OECD Reviews of Vocational Education and Training

The Landscape of Providers of Vocational Education and Training

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Foreword

Vocational education and training (VET) is an important part of education systems around the world. In an era of changing skill needs in the labour market, as a result of global megatrends such as automation and population ageing, VET is well-placed to equip students with the skills the labour market needs and provide education and training opportunities for adults. Likewise, VET can play an important role in the recovery from the COVID-19 crisis, by developing in-demand skills to avoid hiring difficulties among employers, providing youth at risk of being not in education, employment, or training (NEET) with opportunities to acquire work experience through apprenticeships and other forms of work-based learning, and creating avenues for up-skilling or re-skilling of workers who have been displaced, or in need of training to adapt to a changing work environment.

VET systems differ widely between countries in terms of how programmes are designed and delivered. Moreover, countries differ in terms of the types of providers that deliver VET. This report looks at the VET provider landscape in five selected OECD countries, to provide insights into the number of different providers by country, their focus areas and target populations, and the way in which different providers collaborate. The diversity of VET providers often reflects the diversity in VET programme types, levels and student population. The size of the private VET provider market also differs strongly by countries, with some countries having encouraged the entry of private providers in an attempt to diversify the offer and increase efficiency, and other restriction private provision.

This report was drafted by Shinyoung Jeon, Viktoria Kis, Malgorzata Kuczera, Rodrigo Torres and Marieke Vandeweyer from the OECD Centre for Skills, under the supervision of El Iza Mohamedou (Head of the OECD Centre for Skills). Irina Vogel provided research assistance. The report has benefited from comments provided by Mark Pearson (Deputy-Director for Employment, Labour and Social Affairs). Administrative and editorial assistance was provided by Jennifer Cannon and Duniya Dedeyn from the OECD Centre for Skills.

The OECD would like to thank the Department for Education in England (United Kingdom) for the financial support for this report and for the feedback provided on early drafts. The OECD is also grateful for feedback provided on the five case studies presented in this report by the Australian Department of Education, Skills and Employment; TAFE Directors Australia; the Danish National Agency for Education and Quality; the Danish Ministry of Higher Education and Science; the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany; the German Federal Ministry of Education and Research; the Ministry of Education, Culture and Science in the Netherlands; and the Swedish Ministry of Education and Research. The reported also benefited from comments from the OECD Group of Experts on Vocational Education and Training.

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Abbreviations and acronyms

AMU	Labour market training (*arbejdsmarkedsuddannelser,* Denmark)
AOC	Agricultural training centre (*agrarisch opleidingscentrum*, the Netherlands)
ASQA	Australian Skills Quality Authority
ECTS	European Credit Transfer and Accumulation System
HBO	Tertiary vocational education (*hoger beroepsonderwijs*, the Netherlands)
HVE	Higher vocational education
ISCED	International Standard Classification of Education • Level 2: Lower-secondary education • Level 3: Upper-secondary education • Level 4: Post-secondary non-tertiary education • Level 5: Short-cycle tertiary education • Level 6: Bachelor's or equivalent
IT	Information technology
MBO	Upper secondary vocational education (*middelbaar beroepsonderwijs,* the Netherlands)
NBI	Non-subsidised institution (*niet-bekostigde instelling*, the Netherlands)
ROC	Regional Training Centre (*regionaal opleidingscentrum*, the Netherlands)
RTO	Registered Training Organisation (Australia)
TAFE	Technical and Further Education (Australia)
VET	Vocational Education and Training
VSL	VET Student Loan (Australia)

Executive summary

Vocational education and training (VET) comes in many shapes and forms. It is delivered at various levels of education, covers different fields of study, and can be organised as entirely school-based or a combination of school- and work-based learning. VET generally has a more diverse student population than general education, including in terms of students' age. As a result, the provider landscape in VET is diverse in many countries, with no single provider type welcoming students from all levels, fields, programme types and age groups.

This report looks at the provider landscape in Australia, Denmark, Germany, the Netherlands and Sweden to describe the different VET provider types, how they are different and how they overlap, as well as structures and initiatives to foster coordination between them. These countries all have a sizeable VET sector, but differ substantially in how VET is designed and delivered. The provider landscape is distinct in each of these countries, but some key commonalities emerge:

- All countries have both **public and private** VET providers, with the latter generally receiving public funds to deliver accredited programmes. Typically, public and private providers can deliver the same programmes for the same target audience. However, private providers are more likely to target certain fields or sectors and attract more adult learners.
- In most countries, VET programmes at different **levels of education** are provided by different provider types. This is particularly the case for post-secondary programmes, which are usually provided by different institutions than VET programmes at lower levels.
- Various countries have specialised VET provider types that focus on programmes in one or a limited **set of education fields** (e.g. agriculture, health). However, such specialised providers often co-exist with providers that deliver programmes in a broad range of fields, and in most cases those broader providers are not excluded from delivering programmes in the fields for which specialised providers exist.
- Some countries have dedicated provider types for **adult VET**. In some cases, these are the only providers that can deliver VET to adult learners, while in other cases the dedicated adult VET providers share the responsibility with providers that cater to both young students and adult learners.
- In countries where VET can be organised as a school-based track and **apprenticeship** track, these separate tracks are sometimes delivered in different institutions.

The five case studies show that there are many different ways for countries to organise their VET system. There is not one ideal system, and how the provider landscape is structured depends strongly on the role and design of VET. Moreover, differences between countries also reflect broader factors, with liberal market economies often having a larger private provider market and giving more freedom to providers on what types of programmes to deliver and their target audience.

What is clear from the case studies is that not one single system has a VET provider landscape without overlaps between the different providers in terms of programmes or target audience. The overlap is larger in some countries than in others, with some having limited differentiation between providers (often in an

effort to create a competitive market), and others having a relatively segmented provider landscape that has overlaps only in a few fields or programme types. However, all systems require coordination efforts and tools to make the system easy to navigate for learners, employers and other stakeholders. Overlapping provision is not necessarily an issue and may even foster innovation and quality when there is healthy competition between providers, but the system needs to remain transparent. Moreover, strong quality assurance mechanisms, as well as standards that underpin training programmes, contribute to bringing consistency in VET provision. Formal co-ordination bodies and knowledge sharing platforms can encourage and facilitate information exchange and improve coherency.

1 Key insights on vocational education and training providers in the case study countries

This chapter summarises they key insights emerging from the five case studies that are described in detail in the remainder of the report. It provides insights on how those five case study countries structure their landscape of vocational education and training (VET) providers. Moreover, the chapter provides pointers on how to foster transparency and consistency and how to encourage co-ordination between VET providers.

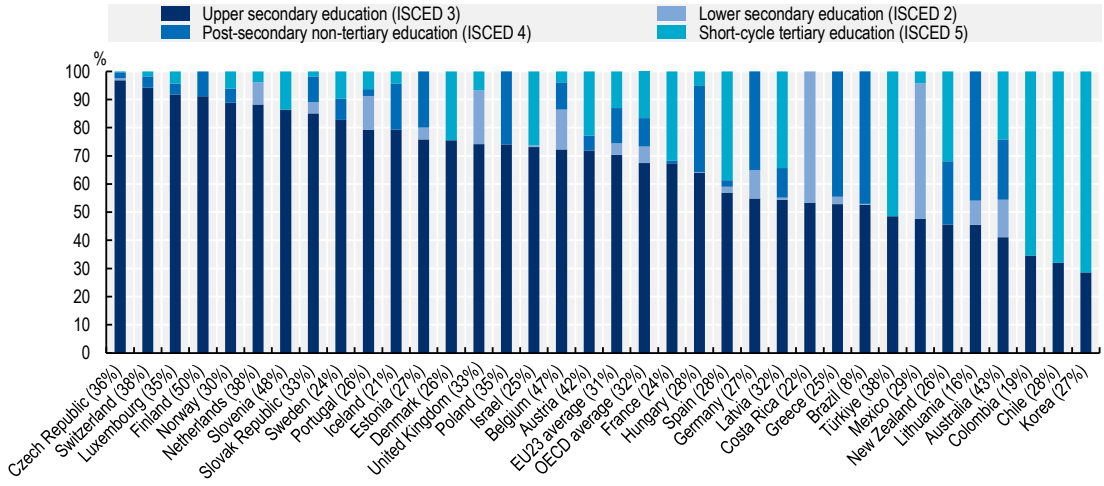
Introduction

Vocational education and training (VET) comes in many shapes and forms. It is delivered at various levels of education (see Figure 1.1), covers different fields of study, and can be organised as entirely school-based or a combination of school- and work-based learning (e.g. apprenticeship). VET generally has a more diverse student population than general education, including in terms of students' age. As a result, the provider landscape in VET is diverse in many countries, with no single provider type welcoming students from all levels, fields, programme types and age groups.

Comparative data on the provider landscape in VET are limited at the international level. The main indicators available concern student enrolment in public and private institutions, with the distinction made according to whether a public agency or a private entity has the ultimate control over the institution. Figure 1.2 shows that countries differ strongly in terms of the share of VET students who graduated from private institutions. Moreover, the prevalence of private providers also differs within countries by level of VET. There are also differences in terms of private institutions' dependence on funding from government sources, with some countries having mostly independent private providers (receiving no or limited core funding from government sources), and others having mostly government dependent private providers (e.g. in Belgium all private VET providers are government dependent, while in Ireland, they are all independent private providers).[1]

Figure 1.1. Distribution of students enrolled in vocational education by level of education

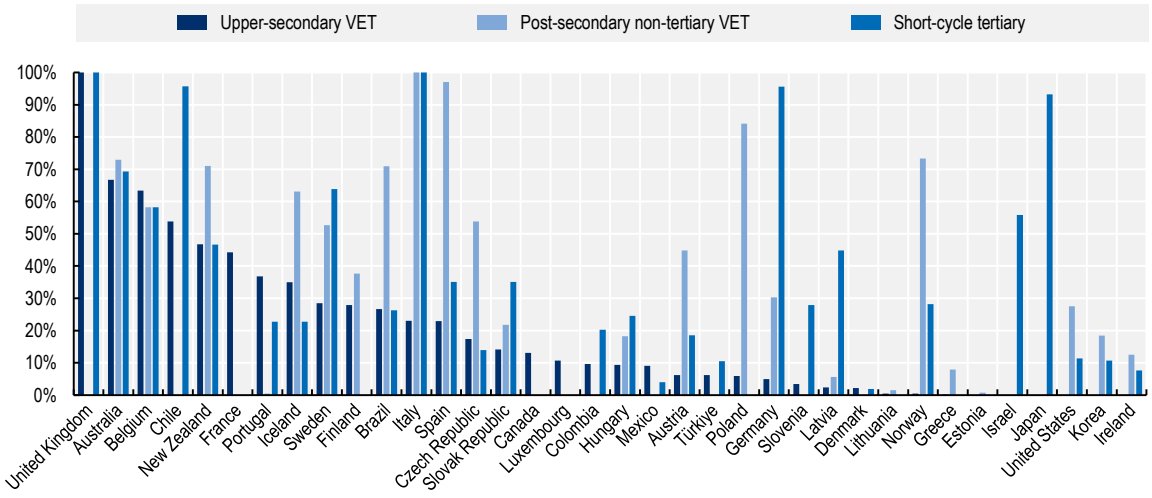
Full- and part-time students enrolled in public and private institutions (2018)



Note: Figures in parentheses refer to the share of students enrolled in vocational education from lower secondary to short-cycle tertiary (International Standard Classification of Education [ISCED] levels 2 to 5) as a percentage of all students enrolled at these levels. For the United Kingdom, short-cycle tertiary programmes include a small number of bachelor's professional programmes.
Source: OECD (2020[1]), Education at a Glance 2020: OECD Indicators, https://dx.doi.org/10.1787/69096873-en.

Figure 1.2. Graduates from private institutions

Share of graduates from private institutions, by level of education



Note: Private institutions include independent private educational institutions and government dependent private educational institutions. Short-cycle tertiary education (ISCED level 5) includes general and vocational programmes, but as described in OECD (2022[2]) most programmes at this level are vocational. Information for upper-secondary VET missing for Ireland, Japan, Korea and United States; for post-secondary non-tertiary VET for Canada, Chile, Colombia, France, Israel, Japan, Mexico, Republic of Türkiye, Slovenia and United Kingdom; for short-cycle tertiary for Canada, Estonia, Finland, France, Greece, Lithuania and Luxembourg.
Source: OECD (2022[3]), *Education at a Glance Database*, OECD.Stat website, https://stats.oecd.org.

This report looks at the provider landscape in Australia, Denmark, Germany, the Netherlands and Sweden to describe the different VET provider types (focusing on formal VET at levels 3-5 of the International Standard Classification of Education, ISCED), how they are different and how they overlap, as well as structures and initiatives to foster co-ordination between them. The remaining chapters of this report present each case study country (see Box 1.1 for an overview).

Box 1.1. About this report

This report looks at the VET provider landscape in Australia, Denmark, Germany, the Netherlands and Sweden to describe the different VET provider types. It focuses on formal VET at levels 3-5 of the International Standard Classification of Education (ISCED). The purpose of the report is to provide a description of the landscape in the selected countries. It does not to provide recommendations on how countries should (re-)structure their provider landscape.

