; representatives of the development partners; the EU High-level Advisor for Education and Research; and the Programme Manager of the EU Delegation to the Republic of Moldova.

This document was prepared by the OECD Directorate for Education and Skills Implementing Education Policies team and the OECD Centre for Skills' Vocational Education and Training and Adult Learning team.

The OECD's work on *Implementing Policies: Supporting Effective Change in Education* offers peer learning and tailored support for OECD Members and non-Members to help them achieve success in the implementation of their policies and reforms in school education. The tailored support consists of three complementary strands of work that target countries' needs: policy and implementation assessment, strategic advice and implementation seminars.

The OECD VET and Adult Learning Team helps countries assess the main strengths and weakness of their VET systems, and identifies opportunities and challenges for future-ready VET systems that are responsive, flexible, inclusive and innovative. The team provides tailored advice to policymakers and other VET stakeholders on how to improve the relevance, quality and attractiveness of VET, building on international data and policy insights.

#### For more information:

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- OECD Implementing Education Policies
- Vocational Education and Training (VET) and Adult Learning

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