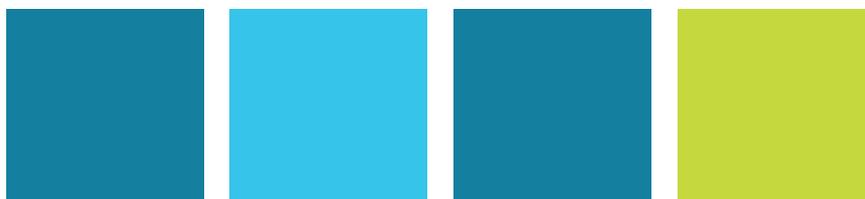
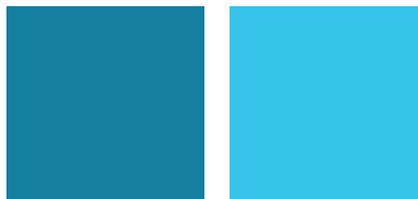

VOCATIONAL EDUCATION
AND TRAINING IN EUROPE

NETHERLANDS



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This VET in Europe report is part of a series prepared by Cedefop's ReferNet network. VET in Europe reports provide an overview of national vocational education and training (VET) systems of the EU Member States, Iceland and Norway. The reports help to understand VET's main features and role within countries' overall education and training systems from a lifelong learning perspective, and VET's relevance to and interaction with the labour market.

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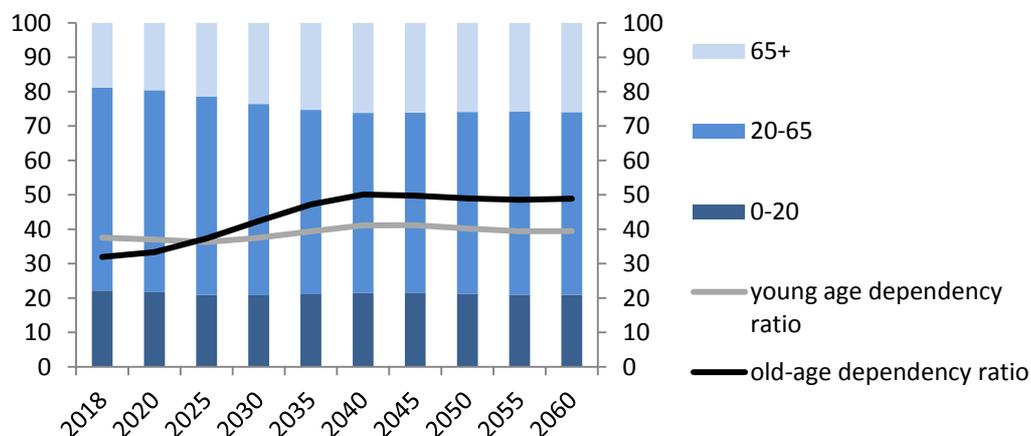
CHAPTER 1.

External factors influencing VET

1.1. Demographics

The population of the Netherlands totals 17 181 084 in 2018 ⁽¹⁾. With a population density of 507 inhabitants per square kilometre (2017) ⁽²⁾, the Netherlands is one of the most densely populated countries in the EU and the world. The population is expected to grow slightly in the next decades. Around 2035, it is expected to reach 18 million. As in many other European countries, population ageing is a dominant trend. The share of the population over 65 (18.9% in 2018) is expected to increase to 26% in 2060, mostly at the expense of the share of the population aged 20-65. Until 2040 the youth dependency ratio and the old-age-dependency ratio will increase, but the increase in the 'grey burden' (old age dependency ratio) is much more pronounced than the growth of the 'green burden' (the young age dependency ratio). After 2040 the age structure of the population and – as a result – the dependency ratios are projected to be stable.

Figure 1 Population forecast by age groups and dependency ratios in %



Source: CBS statline, extracted 31.7.2018.

⁽¹⁾ CBS (2018). Population January 1st, 2018. *Statline* [database]. <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/7461bev/table?dl=EC26> // [accessed 31.7.2018]

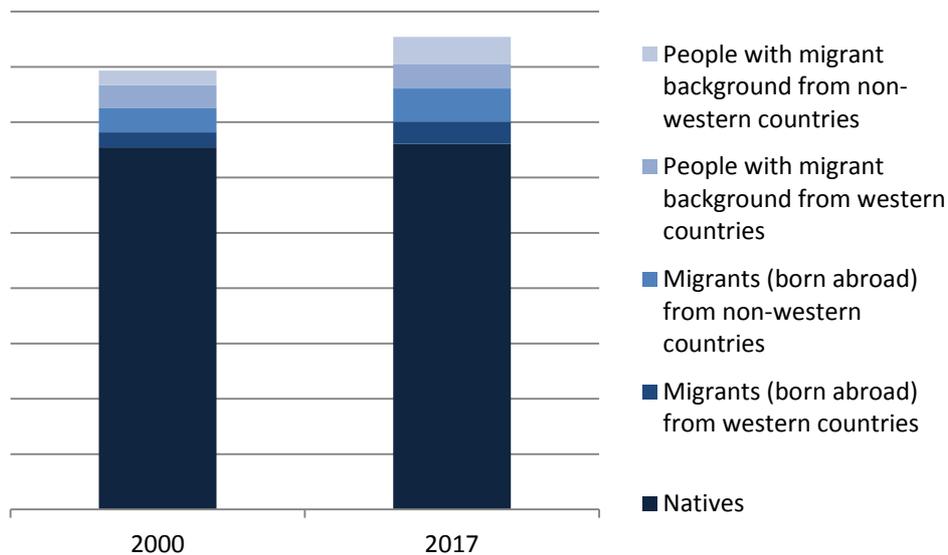
⁽²⁾ CBS (2018). Population January 1st, 2017. *Statline* [database]. <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/37296ned/table?dl=ABBE> [accessed 31.7.2018].

In the first half of 2018 ⁽³⁾ the number of inhabitants in the Netherlands increased by almost 32 thousand. This increase is slightly below the increase of 2017, mainly due to a higher number of deaths. Natural population growth (births minus deaths) contributed to a rise of thousand people in population growth (CBS, 2018a).

During the first half of this year, over 100 thousand immigrants arrived, similar to the first half of 2016 and 2017. The number of emigrants is quite stable in the last few years: 69 thousand emigrants left. The migration ratio stays at 31 thousand people. The share of people from European countries grew.

Migrants and people with a migrant background constitute 22.67% of the total population (2017). Figure 2 shows that people born in non-western countries and those born in the Netherlands with at least one parent born in a non-western country account for most of the growth of the non-native population since 2000.

Figure 2 **Composition of the population, in millions**



Source: CBS Statline, extracted 31.7.2018 (CBS: Centraal Bureau Statistiek; in English: Statistics Netherlands)

Note: People with a migrant background are individuals born in the Netherlands with at least one parent born abroad. Western countries are countries in Europe (excluding Turkey), North America, Oceania and Indonesia and Japan. Non-western countries are countries in Africa, Latin-America and Asia (excluding Indonesia and Japan) and Turkey.

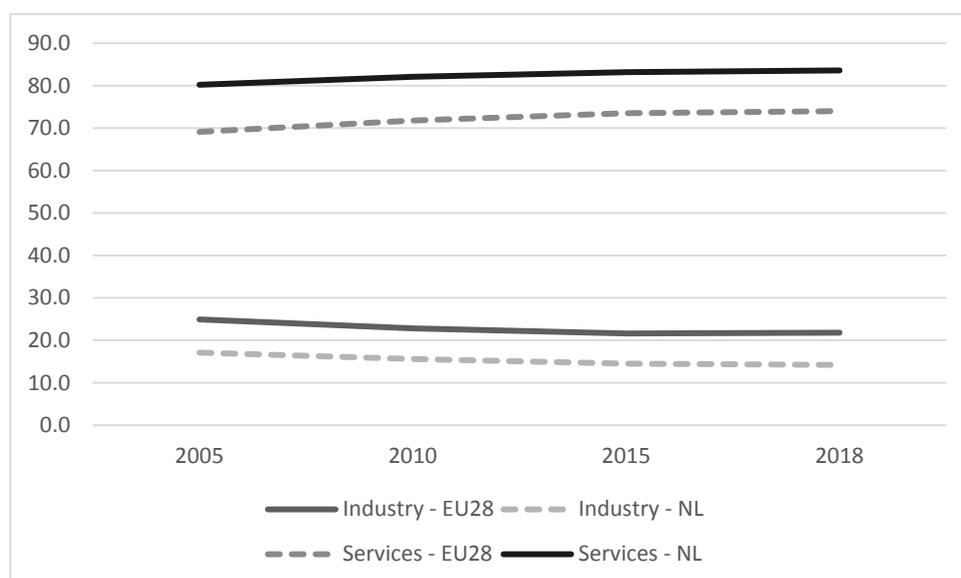
1.2. Economy and labour market trends

The Dutch economy is open and relies heavily on foreign trade. The contribution of exports to GDP is close to a third and has been growing in recent years, leading to new

⁽³⁾ CBS – Ruim 32 duizend inwoners erbij in eerste halfjaar, 31-7-2018.

job creation in trade and business services ⁽⁴⁾. The share of Dutch exports in world trade has increased in recent years, as Dutch exports grew more rapidly than world trade ⁽⁵⁾. Figure 3 shows employment shifts since 2005 and compares national developments with EU trends. Whereas the employment share of services increases and the employment share of industry decreases both nationally and in the EU, the Netherlands appears to be a forerunner: the employment share of services is considerably higher and the employment share of industry is considerably lower. In 2018, services (commercial and non-commercial) made up more than 80% of employment

Figure 3 Employment shares in %, 2005-2018



Source: Eurostat, 2019. nama_10_a10_e extracted 18.7.2019.

Employment has partly been shaped by the long term trend of job polarisation: the process of increasing employment at the lower and upper ends of the labour market in combination with decreasing employment in the middle (Berge, W. van den & Weel, B. ter, 2015). Medium level jobs decline due to the increased capacity of machines and information and communication technology to take over routine tasks. But while job polarisation mirrors trends in other countries, its magnitude is relatively small.

Most companies in the Netherlands are micro, small and medium-sized; employing 64% ⁽⁶⁾ of employees. Between 2008 and 2018, the rate of self-employed people as a

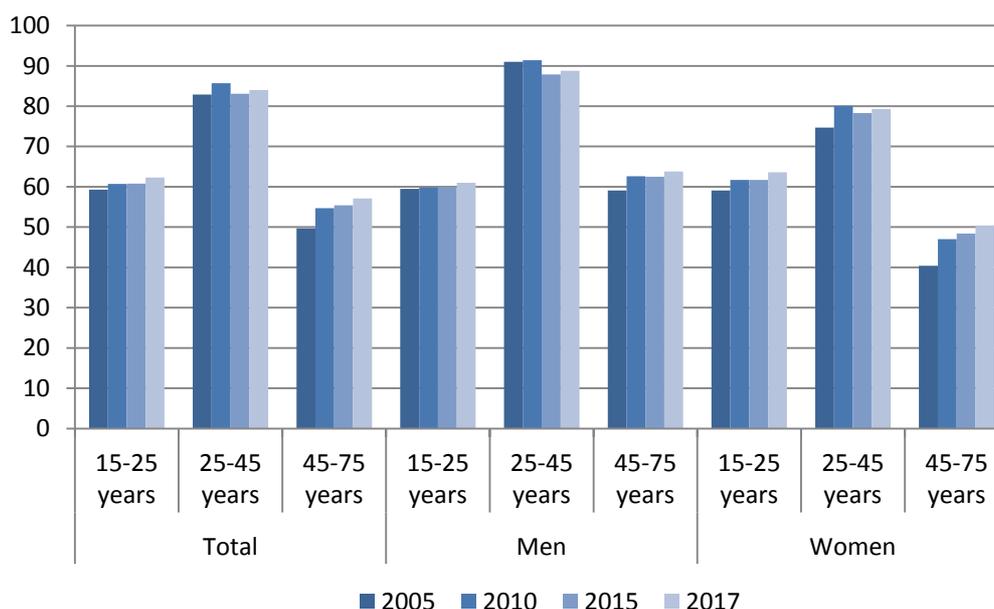
⁽⁴⁾ CBS (2015). <http://www.cbs.nl/en-GB/menu/themas/internationale-handel/publicaties/artikelen/archief/2015/2015-bijdrage-export-aan-bbp-en-werkgelegenheid-neemt-fors-toewm.htm>

⁽⁵⁾ CBS (2018). *Share of Dutch Exports in world market rising again* <https://www.cbs.nl/en-gb/news/2018/20/share-of-dutch-exports-in-world-market-rising-again>

⁽⁶⁾ https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en

share of total employment has increased by 3.7% in the Netherlands ⁽⁷⁾. This makes the Netherlands the largest grower in Europe. In 2018 the share of self-employed is 16% in the Netherlands while in the EU28 14% is self-employed ⁽⁸⁾. In recent years, in almost all sectors the proportion of self-employed has increased. The largest increase occurred in the construction sector. Also in information and communication and in services the increase was above average.

Figure 4 **Net labour participation, by gender and age 15-75 years in % (employed labour force as % of population), 2005-2017.**



Source: CBS statline, extracted 31.7.2018.

In 2017 the employed labour force consisted of 8.6 million people. Almost half of them, mostly women, work part-time (less than 35 hours a week) ⁽⁹⁾. Figure 4 shows that labour market participation has increased among the older segments of the labour force in the last decade. This is due to the (partial) elimination of early retirement schemes and because more women have entered the labour market. Employment of people over 65 has more than doubled in the last 10 years.