The remaining chapters in this report (Chapters 2 to 6) provide a description of the landscape of providers in the five case study countries. Each chapter includes a short description of the country's VET system, and provides an overview of the various VET providers, with a particular focus on how the various providers differ in terms of target population and focus area, as well as looking at whether they are public or private providers. The chapters also describe co-ordination mechanisms and initiatives in place in the countries.

The structure of each case study chapter is as follows:

- The country's VET system: providing a short overview of how the VET system is structured, with a focus on programmes at ISCED levels 3 to 5.

- The VET provider landscape: providing an overview of the different VET providers, highlighting differences in focus areas (e.g. field of study, types of delivery), target audience (e.g. adults vs. young students) and private versus public providers.
- Co-ordination between provider types: providing a description of how the provision of different providers is aligned, and how co-ordination is encouraged and facilitated.

This first chapter summarise key differences and commonalities between the countries and provides pointers on how to make VET provider landscapes transparent, and how to achieve consistency and enable co-ordination.

The landscape of VET providers in the case study countries

The five case study countries all have a sizeable VET sector but differ substantially in how VET is designed and delivered. The provider landscape is distinct in each of these countries, but some key commonalities emerge:

- All countries have both **public and private** VET providers, with the latter generally receiving public funds to deliver accredited programmes. Typically, public and private providers can provide the same programmes for the same target audience. However, private providers are more likely to target certain fields or sectors and attract more adult learners. Among the selected countries, this is the case in Australia and Sweden (and Germany and the Netherlands to a more limited extent).
- In most countries, VET programmes at different **levels of education** are provided by different provider types. This is particularly the case for post-secondary or tertiary programmes, which are usually provided by different institutions than VET programmes at lower levels. Among the selected countries, this is the case in Denmark, Germany, the Netherlands and Sweden.
- Various countries have specialised VET provider types that focus on programmes in one or a limited **set of education fields** (e.g. agriculture, health). However, such specialised providers often co-exist with providers that deliver programmes in a broad range of fields, and in most cases those broader providers are not excluded from providing the fields for which specialised providers exist. Among the selected countries, this is the case for example in Germany and the Netherlands.
- Some countries have dedicated provider types for **adult VET**. In some cases these are the only providers that can deliver VET to adult learners, while in other cases the dedicated adult VET providers share the responsibility with providers that cater to young students and adult learners. In Germany, adults can prepare for professional examinations only with independent providers and not with the main public providers. Likewise, Sweden has dedicated public and private providers for adults. In Denmark adult education centres provide dedicated VET programmes for adults, but adults can also choose to enrol in vocational colleges which also deliver initial VET programmes.
- In countries where VET can be organised as a school-based track and **apprenticeship** track, these separate tracks are sometimes delivered in different institutions. This is the case, for example, in Germany, where vocational schools are the only provider type that delivers dual VET programmes at the upper-secondary level. VET programmes outside the dual VET system are delivered by other provider types.

The case studies show that there are many different ways for countries to organise their VET system. There is not one ideal system, and how the provider landscape is structured depends strongly on the role and design of VET. Moreover, differences between countries also reflect broader factors, with liberal market economies often having a larger private provider market and giving more freedom to providers on what types of programmes to deliver and their target audience.

Co-ordination between VET providers in the case study countries

What is clear from the case studies is that not one single system has a VET provider landscape without overlaps between the different providers in terms of programmes or target audience. The overlap is larger in some countries than in others, with some having limited differentiation between providers (often in an effort to create a competitive market), and others having a relatively segmented provider landscape that has overlaps only in a few fields or programme types. However, all systems require co-ordination efforts and tools to make the system easy to navigate for learners, employers and other stakeholders. Overlapping provision is not necessarily an issue and may even foster innovation and quality when there is healthy competition between providers, but the system needs to remain transparent. In that respect, key messages are:

- When overlap between provider types is large and students can follow the same programme with various provider types that are similar (as is the case mostly for private and public providers), information needs to be available on the quality of the providers. Moreover, when there are differences between these provider types in terms of fees, this needs to be clearly communicated. This will help students make informed choices.
- When students can choose between a specialised provider (in terms of target audience and/or field) or a broader provider offering the same programmes, students need to be aware of the options available and their pros and cons (e.g. in terms of institution size, networks with industry, articulation options).
- Standards need to underpin the training programmes, so that the targeted learning outcomes of programmes are the same across providers. Moreover, regulations need to exist for training providers to be able to deliver accredited VET programmes. Providers should be evaluated on a regular basis to ensure they continue to adhere to those regulations and that the programmes they deliver develop the skills defined in the training standards. Regulations and standards need to be transparent for the providers, and the outcomes of evaluations should be communicated widely.
- Co-ordination between the provider types should be encouraged. This can be done, for example, through formal co-ordination bodies and knowledge sharing platforms. While there are often bodies representing the institutions within a provider type, there are much fewer efforts to bring together the different provider types in the selected countries.

References

OECD (2022), *OECD Education at a Glance Database*, OECD.Stat website, https://stats.oecd.org. [3]

OECD (2022), *Pathways to Professions: Understanding Higher Vocational and Professional Tertiary Education Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://doi.org/10.1787/a81152f4-en. [2]

OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/69096873-en. [1]

Note

[1] A government-dependent private school receives 50% or more of its core funding from government agencies or its teaching personnel are paid by a government agency. An independent private school receives less than 50% of its core funding from government agencies and its teaching personnel are not paid by a government agency. The terms “government-dependent” and “independent” refer only to the degree of a private institution’s dependence on funding from government sources, and not to the degree of government direction or regulation.

2 Australia's landscape of vocational education and training providers

This chapter looks at the landscape of vocational education and training (VET) providers in Australia. It describes the Australian VET system and zooms in on the different types of institutions that provide VET programmes. The chapter looks at how providers differ in terms of focus areas of the provided training and target audience, as well as the role of private and public providers. Lastly, the chapter also discusses how different types of providers are co-ordinated and how they collaborate.

The Australian vocational education and training system

Vocational education and training (VET) qualifications in Australia are defined at the national level and are mostly delivered as a post-school option (i.e. not as part of the standard secondary education system). Vocational qualifications include: Certificate I and II (ISCED level 2), Certificate III (ISCED level 3), Certificate IV (ISCED level 4), Diploma and Advanced Diploma (ISCED level 5), and Graduate Certificate and Graduate Diploma (ISCED level 6). In 2021, 2.1 million students were enrolled in nationally recognised programmes (NCVER, 2022[1]).[1]

While vocational qualifications are mostly delivered outside of secondary education, some senior secondary schools allow their students to pursue parts of these qualifications ("VET in schools"). In 2021, there were 230 700 Australian students undertaking VET as part of their senior secondary certificate (excluding school-based apprentices) (NCVER, 2022[1]). VET is also delivered to secondary students through School-Based Apprenticeships and Traineeships and Australian School-based Apprenticeships, which provides a combination of school-based and workplace learning. In 2021, 25 500 students were in school-based apprenticeships (NCVER, 2022[1]).

Moreover, secondary schools can also offer some VET courses that are not part of vocational qualifications, with course content that can be very different between jurisdictions, and even in some cases within jurisdictions. Over 95% of secondary schools offer VET subjects and around 40% of all upper secondary students undertake at least one VET subject. (OECD, 2020[2]).

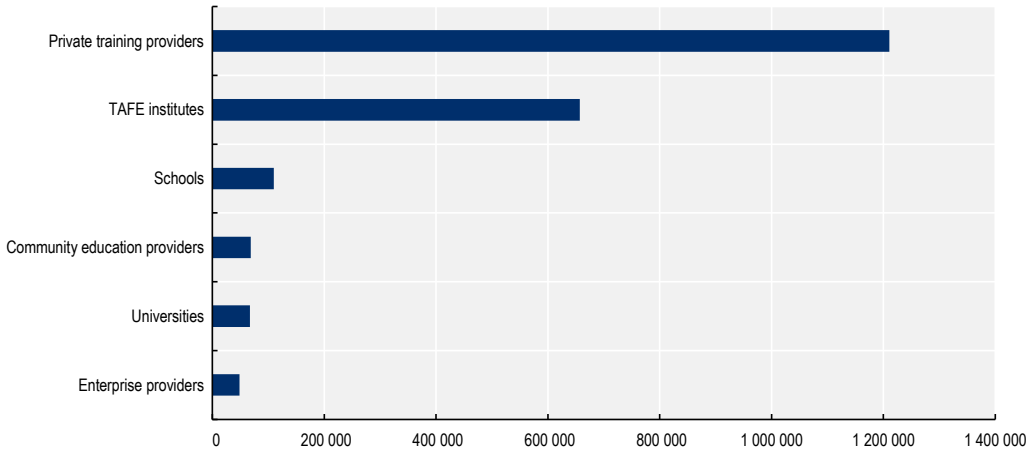
The provider landscape

Vocational qualifications are delivered by registered training organisations (RTOs). RTOs can be classified into six types: private training providers; state- and territory-owned Technical and Further Education (TAFE) institutes; schools; community education providers,[2] universities; and enterprise providers that primarily provide training to their own employees. To become an RTO, an organisation must meet a range of mandatory requirements to ensure its training and assessment services are delivered to the standards expected by students and employers.

Private training providers and TAFE institutes are the largest VET providers, respectively accounting for 59% and 32% of students in nationally recognised programmes (see Figure 2.1). There are many more private training providers than there are TAFEs: on 31 December 2021, there were 3 115 private training providers registered as an RTO, compared to only 24 TAFEs. This reflects that the majority of TAFEs are large multi-campus institutions, whereas private providers are in many cases small. Data from 2014 showed that the median size of a TAFE equalled around 17 000 students (20 000 average), compared to only around 200 students in private training providers (800 average) (Korbel and Misko, 2016[3]). Nonetheless, private providers exist in many sizes, with some of them being as large as TAFEs.

While universities are one of the six provider types, most Australian universities' vocational education programmes are small in size, confined to one campus, are in one or two disciplines, and many are offered through separate organisational units. Some of those offerings are historic leftovers, and often the result of the amalgamations with previously single sector institutions. However, there are a few exceptions, where vocational education is a substantial part of the universities' operations (Moodie, 2009[4]). These are generally referred to as dual sector universities. They are characterised by strong industry partnerships and a strong focus on applied learning (Maddocks et al., 2019[5]).

Figure 2.1. Number of students by type of RTO (2020)



Note: Student numbers by provider may not sum to the total, as students may enrol in more than one provider type. Only includes students in nationally recognised programmes.
Source: NCVER (2021[6]), Total VET students and courses 2020, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/total-vet-students-and-courses-2020.

Table 2.1. Overview of main VET providers in Australia

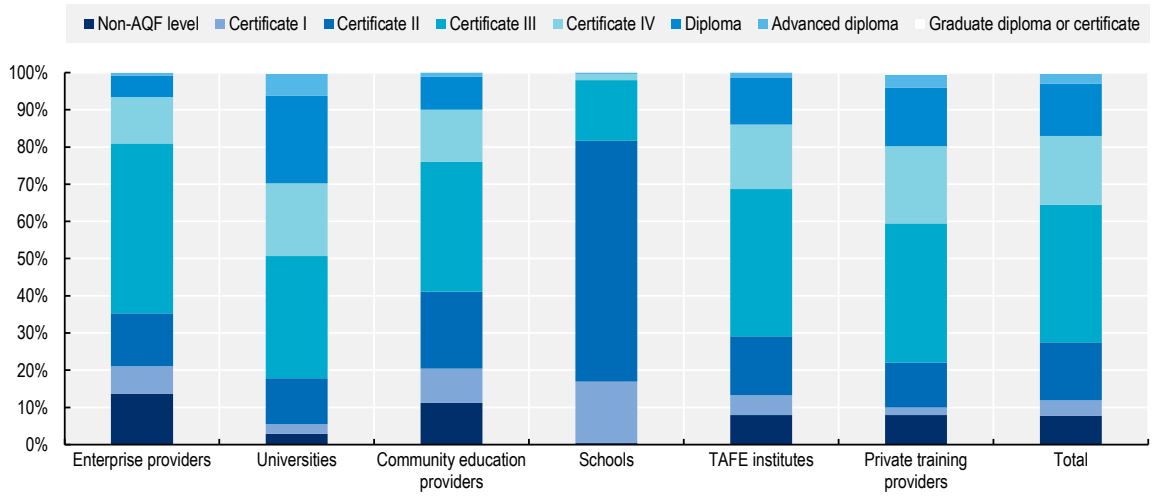
Provider type	Education level	Private or public	Key features
Private training providers	Various levels	Private	Ranging from small providers focusing on a specific field or specialisation to very large providers providing programmes in multiple fields
Technical and Further Education (TAFE) institutes	Various levels	Public	Large state- and territory-owned institutes
Schools	Predominantly ISCED levels 2 and 3	Both	Schools predominantly provide general education at ISCED levels 3 and below
Community education providers	Various levels	Private	Various types of organisations (e.g. Neighbourhood Houses and Centres)
Universities	Various levels	Both	Universities' vocational education programmes are usually small in size, confined to one campus, focused on one or two disciplines, and mostly offered through separate organisational units
Enterprise providers	Various levels	Private	Primarily provide training to their own employees

Note: More details about the various providers are provided in the following sections. ISCED 2: lower secondary education; ISCED 3: upper secondary education.

