



Vocational education and training in the Netherlands

Short description

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Europe 123, 570 01 Thessaloniki (Pylea), GREECE
PO Box 22427, 551 02 Thessaloniki, GREECE
Tel. +30 2310490111, Fax +30 2310490020
E-mail: info@cedefop.europa.eu
www.cedefop.europa.eu

Joachim James Calleja, *Director*
Micheline Scheys, *Chair of the Governing Board*

Foreword

The Netherlands Presidency of the Council of the European Union is in a context where many involved in Dutch vocational education and training (VET) wonder about the implications that revolutionary technological changes will have for VET and its students in the near future. With similar sentiments in other European countries, making VET future-proof is a priority for policy-makers. Promoting VET excellence and innovation, one of the transversal areas and principles agreed in the 2015 Riga conclusions, is also a central part of the European VET agenda.

VET in the Netherlands has good labour market outcomes, with relatively low youth unemployment. The VET system is among the world's best, as it is both comprehensive and highly flexible. A key feature of upper secondary VET is equivalent qualifications for dual and school-based pathways: work-based learning forms a large part of the programmes in both. The system also helps learners progress. Its four-level structure enables many students to move up the education ladder. Most upper secondary VET learners consider a higher level qualification the best guarantee for employment: more than 70% follow programmes leading to EQF level 3 or 4 and half of all level 4 graduates continue in higher VET programmes.

VET providers in the Netherlands are relatively autonomous. They work within a broad legal framework and a national qualification structure but have freedom in shaping curricula and organising provision. Reliable national and regional labour market and VET intelligence helps them in the process.

The experience in the Netherlands shows that an effective VET system requires regular adjustment to keep meeting labour market demand and society's needs. Keeping the right balance between system accessibility, quality and efficiency is a constant challenge. In recent years the focus has been on reducing early leaving from education and training and streamlining qualifications. Some recent steps taken aim at increasing efficiency by reducing programme duration and by introducing funding principles for VET providers rewarding faster programme completion. These and other measures benefit from a tradition of evidence-informed policy and practice. VET and labour market monitoring and regular surveys among graduates signal trends and bottlenecks and promote innovation and change.

Providing expert insight into how national VET systems work is at the heart of Cedefop's mission. We hope that this short description promotes understanding of the Dutch VET system.

Joachim James Calleja
Director

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This short description is the result of a team effort. Anneke Westerhuis, Annemiek Cox and Hester Smulders from the Centre for Expertise in Vocational Education and Training in the Netherlands (ECBO) drafted the text in cooperation with Jasper van Loo from Cedefop, who also took on its overall coordination. Parts of the text are based on the original work of Karel Visser, who passed away unexpectedly in March 2013. The contributors dedicate this publication to his memory.

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The Netherlands



Area:	33 718 km ²
Capital:	Amsterdam
System of government:	Constitutional monarchy with a bicameral parliamentary system
Population:	16 902 146 (2015)
Per capita gross domestic product (GDP) (nominal):	EUR 35 900 (2013)
Legislative power:	Exercised jointly by the States General and the government

CHAPTER 1.

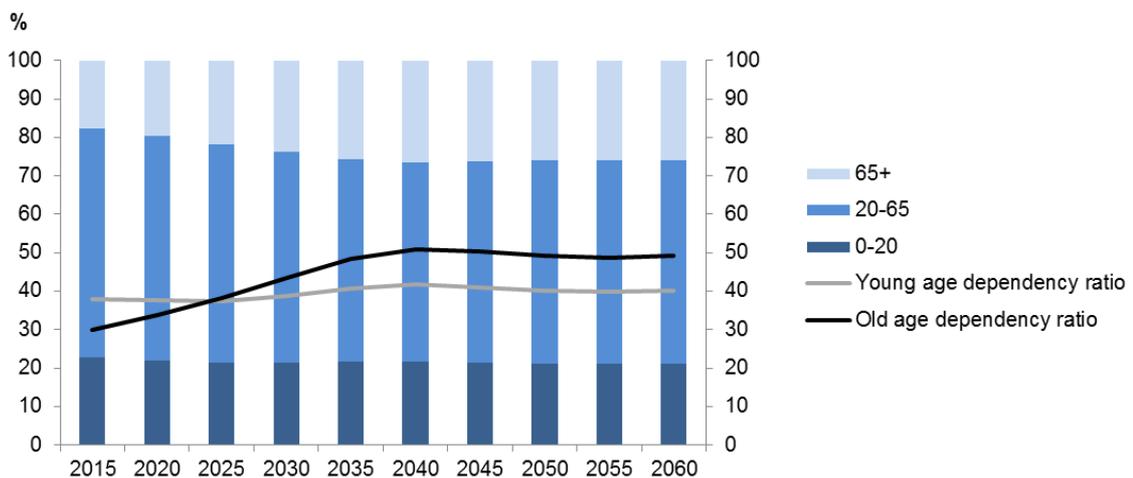
External factors influencing VET

1.1. Demographics

The population of the Netherlands was 16 902 146 in 2015 ⁽¹⁾. With a population density of 500 inhabitants per square kilometre in 2014 (CBS, 2014), 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 coming decades; around 2045, 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 (17.8% in 2015) is expected to increase to 26% in 2060, mostly at the expense of the share of the population aged 20 to 65. Until 2040 the youth dependency ratio and the old-age-dependency ratio will increase, but the increase in the ‘grey burden’ is much more pronounced than the growth of the ‘green burden’. 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 group and dependency ratio