Educational levels and labour market participation are correlated: the higher the educational level, the higher the participation (see figure 5). Net labour market participation of people with tertiary education (ISCED 5-8) is around 80%. While this holds

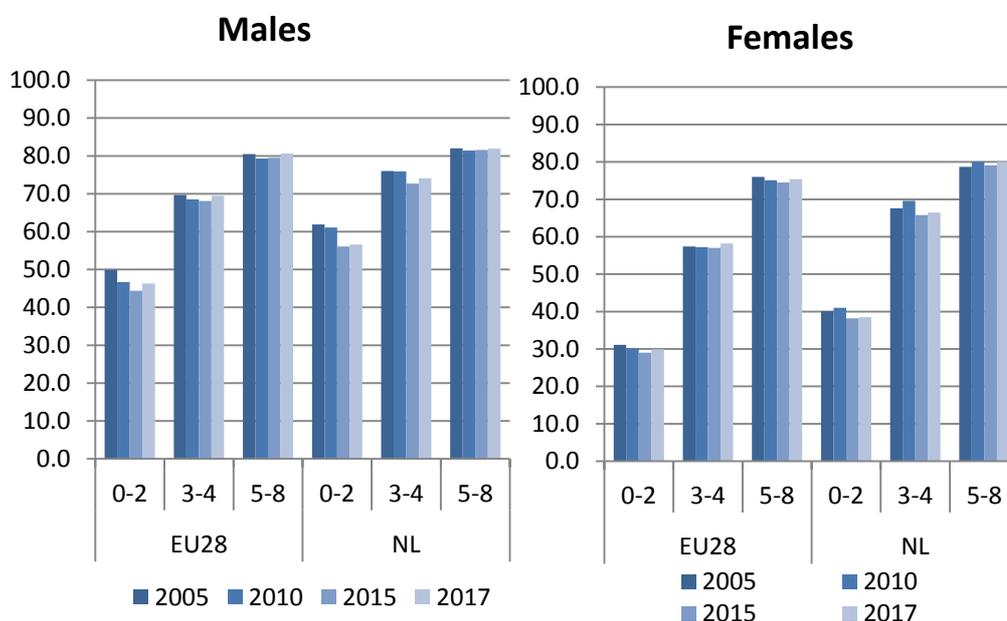
⁽⁷⁾ <https://www.cbs.nl/nl-nl/dossier/dossier-zzp/hoofdcategorieen/ontwikkelingen-zzp>

⁽⁸⁾ <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/EDN-20190430-1>

⁽⁹⁾ CBS (2018). *Statline* [database] <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/82309NED/table?dl=F3FF> [accessed 31.7.2018].

for both the Netherlands and the EU average, there are important differences at lower ISCED levels: in the Netherlands, net participation among low (ISCED 0-2) and medium (ISCED 3-4) skilled is significantly higher than the EU average ⁽¹⁰⁾. People with higher education have been less affected by the economic downturn. Their net labour participation has remained more or less stable while it decreased for those with low or medium-level skills until 2015. In 2017 the employment rates increased again compared, particularly in the group with lower education levels (ISCED 0-2). This increase has been more prominent in the EU than in the Netherlands. Nevertheless, the Netherlands still has a higher employment rate in the lower education section of the working population.

Figure 5 Net labour participation by gender and educational attainment level (ISCED) in %



Source: Eurostat, 2018. Ifsa_ergaed; extracted 31.7.2018.

Note: NB: Data based on ISCED 2011. ISCED 0-2 = Less than primary, primary and lower secondary education; ISCED3-4 = Upper secondary and post-secondary non-tertiary education; ISCED 5-8 = Tertiary education.

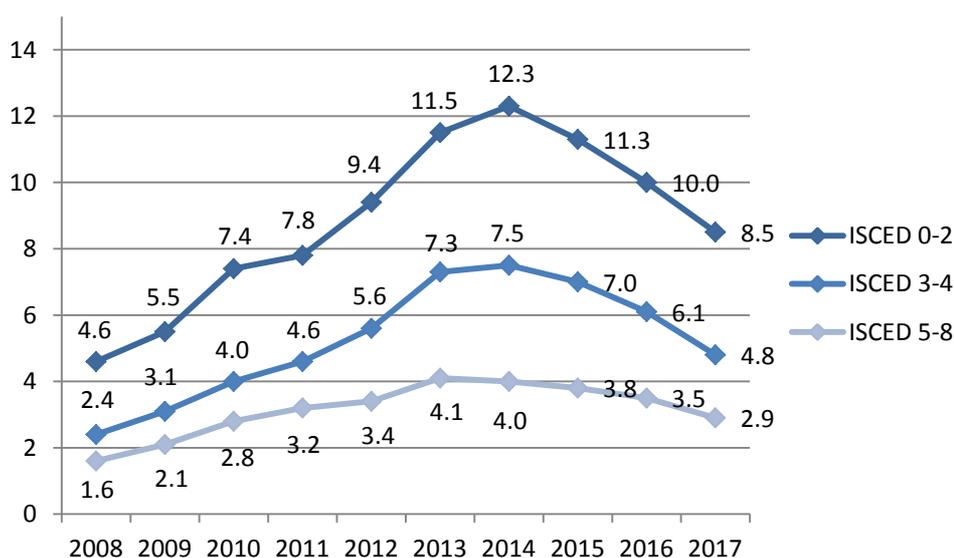
Educational attainment also has a significant impact on unemployment (see figure 6). While the overall 2017 unemployment rate was 4.9%, it was much higher for those with low skills (8.5% for ISCED 0-2) and much lower for those with tertiary education attainment (2.9% for ISCED 5-8). In 2017 unemployment rates have decreased for all educational attainment levels, reaching unemployment rates comparable with those of

⁽¹⁰⁾ It should be noted that while net participation in the Netherlands is relatively high, a large share of the employed has a part-time job.

2011 and 2012. Youth (<25) unemployment is 8.9% in 2017 and is below the EU average, which stood at over 16.8% in 2017.

Migrants and people with a migrant background from non-western countries ⁽¹¹⁾ are most affected by unemployment: while in 2017 they accounted for approximately 11% of the total labour force, their share in the unemployed labour force was close to 25%. Similar to the general unemployment rates, the unemployment ratio of non-western migrants and people with a migrant background has decreased from 16.5% in 2014 to 11.1% in 2017 (CBS, 2018 ⁽¹²⁾).

Figure 6 Unemployment rate by education attainment level of 15-64 year-olds



Source: Eurostat, 2017. Ifsa_urgaed; extracted 31.7.2018. Note: Data based on ISCED 2011. ISCED 0-2 = Less than primary, primary and lower secondary education; ISCED 3-4 = Upper secondary and post-secondary non-tertiary education; ISCED 5-8 = Tertiary education.

In recent years both the unemployment and the long-term unemployment rate have decreased. According to national statistics, in 2015 more than 42% of the unemployed had been registered for over a year, while in 2017 the figure dropped under 37%⁽¹³⁾.

There are several indications that the Dutch labour market is becoming more flexible. First, self-employment is on the rise (in 2018 12.3% of the working population is

⁽¹¹⁾ Migrants from, or with a mother/father born in, Africa, Asia (exl. Japan and Indonesia)

⁽¹²⁾ <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/82809NED/table?dl=F419>

⁽¹³⁾ CBS (2018). *Statline* [database].

<https://opendata.cbs.nl/statline/#/CBS/nl/dataset/81075ned/table?dl=F41B> [accessed 31.7.2018].

self-employed) ⁽¹⁴⁾, a trend that is opposite to what can be observed for the EU as a whole (see figure 3) ⁽¹⁵⁾. Second, with more employees being employed at a temporary basis, the incidence of permanent contracts has decreased in the past years. National panel data suggests that the time span of temporary employment before gaining a permanent contract is also increasing: In 2004, 71% of workers had such a contract after working on a temporary contract basis for 4-5 years. In 2014, only 58% of workers had a permanent contract during the corresponding time span ⁽¹⁶⁾. Finally, working at home (increasing since 2004 and a reality for almost 37% of workers in 2017) ⁽¹⁷⁾ and being able to choose one's own working hours (41% of workers in 2014) also signal increased labour market flexibility⁽¹⁸⁾.

1.3. Educational attainment

Eurostat data show that 37.6% of the population aged 15-64 in the Netherlands has a higher qualification, while 20.6% of the population is low- or unqualified (see figure 7). This means that four out of 10 people are qualified at medium (ISCED 3-4) level. Increases in the educational attainment of the workforce since 2000 are driven by the rising share of young people with higher formal qualifications levels and older generations with lower skill levels gradually leaving the labour market. In 2017, tertiary attainment among 30-34 year olds was 48% and well above the EU and national targets (both 40%) set for 2020. Female higher education attainment has risen faster than male tertiary attainment.

⁽¹⁴⁾ (CBS (2018) <https://www.cbs.nl/nl-nl/dossier/dossier-zzp/hoofdcategorieen/is-elders-in-de-eu-het-aandeel-zzp-ers-zo-hoog-als-in-nederland->)

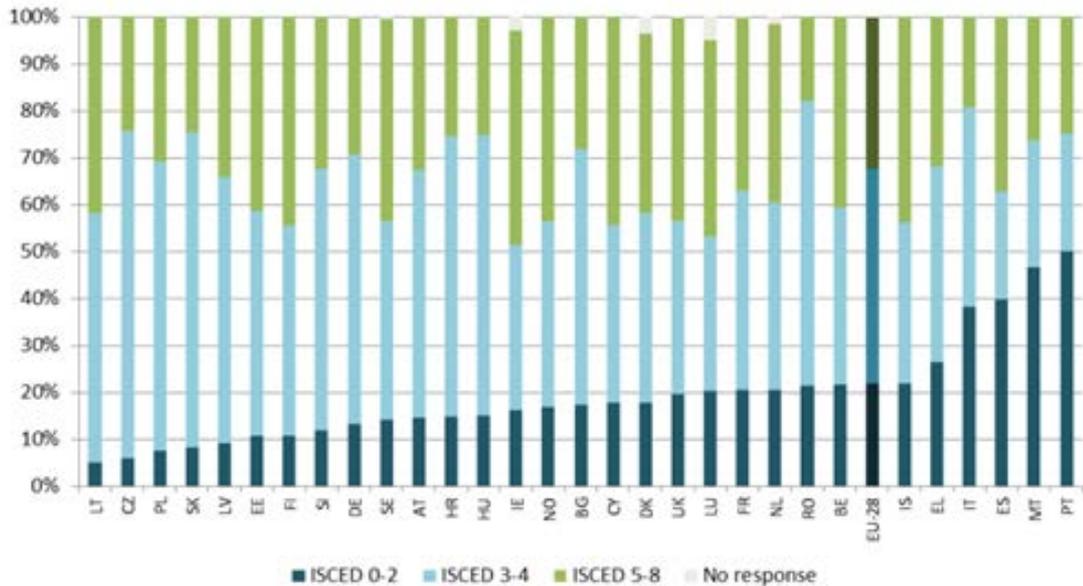
⁽¹⁵⁾ (CBS (2018). *Statline* <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/82309NED/table?dl=F41D> [accessed 24.6.2019]

⁽¹⁶⁾ van Echteld. Crouzen, Vlasblom en de Voogd-Hamelink (2016). Aanbod van arbeid 2016: werken, zorgen en leren op een flexibele arbeidsmarkt.. Sociaal en cultureel planbureau. https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2016/Aanbod_van_arbeid_2016

⁽¹⁷⁾ CBS (2018). *Vooraf vrouwen zijn meer gaan thuiswerken* <https://www.cbs.nl/nl-nl/nieuws/2018/12/vooral-vrouwen-zijn-meer-gaan-thuiswerken> [accessed 31.7.2018].

⁽¹⁸⁾ van Echteld. Crouzen, Vlasblom en de Voogd-Hamelink (2016). Aanbod van arbeid 2016: werken, zorgen en leren op een flexibele arbeidsmarkt.. Sociaal en cultureel planbureau. https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2016/Aanbod_van_arbeid_2016

Figure 7 Population (15-64) by highest level of education attained in 2018 (%)



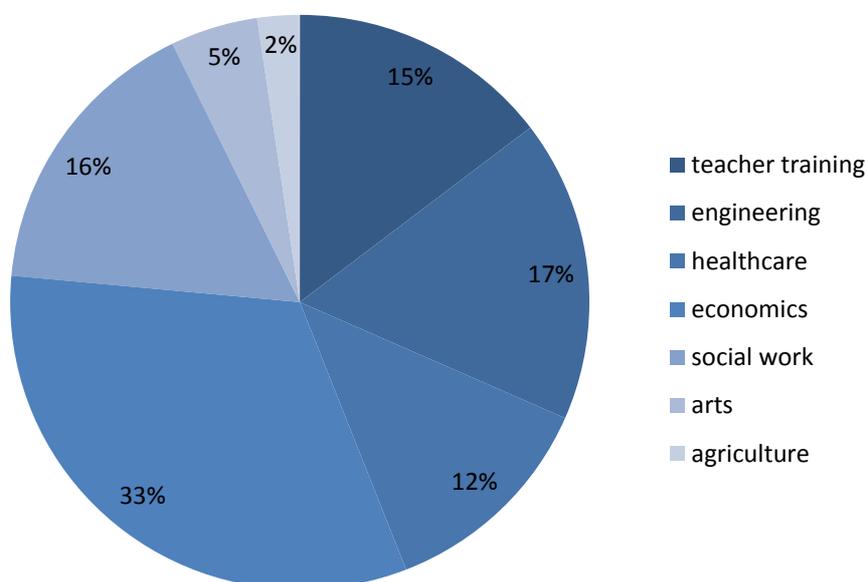
Source: Eurostat, 2019, Table: lfsa_pgaed; extracted 15.07.2019.

Note: Data based on ISCED 2011. ISCED 0-2 = Less than primary, primary and lower secondary education; ISCED3-4 = Upper secondary and post-secondary non-tertiary education; ISCED 5-8 = Tertiary education.

Higher professional education (HBO) is an important component of Dutch higher education. In 2017, almost half of all higher education graduates attained a tertiary VET qualification, in most cases a bachelor degree ⁽¹⁹⁾. Figure 8 shows that most higher professional graduates studied economics, teacher training, social work or engineering.

⁽¹⁹⁾ CBS (2018). *Statline* [database]
<https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83893NED/table?dl=DA1F>

Figure 8 Shares of higher professional education graduates by field of study in 2017



Source: <https://www.onderwijsincijfers.nl/kengetallen/hbo/studenten-hbo/prestaties-gediplomeerden-hbo>; extracted 31.7.2018.

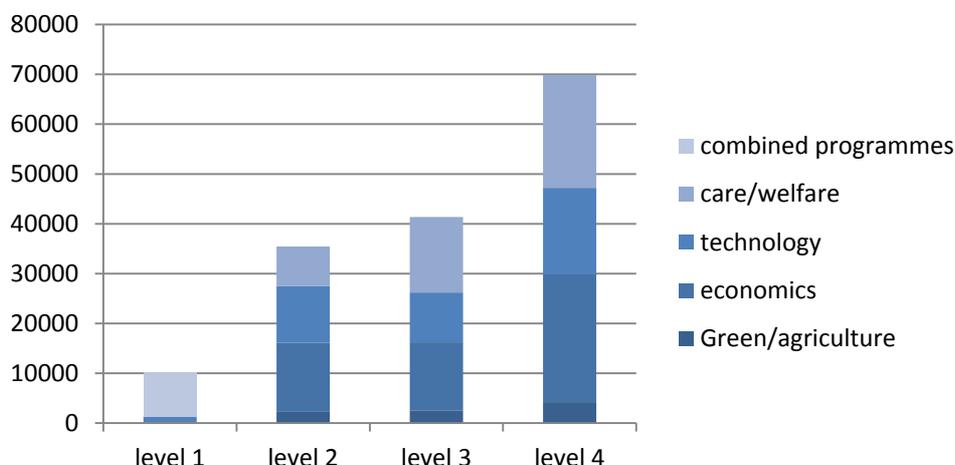
The share of graduates of part-time bachelor programmes has decreased in past years; in 2017, less than 9% of higher professional bachelor graduates²⁰ complete a part-time programme. Among vocational master graduates, part-time programmes are much more popular. Almost two thirds of them take part in a part-time programme; they often combine study with work.