Focus areas

All providers deliver programmes at various levels of education, although some providers focus more on higher-level qualifications and others on lower-level qualifications, see Figure 2.2. For example, around 50% of VET students in universities are in programmes at ISCED level 4 or above, while –unsurprisingly- 80% of VET students in schools are in certificate I or II programmes (NCVER, 2021[6]). Enterprise providers and community education providers have a similar pattern of student enrolment by level, with the latter having slightly higher enrolment in lower-level programmes (Certificate I or II). TAFE institutes and private training providers are similar in enrolling students at various education levels, with TAFE institutes having a slightly higher share of students in lower-level programmes and lower share in higher-level programmes (ISCED level 4 or above).

Figure 2.2. Level of education of students, by RTO type (2020)



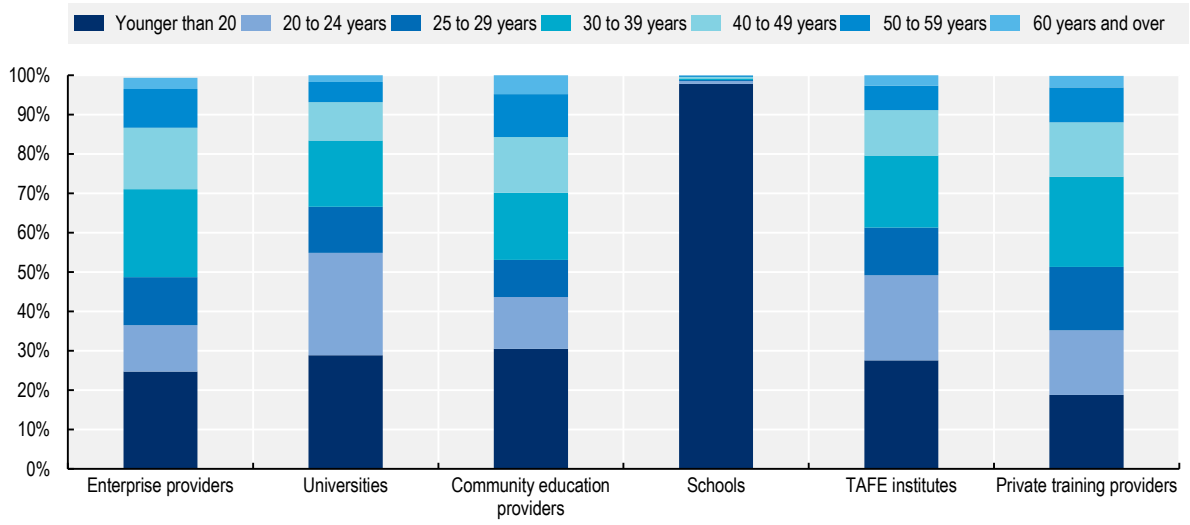
Notes: Only includes students in nationally recognised programmes.
Source: NCVER (2021[6]), Total VET students and courses 2020, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/total-vet-students-and-courses-2020.

TAFE institutes are large institutions, providing a wide range of VET qualifications in various fields. By contrast, private training providers are often small, focusing in some cases on a very specific field or specialisation. However, this is not always the case, and many private training providers –especially the larger ones- provide training in multiple fields. The same holds for the other types of providers, which in some cases are highly specialised and in other cases provide a broader set of training programmes.

Target audience

As highlighted above, VET in Australia is mostly organised as a post-school option, and therefore attracts many adult learners. While the age composition of students differs slightly between provider types, providers clearly do not focus on one single age group, see Figure 2.3. The exception is schools, in which almost all students are younger than 20. TAFE institutes and universities have a larger share of young students (below 25) than the other provider types, reflecting that these institutions are often seen as providing a direct pathway after secondary education. Private training providers and enterprise providers have the lowest share of young students, which is possibly linked to the narrow focus of many of these institutions on a particular field or sector allowing for upskilling opportunities for workers.

Figure 2.3. Age composition of students, by RTO type (2020)



Notes: Only includes students in nationally recognised programmes.
Source: NCVER (2021[6]), Total VET students and courses 2020, https://www.ncver.edu.au/research-and-statistics/publications/all-publications/total-vet-students-and-courses-2020.

Private versus public providers

TAFE institutes are public providers, which is the key element of distinction compared to the large group of private providers. The VET market in Australia was opened up in the early 1990s, with the goal to increase efficiency and effectiveness of the training system (Anderson, 1997[7]).

A significant share of private RTOs also receive public funding. Nationally, government payments to non-TAFE providers amounted to AUD 1.1 billion in 2019, accounting for 21% of all appropriations and programme funding from government for VET (Australian Government Productivity Commission, 2021[8]). Students at private institutions can also make use of public financial support, such as incentive payment and VET Student Loans (VSL). Students studying eligible courses at the diploma and above level can access VSL - income contingent loans financed by the Australian government to cover some or all of the cost of their study. VET providers must apply to become an approved VSL provider and the criteria are rigorous. In 2019 there were 194 approved VSL providers, 23 being public providers with 60.7% of students, 158 private providers with 25.2% of students and 13 other types of providers (e.g. not for profit) with 14.1% of students. In 2019, AUD 134.4 million in loans were made to students studying at public providers, AUD 105.3 million to students at private providers and AUD 36.2 million to students at other public providers.

The opening up of the VET market has posed certain challenges in Australia. The practice of allocating VET funding via competitive tendering between public and private providers has been reported to have meant that certain providers have been squeezed into lowering their aspirations (Hager, 2019[9]). Moreover, unethical and fraudulent activities in the VET sector have been discovered. (Hager, 2019[9]).

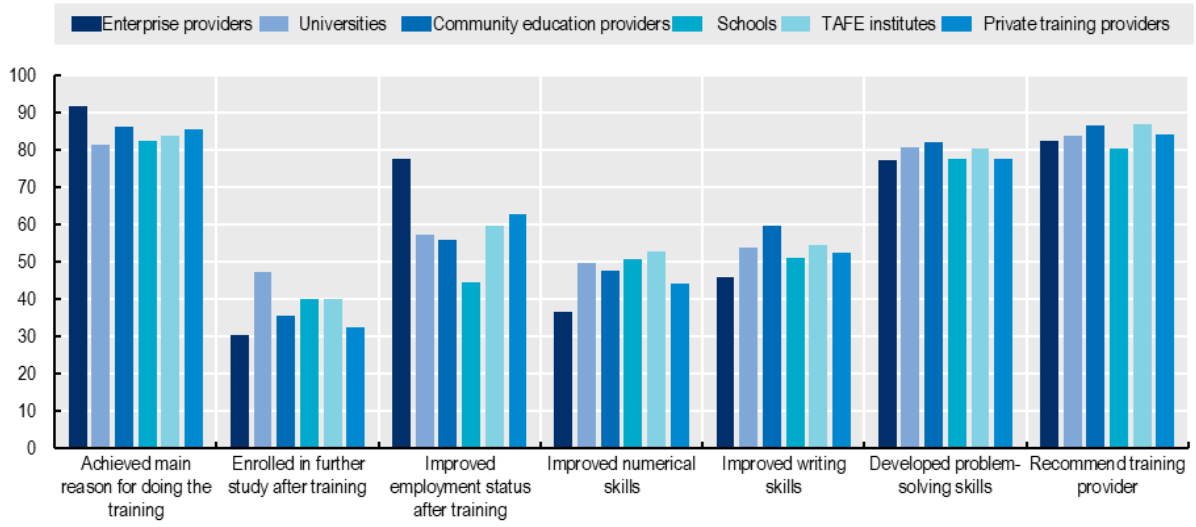
Outcomes by provider type

The National Centre for Vocational Education Research (NCVER) conducts on an annual basis the National Student Outcome Survey, collecting information on outcomes and satisfaction of students who completed nationally recognised VET delivered by RTOs in Australia. Figure 2.4 shows the results of a

selected set of indicators by provider type. Differences between providers are generally small, and often reflect the different target audience and focus area of providers. For examples, those who took their training in universities, schools and TAFEs are more likely to continue in further study, as these institutions are more often seen as part of initial education, attract younger students and in some cases provide clear pathways into further learning. Those who completed their training with enterprise providers are more likely to report that they improved their employment status, which is linked to the fact that often these individuals followed training with their own employer in an effort to upskill or reskill in line with their own or the enterprise's needs. TAFEs, universities and community education providers are more likely than other providers to develop the numerical, writing and problem-solving skills of their students. These average can of course mask differences between providers within the same type.

Figure 2.4. Outcomes and satisfaction of students who completed nationally recognised VET delivered by RTOs during 2020

% of completers



Note: Only includes qualification completers.
Source: NCVER (2021[10]), VET student outcomes 2021, https://www.ncver.edu.au/research-and-statistics/collections/student-outcomes/vet-student-outcomes.

Co-ordinating between provider types

As highlighted above, the Australian provider landscape is complex, with no clear distinction between the different types of RTOs. The only exception is schools, which focus almost entirely on Certificate levels I, II and III for students younger than 20 – although a small number of older students and students in higher-level programmes are also enrolled in schools.

To ensure the quality of the providers and some degree of consistency, the Australian Skills Quality Authority (ASQA) was created. ASQA accredits courses and regulates RTOs to ensure nationally approved quality standards are met. ASQA has jurisdiction over all RTOs, except for those that are state accredited and operate solely in Victoria or Western Australia (and do not offer courses to interstate and overseas students). ASQA is a relatively new regulator, having been established on 1 July 2011 under the National Vocational Education and Training Regulator Act. ASQA monitors RTO compliance against the requirements of the Act and its VET Quality Framework. Its primary functions are to oversee the entry of RTOs into the market, accredit courses, carry out compliance audits and penalise non-compliance,

including cancelling the registration of poor providers. All RTOs registered with ASQA are required to provide an annual summary report of their performance against learner engagement and employer satisfaction quality indicators.

RTOs are required to comply with the Standards for Registered Training Organisations 2015. These Standards form part of the VET Quality Framework, a system which ensures the integrity of nationally recognised qualifications. The purpose of these Standards is to: i) set out the requirements that an organisation must meet in order to be an RTO; ii) ensure that training products delivered by RTOs meet the requirements of training packages or VET accredited courses and have integrity for employment and further study; and iii) ensure RTOs operate ethically with due consideration of learners' and enterprises' needs. There are six standards under three broad headings: training and assessment; obligations to learners and clients; and RTO governance and administration. The Standards describe outcomes RTOs must achieve, but do not prescribe methods by which RTOs should achieve these outcomes. This allows RTOs to be flexible and innovative in their VET delivery—an acknowledgement that each RTO is different and needs to operate in a way that suits their clients and students (ASQA, 2021[11]).

The need for more and better co-ordination between the different types of providers in the Australian VET system is widely acknowledged, and various initiatives have been set up. In Victoria, for example, the Victorian Skills Authority was established in mid-2021 as the key link between the state's industries, training providers, employers and communities. One of its roles is to strengthen connections between TAFE, training, higher education and adult community education.

To help prospective students navigate the complex provider landscape, the MySkills website allows users to search for training providers, giving an indication about the availability of subsidies, VET student loans, and online delivery options. The provider list also flags where an RTO has a regulatory decision attached (e.g. conditions applied to their registration by ASQA). For each provider, users can see the courses that are delivered, as well as information supplied voluntarily by RTO about fees, campuses, delivery options, and student services.

The ongoing Skills Reform aims to strengthen the VET System, so as to provide high-quality, responsive and accessible education and training to boost productivity and support Australians to obtain the skills they need to participate and prosper in the modern economy. Reforms are also improving industry and employer engagement in Australia's VET sector. In addition to these immediate reforms, the Australian, state and territory governments have committed to work collaboratively on long-term improvements to the VET sector through a new National Skills Agreement.

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Notes

[1] These include training package qualifications, accredited qualifications, training package skill sets, accredited courses.

[2] Adult and Community Education providers are a disparate group that go by various names including: Neighbourhood House and Centre, community men's shed, University of the Third Age, Community College and various other names. Provision of formal VET is a focus for some Adult and Community Education providers. These include some Neighbourhood Houses and Centres, all Community Colleges (in New South Wales and Victoria) and Adult and Community Education providers that go by other names.