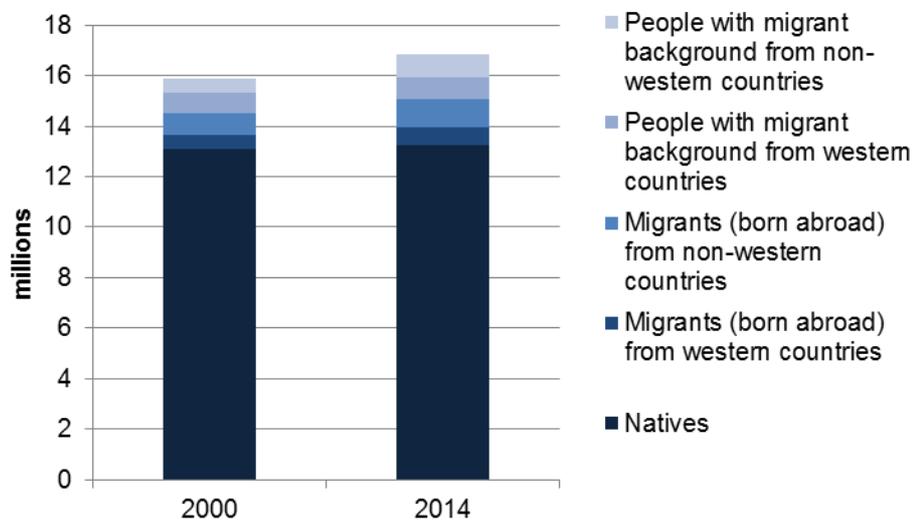
Source: CBS Statline, the electronic databank of Statistics Netherlands [extracted 10.10.2015].

⁽¹⁾ CBS Statline, the electronic databank of Statistics Netherlands, <http://statline.cbs.nl/Statweb/> [extracted 1.1.2015].

In December 2014 ⁽²⁾ the Netherlands had almost 71 000 more inhabitants than in 2013. During the year, almost 183 000 immigrants arrived while 148 000 emigrants left ⁽³⁾. Natural population growth (births minus deaths) contributed 35 000. Both immigration and emigration have been growing since 2010.

Migrants and people with a migrant background comprise 21.4% of the total population (2014). 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. **Population composition**



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

Source: CBS Statline [extracted 10.10.2015].

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 job creation in trade and business services (CBS, 2015a).

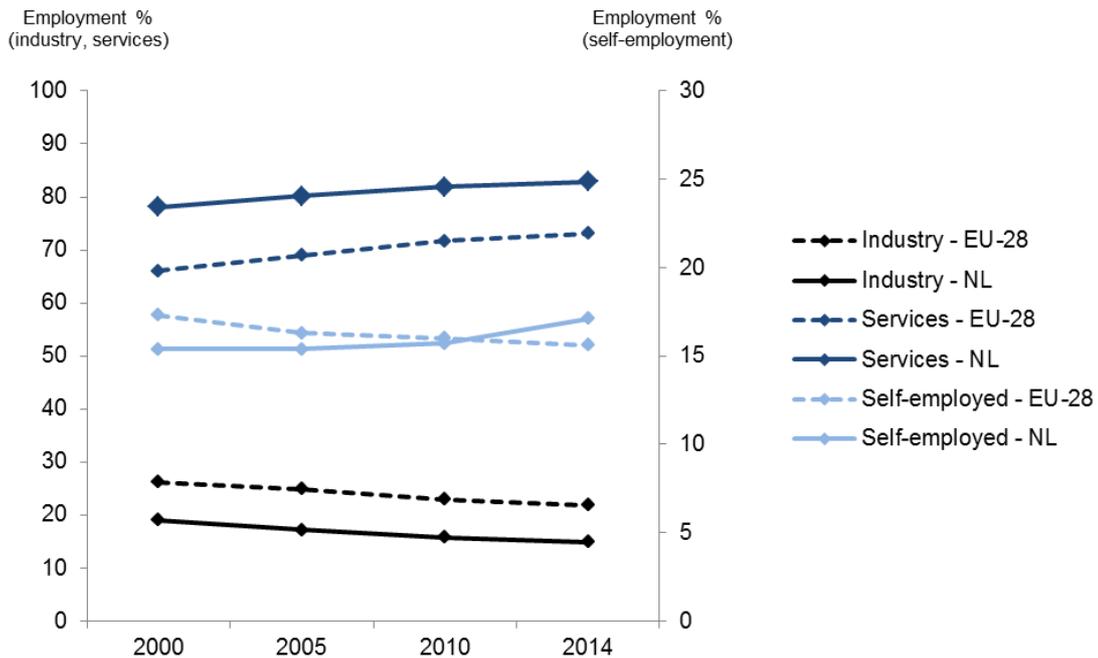
Figure 3 shows employment shifts since 2000 and compares national developments with EU trends. While the employment share of services increases

⁽²⁾ CBS Statline [extracted 10.10.2015].

⁽³⁾ CBS Statline [extracted 10.10.2015].

with that of industry decreasing, both nationally and in the EU, the Netherlands appears to be leading the field: the employment share of services is considerably higher and the employment share of industry is considerably lower. In 2014, services (commercial and non-commercial) made up more than 80% of employment.