At upper secondary level, in 2016/17, most VET graduates completed a level 4 programme leading to EQF4 (see figure 9). At this level, economics and care/welfare programmes are the most popular choices⁽²¹⁾. Most graduates from upper secondary VET programmes in technology attain a qualification at EQF level 2 or 4. At EQF level 1, most graduates were in combined (multi-sectoral) programmes. At all levels of upper secondary VET the green/agriculture programme is the least popular choice.

⁽²⁰⁾ <https://www.onderwijsincijfers.nl/kengetallen/hbo/studenten-hbo/prestaties-gediplomeerden-hbo>

⁽²¹⁾ The area economics in upper secondary VET includes programmes in administration, logistics, retail, secretarial support, tourism, ICT, facility management and public order and security.

Figure 9 Upper secondary VET graduates by level and area of study, 2016/2017*



Source: CBS Statline <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83896NED/table?dl=F448>, extracted 31.7.2018.

Note: Provisional data

1.4. Lifelong learning in a knowledge economy

Eurostat data show that the Netherlands is among the EU countries with the highest lifelong learning rates. Already since 2000, more than 15% of adult population (25-64) has been involved in education or training (participation was 19.1% in 2017). This means that lifelong learning is well above the EU28 average (10.9% in 2017) and that the country has met the Education and Training 2020 (ET2020) 15% benchmark since long ⁽²²⁾.

This does not mean that there are no bottlenecks, as training participation is significantly below average among workers over 55 (11.8% in 2017), the low-skilled (9.5% in 2017), workers with a temporary contract, migrants and people with a migrant background from non-western countries, and people not having participated in training in the past ⁽²³⁾. The gap in training participation between highly educated people and those with low skills has widened between 2004 and 2017 ⁽²⁴⁾.

⁽²²⁾ Eurostat (2018) *Table trng_ifs_01* [dataset] [accessed 31.7.2018].

⁽²³⁾ CBS (2018). *Statline* [database] <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/83916NED/table?dl=81B4> [accessed 31.7.2018].

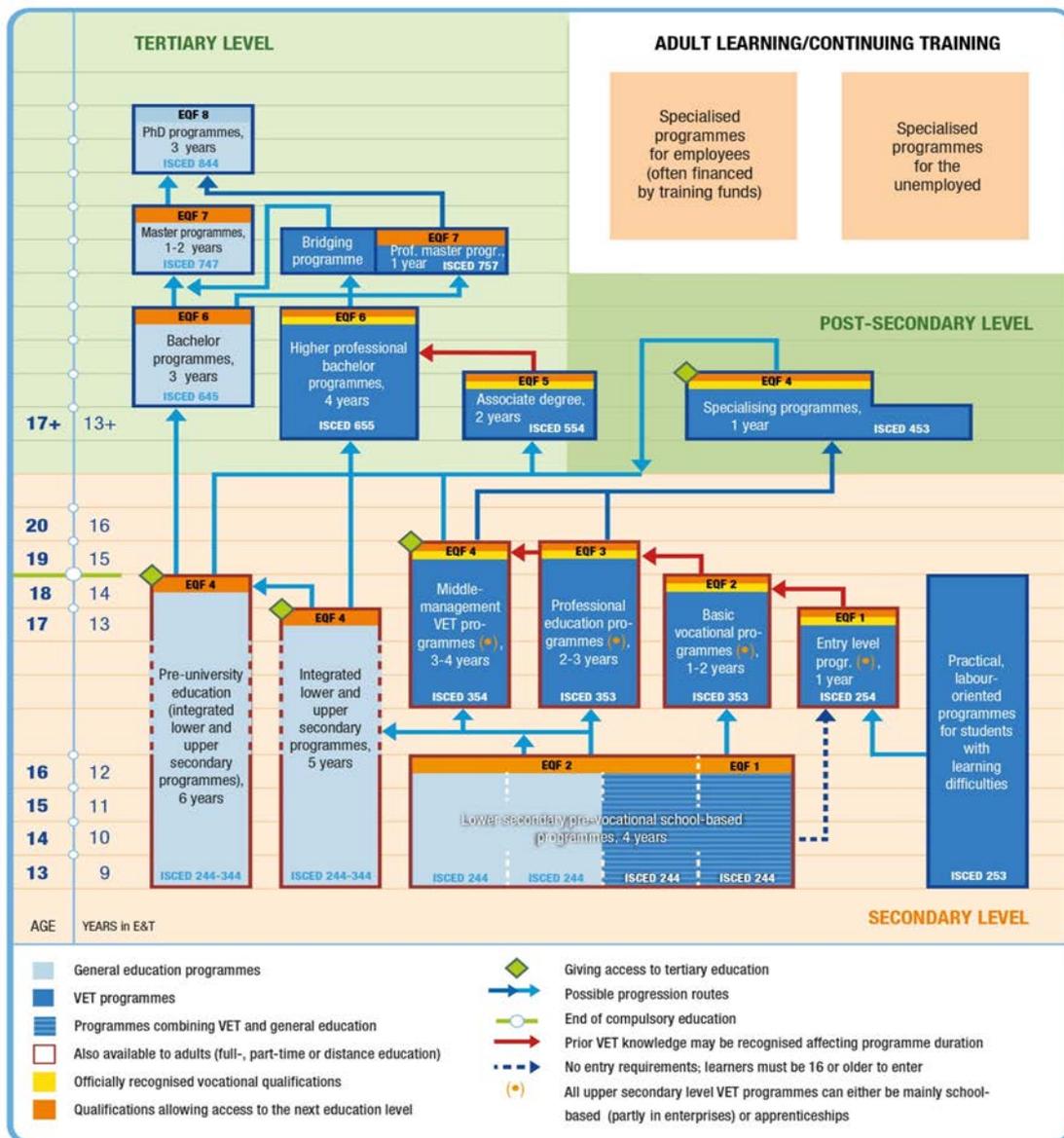
⁽²⁴⁾ Roa, 2018, Nederland in leerstand. Maastricht: Research Centre for Education and the Labour Market. http://roa.sbe.maastrichtuniversity.nl/roanew/wp-content/uploads/2018/06/ROA_R_2018_4-1.pdf

CHAPTER 2.

Provision of VET

2.1. VET in the Dutch education and training system

Figure 10 VET in the Dutch education and training system in 2018



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Netherlands.

One of the principles underlying the education system in the Netherlands, guaranteed under article 23 of the Constitution, is freedom of education. This means there is freedom to establish schools, freedom to organise teaching and to determine the principles on which education is based (freedom of conviction).

Freedom to organise teaching means that both public and private schools are free to determine – within legal boundaries – what is taught and how. The education ministry sets quality standards which apply to both public and government-funded private education. These standards prescribe the subjects to be studied, the expected learning outcomes, the content of national examinations, the number of teaching days/hours per year, required teacher qualifications and planning and reporting obligations. They also give parents and pupils a say in school matters.

The Dutch education and training system consists of the following parts:

- (a) **primary education** (*PO – primair onderwijs*) at ISCED 1 is for pupils aged 4-12. Duration is eight years;
- (b) **special education at primary and secondary level** (*SO/VSO – speciaal onderwijs/voortgezet speciaal onderwijs*) is for pupils aged 3 to 20 with learning or behavioural difficulties and/or mental, sensory or physical handicaps;
- (c) **general secondary education** (*AVO – algemeen voortgezet onderwijs*), ISCED 2 and 3, includes three types:
 - pre-university education (integrated lower and upper secondary programmes). (*VWO – voorbereidend wetenschappelijk onderwijs*) with a duration of six years and leading to EQF4 (ISCED 244 after three years; ISCED 344 after six). It prepares learners for higher education at research universities and higher professional education at universities of applied sciences. Age: 12-18 years, also accessible to adults;
 - Integrated lower and upper secondary general education programmes (*HAVO – hoger algemeen voortgezet onderwijs*) with a duration of five years and leading to EQF4 (ISCED 244 after three years; ISCED 344 after five), duration is five years and prepares for further study in higher professional education. Upon completion, transfer to the fifth year of pre-university education is possible. Age: 12-17 years, also accessible to adults;
 - The two general programmes (the theoretical and combined pathway) within pre-vocational education (*VMBO – voorbereidend middelbaar beroepsonderwijs – theoretische en gemengde leerweg* ⁽²⁵⁾ leading to EQF 2 (ISCED 244). Their

⁽²⁵⁾ In 2021, the combined pathway (VMBO-Gemengde Leerweg) and the theoretical pathway (VMBO-Theoretische leerweg) will be combined in a new pathway. In this new pathway theoretical learning will be enriched with practical/vocational components to improve transition to upper secondary VET and general education (HAVO).

duration is four years and they prepare for further study in upper secondary vocational education (and partly in upper secondary general education). Age: 12-16 years, also accessible to adults. This type of education is discussed below as part of VET.

- (d) **lower secondary pre-vocational school-based programmes** (*VMBO – voorbereidend middelbaar beroepsonderwijs - kaderberoepsgerichte of basisberoepsgerichte leerweg*) leading to EQF 1 or 2 (ISCED 244). Their duration is four years and they prepare for further study in upper secondary vocational education. Age: 12-16 years. This type of education is discussed below as part of VET. Besides these programmes a separate practical, labour-oriented programme (PRO – praktijkonderwijs) is available for pupils not able to attain a diploma in a lower secondary pre-vocational programme (ISCED 253; age: 12-18/19 years, also accessible to adults);
- (e) **upper secondary vocational education programmes** (ISCED 254, 353-354) (*MBO – middelbaar beroepsonderwijs*) for learners aged 16 or older consists of 1-4 year VET programmes in four areas of study at four levels (*MBO 1-4, EQF 1-4*). As part of the Dutch VET system, this type of education is discussed in more detail below.
- (f) **one year specialising programmes** (EQF 4) are part of upper secondary VET and also serve as post-initial education for adults.
- (g) **higher (or tertiary) education** has a professional and a general (academic) strand:
- higher professional education (*HBO – hoger beroepsonderwijs*) is open to learners over 17 years old and mainly offers bachelor degree programmes (ISCED 655/EQF 6) with a duration of four years. After finishing a bachelor degree students can continue in professional master degree (ISCED 757/EQF 7) programmes. Providers are universities of applied sciences. As part of the VET system, this type of education is discussed below;
 - Associate degree (AD) programmes (ISCED 554/EQF 5) is open to learners over 17 years old. These two year associate degree programmes are offered since 2011. scientific/university education (*WO – wetenschappelijk onderwijs*); offers bachelor programmes lasting three to four years (ISCED 645/EQF 6) and one-two year Master's degree programmes (ISCED 747/EQF 7) to learners aged 18 and over. After completing a master degree programme, learners can continue in PhD programmes (ISCED 844, EQF8).
- (h) **CVET** comprises a range of vocational or more general courses for jobseekers, the unemployed, employees, self-employed people, and employers. Upper secondary IVET programmes can also function as CVET.

Education is compulsory for pupils from five to 16. 16 and 17 year olds (on august 1 of any year) without a general or basic vocational qualification at upper secondary level (in the diagram: at least VWO, HAVO or MBO-2, EQF 2) are required to continue learning,

the so-called 'qualification duty' (kwalificatieplicht). This arrangement was introduced in 2008 to reduce early leaving from education and training.

The Dutch education system also caters to the needs of adults without a (suitable) qualification. There are two types of general adult education, which are open for learners 18 or older (under certain conditions 16/17-year-olds can also attend this type of education). Basic education (basiseducatie) is for native and non-native adults with learning deficits for which education or training is not compulsory. It focuses on social and basic literacy and numeracy skills. General secondary education for adults (VAVO – voortgezet algemeen volwassenenonderwijs) offers general secondary programmes (VMBO, HAVO and VWO). At higher level, the publicly funded Open University offers academic adult education programmes. It provides modular programmes and has open access.

The education system has two tracks (see also figure 10). After the first two years of secondary education (voortgezet onderwijs), young learners can follow

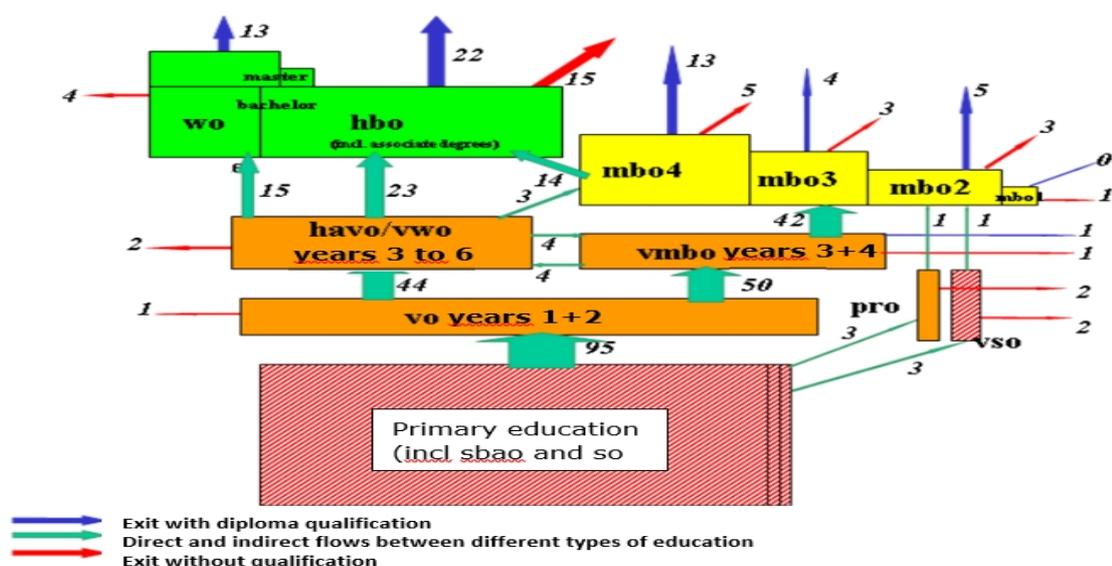
- (a) a general track, which starts in general secondary education (*HAVO, VWO*) and has direct transfer possibilities to higher education (*HBO, WO*); or
- (b) a vocational track, which starts in lower secondary pre-vocational education (study year 3, *VMBO*) with transfer possibilities to upper secondary vocational education. Upper secondary vocational education (*MBO 1-4*) is the backbone of this track. For some students, MBO and the qualification providing labour market access is the end of initial VET. MBO 4 graduates can continue their studies in higher professional education (*HBO*). Over a third of level 4 graduates continue in higher professional education without interrupting their studies (Staat van het Onderwijs, 2018).

Figure 11 shows estimated flows of learners transferring within the system, as well as outflow (with and without a qualification/diploma). The percentages are calculated on the basis of a cohort of pupils leaving primary education in 2016 (100%). Estimates approximately represent flows in one age cohort. The flows show that, although not very common in practice, learners can move from the vocational track to the general track and vice versa.