3 Denmark's landscape of vocational education and training providers

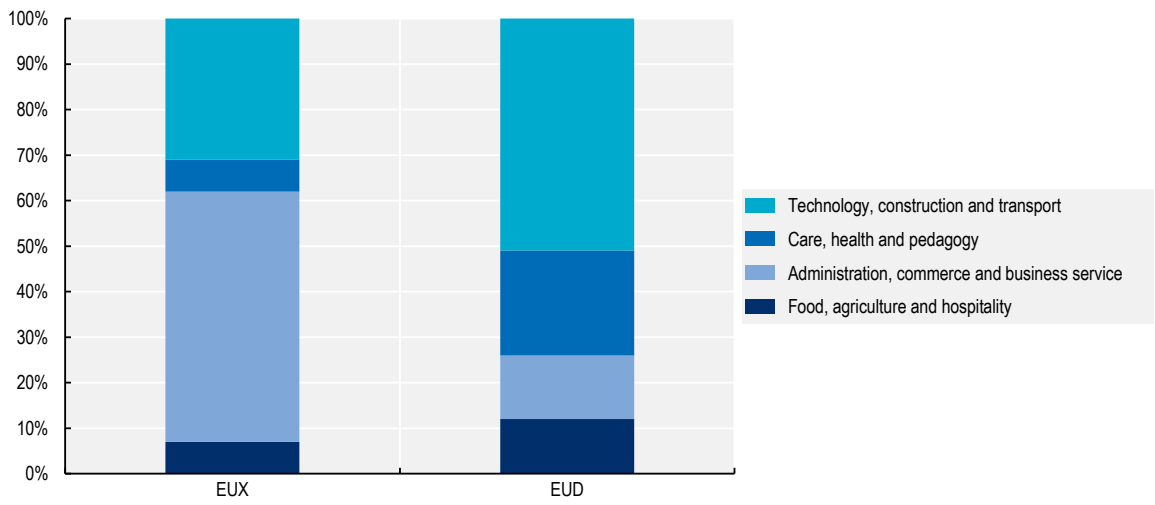
This chapter looks at the landscape of vocational education and training (VET) providers in Denmark. It describes the Danish VET system and zooms in on the different types of institutions that provide VET programmes. The chapter looks at how providers differ in terms of focus areas of the provided training and target audience, as well as the role of private and public providers. Lastly, the chapter also discusses how different types of providers are co-ordinated and how they collaborate.

The Danish vocational education and training system

The VET system in Denmark is organised in upper-secondary and post-secondary levels. At the end of primary education, students choose between general (73.1%) or vocational upper secondary education (19.4%) (CEDEFOP, 2018[1]).Vocational education and training at the upper-secondary level includes four main subject areas: i) food, agriculture and hospitality; ii) technology, construction and transportation; iii) administration, commerce and business service; and iv) care, health and pedagogy (Ministry of Children and Education, 2021[2]). The typical duration of an upper-secondary VET programme is three to four years, compared to two to three years for general programmes. Most upper-secondary VET programmes have a large work-based learning component. Students usually spend between half and two-thirds of their time in training companies under an apprenticeship contract. They can access apprenticeships after a basic training programme in vocational schools, usually lasting the first 12 months of their studies (Ministry of Children and Education, 2021[2]). Apart from the regular upper-secondary VET programmes (called EUD or *erhvervsuddannelse*), Danish upper-secondary education also provides EUX programmes (*erhvervsfaglig studentereksamen*, introduced in 2012), offering the opportunity to gain both vocational and academic credentials and providing direct access to higher VET and academic tertiary education. By 2018, 42 different technical VET fields (approximately half of all programmes) and all business programmes had implemented EUX (CEDEFOP, 2018[1]). About a third of students who enter vocational education do so in a EUX programme (Danske Erhvervsskoler og -Gymnasier, 2021[3]). The proportion of students who follow business programmes is almost four times higher in EUX than in EUD. By contrast, the field of 'care, health and pedagogy' it is more than three times lower in EUX than in EUD.

Figure 3.1. Students in vocational programmes in Denmark, by field and VET programme type

Share of students in 2020



Note: EUD programmes are the regular upper-secondary VET programmes, EUX programmes are upper-secondary programmes that combine general and vocational education.
Source: Danske Erhvervsskoler og -Gymnasier (2021[3]), Elever på eux, https://deg.dk/tal-analyse/eux-0/elever-paa-eux.

All VET qualifications in the upper-secondary level prepare for direct entry into the labour market, but also allow for entry into higher-level vocationally-oriented programmes at ISCED levels 5 and 6. These higher-level education programmes are: 1) *academy professional programmes* (ISCED 5), lasting 2 to 4 years, oriented towards specific professions or job functions; and 2) *professional bachelor programmes*

(ISCED 6), which are three to four and a half years long, similar to university bachelor programmes, but with a stronger focus on professional practice. In many cases those students finalising an academy professional programme can opt to complete a professional bachelor programme within one to two years of study.

Denmark also has a large adult VET sector, providing vocational qualifications to adults that are comparable to those offered to young students. The adult VET sector in Denmark is organised in five types of programmes:

- EUV programmes (*Erhvervsuddannelse for voksne)*, offering basic vocational qualifications similar to EUD programmes.
- Higher preparatory single subject programmes (*HF-enkeltfag*) aimed at individuals looking to improve their skills in one or two subjects at upper-secondary level, preparing them for tertiary studies.
- AMU programmes (labour market education, *Arbejdsmarkedsuddannelser),* aimed at both high-skilled and low-skilled workers looking to acquire either general skills or job-specific skills (leading to credentials at European Qualification Framework levels 2 to 5), usually related to one field of VET.
- Academy programmes, higher-VET level specialisation programmes (ISCED 5) offered by business academies and university colleges for skilled professionals (primarily for people with EUD).
- Diploma programmes, higher level specialisation programmes (ISCED 6) for skilled professionals with prior higher education offered by business academies, university colleges and some universities.

Access to the first three programmes is granted by VET institutions on the basis of recognition of prior learning (non-formal or informal) and/or completion of formal lower-secondary general education focused on adults (CEDEFOP, 2018[1]). Access to academy courses requires completion of an upper-secondary qualification and two years of work experience. Access to diploma programmes requires prior higher education (at least ISCED 5). Academy and diploma programmes are both 60 credits (based on the European Credit Transfer and Accumulation System, ECTS) and are provided as standalone modules of 5-15 ECTS, typically on a part-time basis. Diploma programmes give access to master level academic part-time programmes.

The provider landscape

In Denmark, upper-secondary VET programmes are delivered by vocational colleges (*erhvervsskoler).* These colleges are state funded (by a mix of a base funding allocation per institution, and additional funding per student), and operate as technical colleges (*tekniske skoler*), Health and Social colleges (*SOSU skoler*), or business colleges (*handelsskoler)*. Vocational colleges are self-governing institutions, led by a governing board,[1] with responsibility for the administrative and financial aspects, as well as of the educational activities, in line with the regulatory framework administered by the Ministry for Children and Education (UNESCO-UNEVOC, 2021[4]). Vocational colleges are non-for-profit and autonomous in terms of adapting VET to local needs and demands. They have responsibility for teaching and examination and work closely with local training committees in determining course content. As a country with a strong dual system, social partners play an important role in relation to the content of VET programmes and the organisation of VET delivery.

In higher education, there are mainly four types of providers, two of which are VET-related: business academies (*erhvervsakademier*) and university colleges (*professionshøjskoler*). In addition, research

universities (*universiteter*) provide academic bachelor's degrees, masters, some diploma programmes and PhD degrees and higher institutions of arts offer university level programmes within the arts.

The business academies in Denmark are non-for-profit independent organisations. The main aim of the academies is to offer and develop higher education with a strong relation to practice, especially in the area of technical and mercantile educations. These institutions mainly offer academy professional programmes and academy programmes, but also some professional bachelor programmes and diploma programmes. Academies have a management board, responsible for the quality and development of programmes at the institution. Board members are expected to have experience and knowledge of academy institutions. The board also includes members with knowledge about labour markets needs and with experience in management and business. Daily management of the institution is responsibility of the rector (president). The rector implements the directives defined by the academy board (Field et al., 2012[5]).

University Colleges mainly offer professional bachelor programmes and diploma programmes, but can also offer academic professional programmes as an initial step towards a professional bachelor's degree and academy programmes. The University Colleges are independent institutions lead by a board, which has strategic responsibility for the quality and development of education and the institution. They are operated on a daily basis under responsibility of the rector, subject to the strategic direction of the board. The board has 10-15 members, which are typically representatives of local and regional government, students and teachers. University Colleges must develop applied research, also acting as centres of knowledge in close dialogue with regional stakeholders from industry and the civil society. University colleges attempt to achieve these goals in co-operation with relevant research institutions and universities (Danish Agency for Higher Education and Educational Support, 2012[6]).

Adult VET programmes are offered by these three provider types, as well as by AMU centres. These are independent centres specialised in the provision of AMU courses.

Table 3.1. Overview of main VET providers in Denmark

	Education level	Public or private	Key features
Vocational colleges	ISCED level 3	Public	Technical colleges, health and social colleges, and business colleges provide upper-secondary education to young people and adults, as well as AMU courses
Business academies	Mostly ISCED level 5, but also some ISCED level 6 programmes	Public and private	Mostly provide short-cycle tertiary education programmes to young people and adults
University colleges	Mostly ISCED level 6, but also some ISCED level 5 programmes	Public and private	Mostly provide professional bachelor programmes to young people and adults
AMU centres	Various levels	Public	Centres specialised in adult education, offering short term courses (AMU courses) to upskill and reskill the adult population

Note: More details about the various providers are provided in the following sections. ISCED 3: upper secondary education; ISCED 5: short-cycle tertiary education; ISCED 6: bachelor's level or equivalent.

Focus areas

Out of 103 vocational colleges, 89 are technical colleges, business colleges, agricultural colleges or combination colleges (with technical and business colleges representing the largest number of institutions) and 14 colleges offer social and health care training programmes.[2] Technical colleges usually cover topics such as technology, construction and transport, whereas combination colleges usually offer a variety of subjects, including those related to the hospitality sector, and business and administration (Eurydice, 2021[7]).

In higher education, *business academies* usually have a business and administration focus, a technology focus or a shared focus in both areas. In some cases, academies also offer a wider variety of VET subjects,

including fields such as arts, design and media, health and social care and hospitality. These institutions can collaborate with university colleges, engineering schools and universities.

Outside of the main providers, Denmark also has two types of specialised institutions: maritime educational institutions and institutions in architecture and art. The maritime educational institutions offer education programmes for the Danish merchant fleet, the maritime industry, the fishing industry, the energy sector and the technical industry, etc. – provided at different education levels. The institutions providing these maritime programmes are: five Marine Engineer Colleges; one Maritime Education Centre for Ship's Officers; two Nautical Colleges; two Schools and two Sailing Training Vessels for Ordinary Ratings; and one School for Commercial Fishermen. There are four education institutions that offer higher educations within the Fine Arts.

Target audience

The adult VET sector is relatively large in Denmark, and adults can enrol in VET in dedicated institutions for adults and in the same institutions that enrol young students. A large part of formal education provision for adults is delivered in vocational colleges, i.e. the same institutions as upper-secondary vocational education for young students. Apart from special arrangement for adults, such as part-time programmes, recognition of prior learning and adjusted apprenticeships, the qualifications for young people and adults have a similar structure, leading to the same professional profiles. Higher-level formal adult education programmes can be offered only by the institution providing higher VET programmes to young students, i.e. business academies and university colleges.

This provision in vocational colleges and higher VET providers is complemented by AMU centres, i.e. independent centres specialised in adult education (regulated by the Act on Labour Market Centres), offering short term courses (AMU courses) to upskill and reskill the adult population. AMU centres do not offer basic upper-secondary VET qualifications for adults (EUV) or higher-level programmes (academy and diploma programmes). AMU centres were created with the distinctive mission of providing easily accessible short qualifications and training courses for adult workers (or adults seeking employment), especially those with lower qualifications looking to upskill or qualified workers looking for specialisation. Training activities are primarily directed towards specific sectors and job functions. AMU centres are vital, as they provide tailored training alternatives to those adults in need of specific knowledge and skills to better perform on the job, or looking to start a new professional path. AMU programmes are mainly short vocational training courses for adults offered at both upper-secondary level and tertiary levels, both in part-time and full-time formats. These programmes can last between half a day and 6 weeks. (Ministry of Children and Education, 2020[8])[3]. AMU programmes target both skilled and unskilled adults over 20 years of age. Both employed and unemployed people can participate in AMU courses (Cort, 2002[9]). AMU courses are mainly provided by AMU centres, but also by vocational colleges all over the country. Some private companies and other educational institutions can also be certified as providers of specific AMU courses (Cort, 2002[9]). There are approximately 3 000 different AMU courses offered by different types of providers.

For the provision of AMU programmes, greater autonomy has been granted to vocational colleges and AMU centres with regards to the content structuring, organisation and financial management of their activity compared to other types of programmes. For example, when compared to upper secondary vocational education credentials, AMU programmes can be designed in a less structured way. They may or may not include work-based learning activities and involve a number of hours that varies significantly across programmes based on the amount of content covered and students' specific needs. Moreover, across AMU programmes the assessment procedures and completion requirements also vary significantly, and do not depend on a pre-specified regulation. Some of these courses work as credits to acquire VET qualifications, whereas others do not lead to any formal qualification.

Private versus public providers

In Danish upper-secondary education there are no publicly funded private or fully private vocational upper secondary education institutions (Eurydice, 2022[10]). Since 1989 all colleges are independent public institutions with their own board of governors. By contrast, the majority of institutions at the higher-level, i.e. university colleges, and business academies, are private. All institutions are accredited and regulated by the Ministry of Education or the Ministry of Higher Education and Science respectively. Both private and public institutions must follow the regulation regarding the offer of programmes and credentials issued. Funding at both levels of VET is mostly public and follows predefined criteria. While they can generate income from alternative activities, all VET institutions remain not-for-profit.