Figure 3. **Employment shares, 2000-14**

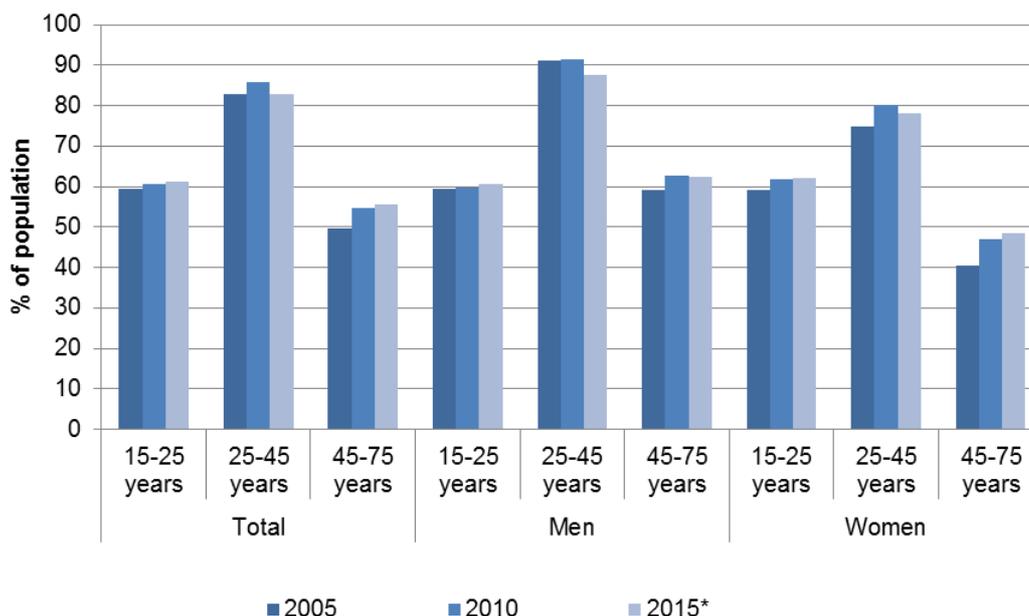


Source: Eurostat, 2015. lfsi_grt_a [extracted 23.9.2015].

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 (Van den Berge and Ter Weel, 2015). Medium-level jobs are in 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, it is relatively small.

In 2015 (second quarter) the employed labour force consisted of 8.3 million people; almost half work part-time (less than 35 hours a week). Figure 4 shows that labour market participation has increased among the older segments of the labour force in the past decade, 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 past 10 years.

Figure 4. Net labour participation, by gender for 15-75 year-olds, 2005-15



(*) Second quarter.

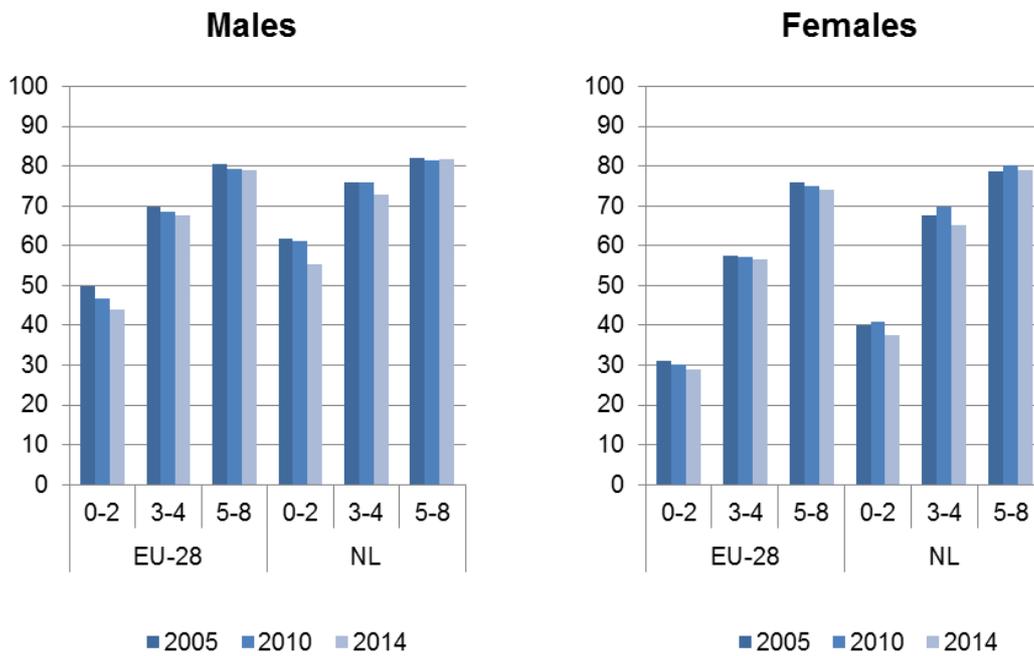
Source: CBS Statline [extracted 10.10.2015].

Education levels and labour market participation are correlated: the higher the education level, the higher the participation (Figure 5). Net labour market participation of people with tertiary education (ISCED 5-8) is around 80%. While this holds 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-skilled (ISCED 3-4) is significantly higher than the EU average ⁽⁴⁾. People with higher education have been less affected by the economic downturn: their net labour participation has remained more or less stable, while it has decreased for those with low or medium-level skills.

Education attainment also has a significant impact on unemployment (Figure 6). While the overall 2014 unemployment rate was 7.5%, it was much higher for those with low skills (12.3% for ISCED 0-2) and much lower for those with tertiary education (4.0% for ISCED 5-8). The unemployment rate for those with low and medium-level skills has also grown faster since 2008 than the corresponding rate for those with a tertiary qualification. Youth (>25) unemployment grew from 5.3% in 2008 to 12.7% in 2014, but is still much below the EU average, which stood at over 22% in 2014.