After finishing primary education, most learners continue in secondary education (VO). Secondary education is either offered by comprehensive schools offering multiple secondary programmes (VMBO/HAVO/VWO) or by schools offering single programmes. In many schools students start in a class where VMBO/HAVO or HAVO/VWO are combined. Within the first two years of secondary education students can postpone their choice for a specific programme or switch between programmes. In the third year of secondary education (see figure 11) 44% of learners are in general programmes (HAVO/VWO), while 50% follows a lower secondary pre-vocational programme (VMBO) (See figure 11). From the students in lower secondary pre-vocational education (VMBO) less than half of the students are in vocationally oriented programmes; the others follow the general programmes offered by VMBO schools. This implies that most learners at age

15 (75%) are in general programmes. Most students from lower secondary pre-vocational education (VMBO) continue in upper secondary VET (MBO). The share of learners in upper secondary VET has decreased in the last decade (from 28% in 2008 to 25% in 2017).

Figure 11 Student mobility between different parts of the Dutch education and training system and outflows in 2015, % based on a cohort of pupils leaving primary education (100%)



SBAO = Special primary education; HAVO = General secondary education; SO = Special education; VWO = Pre-university education; PRO = Labour oriented practical training; MBO = Upper secondary VET; VSO = Secondary special education; HBO = Higher professional education; VO = Lower secondary education; WO = Academic higher education; VMBO = Lower secondary pre-vocational secondary education

Source: www.onderwijsincijfers.nl, extracted 28 October 2015.

2.2. Government regulated VET

2.2.1. Historical background

Four different periods characterise the development of VET in the Netherlands. The first, from the second half of the nineteenth century until 1921, when the first VET law (the industrial, technical and domestic education act, *wet op het nijverheidsonderwijs*) came into force, is characterised by the founding of technical and vocational schools, most of which were privately funded. The 1921 act also provided for an apprenticeship system that was regarded as an alternative to vocational education in a school context.

VET experienced explosive growth during the second period (1921-1968). Growth was pronounced in the years after the Second World War, both for lower vocational education which followed primary education for children up to 12, and for the apprenticeship system. Growing secondary school attendance, which was primarily publicly funded, increasingly required more cohesion between various forms of secondary education. This resulted in the secondary education act (*Wet op het voortgezet onderwijs*) commonly known as the Mammoth act (*Mammoetwet*), which came into force in 1968. General secondary education and vocational education at lower, intermediate and higher level was an integral part of this act. This comprehensive legislation positioned general education and vocational education as equal alternatives within a permeable education and training system. The apprenticeship act of 1969 (*Wet op het leerlingwezen*) gave apprenticeship its own legal base.

Educational expansion continued between 1970 and the mid-eighties/early nineties, a period where both upper secondary VET and higher professional education developed further. The 1986 higher professional education act (*Wet op het hoger beroepsonderwijs*) provided separate legislation for higher VET and 'liberated' it from the constraints of secondary education regulation. The idea of creating greater cohesion between higher professional and academic education that emerged in the 1970s came to fruition with the 1993 higher education and research act (*Wet op het hoger onderwijs en wetenschappelijk onderzoek*). Vocational education at secondary level also underwent significant changes during this period, culminating in the adult and vocational education act (*Wet educatie en beroepsonderwijs*) in 1996. This legislation provides a framework for school- and work-based (dual) VET.

New legislation for higher professional education and for upper secondary VET has created major VET providers with high levels of autonomy within a framework of general, statutory regulations – a feature typical of the fourth period. Different types of vocational education were integrated and placed under one roof (the so called ROCs - regional training centres), which led to economies of scale, a new type of governance (internal management and control, vertical and horizontal accountability relations) and competition between institutions. The first decade of this century saw social and political debate on the quality of upper secondary vocational education (MBO). A commission investigated its organisation and governance following negative publicity in the media. The commission's 2010 report 'towards more focus on MBO' (*Naar meer focus op het mbo*) proposed a range of recommendations to simplify and improve governance and to encourage quality. Based on these recommendations, the minister for Education, Culture and Science (OCW) drafted the focus on craftsmanship action plan (2010), which set the stage for the most recent policy developments in VET.

From 2010 onwards, several policy agenda's and initiatives stress the importance of a flexible and responsive to labour market demands VET system ⁽²⁶⁾. A major priority is to enable VET colleges to innovate and to improve the labour market relevance of their programmes and, to embark on partnerships with companies. VET colleges are also stimulated to take a major role in lifelong learning and development.

2.2.2. Legislative framework

Education laws provide a broad framework outlining core elements such as general aims and objectives of VET, access and accessibility, procedures for programme design and for developing qualifications, curricula and examinations, quality assurance, provisions for the administration of publicly financed VET providers, procedures for recognising private commercial VET providers, and financing.

The main legislation for initial VET (IVET) is:

- (a) the Secondary Education Act (WVO – Wet op het Voortgezet Onderwijs; 1968 with later amendments) for lower secondary general and pre-vocational education (VMBO – voorbereidend middelbaar beroepsonderwijs) as part of general secondary education;
- (b) the Adult Education and Vocational Education Act (WEB – Wet Educatie en Beroepsonderwijs; 1996 with later amendments) for upper secondary vocational education (MBO – middelbaar beroepsonderwijs); and
- (c) the Higher Education and Scientific Research Act (WHW – Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek; 1993 with later amendments) for higher professional education (HBO – hoger beroepsonderwijs).

The following laws are also important for (I)VET:

- (a) the regional registration and coordination act (RMC - Regionale Meld- en Coördinatiewet, 2001). This act aims to reduce early leaving from education or training for young people over 18 for whom school attendance is no longer compulsory ⁽²⁷⁾ and makes 39 regions responsible for combatting it. Each municipality is part of one of these 'registration and coordination' regions. One municipality in each region (the so-called 'contact municipality') takes the lead by ensuring the identification and registration of early leavers and by coordinating their return to education or training programmes;
- (b) the student finance act 2000 (Wet studiefinanciering, 2000, amended later) helps students over 18 in full-time education cover education costs. Since September

⁽²⁶⁾ <https://www.government.nl/documents/parliamentary-documents/2014/08/27/clearing-the-way-for-workmanship-future-oriented-vocational-education>

⁽²⁷⁾ For students under 18 the compulsory schooling act (Leerplichtwet, 1969) applies.

2015 a new student finance system applies to students in higher education (see paragraph 4.1).

- (c) the education supervision act (WOT – Wet op het onderwijstoezicht, 2002, amended later) is the legal basis for the work of the education inspectorate (Inspectie van het onderwijs). It obliges the inspectorate to conduct a periodical assessment of the quality of each educational institution;
- (d) the professions in education act (Wet BIO – Wet op de beroepen in het Onderwijs, 2004) covers teachers, including instructors and teaching assistants, in primary, secondary and general adult education and for VET at lower/upper secondary level. It regulates minimum qualification requirements and continuing professional development of teachers.

2.2.3. Institutional VET framework

There are three organisational levels in the Dutch VET system: the national level, the sectoral level (especially in upper secondary VET) and the regional/local (or school) level. Table 1 provides a schematic overview of how Dutch regulated VET works by combining these levels with the functions and roles in the system.

In the institutional VET framework, the Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven – SBB) has a key role. SBB optimises the links between VET and the labour market to deliver well-qualified professionals. The organisation is responsible for maintaining the qualifications for secondary VET, for accrediting and coaching companies offering work placements, and collecting suitable labour market information.

Representatives from vocational education and social partners work together on the VET qualifications system, examinations, work placements, the efficiency of programmes and more. SBB also works on themes with a cross-regional and cross-sector focus.

Table 1 Organisational levels and functions/roles in initial VET

Function	VMBO (ISCED-2)	MBO (ISCED-3/4)	HBO (ISCED-5)
Legislation/ financing	Education ministry	Education ministry	Education ministry
Qualification development	Design: national level Validity: national	Design: sectoral level by Sector Chambers (social partners &VET) within the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB). Validity: national	Design: school level Validity: national
Curricula development	School level	School level	School level
Examination	Partly central/national; partly school exams	School exams; external contribution of trainers in enterprises Central examination of Dutch language and basic maths (August 2015 onwards)	School exams
Quality assurance	Internal External: Inspectorate	Internal External: Inspectorate; special attention: exams	Internal: self-evaluation. External: accreditation of HBO-programmes by NVAO** European level: use of Dublin level descriptors
Promotion of interests by associations of schools***	Association of Lower Secondary Schools	Association of VET Colleges	Association of Universities of Applied Sciences

NB: * SBB: Cooperation Organisation for Vocational Education, Training and the Labour Market

** NVAO = Dutch-Flemish Accreditation Organisation (Nederlands-Vlaamse Accreditatie Organisatie).

*** NRTO (*Dutch Council for Training*) promotes interests of private, non-subsidised VET providers that have been legally recognised by the education ministry to offer regulated VET courses at upper secondary and tertiary level.

SBB was first set up in 2012 on request of the education ministry to replace the earlier structure. SBB provides advice on VET policy to the ministry and offers a single contact point that draws up recommendations and advice on education and labour market, against the background of social interests. Until 2015 SBB represented the interests of 17 sectoral VET expertise centres. These centres were legally responsible for the development and maintenance of qualifications and accreditation and quality monitoring of companies offering work placements.

In 2012 the government announced a budget cut for these centres of expertise. As result a new organisation model has been developed and implemented in August 2015. The legal tasks of the 17 VET expertise centres have been transferred to SBB. Fine-tuning between VET and labour market representatives now takes place within nine

'sector chambers' under SBB. In each sector chamber VET and social partners are equally represented.

2.2.4. Funding

Total expenditure on education by the government, households, enterprises and non-profit organisations made up 6.1% of GDP in 2016. Government expenditure on education has decreased from 6.0% of GDP in 2010 to 5.5% in 2016 (CBS Statline, 2018) ⁽²⁸⁾.

In 2016 government expenditure represents 71% of all spending on upper secondary VET. Companies (24%) and households (4%) pay the rest. Total government expenditure on VET is 0.8% of GDP, when expenditure of households and enterprises is included total spending is 1.0% of GDP. These percentages are stable since 2010 ⁽²⁹⁾.

The funding arrangements for VET are as follows:

- (a) in lower secondary prevocational education and training (VMBO) the funding principle is block grant funding. It gives schools considerable freedom in deciding how to spend available resources. They receive a fixed amount per student plus a fixed amount per school. Part of funding rewards good performance based on national targets agreed on sector level with governing bodies. There are also extra financial incentives for students at risk;
- (b) in upper secondary VET (MBO) the principle is block grant funding based in part on the number of students per course/learning track and in part on number of certificates awarded per institution. In 2014 'cascade funding' was introduced. Schools receive money for each student for a maximum of six years with extra funding for the first year and a decrease in the last two years, to encourage schools to place students directly in the right track instead of stacking courses consecutively. However, this system of 'cascade' funding ended in 2018 for reasons of its negative effects on completion rates. In the new system funding will be based on the number of students, irrespective of the number of years they stay in VET. In addition to block grant funding, performance based funding was introduced in 2014 ⁽³⁰⁾ to reward individual schools for their good performances. This introduction was part of the quality agreements concluded between all VET colleges and the education ministry. These bilateral agreements aim to facilitate a rapid and comprehensive implementation and to encourage colleges to increase

⁽²⁸⁾ CBS (2018). *Statline* [Database] <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80393ned/table?dl=102B2> [accessed 21.8.2018].

⁽²⁹⁾ CBS (2018). *Statline* [Database] <https://opendata.cbs.nl/statline/#/CBS/nl/dataset/80393ned/table?dl=102B2> [accessed 21.8.2018]

⁽³⁰⁾ <https://wetten.overheid.nl/BWBR0035923/2016-07-20>

their performance in terms of equal access, qualify vulnerable youth and greater responsiveness to labour market developments ⁽³¹⁾.

- (c) VET colleges have other funding sources as well, for instance from contracted activities for companies and individuals, from municipalities for providing civic integration training courses for adults, and from student fees. Additionally there is a subsidy scheme for companies to cover their costs when offering learning places in dual tracks (BBL);
- (d) in higher professional education (HBO – higher professional education), funding is partly fixed and partly based on number of enrolled participants and output/outcome results (number of diplomas). Part of funding is performance based and rewards achievements towards targets set by providers themselves. Contracted activities paid by enterprises and or individuals/employees and income from tuition fees paid by students are other sources of funding. Companies benefit from subsidies when offering learning places in dual higher professional education.

The education ministry administers almost all central government expenditure on education through a specialised agency (DUO - Dienst Uitvoering Onderwijs). DUO plays a key role in administration and financing state-regulated VET. There is a complex but direct financing relationship between DUO and schools for upper secondary vocational education. Funds are channelled either directly to schools or indirectly through municipalities. Municipalities fund special projects (e.g. to reduce early leaving from education and training).

2.2.5. Governance

The adult and vocational education act (Wet Educatie en Beroepsonderwijs – WEB, see paragraph 2.2.2) grants upper secondary VET schools ample space for policy making. Schools have full control over deployment and continuing professional development of teaching staff, programme offer, regional industry-specific training portfolios, organisation of learning, and choice of cooperation partners. School management is also responsible for deciding how to allocate the annual lump sum grant from the ministry to personnel costs, materials, housing and reservations for future investments. Yearly auditing reports provide insight into how the grant is spent.

Governance has an internal, vertical and a horizontal dimension. The internal dimension refers to the organisation of internal management and control; the vertical dimension stands for the accountability relations between schools and the government; the horizontal dimension captures the (accountability) relations between a school and its

⁽³¹⁾ <https://www.kwaliteitsafsprakenmbo.nl/documenten/publicatie/2018/06/15/regeling-kwaliteitsafspraken-2019-2022>

local stakeholders. Governance in upper secondary VET is regulated by law (WEB) and in a governance code (MBO Raad, 2014).

Internal monitoring and control: upper secondary VET colleges have small executive boards (*CvB - College van Bestuur*) with one chairperson and one or two members and internal supervisory boards. Middle management is accountable to the executive board. Participation of students, teachers and parents in decision making is regulated in the act on work councils (WOR - Wet op Ondernemingsraden).

Vertical monitoring and control: the education inspectorate (Inspectie van het Onderwijs) is in charge of the external supervision, checking whether statutory provisions are met and quality assurance is in place. The assessment framework covers five quality areas: (i) educational process; (ii) school climate; (iii) learning outcomes; (iv) quality assurance and ambition; and (v) financial management. Supervision is proportional in nature, meaning it is stricter where deficiencies are found, and the inspectorate follows up by monitoring whether required improvements have been put in place.

In 2017, the Inspection Framework for external supervision has been renewed. One of the most important changes is to make a distinction between statutory requirements and quality factors defined by the schools themselves. Self-defined quality factors pertain to the objectives and ambitions set by the school itself (see paragraph 3.6) above and beyond the basic quality level. In its reports, the Inspectorate will draw a clear distinction between judgements related to statutory requirements and the assessment of performances on the self-defined quality indicators above and beyond those enshrined in law ⁽³²⁾.

Horizontal dialogue: Using self-chosen tools, the executive board of a VET college is expected to develop and sustain good relations with important local/regional stakeholders: employers, local governments and regional organisations (MBO Raad, 2014).