Co-ordinating between provider types

At the upper-secondary education level, vocational colleges function independently, receiving funding from the state. VET colleges are under the responsibility of the Ministry of Education. The Ministry is in charge of overseeing that the existing regulations are being followed. Vocational colleges often participate in joint initiatives, organised by the central government, private foundations or local governments, in topic such as innovation, employability or teacher training. For example, the Knowledge Centre for IT in Teaching promotes the use of advanced digital technology in VET. The Centre has established a network of pedagogical staff and a network of vocational school leaders across the country to facilitate the exchange of ideas and share their practical and technical knowledge, creating new solutions to common challenges. The Centre focuses on supporting teachers in the use of IT for teaching across all subjects with a special focus on the pedagogical aspects of teaching practice making use of innovative technology (CIU, 2022[11]).

At the tertiary level, business academies and university colleges are all state funded self-governing institutions, with the autonomy to grant VET credentials. All higher education institutions are under the supervision of the Ministry of Higher Education and Science, whereas the accreditation of all these institutions is performed by the Danish Accreditation Institution. The Ministry of Higher Education and Science is in charge of overseeing the quality of VET provision as well as the observance of the national regulations. Collaborations between university colleges, academic universities and business academies exist in certain areas (e.g. promotion of science education, scientific research), but are not necessarily widespread and systematic. The fact that part of their funding is based on the number of students, and that there is an overlap in terms of the types of credentials offered by different types of institutions, creates some incentives to compete to attract students, possibly undermining potential collaborations.

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Notes

[1] The board consists of teachers, students and administrative staff representatives, and social partner representatives. The board takes decisions regarding offer of programmes, the administration of the college's financial resources, and hires and fires the operational manager (director, principal, dean or similar) (UNESCO-UNEVOC, 2021[4]).

[2] Extracted from https://uddannelsesstatistik.dk on 31.01.2022.

[3] The main goals of AMU programmes are: i) to give, maintain and improve the vocational skills of the participants in accordance with the needs and background of students, companies and the labour market in line with technological and social developments; ii) to solve restructuring and adaptation problems on the labour market in a short term perspective; and iii) To give adults the possibility of upgrading of competences for the labour market as well as personal competences through possibilities to obtain formal competence in vocational education and training (Ministry of Children and Education, 2020[8]).

4 Germany's landscape of vocational education and training providers

This chapter looks at the landscape of vocational education and training (VET) providers in Germany. It describes the German VET system and zooms in on the different types of institutions that provide VET programmes. The chapter looks at how providers differ in terms of focus areas of the provided training, type of training and target audience, as well as the role of private and public providers. Lastly, the chapter also discusses how different types of providers are co-ordinated and how they collaborate.

The German vocational education and training system

Apprenticeships are at the heart of the German VET system. At International Standard Classification of Education (ISCED) level 3, nearly 90% of VET students pursue studies in the so-called dual system. Programmes typically take three years to complete and cover a wide range of fields, with three-quarters of apprentices in industry, crafts or trade related occupations. Only 10% of VET students at this level pursue school-based programmes, mostly in the healthcare and childcare sector, as well as mid-level civil service. The dual system is also open to those already holding an upper secondary qualification – general upper secondary graduates seeking occupational training, and VET graduates in need of a career change. Such "second cycle" programmes are offered at ISCED level 4. The German system also provides pre-apprenticeship programmes ("basic vocational training"), which take one year to complete, involve a basic skills component, initial vocational training and some career guidance. They are designed to help young people who could not find a suitable apprenticeship contract transition into the dual system.

Higher vocational programmes (at ISCED 5, 6 and 7) are available to VET graduates, who after a period of employment seek to upskill and reach higher professional and management positions by passing master craftsmen examinations. Candidates usually pursue preparatory courses, which in the case of level 5 examinations require less than 880 hours of coursework. Level 5 examinations yield the title "Certified occupational specialist" in a range of target occupations (e.g. opticians, plumbers and heating engineers). Alternatively, VET graduates may attend courses offered by trade and technical schools (at ISCED 6), pursue professionally-oriented tertiary studies (ISCED 5, 6 or 7), or complete a bridging course to gain eligibility to the academic tertiary education sector (universities).

The provider landscape

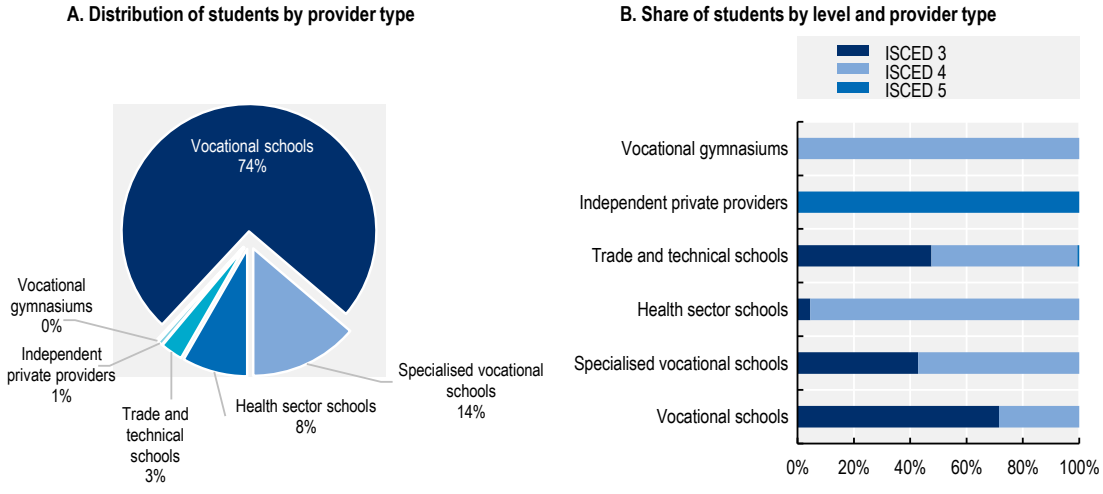
In Germany's dual system companies are considered the main providers of training, as apprentices spend most of their time in companies. The firm-based component of the dual system is subject to strong quality assurance. Chambers provide guidance to companies that take on apprentices, and determine the suitability of companies and instructors. They also conduct nationally standardised examinations, which ensure the recognition of qualifications. The training delivered in companies is sometimes complemented by inter-company training centres (*überbetriebliche Berufsbildungsstätten*). These centres are designed to help small and highly specialised companies engage in apprenticeships. When the company is highly specialised and unable to cover all of the training content contained in the relevant regulations, apprentices may pursue additional practical training in inter-company training centres. The training centres are owned by chambers and receive funding from the Federal Ministry of Economic Affairs and Energy (BMWI, 2022[1]). Small and highly specialised companies may also provide apprenticeships through collaborative apprenticeship schemes (*Verbundausbildung*). Such schemes may take different forms, under the most commonly used model a "lead company" hires the apprentice and partner companies provide training components that the lead company is unable to provide (Azubi.de, 2022[2]).

Against this background and recognising much of the training is delivered within companies, the remaining part of this section focuses on training providers in the sense of providers of off-the-job training. Vocational programmes at ISCED levels 3, 4 and 5 (as well as 6) are provided in various types of institution, the main ones being vocational schools (*Berufsschulen*), specialised vocational schools (*Berufsfachschulen*), trade and technical schools (*Fachschulen*), health sector schools (*Schulen des Gesundheitswesens*) and vocational grammar schools or gymnasiums (*Fachgymnasien*). In the initial VET system, providers are under the responsibility of individual Länder. Accordingly, while the main provider types listed above exist in all (or nearly all) *Länder*, some smaller provider types exist in only parts of the country. This section focuses on the largest provider types of initial VET.

In addition, a range of independent private providers offer continuing vocational education programmes – in particular preparatory courses towards master craftsmen examinations. Such providers include social partners (e.g. Chambers of Commerce and Trade, Chambers of Skilled Crafts), as well as a wide range of private providers. This section covers only formal programmes delivered by these private training providers and excludes non-formal programmes, recognising that the latter play a major role in adult learning.[1]

In terms of the overall number of students in vocational programmes at ISCED levels 3-5, vocational schools dominate the system. They provide the off-the-job training in apprenticeship programmes, and their size therefore reflects the central role of apprenticeships in the German VET system (see Figure 4.1, Panel A). Specialised vocational schools and health sector schools are the next most important provider types, with a focus on school-based VET programmes mostly in specialised fields. Independent private providers focus on the delivery of preparatory courses for master craftsmen examinations (as well as courses that are not part of the formal education and training system). As illustrated by Figure 4.1 (Panel B), each provider type focuses on just one or two levels of education. The overlap between provider types in terms of targeted field and level is relatively limited: it exists mostly in the case of pre-apprenticeship programmes (offered in vocational schools and specialised vocational schools) and healthcare-social care programmes (provided in specialised vocational schools, health sector schools and technical schools).

Figure 4.1. Providers of VET programmes in Germany (ISCED levels 3-5)



Note: Reference year 2018/19.
Source: OECD calculations based on data collected for the OECD Survey on Vocational Education and Training (2019).

Table 4.1. Overview of main VET providers in Germany

	Education level	Public or private	Key features
Vocational schools	ISCED levels 3 and 4	Mostly public	Deliver the off-the-job component of dual programmes or apprenticeships, as well as pre-apprenticeship programmes
Specialised vocational schools	ISCED levels 3 and 4	Mostly public	Provide vocational programmes that do not follow the dual model (mostly in healthcare, social care and childcare), as well as pre-apprenticeship programmes
Trade and technical schools	ISCED levels 3 and 4, and some ISCED level 5	Mostly public	Focus to a large extent on healthcare and preparation for civil service jobs, and some upskilling for professionals
Health sector schools	Mostly ISCED level 4	Mostly public	Provide 2-3 year programmes that prepare for health sector occupations and short healthcare programmes
Vocational grammar schools or gymnasiums	ISCED level 4	Mostly public	Vocational upper level of general secondary education
Independent private providers	ISCED level 5	Private	Provide preparatory courses for master craftsmen examinations

Note: More details about the various providers are provided in the following sections. In the dual system, employers are the main provider of vocational training, but this table only considers off-the-job training providers.

Programme type and target audience

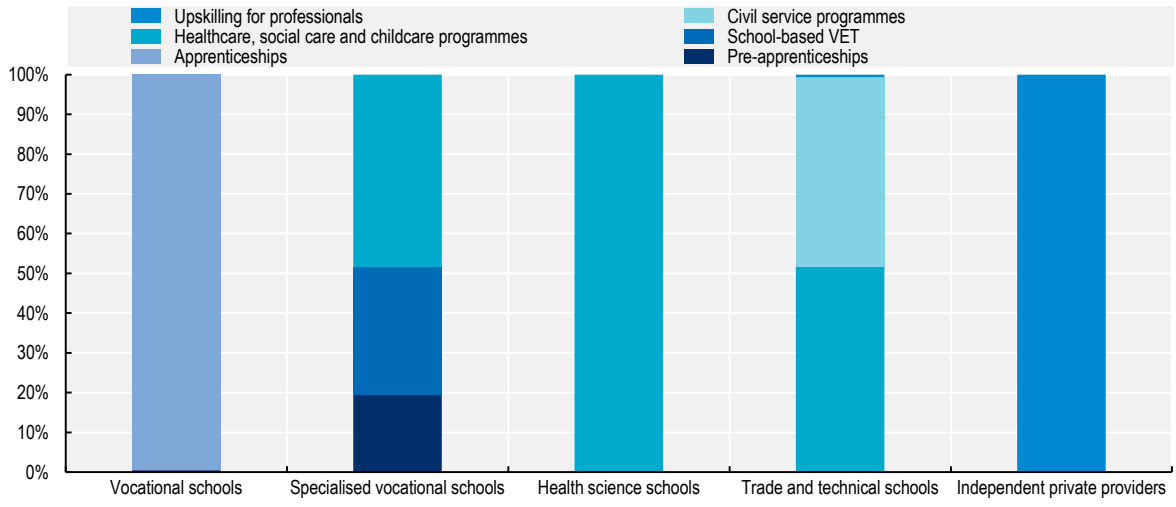
The main line of division between different types of providers is the kind of programme offered: pre-apprenticeship programmes, apprenticeships, school-based VET or upskilling for experienced professionals. The target audience of different providers varies accordingly, see Figure 4.2.

Only specialised vocational schools target several types of programmes and therefore overlap with some other provider types. Their specificity is that they provide vocational programmes that do not follow the dual model. In these programmes, work-based learning takes the form of work placements rather than alternating period as in apprenticeships. The majority (60%) of students in specialised vocational schools study in just three fields that mostly fall outside of the dual system: healthcare, social care and childcare. There is some overlap with vocational schools in two areas: pre-apprenticeship programmes and some vocational programmes (which prepare for occupations also targeted by apprenticeships). In addition, there is some overlap between specialised vocational schools and health sector schools. 2-3-year programmes that prepare for health sector occupations (e.g. medical assistant, nurse, midwife) are the main task of health sector schools and short healthcare programmes are available in both provider types. Trade and technical schools also provide 2-3-year programmes for the same health sector occupations, but account for a smaller share of provision in this area than specialised vocational schools and health sector schools.