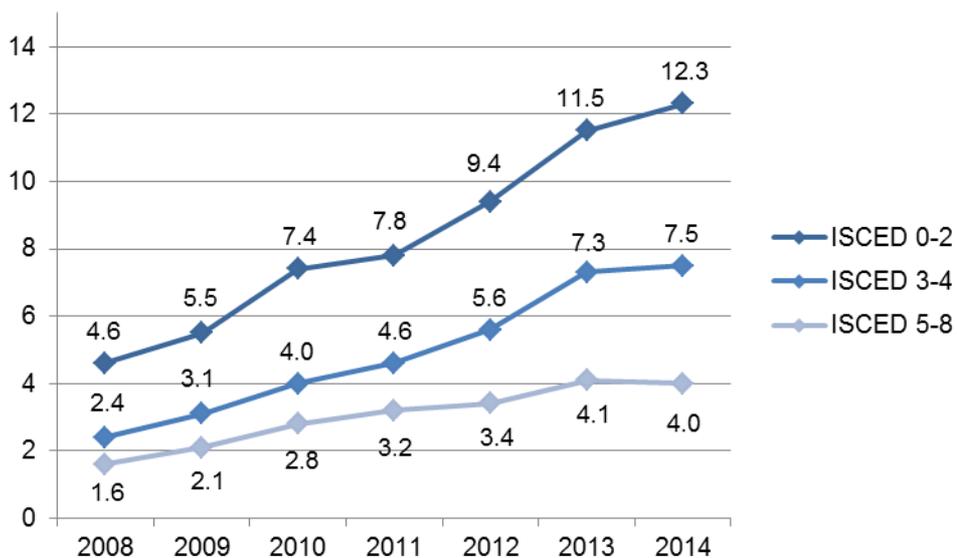
⁽⁴⁾ While net participation in the Netherlands is relatively high, a large share of the employed has a part-time job.

Figure 5. Net labour participation by gender and education attainment level (ISCED)



NB: 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.
 Source: Eurostat, 2015. lfsa_ergaed [extracted 23.9.2015]

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



NB: 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.
 Source: Eurostat, 2015. lfsa_ergaed [extracted 14.10.2015].

Migrants and people with a migrant background from non-western countries are most affected by unemployment: while in 2014 they accounted for less than 11% of the total labour force, their share in the unemployed labour force was close to 25%. In the past decade, there have been no real signals that their disproportionate exposure to unemployment is decreasing.

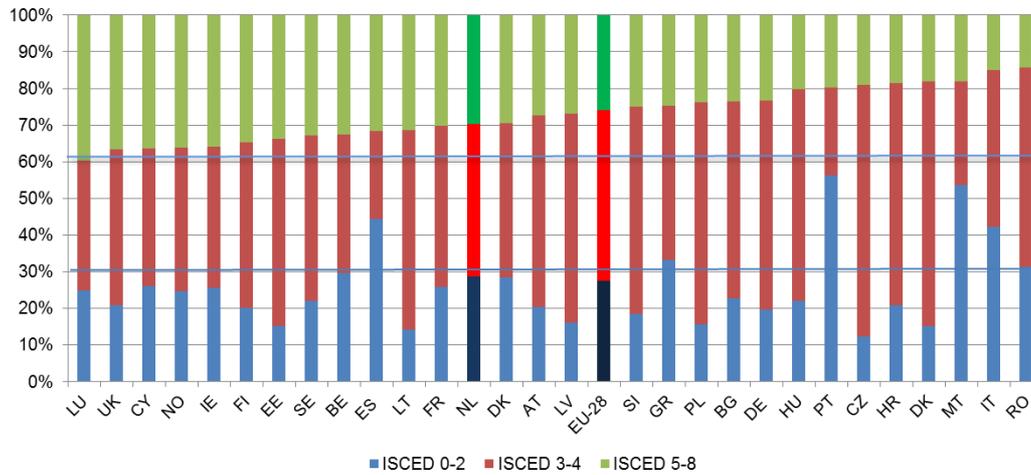
Since 2010, the long-term unemployment rate has almost doubled. According to national data, in 2014 more than a third of the unemployed has been registered for over a year. People with only primary education or uncompleted general secondary education are overrepresented among the registered long-term unemployed.

There are several signs that the Dutch labour market is becoming more flexible. First, self-employment is on the rise, a trend opposite to that for the EU as a whole (Figure 3). Second, with more employees being employed on a temporary basis, the incidence of permanent contracts has decreased in the past years. National panel data suggest that the period of temporary employment before gaining a permanent contract is also increasing: In 2002, 80% of workers had such a contract after working on a temporary contract basis for 6 to 10 years. The corresponding period in 2012 was 10 to 15 years (Vlasblom et al., 2015). Working at home (increasing since 2002 and a reality for one out of five workers in 2012) and being able to choose one's own working hours (40% of workers in 2012) also signal increased labour market flexibility.

1.3. Education attainment

Eurostat data show that 30% of the population aged 15 to 64 in the Netherlands have a higher qualification, while a similar share of the population is low- or unqualified (Figure 7). This means that four out of 10 people are qualified at medium (ISCED 3-4) level. Increases in workforce education attainment 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 2014, tertiary attainment among 30 to 34 year-olds was close to 45%, well above the EU and national targets (both 40%) set for 2020. Female higher education attainment has risen faster than male tertiary attainment.

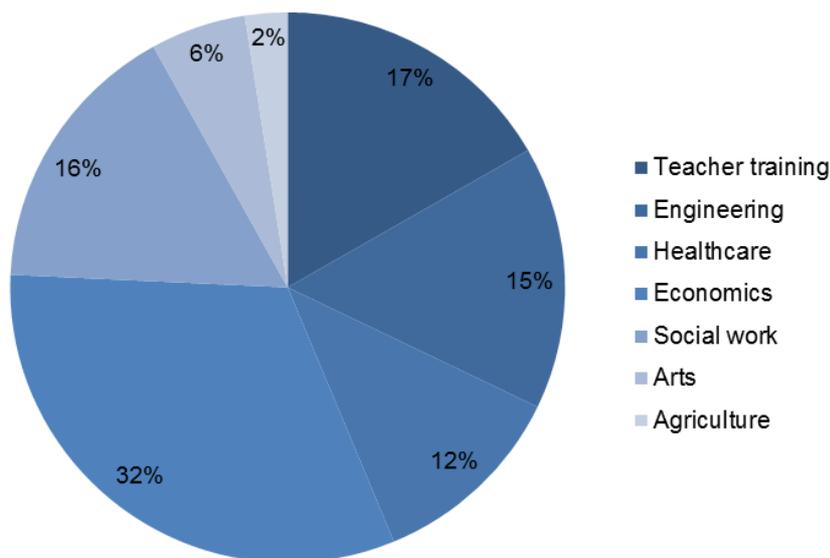
Figure 7. Population (15-64) by highest education level attained in 2014



NB: 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.
 Source: Eurostat, 2015. Table: lfsa_pgaed [extracted 14.10.2015].