2.2.6. Teachers and trainers

Teachers in upper secondary vocational education (VET) have to have either a first degree teaching license (Master), a second degree teaching license (Bachelor) education) or a teaching certificate. A higher education diploma is obligatory to obtain a teaching certificate. The certificate can be obtained via a one year work-based course (640 study hours), covering both pedagogical and educational subjects.

⁽³²⁾ <https://english.onderwijsinspectie.nl/documents/publications/2017/07/03/inspection-framework-secondary-education>

Recently, requirements are introduced for teachers responsible for the vocational skills training of VET students, called instructors. Instructors should also meet professional, didactic and pedagogical standards ⁽³³⁾.

The education professions act (Wet BIO – Wet op Beroepen in het Onderwijs), which came into force in 2006, regulates competence standards for teachers and other educational staff in primary, general secondary, vocational secondary and general adult education. It requires schools to maintain a competence document for all teachers. This document details teacher's competences and activities aimed at maintaining and improving them (OCW, 2011a).

Professionalisation of teachers is high on the policy agenda and substantial resources have been invested to raise standards. The policy measures in the action plan 'Teachers 2020: a strong profession' (*Actieplan Leraar 2020 - een krachtig beroep!*) (OCW, 2011b) respond to several challenges: an expected shortage for teachers, especially in secondary education; although above average in international rankings, no top five performance in any category of learning achievement; several indicators pointing to declining student achievement and general concerns about teacher quality (OCW, 2011b). Since then the following measures have been carried out:

- (a) to strengthen the quality of current and future teachers by introducing a professional register. It should encourage teachers to maintain and improve their professional competences (OCW, 2011a). However, due to limited support among teachers, the mandatory registration is postponed. First of all, a strong professional organisation, having the support of all teachers, is needed. Only such an organisation can act on behalf of teachers discussing raising the quality of teaching;
- (b) to encourage schools to become highly professional organisations by introducing an ambitious, results-based culture and by stimulating professional HR policies. This means: giving teachers sufficient opportunities for professional growth, providing options for professionalisation and showing appreciation and reward for excellent teaching. Schools received additional funding for promoting teachers to higher positions;
- (c) to improve the quality of teacher training, by educating new teachers to a higher level and by using stricter standards. Teacher training colleges started offering a specialisation track for vocational education in teaching qualification at bachelor level. The aim of this specialisation is to prepare teachers adequately for pre-vocational secondary education and upper secondary vocational education. Teachers are also stimulated to obtain a master's degree and encouraged to

⁽³³⁾ <https://www.rijksoverheid.nl/documenten/besluiten/2018/04/09/besluit-bekwaamheidseisen-onderwijspersoneel>

engage in research activities. This is intended to reduce the gap between educational research and educational practice.

Already earlier (2009) an agreement between social partners in upper secondary education was reached on the introduction of a professional statute for teachers. In this statute the right of say is established for teachers and their teams on the VET schools' pedagogical and quality issues. In combination with the Teacher 2020 action plan and various collective bargaining agreements in VET education, these developments aim to produce a more modern human resources management (HRM) policy for VET staff.

Trainers responsible for in-company learning of upper secondary VET students (both in dual and in school based track) must be qualified at least at the same level for which he/she is supervising work-based learning. Furthermore, trainers must be able to share their expertise with students and are required to have pedagogical skills (validated by diplomas/certificates). The quality of the trainers is one of the criteria for accreditation of companies providing work-based learning. Accreditation is one of the legal tasks of the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB). Training for trainers is offered by private providers.

2.3. Regulated VET programmes

Table 2 lists the different VET programmes available in the Netherlands along with their duration and classification according to ISCED and EQF. The programmes are discussed below.

Table 2 **Classification of VET programmes in pre-vocational, upper secondary vocational and higher professional education**

Dutch level (*)	ISCED level	Nominal duration (**) in years	NLQF / EQF level
Lower secondary; study year 3 and 4	244	2	1 and 2
Upper secondary: MBO 1	254	1	1
MBO 2	353	2-3	2
MBO 3	353	3-4	3
MBO 4	354	3-4	4
MBO 4/specialist	453	1-2	4
Tertiary: associate degree (AD)	554	2 (120 ECTS)	5
Tertiary: bachelor	655	4 (240 ECTS)	6
Tertiary: master	757	1-2 (60-120 ECTS)	7

NB: (*) MBO level = upper secondary level. (**) ECTS = European credit transfer system (study points).

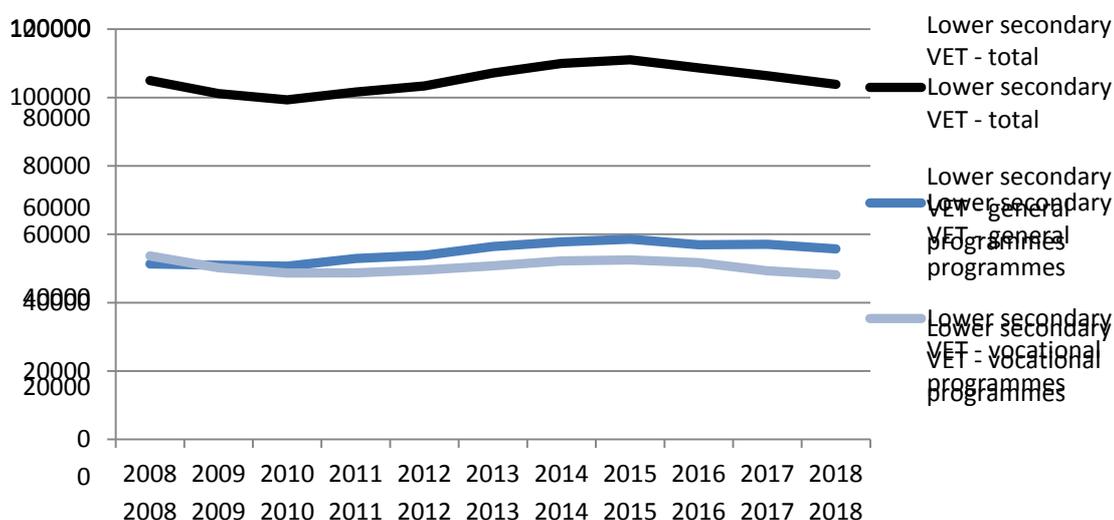
2.3.1. VET programmes in lower secondary education

VET at lower secondary level is part of secondary education. Lower secondary pre-vocational education (VMBO – voorbereidend middelbaar beroepsonderwijs; EQF 1 or 2) lasts four years. Although part of VET, VMBO schools offer both vocational and general programmes. The first two years consist of general subjects. In years three and four, pupils choose a learning pathway characterised by ‘level differentiation’, programme orientation and transfer possibilities in the education system. The four learning pathways are:

- (a) theoretical learning pathway (*VMBO-TL – theoretische leerweg*, EQF 2). Those graduating from the theoretical learning pathway can transfer to upper secondary vocational education, especially long courses at highest levels of upper secondary VET – MBO 3 and 4 or continue in the fourth year of upper secondary general education (HAVO). Programme content is general in character;
- (b) combined learning pathway (*VMBO-GL – gemengde leerweg*, EQF 2). Similar to theoretical learning pathway, apart from 10 to 15% of study time dedicated to vocational subjects. Progression routes in upper secondary VET are the same as for theoretical learning pathway;
- (c) advanced level vocational learning pathway (*VMBO-KL – kaderberoepsgerichte leerweg*, EQF 2). Preparation for long courses in upper secondary VET (MBO 3 and 4) with dominantly vocational subjects;
- (d) basic level vocational learning pathway (*VMBO-BL – basisberoepsgerichte leerweg*, EQF 1). Preparation for short courses in upper secondary VET (MBO 2) with dominantly vocational subjects. Within this pathway, pupils with learning difficulties can follow a dual track, combining learning and working.

The share of 15-year olds participating in VMBO programmes has declined slightly in the last years. Whereas the vocational pathways were most popular in the past, in 2018, most learners in the third year of secondary education were in one of the general pathways (see figure 12).

Figure 12 Pupils in third year of VMBO by programme orientation (2008/09 – 2017/18)



Source: Onderwijs in Cijfers, 2019, extracted 07.03.2019

In the third year of VMBO, learners in vocational programmes have to make a choice between the 10 vocational profiles (e.g. agriculture, building, mobility and transport, economy and business, health and welfare). The profiles were introduced in 2016 to put VMBO in a better position to respond to changes and needs in further education and the regional labour market. Profiles are new in terms of content, in sync with modern occupational practices and curriculum developments in VET/MBO, and in terms of structure; over 30 programmes have been replaced by 10 profiles with fixed general, vocational and optional modules. Career orientation and guidance will be an important part of all programmes, the theoretical learning pathway as well. The lower secondary VET (VMBO) diplomas have no labour market currency as pupils are expected to continue in upper secondary VET (MBO) or in general education (HAVO). Support, such as tutoring or homework support is available for VMBO pupils with learning difficulties (*LWOO-leerweg ondersteunend onderwijs*).

2.3.2. Labour market-oriented practical training

For learners not capable of entering pre-vocational education, labour market-oriented practical training (PRO - *praktijkonderwijs*) is available. The share of PRO learners continuing their education has decreased from 56% in 2010/2011 to 51% in 2015/2016. About 40% of them transfer to upper secondary VET (MBO 1, entry level education; see paragraph 2.3.2) to obtain an upper secondary VET diploma. PRO-pupils and those without formal diplomas are more or less unconditionally allowed to enter entry level (MBO 1) upper secondary VET programmes.

To facilitate progression, VMBO schools can offer MBO entry level and level 2 programmes under the condition that they cooperate with upper secondary VET colleges.

2.3.3. Upper secondary (non-tertiary) VET programmes

Upper secondary VET programmes cater to the need of youngsters and adults. The age of its participants ranges from 16 to 35 and over. The average age of upper secondary VET participants is slightly higher than in higher education, meaning that it fulfils a role in educating people later in life.

Subsidised VET programmes at upper secondary level are offered by 43 regional, multisectoral VET colleges (*ROC – regionale opleidingscentra*), 10 specialist trade colleges (*vakscholen*: specific for a branch of industry), 10 agricultural training centres (*AOC – agrarische opleidingscentra*) and one school for people with disabilities in hearing, language and communication. Private, non-subsidised providers can offer VET programmes as long as their programmes are accredited by the ministry, making upper secondary VET an open system. Subsidised educational institutions can also offer commercial training, paid for by employers and/or employees.

Three structural elements determine the provision of MBO programmes: differentiation according to:

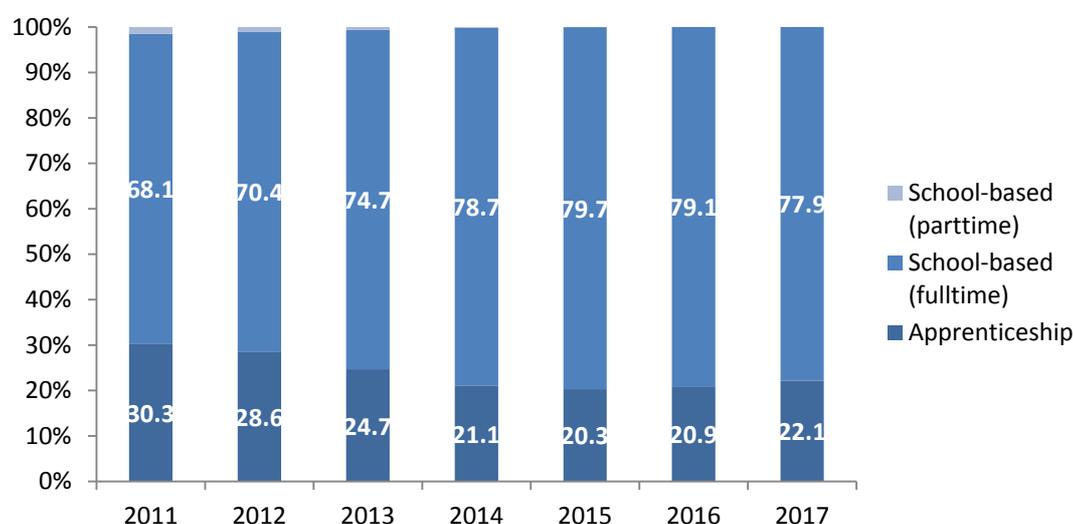
- (a) learning pathway – school-based or apprenticeship (dual pathway);
- (b) programme level – entry level, basic vocational education, professional education and middle management education;
- (c) area of study (*sector*) – green/agriculture, technology, economics and care/welfare.

Learning pathway

In the school-based track (*BOL – beroepsopleidende leerweg*) practical periods in companies make up at least 20% of study time up to a maximum of 59%. The dual or apprenticeship track (*BBL – beroepsbegeleidende leerweg*), training takes place in companies at least 60% of study time. School-based and dual tracks in upper secondary VET lead to the same diplomas; there is no reference to the track on the diploma. Participants in the school-based track are mainly youngsters, while 46% of those following a dual track are 23 or over, this is because this track is also used by companies to upgrade their employees. To enrol in the dual/apprenticeship track a contract (an employment contract in most cases) with a firm is mandatory. There is no such obligation for the school-based track.

Most learners take part in the school based track, which also appears to be gaining popularity (see figure 13). Between 2008 and 2015 the share of learners in dual/apprenticeship VET has decreased due to the economic recession. However more structural reasons like upward mobility and growing preferences from youngsters and employers for school based education, could not be excluded (Cuppen, 2017). In the last two years the share of learners in the dual track has increased slightly, due to the increased enrolment of adults.

Figure 13 **Participation (%) in upper secondary VET by learning track (2011-17)**



Source: www.onderwijsincijfers.nl, extracted 21.8.2018.

VET legislation mandates accreditation of companies offering work placements to VET students. The accreditation process is one of SBB's legal tasks and has to be obtained for each qualification – for training places in the dual track and the school-based track. Names and addresses of the accredited companies are available on a national website (stagemarkt.nl).

Programme level

There are upper secondary VET programmes at four levels. They have different access criteria and transfer possibilities for further learning.

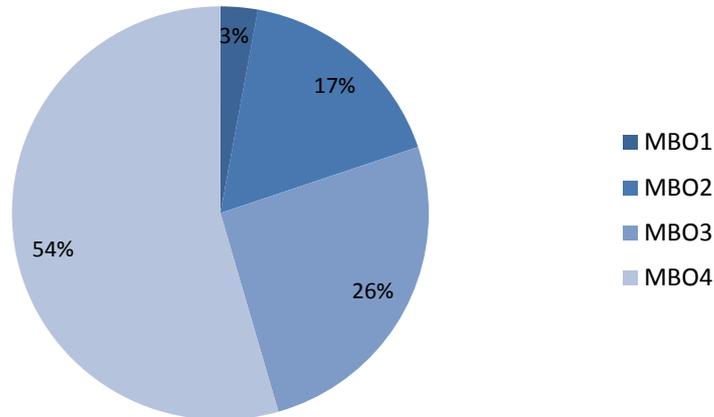
- (a) Entry level (*entreeopleiding*) programmes last maximum one year (ISCED 254, EQF 1). In 2014 they replaced the MBO 1 'assistant training' (*assistentenopleiding*) and broader work-oriented programmes for vulnerable groups (assistant with a job market qualification – *arbeidsmarktgekwalificeerde assistent*). With introducing entry level courses, admission is limited to school

leavers from lower secondary education without a diploma. Entry level courses are aimed at qualifying youngsters to entering programmes at the next level (MBO 2), as well as guiding youngsters not capable to make this step, to work. Within four months after starting an entry course youngsters over 17 are told whether they will be allowed to continue in the same study programme. This means that schools do not remain responsible for young people making insufficient learning progress.