Other providers tend to focus on one specific function. Vocational schools' main role is to deliver the off-the-job component of dual programmes. Independent private providers focus on a highly specific sector: preparatory courses for master craftsmen examinations, which are not targeted by vocational or specialised vocational schools. Their target audience are adults, i.e. experienced professionals, who already hold an initial vocational qualification and after several years of work experience seek to upskill. To take the craftsmen examination, candidates do not need to have gone through particular preparatory training. Hence the training that exists is purely optional (and hence rather distinct from the standard formal initial VET system), with various types of providers offering such training options.

Figure 4.2. Types of programmes by VET provider type in Germany

Share of students



Note: Reference year 2018/19.
Source: OECD calculations based on data collected for the OECD Survey on Vocational Education and Training (2019).

While none of the other providers specifically target adults vs. young students, the age profile of the students in the different institutions reflects the types of programmes they offer and the goal of those programmes. Vocational schools mostly enrol young people as most apprentices are completing their initial schooling (over 70% study towards a first upper secondary qualification). But a growing share (nearly a quarter) of apprentices already have a general upper secondary qualification and therefore are aged 18 or more. Only a small part of the dual system is re-training for adults with a prior vocational qualification: they account for about 6% of the dual system enrolment. The typical entry age in specialised vocational schools, health sector schools and trade and technical schools is 16-20, with some variation depending on the targeted programme. For example, typical entrants to short healthcare programmes are aged 16-18 in specialised vocational schools and 19-20 in health sector schools and trade and technical schools. But specialised vocational schools also provide programmes for mostly 19–20-year-olds: 2-3-year programmes in healthcare, social care and childcare.

Focus areas

As described above, the largest provider type, vocational schools, cover a wide range of fields reflecting the broad coverage of the German apprenticeship system. Independent private providers that prepare for professional examinations overlap with the fields targeted by vocational schools by design: they offer a route to higher level positions related to individuals' initial qualification. Specialised vocational schools cover a more limited spectrum: much of their provision is in healthcare, social care and childcare, but their pre-apprenticeship and school-based vocational programmes cover a larger set of fields. The remaining provider types tend to focus on a smaller set of fields. Health sector schools have a highly specific target, while trade and technical schools focus to a large extent on healthcare and preparation for civil service jobs - while also providing some programmes for upskilling of professionals.

Public vs. private providers

In the initial VET system, the private sector is relatively small (although growing), both in terms of the share of providers and students. A quarter of initial VET providers are private (Destatis, 2020[4]), but they enrol less than 10% of students. Only 9.7% of students in vocational schools, specialised vocational schools or health sector schools attended a private institution in 2018/19 (these three types of providers enrol 97% of VET students at ISCED levels 3 and 4). In the general education sector private providers also play a limited role, enrolling 9.2% of students. Private schools may be established and run by individuals or bodies, such as churches or associations. The legal framework varies across *Länder* (Destatis, 2021[5]). By contrast, in the area of upskilling for professionals, private providers dominate the field as they are the main providers of preparatory courses for master craftsmen examinations, which are subject to limited regulation – especially as candidates for the master craftsmen examination are not required to enrol in training to prepare for the examination.

Co-ordinating between provider types

The overall responsibility for national VET strategy lies with the Federal Ministry of Education and Research. It is responsible for national legislation that provides common ground for initial vocational programmes. Legislation sets out the list of recognised professions, which may be targeted by vocational programmes, describes the profile of each profession, the duration of apprenticeship and examination requirements. A framework curriculum for the school-based part of apprenticeships is issued by the Standing Conference of Ministers for Education and Cultural Affairs for vocational subjects (about two-thirds of the school-based part), and by *Länder* for general subjects (as schooling is the responsibility of individual *Länder*). *Länder* have the sole responsibility for schools that provide initial VET – both those providing the school-based component of apprenticeships (vocational schools) and school-based programmes (specialised vocational schools, trade and technical schools, health sector schools). Regulations regarding providers of initial VET therefore vary across the *Länder*.

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Note

[1] In 2018, 5% of 25-64 year-olds reported participation in formal programmes, while 54% pursued non-formal learning (Destatis, 2021[5]).

5 The Netherlands' landscape of vocational education and training providers

This chapter looks at the landscape of vocational education and training (VET) providers in the Netherlands. It describes the Dutch VET system and zooms in on the different types of institutions that provide VET programmes. The chapter looks at how providers differ in terms of focus areas of the provided training and target audience, as well as the role of private and public providers. Lastly, the chapter also discusses how different types of providers are co-ordinated and how they collaborate.

The Dutch vocational education and training system

Vocational education and training (VET) in the Netherlands is delivered at lower-secondary, upper-secondary and tertiary levels. When finishing primary education at age 12, half of students in the Netherlands continue into lower secondary pre-vocational programmes (50.4% in 2017-18). Lasting four years, lower secondary pre-vocational programmes combine theoretical education with vocational training and prepares students for upper secondary VET (*middelbaar beroepsonderwijs,* MBO). MBO last between one and four years and offer four levels of courses and qualifications (MBO Levels 1 to 4) (Education Inspectorate, 2021[1]). MBO offers two parallel learning pathways that lead to the same diploma: a predominantly school-based track and a work-based track. The school-based track consists of 20-60% of learning in the workplace, while this amounts to 60% or more in the work-based track (European Commission, 2021[2]).

Post-secondary non-tertiary education (International Standard Classification of Education, ISCED level 4) is designed as a continuation from upper secondary education. It includes MBO 4 specialist training (typically lasting one year) and 1-year higher professional courses (European Commission, 2021[3]).[1] Its curriculum content is generally focused on entry to the labour market, but the programmes also provide a pathway into tertiary education.

VET programmes at ISCED level 5 offer two-year tertiary education leading to an associate degree. They are part of higher professional education (*hoger beroepsonderwijs*, HBO), which also includes professional bachelor programmes at ISCED level 6. Given that associate degree programmes largely coincide with the first half of professional bachelor programmes, their graduates have the opportunity to follow another two-year-long programme in order to receive a professional bachelor's degree. A substantial share of MBO level 4 graduates enter a HBO programme: in the 2020-21, 44% started an HBO course.

The provider landscape

The Ministry of Education, Culture and Science allocates public funding to upper-secondary VET institutions, based on the number of students enrolled, certificates awarded, as well as educational preparation and support activities volume. The main publicly-funded MBO providers are the 42 regional training centres (ROCs) that cover VET courses for both initial students and adults. These ROCs were established by merging the roughly 500 VET providers that existed previously. In addition, there are 8 agricultural training centres (AOCs) and 11 specialist colleges for specific occupational fields, accounting each for around 5% of MBO students in 2021 (MBO Raad, 2022[4]). These VET colleges are regionally oriented. In addition, there are a number of private providers at the upper-secondary level which do not receive public funding. At the HBO level, university colleges provide associate degree programmes, as well as professional bachelor programmes.

VET institutions enjoy a relatively large degree of freedom when it comes to budget allocation, programming and planning. Moreover, they have full autonomy in the execution of the nationally determined programme goals. The Inspectorate of Education surveys whether VET institutions comply with national regulations and inspects teaching and exam quality.

Table 5.1. Overview of main VET providers in the Netherlands

	Education level	Public or private	Key features
Regional training centres (ROC)	ISCED levels 3 and 4 (MBO)	Public	Large multi-campus MBO providers offering programmes in various fields
Agricultural training centres (AOC)	ISCED level 3 (MBO)	Public	Focus on MBO courses and degrees in food, nature and the environment
Specialist colleges	ISCED levels 3 and 4 (MBO)	Public	Occupation-specific colleges that provide MBO programmes in a specific occupational field in a specific vocational sector
Private MBO providers (NBI)	ISCED levels 3 and 4 (MBO)	Private	Non-subsidised private institutions that offer training and education at MBO level
Universities of applied sciences	ISCED levels 5 and 6 (HBO)	Public	Publicly-funded HBO providers

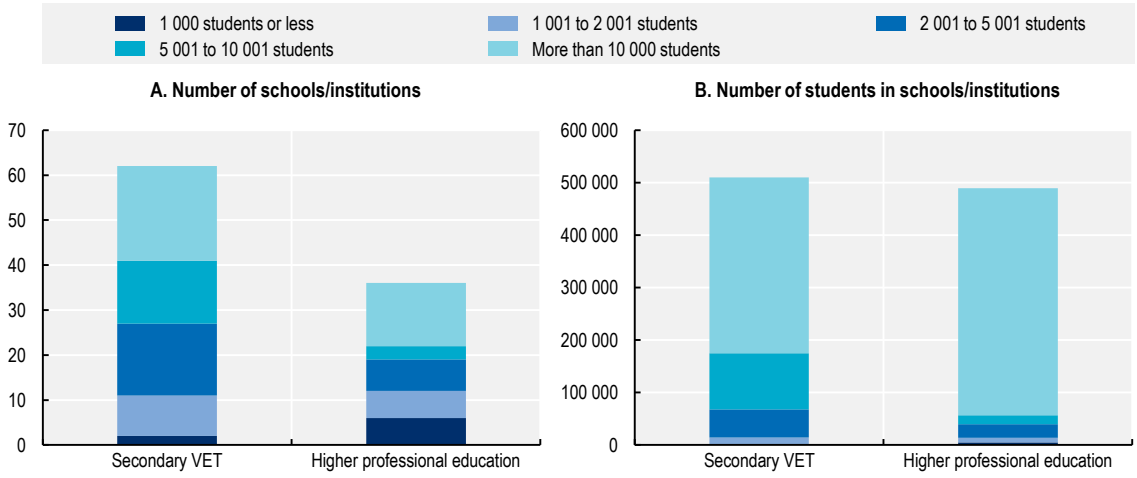
Note: More details about the various providers are provided in the following sections. ISCED 3: upper secondary education; ISCED 4: post-secondary non-tertiary education; ISCED 5: short-cycle tertiary education; ISCED 6: bachelor's level or equivalent. MBO is ISCED level 3 (and some ISCED level 4); HBO is ISCED levels 5 and 6 (and some ISCED level 4).

Public vs. private providers

In 2020, the Netherlands counted 61 public upper-secondary VET providers: 42 regional education and training colleges (ROCs), 8 agricultural colleges (AOCs) and 11 specialist colleges, and two 'other institutions' (i.e. centres for persons with hearing loss and schools with a faith-based ethos). The number of these public providers has remained relatively stable in recent years. One of key features of Dutch VET providers is their large size (see Figure 5.1) – this has been the result of the 1996 VET Act under which VET providers were merged (Casey, 2013[5]). ROCs enrol on average about 12 000 students, but this can go up to 20 000 students. ROCs generally have multiple campuses in their region, with each campus focusing on a set of fields. The student-teacher ratio in VET is the 5th highest (18.4) among OECD countries after the United Kingdom, Finland, New Zealand and Chile (OECD, 2020[6]).

VET providers have a relatively high degree of freedom to shape VET provision as far as they meet qualification requirements. The VET law provides a broad framework outlining key elements at system level. Government funding is divided into funding for education and for design and development. Of the education component, 90% is divided among the institutions in proportion to the number of registered students and the number of degrees obtained, and approximately 10% is distributed on the basis of fixed amounts per institution.

Figure 5.1. Number of VET providers and student enrolment in the Netherlands



Note: Refers to schools and educational institutions financed by the government. Panel B shows the total number of students in the institutions covered in Panel A (e.g. 21 secondary VET institutions have more than 10 000 students, and these 21 institutions enrol in total around 335 000 students).
Source: CBS (2021[7]), Statline - School size by type of education and ideological basis, https://opendata.cbs.nl/statline/#/CBS/en/dataset/03753eng/table?ts=1639496589264.

Besides publicly funded MBO institutions, there are also non-subsidised private institutions that offer training and education at MBO level (*niet-bekostigde instellingen*, NBI). More than 100 of these NBIs are licensed to offer accredited MBO programmes. The size of these NBIs differs, from the smallest institutions offering only one degree programme to the largest institution offering 145 degree programmes. More than 40 000 students are following an accredited MBO course at an NBI. This is around 7% of the total number of MBO students. More than half of the MBO students at an NBI follow a course in the domain of care and welfare, for example as a doctor's assistant or pedagogical employee. In addition, many students follow training in the domain of safety and sports and in the domain of economics and administration (Cedefop, 2016[8]; European Commission, 2021[3]). NBIs can set their own student fees, which are in general higher than in public institutions. NBIs often provide more flexible programmes than public providers and have smaller class sizes.