Higher professional education (HBO) is an important component of Dutch higher education. In 2014, almost half of all higher education graduates attained a tertiary VET qualification, in most cases a bachelor degree. Figure 8 shows that most higher VET graduates studied economics, teacher training, social work or engineering.

Figure 8. Shares of higher VET graduates by area of study, 2014

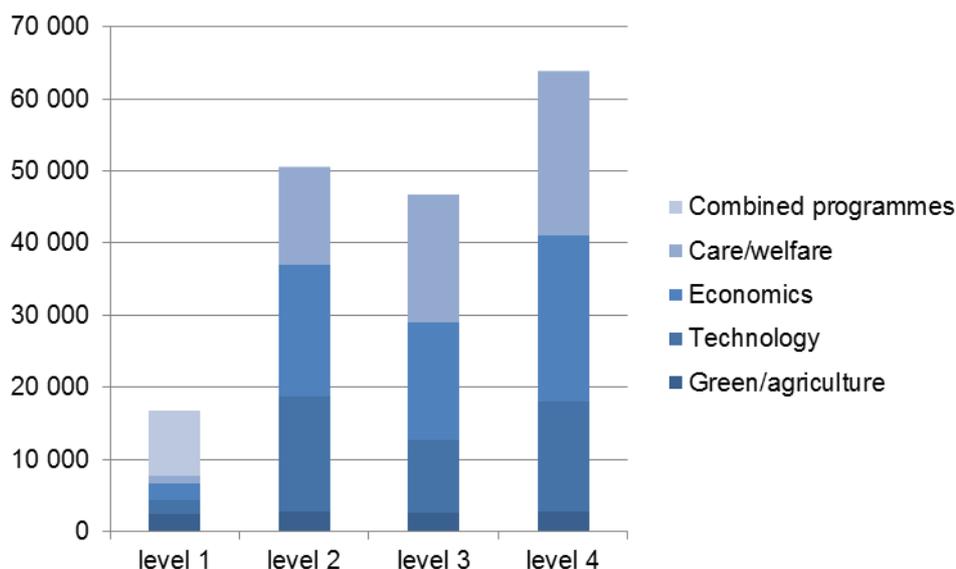


NB: Shares include bachelor and master degrees.
 Source: Onderwijs in Cijfers, statistical information on education in the Netherlands, www.onderwijsincijfers.nl [extracted 15.10.2015].

Only one in eight higher VET bachelor graduates completes a part-time programme; the share of graduates from such programmes has decreased in past years. Part-time programmes are much more popular among vocational master graduates; two thirds take part in a part-time programme and they often combine study with work.

At upper secondary level, in 2013/14, most VET graduates completed a level 4 programme leading to EQF 4 (Figure 9). At this level, economics and care/welfare programmes are the most popular choices ⁽⁵⁾. Most graduates from upper secondary VET programmes in technology attain a qualification at EQF level 2 or 3. At level 1, most graduates were in combined (multisectoral) programmes. At all levels, a minority of upper secondary VET graduates completed a green/agriculture programme.

Figure 9. **Upper secondary VET graduates by level and area of study, 2013/14**



NB: Provisional data.

Source: CBS Statline, [extracted 10.10.2015].

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. Since 2000, more than 15% of the adult (25 to 64)

⁽⁵⁾ Economics in upper secondary VET includes programmes in administration, logistics, retail, secretarial support, tourism, ICT, facility management and public order and security.

population has been involved in education or training (participation was 17.8% in 2014). This means that lifelong learning is well above the EU-28 average (10.7% in 2014) and that the country long ago met the education and training 2020 (ET 2020) 15% benchmark.

National data and reports provide detailed insights into the relevance and impacts of training and lifelong learning (Vlasblom et al., 2015; Borghans et al., 2014). They confirm high participation and suggest that lifelong learning is quite effective: in 2012 only 5% of the employed experienced problems in work due to lacking knowledge or competences (Cedefop, 2015a) ⁽⁶⁾. Spillover effects from participation in training appear significant. Though mostly targeted towards employer or sectoral skill needs, 44% of the trained employed still expect knowledge developed to be useful in another sector. And almost half have shared what they learned with colleagues.

This does not mean that there are no bottlenecks: training participation is significantly below average among workers over 45, the low-skilled, workers with a temporary contract, and those not having participated in training in the past. The gap in training participation and training intensity (number of hours) between highly educated people and those with low skills has widened between 2004 and 2013.

Workers participating in training also learn more informally on the job. National research shows that participation in education or training is only a small part of skill development. Employees spend 35% of their time on tasks that they learn from: this proportion has increased since 2004, particularly among people with upper secondary VET background. People learn most from challenging or new tasks and cooperation with more experienced colleagues.