- (b) MBO 2 'basic VET' (*basisberoepsopleiding*) programmes have a one-two year duration and prepare for executive tasks (ISCED 353 short, EQF 2). MBO 2 is the 'official' minimum qualification level for the labour market, the term 'official' in this context meaning that it is politically speaking regarded as a desirable education minimum for every citizen. The term is also related to the definition of early school leaving which means that students who leave education before obtaining a diploma at MBO 2 (or equivalent) are defined as early school leavers. Access requirements are at least a basic pre-vocational education diploma, a completed entry level (MBO 1) programme, or proof of successful completion of the first three years of upper secondary general education or pre-university education. Until 2014 no access requirements applied, but this has changed since the introduction of entry level (MBO 1) programmes. Progression to MBO 3 and (for some students to) level 4 programmes is possible.
- (c) MBO 3 'professional VET' (*vakopleiding*) programmes last two-three years. They prepare people to carry out tasks independently (ISCED 353, EQF 3). Access requirements are (1) a pre-vocational secondary education certificate/diploma (however one of the four pathways in pre-vocational education – the basic level – does not give access, see paragraph 2.3.1), or (2) proof of successful completion of the first three years of upper secondary general education or pre-university education. Progression to programmes at MBO 4 level is possible as are middle management training programmes and specialising programmes (see below).
- (d) MBO 4 'middle-management' (*middenkaderopleiding*) programmes predominantly last three years (some last four years). They prepare people to carry out tasks independently and with responsibility (ISCED 354, EQF 4). The Access requirements are the same as those in place for MBO 3 programmes. Progression to associate degree programmes and higher professional education is possible. In 2014 the duration of most MBO 4 programmes was reduced by one year to three years, as a result of new government policies (*Focus on craftsmanship - Focus op Vakmanschap*).

Of the 462 500 learners in upper secondary VET programmes in 2017, most were in MBO 4 programmes (see figure 14). Most of them were in a school-based track. Apprentices are predominantly found at level 2 and 3. Only 3% of upper secondary VET learners was in an entry-level programme.

Figure 14 Participation (%) in upper secondary VET by level in 2017

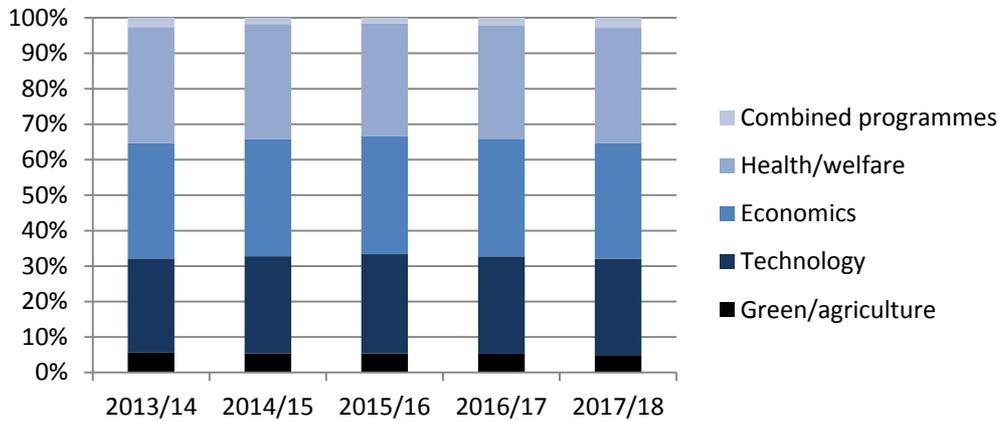


Source: www.onderwijsincijfers.nl, extracted 21.8.2018.

Area of study

Upper secondary VET programmes are offered in four different areas of study (nationally referred to as 'sectors'): green/agriculture, technology, economics, and health/welfare. Each study area caters to the needs of various sectors of industry or business. There are also programmes that combine several study areas (combination programmes). Most students are in economic or health/ welfare programmes (see figure 15).

Figure 15 Participation (%) in upper secondary VET by area of study (2013-17)



Source: DUO 2018.

2.3.4. Post-secondary VET programmes

MBO 4 'specialising programmes' (*specialistenopleiding*) at post-secondary (non-tertiary) level last one year (ISCED 453; EQF 4). Access requirements are a completed MBO 3 or 4 programme. Progression to higher professional education, especially dual or part-time tracks, is possible. The number of participants has decreased from 4000 in 2005 to almost 100 in 2015.

2.3.5. Higher professional education

Higher professional education (HBO) offers professionally oriented higher VET programmes. The universities of applied sciences (*hogescholen*) providing them are publicly financed providers. Non-subsidised, private providers can offer similar programmes if they have appropriate accreditation.

These educational institutions offer study programmes leading to bachelor degrees (ISCED 655, EQF 6) – this is their core business. Higher professional education providers also offer master's programmes (ISCED 757, EQF 7) for bachelor graduates. The range of master programmes on offer is expected to increase in the next decade.

In addition to bachelor and master programmes, successful pilot projects with short-cycle higher education programmes ('associate degree' or AD, ISCED 554, EQF 5) were introduced a few years ago. These programmes were implemented in the regular education system in September 2013. AD programmes (120 ECTS; normative duration two years) are part of bachelor programmes (240 ECTS; normative duration four years), so that further progression in higher education for AD graduates is possible. However, in 2016, the Minister has proposed to end this connection. In 2018 the AD is a programme in its own right. Consequently, AD programmes is expected to be able to respond better to labour market and the adult learners' needs. A greater variety of AD programmes will also better suit the needs of MBO-students and employed persons ⁽³⁴⁾.

AD programmes are of particular interest to those with a VET qualification at upper secondary level. In 2015 the total number of students in an AD programme was 8600 (Onderwijs in cijfers, 2017). Their share in the total number of learners in higher professional education is small (1.9%) but growing (Onderwijs in cijfers, 2017).

In 2013 new legislation has been introduced (Wet Kwaliteit in Verscheidenheid - Quality through diversity act), which urges the higher professional education providers to differentiate in terms of programme offer (AD programmes, broad 'comprehensive' Bachelor programmes and dual learning tracks) and orientation (stronger ties with

⁽³⁴⁾ <https://www.rijksoverheid.nl/actueel/nieuws/2016/11/11/associate-degree-krijgt-zelfstandige-status-in-hoger-onderwijs>

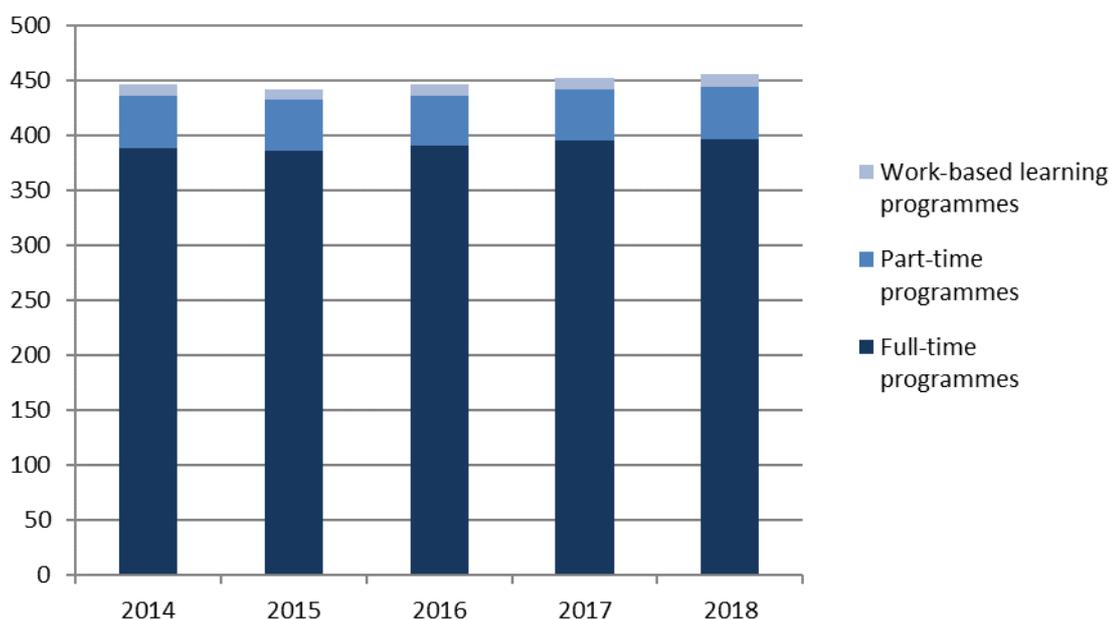
research-based universities, cooperation with upper secondary VET and a stronger focus on applied research). Intake procedures and guidance to support students in their educational choice are being strengthened.

Enrolment in professional higher education (HBO) is steadily increasing (see figure 16). In 2018 the number of students totalled 455 thousand.

Higher professional bachelor programmes are open to learners aged 17 or older. Admission requires an upper secondary general education (HAVO or VWO) or VET qualification (MBO 4). After a decrease, the percentage of upper secondary vocational education pupils (MBO 4) who enrol directly in a professional higher education programme has been stable over the past three years. In 2016/17 36% of the graduated students in MBO 4 continued in higher professional education ⁽³⁵⁾.

Some bachelor programmes apply additional admission criteria relating to the subjects learners studied in prior studies. These criteria do not apply to students with an MBO 4 qualification, as they currently have a legal right to enter HBO. But the 'Quality through diversity' act gives higher professional education providers the possibility to apply stricter admission criteria for MBO 4 students for specific programmes.

Figure 16 **Students (in 1 000s) in higher professional bachelor education, 2014-18**



Source: www.onderwijsincijfers.nl, extracted 10 June 2018.

⁽³⁵⁾ <https://www.onderwijsinspectie.nl/documenten/rapporten/2018/04/11/rapport-de-staat-van-het-onderwijs>

After completing the first year of a professional bachelor's programme, entrance to university bachelor programme is possible. A professional bachelor degree gives access to professional master degree programmes in higher professional education and university master degree programmes. A bridge programme for professional bachelor graduates often precedes their entry into an academic master programme.

Higher professional education provides programmes for professions requiring both theoretical knowledge and specific skills. They are almost always closely linked to a particular profession or group of professions and most programmes include an internship. Higher professional education can also be attended part-time as part of professionally oriented adult education, and, for the last 10 years, in dual learning tracks. The programmes cover one or more of seven areas of study: 'green'/agriculture, technology, economics and services, health care, behaviour and society, culture and arts, and teacher training.

The responsibility for curriculum development and assessment is in the hands of the universities of applied science. Various curricula and learning environments exist even for programmes related to the same profession. The Dutch-Flemish accreditation body (NVAO) accredits the programmes once every six years. One of the core assessment criteria is whether programmes incorporate the latest developments in disciplines and professions. Higher professional bachelor degrees are awarded by the institutions themselves. Official recognition of programmes is granted as long as they are accredited by NVAO.

Graduation rates have been fluctuating. The graduation rate of students, having started their study in higher professional education in 2003, was 59% (graduation within five years after enrolment), and decreased to 50% for the 2012 cohort ⁽³⁶⁾. Higher professional education institutions can also offer market-driven contract activities paid by employers and/or individuals/employees, such as training courses and applied research.

2.4. Other forms of vocational education and training

2.4.1. Provision

There is no institutional framework for other forms of VET in the Netherlands, especially for continuing vocational education and training (CVET). Provision is market-driven with many suppliers. Social partners can stimulate CVET with the help of their sectoral training and development funds (*Opleidings- en ontwikkelingsfondsen*). Until 2014 tax deduction

⁽³⁶⁾ (extracted 26-10-2018)

measures for employers encouraged training and procedures for validation of prior learning. This tax facility has been replaced by a subsidy-system and a budget cut of EUR 100 million in 2014.

Apart from legally regulated and publicly financed part-time/dual IVET functioning as CVET for individuals (discussed in paragraph 2.3.), there are two other types of CVET:

- (a) training for unemployed and jobseekers, financed by the public employment service (UWV) or municipalities.
- (b) private, non-government-funded training for employees, self-employed people and employers.

Unemployed people can search for jobs at their regional employment service (*UWV Werkbedrijf*). Municipalities are responsible for paying income support to people with no income from work or the social security/insurance system. UWV Werkbedrijf-agencies cooperate in helping people to find work and training can be part of (re)integration into work. Depending on circumstances, people themselves have a say in choosing the most appropriate routes back to work, in particular through training components such as job application courses/programmes paid by these agencies. The unemployed aged 50 and over can apply for training vouchers. The vouchers must be used for training improving the chances of finding work.

Many training providers are active in non-formal CVET (off-the-job) market for employees. Most are private commercial training providers covering more than three quarters of training market and a smaller share are publicly funded VET providers that offer training on a commercial basis paid by employers or employees.

Most CVET is provided by private training companies and financed by employers and/or employees. A recent survey ⁽³⁷⁾ shows that between 2014 and 2017 there was a decrease of 1 500 in the number of private providers to approximately 14 400 training companies. Especially smaller training providers have left the CVET market. Despite the decline in number of providers, the total turnover did not change compared to 2014. In 2017 the realised total turnover was between EUR 3.1 and 3.4 billion (SEO, 2018).

The type of training offered by private trainers is changing. Especially the share of CVET courses leading to upper secondary (MBO) or tertiary (HBO) diplomas has declined. While in 2010, 18% of the courses fell into this category, the share decreased further from 14% in 2014 to 8% in 2017. On the other hand, the share of courses leading to a sectoral or professional qualification increased from 26% in 2010, to 31% in 2014 and further to 34% in 2017.

⁽³⁷⁾ <https://www.nrto.nl/wp-content/uploads/2018/06/20180605-Marktmonitor-private-aanbieders-van-beroepsopleidingen.pdf>

More than half of the CVET courses offered by private training providers last five days or less. The market share of short courses is increasing. The share of longer courses offered by private providers decreased between 2010 and 2017 (from 17.3% to 9,8). Most courses are delivered in a classroom setting, but the demand for blended learning approaches is increasing.

Among the courses leading to a VET qualification, programmes in the fields of building and technology are the most popular. While in 2010 the share of courses in economics, wholesale/retail, management and administration and those in health and care were the most popular. Among courses on offer not leading to an official qualification those focusing on communication/personal effectiveness, are the most popular.