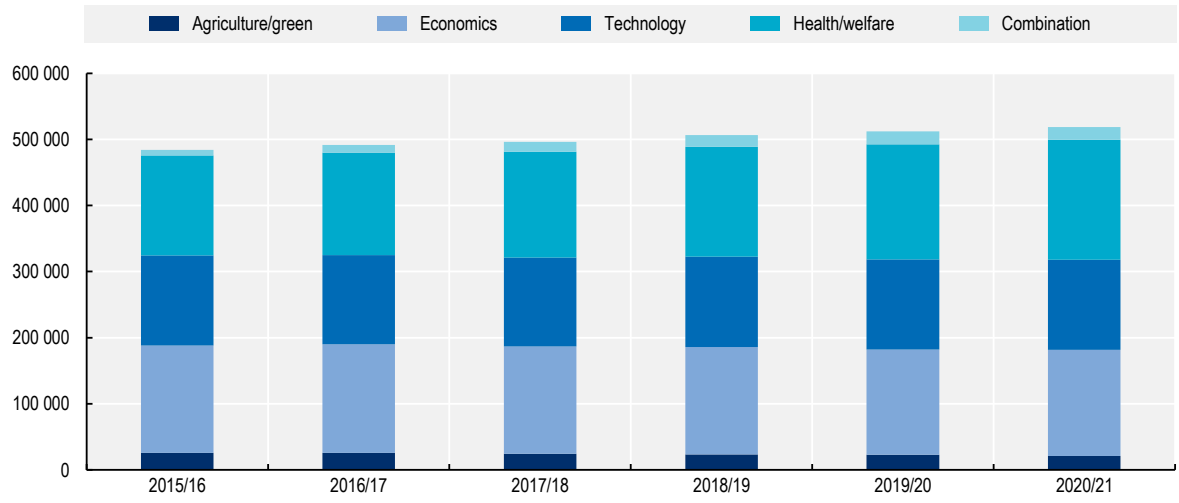
For HBO, the universities of applied sciences (*hogescholen*) are publicly financed providers, which also charge student tuition fees. (Cedefop, 2016[9]). There are 36 government-funded universities of applied sciences (Dutch Association of Universities of Applied Sciences, 2021[10]). Non-subsidised, private providers can offer similar programmes if they have appropriate accreditation. Any private-sector institution established in the Netherlands can apply for accreditation (European Commission, 2018[11]). The certificates they award to graduates are legally recognised after being approved by the Education Inspectorate and the Netherlands-Flanders Accreditation Organisation (European Commission, 2018[11]).

Focus areas

ROCs are large institutions providing MBO programmes in four fields of study: economics, care and welfare, technology, and green/agriculture. In addition to these ROCs, MBO is also provided in Agricultural training centres (AOCs), which provide courses and degrees in food, nature and the environment. While AOCs cannot provide MBO programmes outside their narrowly defined field, ROCs can in principle provide programmes in that same field – although this only happens sporadically. There are also a few specialist colleges, which are occupation-specific colleges that provide education and training in a specific occupational field in a specific vocational sector (European Commission, 2021[2]). Figure 5.2 shows that health and welfare programmes enrol the largest number of MBO students, followed by economics and technology.

Figure 5.2. Participation in upper secondary VET (MBO), by area of study

Number of students



Source: CBS (2022[12]), Statline - MBO students by level, pathway, field of study and migrant background, https://opendata.cbs.nl/#/CBS/nl/dataset/83850NED/table

At the HBO level, VET programmes cover seven different sectors: agriculture and food, education, science and technology, economy, healthcare, social studies and art. The largest sector in terms of student enrolment in HBO (at ISCED levels 5 and 6) is economics (37.8%), followed by the science and technology sector (20.8%) (HBO, 2020[13]). Some of the university colleges focus on one sector whereas others provide programmes in a range of sectors: 22 HBO institutions provide multi-sectoral courses and 14 provide courses in a single sector.

Target audience

Private and public MBO and HBO providers are in principle open to learners of all ages. MBO programmes are for those aged 16 or above, while HBO programmes are open to learners aged 17 and above. Admission to HBO requires an upper secondary general education or VET qualification (MBO 4) but the Quality Through Diversity Act gives higher VET providers the possibility to apply stricter admission criteria for MBO 4 students for specific programmes (Cedefop, 2016[9]).

Regional, multi-sectoral VET colleges (ROC) offer a complete range of VET courses for initial students and adults, both full-time and part-time. Some ROCs provide basic skills education and training[2] and general secondary education for adults.[3] Non-government funded private institutions that offer MBO (NBI) have an older student population than publicly-funded institutions: more than half of the MBO students are older than 30 years in NBI, while in government-funded education only 7% are older than 30.

Co-ordinating between provider types

Both upper secondary and tertiary VET are governed by the Ministry of Education, Culture and Science. The Ministry is in charge of strategic planning and development, ensuring quality, and funding public institutions. The Inspectorate of Education surveys whether VET institutions comply with national regulations and inspects teaching and exam quality. Social partners are also an important actor in VET. The Foundation for Cooperation on Vocational Education, Training and the Labour Market (*Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven* SBB) represents all employers, employees and training providers. It is tasked with developing a qualification structure for secondary VET, finding new

placement providers (where students get practical training in a trade or profession) and accrediting them, and monitoring the quality of the placement providers (European Commission, 2021[2]; Education Inspectorate, 2021[1]).

Publicly-funded VET colleges at the upper secondary level (ROCs) are represented by the MBO Council (*MBO Raad*), while the Dutch Council for Training and Education (*Nederlandse Raad voor Training en Opleiding*, NRTO) represents private institutions that provide MBO. For HBO, the Association of Universities of Applied Sciences (*Vereniging Hogescholen*) represents the 36 government-funded HBO providers. The association promotes the collective interests of the higher professional education sector, supports common activities of the colleges and acts as an employers' organisation on behalf of its members. It negotiates labour conditions for the sector with the trade unions and signs collective labour agreements.

To facilitate coordination and knowledge sharing and to bring together all information relevant to the entire network of MBO providers, various MBO Knowledge Hubs have been set up. Through these hubs, MBO providers can find information about laws and regulations and can share practical solutions with each other. The hubs provide documentation and publications, organise information sessions, share newsletters, and have an online discussion board. Hubs have been created on the topics of teaching and examination; lifelong learning; language and mathematics; equal opportunities; education fit for all; citizenship education.

Collaboration between public and private MBO providers has been encouraged and supported in the area of lifelong learning. Since 2019, public and private providers can request subsidies to develop flexible programmes in partnership. The subsidy can be used for the development of flexible programmes for workers and jobseekers, for awareness-raising among the target group, for the professional development of teachers and trainers and for knowledge sharing in this area. Since the start of the programme, 26 partnerships have received a subsidy and started collaboration on flexible lifelong learning.

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CBS (2022), *Mbo; studenten, niveau, leerweg, studierichting, migratieachtergrond*, https://opendata.cbs.nl/#/CBS/nl/dataset/83850NED/table. [12]

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OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/69096873-en. [6]

Notes

[1] The specialist training programmes fall under MBO and the 1-year higher professional programmes under HBO. Therefore, the remainder of this chapter covers these programmes under MBO and HBO without making a distinction between these ISCED level 4 programmes and the other programmes covered by MBO and HBO.

[2] This mostly covers training for adults with a migrant background, including language training and preparation for the “integration exam”. This type of training can be delivered by a broad range of providers, including ROCs and private providers.

[3] General upper-secondary education for adults (VAVO, which also includes lower-secondary VET for adults) is delivered by public and private MBO providers.

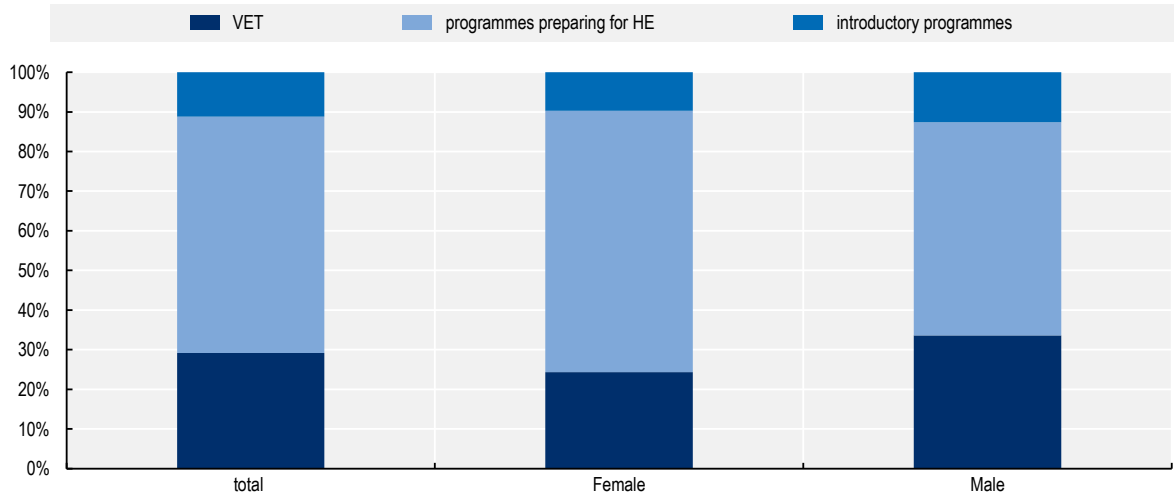
6 Sweden's landscape of vocational education and training providers

This chapter looks at the landscape of vocational education and training (VET) providers in Sweden. It describes the Swedish VET system and zooms in on the different types of institutions that provide VET programmes. The chapter looks at how providers differ in terms of target audience, as well as the role of private and public providers. Lastly, the chapter also discusses how different types of providers are co-ordinated and how they collaborate.

The Swedish vocational education and training system

Students who successfully complete compulsory education (typically aged 16) can apply for one of 18 national upper-secondary programmes, 12 of which are vocational. Students who do not qualify for national upper-secondary programmes attend introductory programmes preparing them for the transition into one of the national upper-secondary programmes or into the labour market (Skolverket, 2021[1]). About 30% of students are in VET programmes and 11% in introductory programmes, with these shares being higher among male than female learners (see Figure 6.1). Among the 12 VET programmes, electricity and energy and construction attract the largest number of students (see Figure 6.2). All national upper-secondary VET programmes last three years. Students in vocational programmes can attend a mainly school-based track or an apprenticeship track. In the latter at least half of the learning is work-based. Approximately 13 % of students in vocational upper-secondary programmes are in the apprenticeship track (Skolverket, 2021[2]). School-based VET and apprenticeships have the same learning objectives and lead to the same qualifications.

Figure 6.1. Share of upper-secondary students by type of programme in Sweden, 2020/21



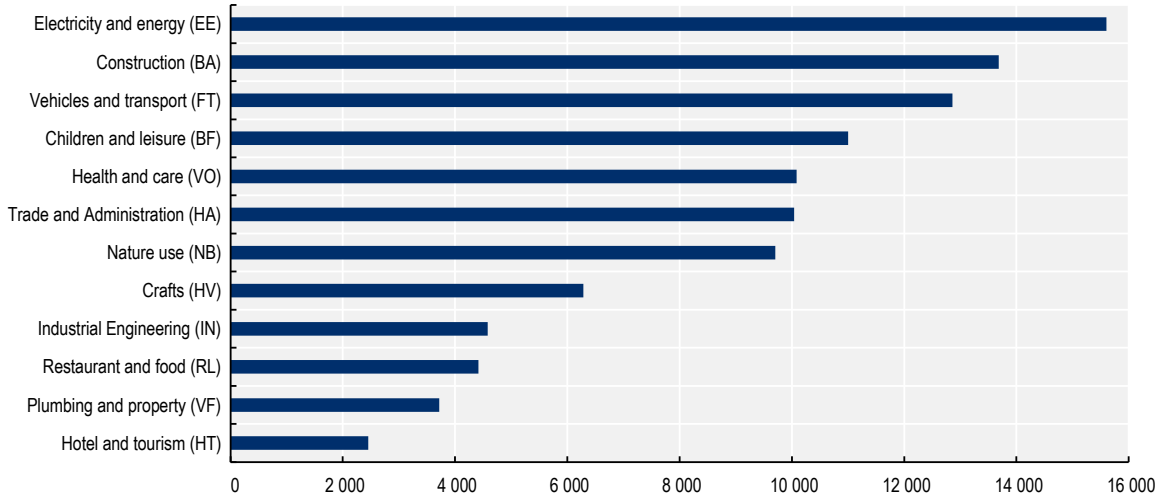
Note: HE is higher education.
Source: Skolverket (2021[3]), Statistik över gymnasieskolans elever 2020/21, https://www.skolverket.se/skolutveckling/statistik/fler-statistiknyheter/statistik/2021-03-11-statistik-over-gymnasieskolans-elever-2020-21.

The scope of the courses in upper-secondary education is defined by upper-secondary credits, indicating the relative weight of the course in the full programme. All upper-secondary school programmes include the same eight core required subjects, but the scope and therefore also the amount of credits associated with the core/foundation subjects differ across vocational and general programmes (i.e. programmes preparing for higher education). In addition to the core required subjects, students study programme-specific subjects. General and vocational programmes are provided within the same institutions and education is delivered on a full-time basis. Students who have completed upper-secondary school with basic eligibility for higher education can apply to universities (*universitet*), university colleges (*högskola*) and/or higher vocational education providers (*yrkeshögskola*) (Kuczera and Jeon, 2019[4]).