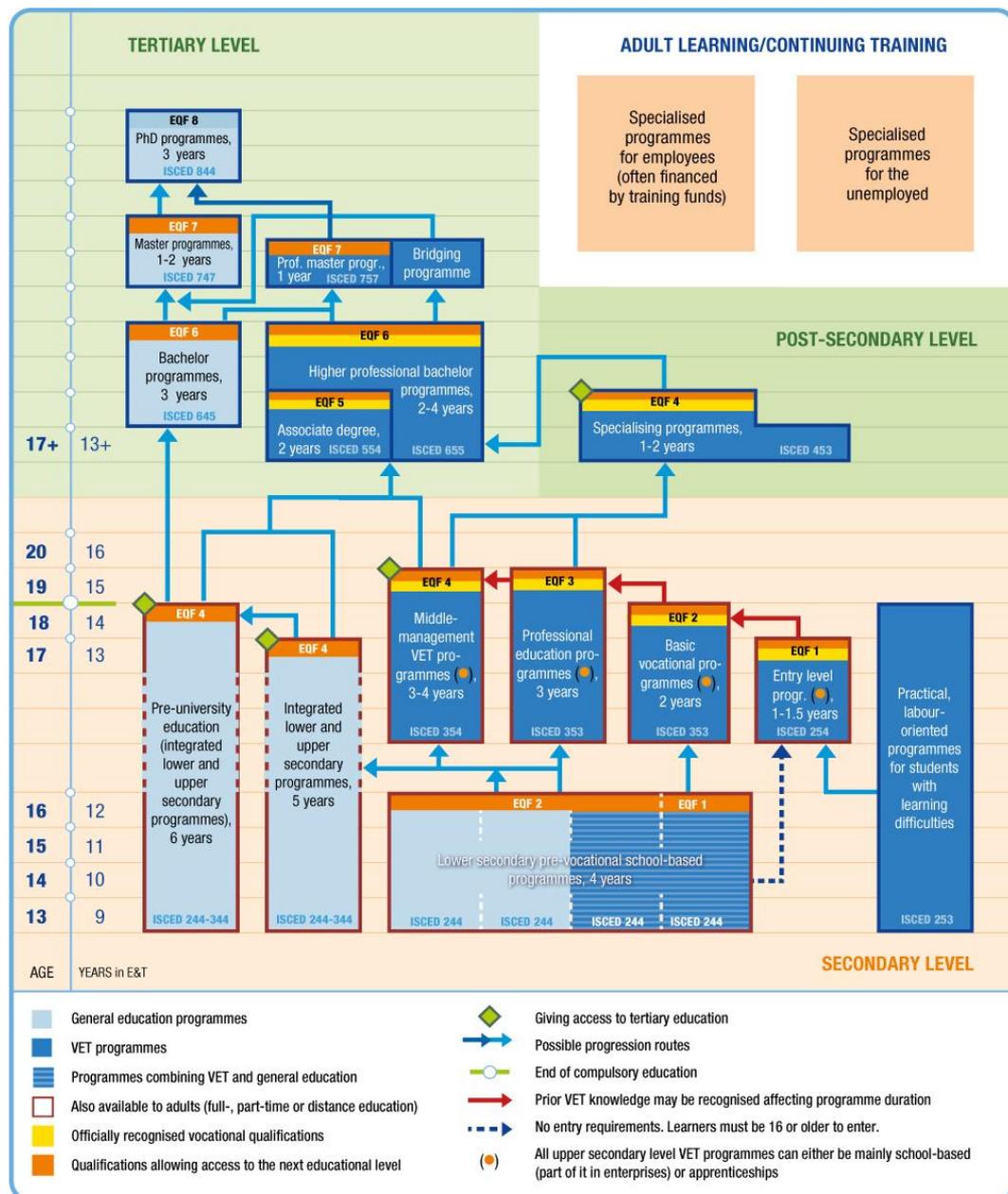
Although challenges remain, trends signal a transition to a more inclusive and stronger knowledge economy. While still below average, training participation among ageing workers, and their skill development, increased between 2007 and 2013. The negative relationship between age and employability has become less strong in recent years. And while participation in formal training is lower among people with a flexible contract, they learn as much from work informally as employees with a permanent contract. The self-employed compensate for lower access to training by investing more time in self-study to acquire skills needed.

⁽⁶⁾ Cedefop's 2014 European skills and jobs (ESJ) survey found that 6% of adult employees in the Netherlands are underskilled. Analysis for all EU-28 Member States showed that the chances of people starting a new job being underskilled are comparatively low in the Netherlands (Cedefop, 2015a).

CHAPTER 2. Provision of VET

2.1. VET in Dutch education and training

Figure 10. VET in Dutch education and training in 2015



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Netherlands.

One of the principles underlying education 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 Ministry of Education, Culture and Science ⁽⁷⁾ and the Ministry of Economic Affairs ⁽⁸⁾ set 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.

Education is compulsory for pupils from 5 to 16. Those aged 16 and 17 (on 1 August 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 and training system consists of the following parts:

- (a) primary education (PO, *primair onderwijs*) at ISCED 1 is for pupils aged 4 to 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:
 - (i) pre-university education (integrated lower and upper secondary programmes) (VWO, *voorbereidend wetenschappelijk onderwijs*) lasting six years and leading to EQF4 (ISCED 244 after three years; ISCED 344 after six). This prepares learners for higher education at research universities and higher professional education at universities of applied sciences. For ages 12 to 18, also accessible to adults;
 - (ii) integrated lower and upper secondary general education programmes (HAVO, *hoger algemeen voortgezet onderwijs*) lasting five years and

⁽⁷⁾ Subsequently in this publication referred to as Ministry of Education.

⁽⁸⁾ For green/agricultural education only.