2.4.2. Sectoral training funds

CVET is partly influenced by sectoral collective labour agreements. It can be financed through sectoral funds for training and/or research and development (*O&O fondsen - Opleidings- en Ontwikkelingsfondsen*). There are about 85 of these funds (ministry for social affairs and employment (SZW), 2017), which are foundations governed by social partners. Most funds are financed by a payroll levy. Employers pay this levy to the training fund for their sector and can benefit from reimbursements for the cost of training their employees. Not all funds operate in the same way. Some funds limit their activities to the distribution of financial resources while others pursue active labour market policy. To stimulate participation in education and training, the funds use a variety of measures to cover the costs of training, training leave or examinations (Van der Meijden, 2013).

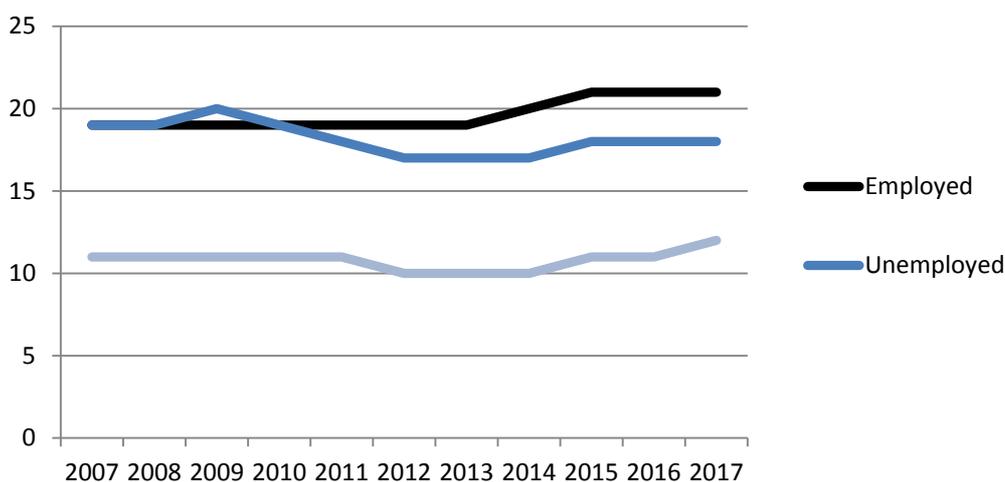
Most training funds approach and finance training from an employability perspective. They help employees progress in their careers and sometimes even in other sectors. Funds also support the development of effective human resource management policies at sector level. Other activities funds are involved in focus on job-to-job mobility and improving working conditions and safety at work.

2.4.3. Lifelong learning participation

The structure and organisation of CVET shapes lifelong learning opportunities and participation. Labour market position has a strong impact on lifelong learning participation. Those outside the labour force participate least. A decade ago, participation of employed and unemployed people in lifelong learning was almost equal. While the participation rate of unemployed has been decreasing between 2009 and 2014, in 2015 this participation increased again (see figure 17).

Most 25-65 year old participants in lifelong learning (85%) take part in courses at private non-government funded education and training providers. Only 15% of lifelong learners are in a training course offered by a government funded provider.

Figure 17 Lifelong learning participation (%) by labour market position (25-65 year olds)



Source: www.onderwijsincijfers.nl, extracted 21.8.2018.

NB: Lifelong learning Lifelong learning encompasses all purposeful learning activity, whether formal, non-formal or informal, undertaken on an continuing basis with the aim of improving knowledge, skills and competence. The reference period for the participation in education and training is the four weeks preceding the interview as is usual in the labour force survey.

Participation in non-government lifelong learning activities strongly depends on education background. In 2016, 7.9% of adults with an EQF 1 qualification took part in non-government funded lifelong learning. The corresponding participation rate for those with a qualification at EQF level 5 or above was 22.3% (www.onderwijsincijfers.nl, source EBB). Most participants in non-government funded lifelong learning take part in shorter training courses. In 2016, about 35% lasted less than a week and 40% had a duration of one week to six months. 10% had a duration of minimum one year (Onderwijs in cijfers, 2018).

2.4.4. Recent developments in lifelong learning policy

The current Dutch Cabinet aims to a breakthrough on the lifelong learning agenda. Therefore it needs the cooperation of the Social Partners, Sectoral Training Funds, educational institutions like VET schools, and other stakeholders. The new Lifelong learning Policy ⁽³⁸⁾ aims to raise individuals' awareness of economic changes and to

⁽³⁸⁾ <https://www.rijksoverheid.nl/documenten/kamerstukken/2018/09/27/kamerbrief-leven-lang-ontwikkelen>

anticipate labour market developments. Based on white papers and policy advices from the ad hoc Committee Demand driven Funding in VET ⁽³⁹⁾, Social and Economic Council ⁽⁴⁰⁾ and the OECD ⁽⁴¹⁾, the Dutch Cabinet concludes that a culture shift is necessary to get lifelong learning higher on the agenda – of all stakeholders and society.

To achieve this culture shift, the government has identified three policy goals:

- (a) to inform: insight in training opportunities makes it easier for individuals to make their own choices;
- (b) to stimulate: launching individual learning and development budgets for everyone;
- (c) to facilitate: e.g. by providing support structures and flexible provision in education.

The coming years this approach will be further elaborated.

⁽³⁹⁾ <https://www.rijksoverheid.nl/documenten/rapporten/2017/04/04/advies-commissie-vraagfinanciering-mbo-doorleren-werkt>

⁽⁴⁰⁾ <https://www.ser.nl/nl/publicaties/adviezen/2010-2019/2017/leren-ontwikkelen-loopbaan.aspx>

⁽⁴¹⁾ <http://www.oecd.org/ctp/oecd-skills-strategy-diagnostic-report-the-netherlands-2017-9789264287655-en.htm>

CHAPTER 3.

Shaping VET qualifications

3.1. Anticipating skills needs

A robust methodology deployed by trusted organisations enhances the quality of the evidence produced by skill needs anticipation exercises and builds stakeholder trust in the process and suggested shifts in policy decisions. Assigning the responsibility of the methodology design and/or the skills exercises' overview to an independent and well-respected organisation can support this.

The set-up and governance of skill anticipation in the Netherlands can serve as an exemplar case. The Research Centre for Education and the Labour Market (ROA - Researchcentrum voor Onderwijs en Arbeidsmarkt) is the institute in the Netherlands that specialises in labour market forecasting and skills anticipation. Its labour market forecasts aim to increase transparency and improve the match between education and the labour market. The work is financed and co-steered by key national education and labour market stakeholders ⁽⁴²⁾.

Two approaches to skills anticipation can be distinguished: top-down and bottom-up. In the top-down approach, a general forecasting model covering the whole labour market uses national data sources to generate information relevant for policy makers and for guidance purposes. Every second year, ROA publishes the report 'The labour market by education and occupation in 20xx' (e.g. ROA, 2017) which includes an overview of education and labour market trends as well as analyses of expected labour market developments in the light of particular policy issues.

In the bottom-up approach, partial labour market forecast models are used, for example for a single sector or occupation or for a selection of them, with input from specific (ad hoc) data sources. This can be complementary to the top-down approach.

The national social security agency (UWV - Uitvoeringsinstituut Werknemersverzekeringen) is involved in cooperation between ROA and the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB - Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven) to match information on demand and supply in the labour market, at sectoral and regional level.

The generated labour market information caters to the needs of several stakeholders. Youth and jobseekers benefit by being able to base their education choices on the mid-term labour market perspectives of different education tracks. Websites such as www.studiekeuze123.nl, www.kansopwerk.nl and www.kansopstage.nl, as well as

⁽⁴²⁾ <http://roa.sbe.maastrichtuniversity.nl/?portfolio=poa-project-onderwijs-arbeidsmarkt-2>

education guides (www.keuzegids.org) help them make education and training decisions. Different groups of policy makers benefit from labour market information for youth (*Basiscijfers Jeugd* - <https://www.s-bb.nl/publicaties/basiscijfers-jeugd>) available for each labour market region as the information helps ease decisions on whether to open new education tracks or amend existing ones. The information also helps companies and their sector organisations, as it gives them a chance to act on expected skills shortages in the near future. Public and private employment services use the information to shape training policies for their beneficiaries.

SBB is responsible for labour market research focused on further developing the structure of qualifications in upper secondary VET. The nine sector chambers within SBB take on this task. Educational institutions are responsible for attuning their VET provision regionally. Regional training centres sometimes carry out their own market research to gain insight into expected labour market needs for qualified employees at regional level.

Private commercial training providers have their own marketing strategies (including market research), so they can offer courses that are relevant to potential target groups and labour market needs.

3.2. Designing qualifications and curriculum development

The qualification design process differs between parts of the VET system:

- (a) in lower secondary pre-vocational education: examination syllabi are laid down in a framework by the education ministry and developed by the Foundation for Curriculum Development in the Netherlands (SLO - Nationaal expertisecentrum leerplanontwikkeling);
- (b) in upper secondary VET: the national qualification system (nationally referred to as 'qualifications structure') defines the desired output of qualifications. There are three steps:
 - social partners develop and determine/validate vocational/occupational standards. This process takes place in committees at sub-sectoral level referred to as 'market segments' in the national context ⁽⁴³⁾;
 - social partner and VET representatives develop qualification profiles (educational standards as output), which are adopted by the education ministry. This is done within the nine sector chambers within SBB.
 - VET colleges develop curricula in cooperation with training firms based on qualification profiles.

⁽⁴³⁾ See <https://www.s-bb.nl/samenwerking/sectorkamers-en-marktsegmenten>

- (c) In higher professional education (HBO): qualifications and programmes, developed by schools, are accredited by the Dutch-Flemish Accreditation Organisation. A curriculum is part of the accreditation request.

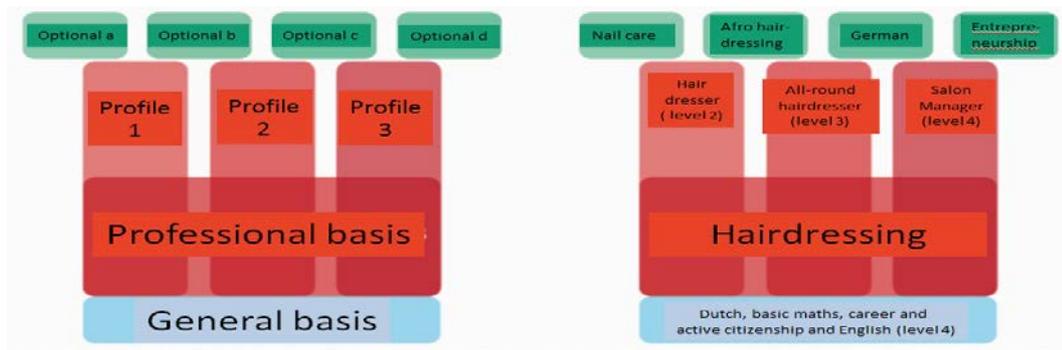
3.2.1. Qualification and curriculum development in upper secondary VET

The qualifications system for upper secondary VET comprises competence-based qualifications and contains occupational standards covering one qualification profile or several interrelated ones. They describe desirable learning outputs of VET programmes related to a specific vocation or group of occupations, to citizenship and further learning.

In August 2016 a new qualification system has been implemented. Qualifications are now clustered for better transparency and functionality. Definitions of qualifications are broadened, with a general part (language-, numeracy-, citizenship- and career management skills), a basic vocational part applicable for all occupations in the qualification, several profile modules (specific for the profile within the qualification) and optional modules (see figure 18). In July 2018, the qualification framework consists of 179 qualifications, 491 profiles (specialisations within a qualification) and almost 1000 optional modules (www.sbb.nl).

It is expected that broader definitions of qualifications will give VET colleges more leeway to adapt curricula to labour market needs. The optional modules are introduced to ensure the labour market relevance of curricula. These optional modules are described separately from specific qualifications and are relevant for several qualifications. Companies and educational institutions jointly develop them to quickly respond to innovations or emerging needs within their region. The modules can be defined every three months and then immediately offered to students. Regions will be afforded some leeway to draft optional modules themselves to be able to respond to regional needs and/or to help learners progress through the education and training system. The options will also allow them to provide coursework in German, to include commercial skills in their programmes or to include skills relevant for continuation in professional higher education (Parliamentary Letter, 2014).

Figure 18 **Upper secondary VET qualifications in the new qualification structure (obligatory from August 2016) and an example for hairdressing**



Source: <http://www.s-bb.nl>

The nine sector chambers (see paragraph 2.2.3) within the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB - *Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven*) responsible for VET qualifications include social partners and the VET sector. These chambers are the link between sectoral education and labour market stakeholders and the executive branch of SBB but they also contribute to general qualification policies. Next to being responsible for keeping the qualification system up-to-date, the chambers promote the quality of learning in enterprises and interpret and validate information on VET and the labour market. Each sectoral chamber is supported by representatives of the different labour market segments that form part of the sector.

Schools are primarily responsible for curricula and their modernisation. Authority with regard to learning arrangements is assigned to them by the constitution. This does not mean, however, national government remains completely aloof. It can stimulate developments and innovations that have consequences for the modernisation of curricula.

Starting with the 2016-2017 school year, and in addition to the revision of the qualification system, more experimentation will be allowed for cross-overs, in which innovative training programmes can be created that go off the beaten path by combining parts of several qualifications. Institutions with a programme offer that is insufficient to offer demonstrable job prospects will be allowed to engage in such experiments (Parliamentary Letter, 2014). Moreover, a new initiative kicked off in 2018 allows VET colleges to draw up regional elements in national qualifications in cooperation with the (regional) business community. The new qualifications should be based on national qualifications (60% of the teaching time should be based on the national qualification) providing substantial room for addressing regional needs.

3.3. Qualifications framework

The Netherlands Qualification Framework (NLQF - *Nederlands Kwalificatieraamwerk*) has been set up to ease lifelong learning and mobility, as it provides transparency and facilitates the comparison of qualification levels nationally and internationally. The eight level framework supports employers, as it enables them to gain insight into their (potential) employees' knowledge and know-how. The NLQF is also seen as an instrument helping employees and learners in developing their careers, as it helps them better understand their capacities.

The NLQF was referenced to the European Qualifications Framework (EQF) in 2011 (HE framework linked to QF-EHEA in 2009) and was formally adopted mid-2012. The NLQF is now fully operational. In 2014, the education ministry initiated a revision of the legal texts underpinning the Dutch education and training system to insert NLQF, as the national translation of EQF and to ensure that references to NLQF are made on certificates and qualifications. The results of the evaluation of the NLQF and the NCP (National Coordination Point) were published in November 2017. One of the recommendations being to strengthen the legal basis of the framework, and to broaden up communications with stakeholders. The development of a NLQF law is foreseen in the end of 2018 ⁽⁴⁴⁾

3.4. Assessment and validation

In the Netherlands, mechanisms to recognise formal learning in government-regulated VET are as follows:

- (a) in lower secondary pre-vocational education (VMBO), central, national examinations and school examinations are held, which are important for gaining a diploma. The education inspectorate supervises quality of school exams;
- (b) in VET at upper secondary (MBO) level, assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises quality of examinations (content, level and procedures at programme level);
- (c) in both lower and upper secondary VET the introduction of obligatory central examinations in Dutch language and basic maths will be carried out in phases. Passing central examinations in Dutch language is compulsory to obtain an upper secondary VET diploma. Central examination in basic maths is not yet compulsory;

⁽⁴⁴⁾ http://www.cedefop.europa.eu/files/4163_en.pdf

- (d) in higher professional education, schools are responsible for examinations in accordance with teaching and assessment regulations designed by providers. These regulations are part of the accreditation request for recognised *HBO* programmes.