At the post-secondary level, higher vocational education (HVE) was established in 2009 in its current form, to fill a gap in the education market by providing postsecondary non-university programmes closely connected to labour market needs. Most HVE programmes require between six months and two years of

full-time study with 70% of programmes lasting two years. A programme of at least one year (equivalent to 200 HVE credits) can lead to a diploma qualification and a programme of at least two years (equivalent to 400 HVE credits) can lead to an advanced diploma. They are classified at ISCED level 4 and 5, respectively (Cedefop, 2016[5]). In 2020 there were 3 016 ongoing HVE training programmes in 14 fields, including construction, finance, administration, sales, IT, tourism, healthcare, agriculture, media, design, engineering and manufacturing (Cedefop, 2019[6]). To establish a new HVE programme, education providers must secure employers' involvement. The providers, in collaboration with employers, propose programmes to the National Agency for HVE which may then be funded for up to five training periods. After that, a new application must be filed to the Agency to ensure that the programme still meets the needs of the labour market.

Figure 6.2. Number of upper-secondary VET students in Sweden, by programme (2020/21)



Source: Sveriges Officiella Statistik (2021[7]), Gymnasieskolan – Elever – Riksnivå: Elever på program redovisade efter typ av huvudman och kön, läsåret 2020/21 (Table 5 A), https://siris.skolverket.se/siris/sitevision_doc.getFile?p_id=550197.

The provider landscape

Upper-secondary schools in Sweden are mainly divided into municipal public schools (*kommunala skolor*) and independent ones (*fristående skolor*). HVE providers can be private education companies, municipalities, counties/regions, universities or other tertiary education providers or other government agencies. In addition to these main providers of initial upper-secondary and HVE, adult municipal education and folk high schools provide upper-secondary courses to adults who have not completed compulsory or upper-secondary education, but also to other target groups. These institutions also provide programmes at other levels of education as well as courses that are outside the formal education system.

Table 6.1. Overview of main VET providers in Sweden

	Education level	Private or public	Key features
Municipal schools	ISCED 3	Public	Public upper-secondary schools run by municipalities
Independent schools	ISCED 3	Private	Upper-secondary schools run by third parties such as companies, foundations, and staff and parent co-operatives
Higher vocational education (HVE) providers	ISCED 4-5	Public and private	HVE providers can be private education companies, municipalities, counties/regions, universities or other tertiary education providers or other government agencies
Adult education providers	Various levels	Public and private	Organised by municipalities and often outsourced to private providers, delivering programmes for adults with low levels of qualifications
Folk high schools	Various levels	Public and private	Folk high schools provide formal and non-formal education for adults, delivered by various civic or social movement organisations and associations, as well as county councils and regions

Note: More details about the various providers are provided in the following sections. ISCED 3: upper secondary education; ISCED 4: post-secondary non-tertiary education; ISCED 5: short-cycle tertiary education.

Public vs. private providers

A series of reforms in the 1990s reinforced student choice and allowed private entities to establish private schools, also called independent schools. The aim of these reforms was to increase the educational offer and give more choice to students and parents. Hence, today upper secondary VET programmes are provided by municipal schools, run by the municipalities, and independent schools, run by third parties such as companies, foundations, and staff and parent co-operatives. Permission to start an independent school is issued by the School Inspectorate and is given on the condition that the school follows the nationally provided syllabus and teaches the same democratic values as schools run by the municipalities (Kuczera and Jeon, 2019[4]). Six months after the start of school, the Inspectorate conducts a first-time inspection to ensure that the activities are conducted in the manner specified in the application. While empowerment of schools allowed them to address more effectively individual student needs and local labour market circumstances, competition created some risks. Competition among education providers for students inevitably creates an environment in which it is more challenging to encourage collaborative approaches (Kuczera and Jeon, 2019[4]).

In 2020, 456 out of 1 307 upper-secondary schools were independent, which represents 35% of the sector. According to 2020 data, in 250 municipalities, out of a total of 290, there were upper-secondary schools run by municipalities, whereas independent upper-secondary schools could be found in 97 municipalities (Swedish Association of Independent Schools, 2022[8]). Overall, 28% (or 101 000) of the upper-secondary student population attend independent schools. Student performance in public and independent upper secondary schools is comparable. In the 2018/19 academic year, the average grade point for students in independent schools was 14.9, compared to 14.8 in municipal and county council-run schools. Independent upper-secondary schools tend to be smaller than municipal schools. An independent upper-secondary school caters to 231 students on average, as compared to 294 students enrolled in municipally run institutions. There are 20 entities that have five or more school units in compulsory and upper-secondary education, ten of which are owned by private individuals, three are foundation-owned, two are staff-owned and three are listed on the stock exchange (Swedish Association of Independent Schools, 2022[8]).

Programmes run by public and independent upper-secondary schools lead to the same qualifications. Independent schools may offer any of the 18 national upper-secondary programmes, including VET, and introductory programmes. However, while municipalities have to serve all learners from the area,

independent schools can target specific groups. Differences can indeed be observed. For example, municipalities enrol more students in introductory programmes designed for students who do not qualify for upper secondary education than independent schools. In terms of socio-economic background, 54% of students attending independent institutions have parents with post-secondary education, as compared to 52% in municipal schools (Swedish Association of Independent Schools, 2022[8]).

Upper-secondary education is free of charge to students. Most of the funding for upper secondary schools comes from municipal taxes and additional funds from the state budget. Independent upper-secondary schools are funded through a "voucher system" which allocates funds to schools depending on the number of students enrolled in the different programmes. The amount of funding per student and criteria according to which the funding is allocated are roughly the same for municipal and independent schools – the municipality pays the independent school the same amount per student as the municipal school would get. A key difference, however, is that while public school funds remain within the municipality, independent schools are able to keep and make use of the profits they make (Swedish Association of Independent Schools, 2022[8]). This means that an owner of an independent school may pay dividends to shareholders or invest the surplus in areas not related to education. Conversely, if a public school is left with a surplus by the end of the budgetary year, the surplus is reinvested in education.

Similarly, HVE providers can be public and private. In 2020, out of 214 institutions providing HVE, 121 were private while the rest belonged to local and regional authorities and the state (Swedish National Agency for Higher Education, 2020[9]). Over time, the proportion of private providers and training places at privately run institutions increased. In 2020, private providers offered 73% of training places as compared to 49% in 2007 (Swedish National Agency for Higher Vocational Education, 2021[10]). The various providers of HVE programmes must apply to the Agency for Higher Vocational Education for approval of the programmes they wish to deliver. HVE programmes are publicly funded, with no tuition fees. The overall budget for HVE is determined by the government and the Parliament and the Agency for HVE funds individual providers in the form of grants covering up to five training periods based on an evaluation of the programme and the provider.

Likewise, adult education is provided by public providers and private providers. Municipalities organise municipal adult education (*komvux*, see below), but they outsource some adult education courses to other, mainly private training providers, with education companies representing the overwhelming majority. In 2019, 50% of the participants in municipal adult education received training in a school operated by a provider other than municipality (Andersson and Muhrman, 2021[11]). The proportion of students in training provided by organisations other than the municipality has doubled over the past decade. A survey carried out among municipalities shows that municipalities hire external providers to offer a wider range of courses and to keep prices low through competition between education providers. However, this only works in larger municipalities where several providers compete to win the procurements. Many smaller municipalities reported difficulties to attract external providers (Andersson and Muhrman, 2021[11]). Municipalities pay for adult education, including courses delivered by other providers. They also ensure the quality of municipal adult education across all institutions. Private providers are typically selected through a public procurement process culminating in a selection of providers that can deliver education according to the required criteria at the lowest price. Some municipalities use an authorisation system, as in youth education, whereby municipalities define the price per course/student and the criteria the provider should fulfil. A survey of municipalities shows that there are issues with quality in some private providers and some municipalities envisage to expand its internal provision (Andersson and Muhrman, 2021[11]). Adult education is also provided by folk high schools (see below). There are a total of 155 Folk High Schools in Sweden, 111 of which are run by various civic or social movement organisations and associations, whilst the remaining 44 are run by county councils or regions (Eurydice, 2019[12]).

Target audience

Upper-secondary schools –both the municipal schools and the independent schools- mostly target young students coming directly from compulsory education. The learners in HVE are more diverse in age, with about 45% of the HVE students in 2021 being younger than 30, 42% between 30 and 45, and 13% aged 45 and older (Sveriges Officiella Statistik, 2022[13]).

Adults who want to study at the upper-secondary level can do so in municipal adult education and in Folk High Schools. Both types of institutions provide formal programmes at different education levels and Folk High Schools also offer a range of non-formal programmes. Their formal programmes at upper-secondary level lead to the same qualifications as the ones provided in upper secondary schools for youth.

Municipal adult education (*komvux*) is targeted at adults aged 20 and over who have not completed primary or upper-secondary education. Municipalities are legally obliged to offer this type of education. If a municipality does not provide a relevant course and the person attends adult education in another location, the home municipality pays its cost to the municipality or county council offering the education (Eurydice, 2020[14]). Students in municipal adult education can work towards a diploma that is equivalent to upper-secondary school diploma, supplement earlier education to gain eligibility for higher education, and get vocational training. Learning goals of municipal adult education are the same as in upper-secondary education for youth but there are no nationally determined programmes. Instead, adults study one or more courses based on their specific needs and preconditions. Municipal adult education is free of charge for participants (Eurydice, 2020[14]; Skolverket, 2021[1]). In 2019, 4,3% of 20-64 year-olds or 387 000 students were enrolled in municipal adult education (Andersson and Muhrman, 2021[11]). Over 175 000 students, studied at upper-secondary level (Eurydice, 2020[14]).

Adults can also attend Folk high schools (*Folkhögskola*) to enrol in programmes at the level of compulsory or upper-secondary school education. These so-called general courses must represent at least 15% of every folk high school's programme for them to receive public financing or government grants. The minimum age for admission to the general courses is 18 years. In addition, folk high schools can provide vocational courses at post-secondary level (e.g. course in sign language translation) and special courses that do not confer eligibility for higher education (such as in music, textiles, globalisation and many other subjects) (Eurydice, 2019[12]). Folk high schools have freedom to develop their own courses, and they do not follow a centrally established, standard curriculum but develop their own teaching plans within the limits set by a special ordinance. Education in folk high schools is free of charge and the schools receive financial support from the state. In 2020, 30 646 adults participated in general courses, 45 837 in special courses of 15 days or longer, and 28 944 took part in short courses of less than 15 days (Statistics Sweden, 2022[15]).

Co-ordinating between provider types

All upper-secondary schools, municipal and independent, are run according to the prescriptions of the Education Act and its accompanying Upper Secondary School Ordinance, and goals for upper-secondary VET are set nationally. Within a nationally defined curriculum, schools choose which courses to offer to meet local and regional needs. Measures of quality are also defined nationally and all upper-secondary schools are evaluated by the Swedish School Inspectorate. Whereas the rules according to which upper-secondary VET programmes can be run are the same for municipal and independent schools, municipalities are obliged to ensure that all young people have access to upper-secondary education placing them in a slightly different situation than private providers (Kuczera and Jeon, 2019[4]). This means that independent schools can target 'easier to teach' students. They may also privilege VET programmes that are cheaper to provide and do not require heavy upfront investment (for example in terms of equipment). There is not much co-operation between independent and municipal institutions as they compete for students. For example, it has been observed that municipal schools increased marketing

activities in response to the introduction of the market in youth education in the 1990's (Lundahl et al., 2013[16]).

At the HVE level, the Swedish National Agency for HVE plays a central role in ensuring the relevant regulations are observed and co-ordinating the different training providers. The Agency ensures that HVE programmes meet the labour market's needs for skills, by analysing skill needs and on this basis deciding which programme to offer. The Agency also allocates government grants, conducts reviews, produces statistics and promotes quality improvement in HVE (Myndigheten för yrkeshögskolan, n.d.[17]). The HVE providers must apply to the Agency for Higher Vocational Education for approval of new programmes. To establish a new HVE programme, education providers must secure employers' involvement, and HVE is thus driven by employer demand for labour and skills rather than student choice. The National Agency for HVE allocates funding for training programmes on the basis of labour market needs and also takes into account the suitable geographical location for each training programme. Providers cannot expand unless they receive support from employers and funding from the National Agency of HVE. This mechanism prevents expansion of programmes that are popular with students but lead to poor labour market outcomes. It ensures that the offer of each provider reflects the demand from the labour market for the associated skills, and the incentives to compete for students are weak.

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OECD Reviews of Vocational Education and Training

The Landscape of Providers of Vocational Education and Training

Vocational education and training (VET) is an important part of education systems around the world. VET systems differ widely between countries in how programmes are designed and delivered. Moreover, countries differ in terms of the types of providers that deliver VET. This report looks at the VET provider landscape in Australia, Denmark, Germany, the Netherlands and Sweden. It provides insights into the number of different providers by country, their focus areas and target populations. It describes how providers are different and how they overlap, as well as structures and initiatives to foster co-ordination between them.

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