- leading to EQF4 (ISCED 244 after three years; ISCED 344 after five); these prepare for further study in higher professional education. On completion, transfer to the fifth year of pre-university education is possible. For ages 12 to 17, also accessible to adults;
- (iii) the two general programmes (the theoretical and mixed pathways) within pre-vocational education (VMBO, *voorbereidend middelbaar beroepsonderwijs – theoretische en gemengde leerweg*) leading to EQF 2 (ISCED 244) last for four years and prepare for further study in upper secondary vocational education (and partly in upper secondary general education). For ages 12 to 16, 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). These last for four years and prepare for further study in upper secondary vocational education. For ages 12 to 16. 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; for ages 12 to 18/19, also accessible to adults);
 - (e) upper secondary vocational education programmes (ISCED 254, 353-354) (MBO, *middelbaar beroepsonderwijs*) for learners aged 16 and above, consist of two to four 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) higher (or tertiary) education has a VET and a general (academic) strand:
 - (i) higher professional education (HBO, *hoger beroepsonderwijs*) is open to learners over 17/18 and mainly offers bachelor degree programmes (ISCED 655/EQF 6) with a duration of four years. Since 2011 there are also two-year associate degree (AD) programmes (ISCED 554/EQF 5) and 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;
 - (ii) scientific/university education (WO, *wetenschappelijk onderwijs*); offers bachelor programmes lasting three to four years (ISCED 645/EQF 6) and one- to two-year master 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);

- (g) continuing vocational education and training (CVET) comprises a range of vocational or more general courses for jobseekers, the unemployed, employees, the self-employed, and employers. Upper secondary initial VET (IVET) programmes can also function as CVET.

The Dutch education system also caters to the needs of adults without a (suitable) qualification. There are two types of general adult education, open to learners age 18 or over (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 Open University offers academic adult education programmes; it provides modular programmes and has open access.

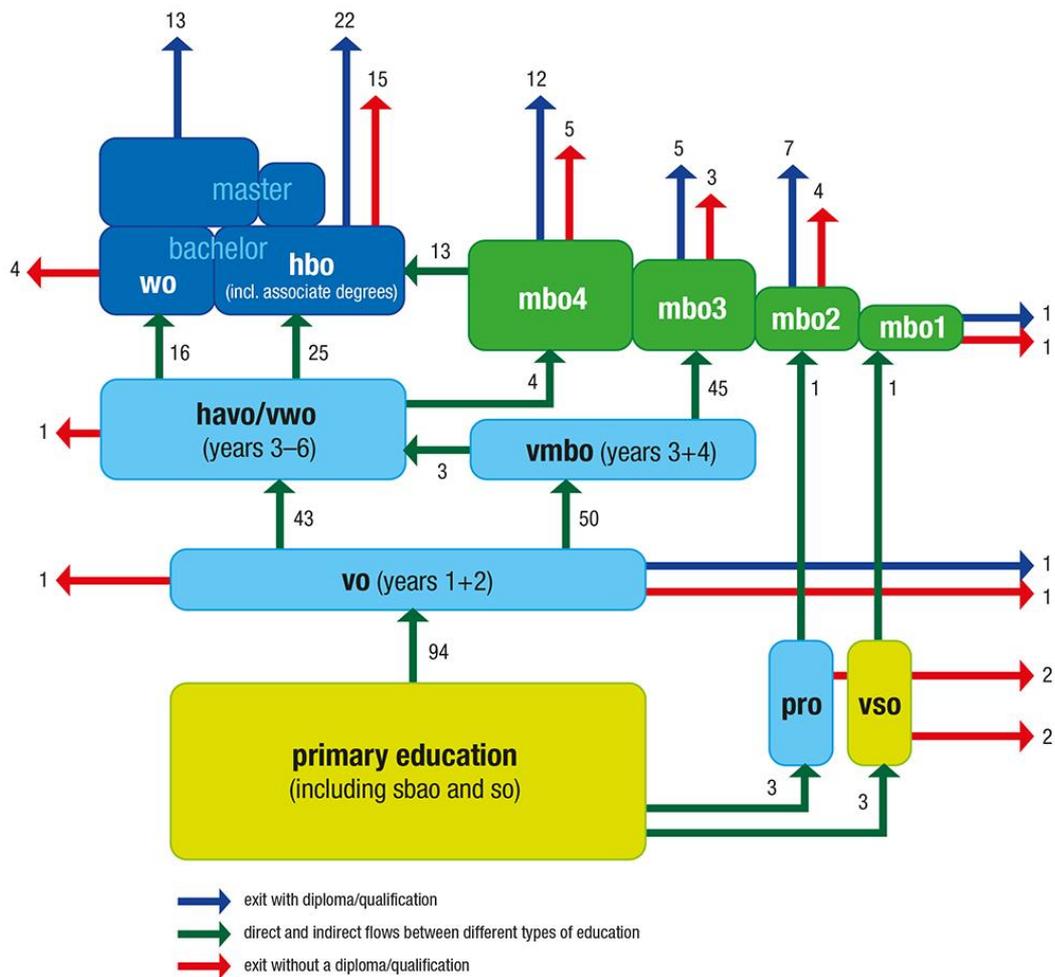
The education system has two tracks (Figure 10). After the first two years of secondary education (*voortgezet onderwijs*), young learners can follow:

- (a) a general track, which starts in general secondary education (HAVO, VWO) and has direct transfer possibilities to higher education (HBO, WO);
- (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). About 50% of level 4 graduates continue in higher professional education without interrupting their studies.

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 from a cohort of pupils leaving primary education in 2014 (100%); estimates approximate 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.

In the third year of secondary education, 45% of learners are in general programmes (HAVO/VWO), while 53% follow a lower secondary pre-vocational programme (VMBO) (2014/2015). Half of the VMBO students are in vocationally oriented programmes; the others follow the general programmes offered by VMBO schools; this implies that most learners at age 15 (72%) are in general programmes. The share of learners in VET has decreased in the past decade (from 34% in 2004/5 to 28% in 2014/15).

Figure 11. Learner flows between different parts of Dutch education and training and outflows in 2015, % based on a cohort of pupils leaving primary education (100%)



NB: 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: pre-vocational secondary education.

Source: Onderwijs in Cijfers [accessed 28.10.2015].

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 19th 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 (1921-68). 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 apprenticeship. 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 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.

Education 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 emerged in the 1970s and 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 (apprenticeship) 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. Using these, 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.