Validation of prior, non-formal and informal learning is an instrument that has been promoted in the Netherlands for the last fifteen years. A comprehensive validation system that encompasses all education levels and sectors is in place.

In line with discussions and proposals made in the last few years, from 2016 onwards there are two formal validation procedures:

- (a) validation for the labour market: Recognition/documentation of prior learning – a formal procedure for the employed and jobseekers that leads to the award of a validated skills portfolio (certificate). Validation is possible for sectoral, formal VET and HE qualifications. This type of validation is most used. The certificate offers no legal right for exemptions for learning or exams in formal VET of Higher professional education (see below);
- (b) validation for education: Accreditation/certification of prior learning (APL) – a formal procedure in which a candidate can get his/her learning outcomes assessed against a national qualification standard to obtain a formal qualification in VET or HE. Validation supports access to education and training at all levels. Although both VET and HE qualifications can in theory be obtained through validation, in practice this depends on demand and is currently most common in VET.

Within the educational route, the government supports the build-up of an infrastructure within the VET colleges and higher education institutes to further implement and improve validation procedures. In the future the education ministry will no longer have a coordinating role in quality assuring in validation for the labour market. Social partners have therefore prepared a quality label for providers offering validation for the labour market. Validation in the educational route is assigned to the education inspectorate or NVAO ⁽⁴⁵⁾.

Individuals themselves or their employers have to pay for validation. Financial support is often provided by sectoral training funds (for employers), tax benefits (for individuals), or for people with occupational disability benefits – by the national social security agency (*UWV*).

⁽⁴⁵⁾ See <https://www.rijksoverheid.nl/documenten/kamerstukken/2015/10/26/kamerbrief-over-voortgang-leven-lang-leren>

3.5. Macro-effectiveness of VET provision

The education ministry determines provision (learning departments for broad fields related to the labour market) in lower secondary pre-vocational education. In 2016 new programmes were introduced in VMBO. Caused by expected declines in student numbers, schools have to make new choices. They have to develop cooperation arrangements with other schools in their region and adjust their educational offer to the student population, the offer of regional MBO colleges and labour market developments⁽⁴⁶⁾.

Schools in upper secondary VET decide for themselves which qualifications to provide. Recently however, macro-efficiency has been put on the national agenda for upper secondary VET to remove overlaps in regional provision of VET courses. Competition between providers has been replaced by a policy focussing on macro-efficiency. Its key aim is to achieve an optimal offer of qualifications at national and regional level to meet labour market needs effectively and efficiently. Schools have to meet specific criteria such as a minimum number of students in a programme. The work has been entrusted to SBB. SBB also supports VET-schools and regional business by providing up-to-date information on the number of VET courses provided by each VET college, the number of students enrolled in these courses, the number of youngsters living in a region and regional labour market developments.

In higher professional education, schools develop their programmes themselves (in cooperation with partners in the labour market). These programmes are accredited by the NVAO. The education ministry decides whether an accredited programme is to be publicly funded or not (macro-effectiveness test).

3.6. Quality assurance

A national quality assurance approach and a methodology for internal and external evaluation have been devised. So far upper secondary IVET and higher professional education (HBO) have quality assurance systems, the first based on supervision and inspection, the latter based on self-evaluation, review and accreditation. A common quality assurance framework for VET providers is in place and applies to workplace learning. For recognised CVET courses (in the official registry) offered by private providers the same rules apply as in IVET.

The education ministry through the education inspectorate and VET providers themselves are responsible for quality assurance in upper secondary VET. The VET law

⁽⁴⁶⁾ See <https://www.verus.nl/sites/www.verus.nl/files/documenten/kamerbrief-over-fundamenteel-vmbo.pdf>

mandates VET providers to set up a quality assurance system. They are relatively free to design and set up their systems, but have to ensure regular quality assessments that include the arrangements in place for teacher training. Upper secondary VET institutions' annual reports are the basis for external quality evaluation by the education inspectorate (see paragraph 2.2.5).

Guidelines and standards promote a culture of continuous improvement. Stakeholders (including the inspectorate, VET providers, students/learners and teachers/trainers and VET expertise centres) have contributed to its development. Stakeholders take part in setting VET goals and objectives and their involvement in monitoring and evaluation has been agreed. An advisory committee consisting of all important VET stakeholders meets several times a year to discuss further developments. All EQAVET indicators are used (⁴⁷).

Quality, responsiveness and innovation capacity in upper secondary VET have been core policy priorities in the past few years. The focus has been on excellence and the introduction of cross-over qualifications, optional parts in qualifications meeting regional needs, combined tracks, distance learning and modularisation. The consensus is that while upper secondary VET has a good basic quality, there is a need to be more ambitious. Extra (partly performance-based) funding is introduced to increase quality. The responsible minister has concluded quality agreements with all VET institutions, which makes them responsible and accountable for their performance. The quality agreements are the basis for quality plans for 2015-2018 and again for 2019-2022 drafted by VET providers themselves. VET colleges should elaborate strategic plans to improve the quality of VET in line with regional needs and in close collaboration with regional stakeholders, young people in a vulnerable position and equal opportunities for all students.

⁽⁴⁷⁾ See http://www.eqavet.nl/_images/user/Eqavet_Leaflet_NL.p_20131030151118.pdf

CHAPTER 4.

Promoting participation in VET

4.1. Incentives for learners

In the Netherlands, at the age of twelve youngsters continue their education in one of the school types in secondary education. The admission in secondary education school types is based on the advice provided by the primary schools. In secondary education youngsters either go to general education (HAVO, VWO) or pre-vocational education (VMBO). About half of all 12 year olds enrol in pre-vocational education. As pre-vocational education prepares for upper secondary VET, almost all VMBO learners end up in upper secondary vocational education.

4.1.1. Student finance act

The student finance act of 2000 (*Wet studiefinanciering*) aims to cover the education costs of students over 18 in full-time education. The finance system for upper secondary VET students comprises 4 financing components: a basic grant, a supplementary grant (depending on the level of parental income), a free/discounted public transportation card and a loan. Learners do not have to refund the basic grant, the supplementary grant and their public transportation fees when they graduate within 10 years. Students in VET courses at level 1 and 2 are exempt from paying back the grants, as well as the loans.

From September 2015 onwards the finance system for to students in higher education has been changed. The most important change is the abolition of the basic grant. As a consequence the share of the loan has increased. By way of compensation, the repayment period is increased from 15 to 35 years. Furthermore, students do not have to refund the supplementary grant and public transportation fees when they graduate within 10 years.

4.1.2. Right of enrolment in VET

New legislation to 'ensure the right of enrolment in VET for all' (*Wet vroegtijdige aanmeldatum en toelatingsrecht tot het mbo*) was adopted in 2016 and came into effect on 1 August 2017. The main reason for the introduction of this legislation is to tackle problems in the transition from lower secondary pre-vocational education (VMBO) to upper secondary VET, as one third of the early school leavers drops out during the transition period for the following reasons: they regret their study choice or as a result of unclear, or confusing intake procedures in upper secondary VET colleges. The aim of this Act is to smoothen the transition from lower secondary to upper secondary VET. This has to be achieved by better (study) guidance facilities before and during the transition phase, by bringing forward the registration date (the first of April) for students leaving lower

secondary pre vocational education (VMBO) for upper secondary VET and by strengthening the position of students in the VET college intake procedures ⁽⁴⁸⁾.

4.2. Incentives for enterprises

Until 2014, tax deduction measures for employers encouraged them to offer training placements for students in VET. This tax facility has been replaced by a subsidy-system. This subsidy is meant to cover costs of learning places for students in the pre-vocational education, upper secondary VET, higher professional education and PhD students.

4.3. Guidance and counselling

Since 2011, career orientation and guidance (LOB) in VET was promoted through the project *Stimuleringsproject LOB in het mbo*. In this project, VET-schools cooperated in the development and implementation of career orientation and guidance systems. Since July 2017, a national expertise centre for career orientation and guidance ⁽⁴⁹⁾ is operational. It operates cross-sectoral and supports lower secondary pre-vocational education (VMBO), general secondary education (HAVO-VWO) and upper secondary VET (MBO) in improving the career orientation and guidance of pupils and students.

Labour market information caters to the needs of learners from lower secondary pre-vocational education (VMBO) and upper secondary VET (MBO) and jobseekers. This information should help them to make a considered choice for an education program; based on the labour market perspectives of the different options. For students looking for work-based placements in both tracks in VET in an 'accredited work placement company', SBB provides information via the portal [Stagemarkt.nl](https://www.stagemarkt.nl). SBB also provides information on mid-term job prospects for all upper secondary VET programmes in (<https://www.sbb.nl/onderwijs/studie-cijfers>). This website also supports pre-vocational and VET schools to inform future potential about job prospects, helping them and their parents to make a well-informed choice. Information can also be derived from websites such as www.studiekeuze123.nl, <https://www.kiesmbo.nl>, www.kansopwerk.nl and Guides (www.keuzegids.org).

⁽⁴⁸⁾ <https://www.mboraad.nl/themas/toelatingsrecht>
<https://www.rijksoverheid.nl/documenten/publicaties/2018/10/05/ruimte-in-regels-in-het-mbo> (p. 28)

⁽⁴⁹⁾ <https://www.expertisepuntlob.nl/>

4.4. Recent developments

Following the advice of the education council of June 2015 and in response to the manifest for the future of secondary vocational education issued by the association of VET colleges (MBO Raad, April 2016), possibilities to redesign and reposition lower secondary pre-vocational education (VMBO) are being explored. In particular, attention is given to the transition to and accessibility of VET and the image of VET, hopefully resulting in an increase of the enrolment figures.

One of the possible ways to smoothen the transition from lower secondary pre-vocational education (VMBO) to upper secondary VET is the introduction of comprehensive pathways, integrating the pre-vocational secondary education and upper secondary sections in the route towards a VET-diploma. These pathways start in the third year of pre-vocational secondary education and include the whole VET programmes at MBO level 2 or 3 in all sectors. The other comprehensive pathway, called the technological pathways, ends at VET level 4. The experiments with the two comprehensive pathways started in 2014 will end in 2022 ⁽⁵⁰⁾.

In 2018 the education ministry introduced another programme to strengthen the position of pre-vocational education and upper secondary VET in the education system, called Strong Vocational Education (*Sterk beroepsonderwijs*)⁽⁵¹⁾ (⁵²). The aim is to strengthen regional cooperation by building networks of lower secondary pre-vocational schools (VMBO), upper secondary VET schools (MBO) and regional labour market partners (companies). The ministry also has the intention to structurally implement the comprehensive pathways from pre-vocational to upper secondary VET. Another intention is to combine two pathways (out of four pathway in pre-vocational education), the combined pathway (VMBO-Gemengde leerweg) and the theoretical pathway (VMBO-Theoretische leerweg) in one new pathway. In this new pathway theoretical learning will be enriched with practical/vocational components to improve transition to upper secondary VET and general education (HAVO). With this programme the education ministry wants to make sure that by 2021 consecutive learning routes from pre-vocational education to upper secondary VET are available in in all regions.

⁽⁵⁰⁾ <https://www.rijksoverheid.nl/documenten/rapporten/2016/12/01/rapport-experimenten-vakmanschap-en-technologieroute>

⁽⁵¹⁾ <https://www.rijksoverheid.nl/documenten/kamerstukken/2017/02/20/kamerbrief-over-versterken-vmbo>

⁽⁵²⁾ <https://www.sterkberoepsonderwijs.nl/wp-content/uploads/2018/05/kamerbrief-over-programma-versterking-vmbo-mbo.pdf>

List of abbreviations

AD	Associate degree
AOC	agrarisch opleidingscentrum [agricultural training centre]
AVO	algemeen voortgezet onderwijs [general secondary education]
BAO	basisonderwijs [primary education]
BBL	beroepsbegeleidende leerweg [dual track (apprenticeship training) in which learning and working are combined]
BOL	beroepsopleidende leerweg [school-based full-time or part-time programmes with practical periods in enterprises]
BVE	beroepsonderwijs en volwasseneneducatie [upper secondary vocational education and general adult education]
CBS	Centraal Bureau voor de Statistiek [Statistics Netherlands]
DUO	Dienst Uitvoering Onderwijs [Service Institution Education]
HAVO	hoger algemeen voortgezet onderwijs [upper secondary general education]
HBO	hoger beroepsonderwijs [higher professional education]
LFS	Labour force survey
MBO	middelbaar beroepsonderwijs [upper secondary vocational education]
NVAO	Nederlands-Vlaamse Accreditatie Organisatie [Dutch-Flemish Accreditation Organisation]
NRTO	Nederlandse Raad voor Training en Opleiding [Dutch Council for Training]
O&O fonds	Opleidings- en Ontwikkelfonds [Training and Development Fund]
OU	Open Universiteit [Open University]
PRO	praktijkonderwijs [practical labour oriented education]
ROA	Research Centre for Education and the Labour Market

ROC	regionale opleidingscentrum [regional, multisectoral training centre]
SBAO/SO	speciaal basisonderwijs/speciaal onderwijs [special (primary) education]
SBB	Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven [Cooperation organisation vocational education, training and the labour market]
SLO	Nationaal expertisecentrum leerplanontwikkeling [foundation for curriculum development in the Netherlands]
UWV	Uitvoeringsinstituut Werknemersverzekeringen [national social security agency]
VMBO	voorbereidend middelbaar beroepsonderwijs [lower secondary pre-vocational education]
VMBO – BL	basisberoepsgerichte leerweg [basic level vocational learning pathway]
VMBO – GL	gemengde leerweg [combined learning pathway]
VMBO – KL	kaderberoepsgerichte leerweg [advanced level vocational learning pathway]
VMBO - TL	theoretische leerweg [theoretical learning pathway]
VAVO	voortgezet algemeen volwassenenonderwijs [general secondary education for adults]
VO	voortgezet onderwijs [secondary education]
VSO	voortgezet speciaal onderwijs [special secondary education]
VWO	voorbereidend wetenschappelijk onderwijs [pre-scientific education]
WSF	Wet op de studiefinanciering [student finance act]
WO	wetenschappelijk onderwijs [scientific education]

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www.vereniginghogescholen.nl	Netherlands Association of Universities of Applied Sciences
roa.sbe.maastrichtuniversity.nl	Research Centre for Education and the Labour Market
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