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 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*);
- (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 ⁽⁹⁾ 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 identification and registration of early leavers and 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 2015 a new student finance system has applied to students in higher education. The most important change is the abolition of the basic grant. The new system comprises three financing components: a loan, free/discounted public transportation cards and a supplementary grant (depending on parental income). The repayment period for loans will be

⁽⁹⁾ For students under 18 the Compulsory Schooling Act (*Leerplichtwet*, 1969) applies.

- increased from 15 to 35 years. Learners do not have to pay back the supplementary grant and public transportation fees when they graduate within 10 years. For students in upper secondary VET (MBO) the student finance system will not change: the basic grant will remain. Free/discounted public transportation will also become available for MBO students under 18 from 2017 onwards;
- (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 periodic 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.

Internet links to the core VET-related legislation are provided at the end of this publication.

2.2.3. Institutional VET framework

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

The cooperation organisation for vocational education, training and the labour market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven, SBB) has a key role in the institutional VET framework. SBB optimises the links between VET and the labour market to deliver well-qualified professionals. It 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 the social partners work together on VET qualifications, examinations, work placements, the efficiency of programmes and more. SBB also works on themes with a cross-regional and cross-sector focus.

Table 1. Organisation levels and functions/roles in initial VET

Function	VMBO (ISCED-2)	MBO (ISCED-3/4)	HBO (ISCED-5)
Legislation/ financing	Ministry of Education	Ministry of Education/Ministry of Economic Affairs	Ministry of Education/ Ministry of Economic Affairs
Qualification development	Design: national level Validity: national	Design: sectoral level by sector chambers (social partners and VET) within the cooperation organisation for vocational education, training and the labour market (SBB). Validity: national	Design: school level Validity: national
Curriculum 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***	VO Council	MBO Council	Association of Universities of Applied Sciences

(*) 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 Ministry of Education to offer regulated VET courses at upper secondary and tertiary levels.

Source: Centre for expertise in vocational education and training in the Netherlands (ECBO).

SBB was first set up in 2012 on request of the Ministry of Education 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 developing and maintaining 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 was 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

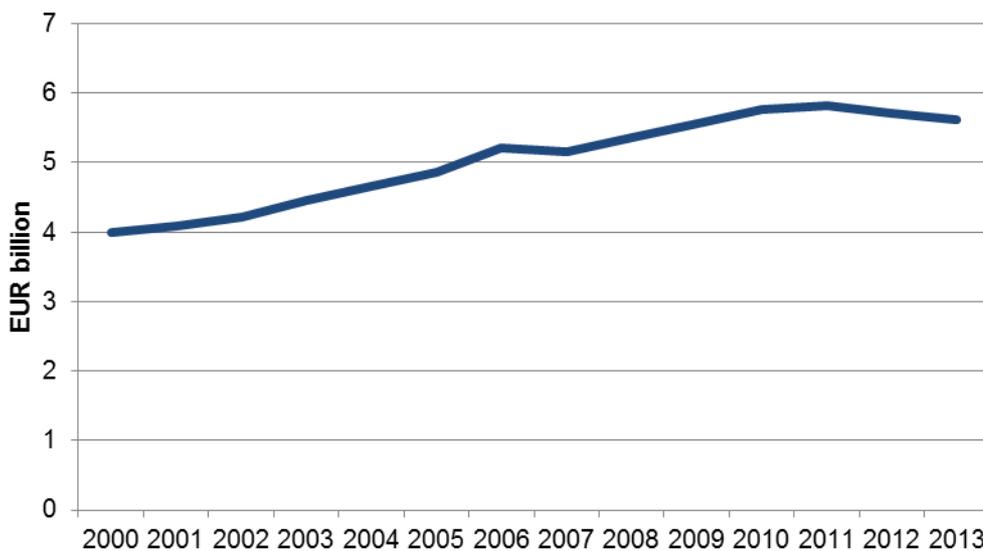
representatives now takes place within eight 'sector chambers' under SBB. VET and social partners are equally represented in each sector chamber.

2.2.4. Funding

Total expenditure on education by the government, households, enterprises and non-profit organisations made up 6.5% of GDP in 2013. Government expenditure on education has increased compared to a year earlier and the share of education expenditure in the total government budget in 2013 was 0.4 percentage points higher than in 2000 (CBS, 2015b).

Government expenditure is 68% of all spending on upper secondary VET: companies and households pay the rest. Total expenditures on upper secondary VET have steadily increased since 2000. In real terms, expenditures in 2013 were EUR 1.6 billion higher than in 2000 (Figure 12).

Figure 12. Total expenditure on upper secondary VET in 2000 prices, 2000-13



NB: 2013 data are provisional.

Source: Onderwijs in Cijfers [extracted 1.12.2015].

The funding arrangements for VET are as follows:

- (a) in pre-vocational education and training (VMBO) the funding principle is block grant funding, which 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 at 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 partly on number of students per course/learning path and partly 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. This is to encourage schools to place students directly in the right track and prevent learners following different tracks consecutively. A recently introduced type of performance-based funding is quality agreements rewarding individual schools for good performance. MBO colleges also have other funding sources, such as contracted activities for companies and individuals (and for municipalities in civic integration training or adult education) and course fees paid by students. There is a subsidy scheme for companies to cover costs of offering learning places in dual tracks (BBL);
- (c) in higher VET (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 the 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 VET.

The Ministry of Education 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 (such as to reduce early leaving from education and training).

2.2.5. Governance

The Adult and Vocational Education Act (*Wet Educatie en Beroepsonderwijs*, WEB) 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 internal, vertical and horizontal dimensions. 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 local stakeholders. Governance in VET is regulated by law (WEB) and in a governance code (MBO Raad, 2014).

In 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 Work Councils Act (*WOR, Wet op Ondernemingsraden*).

In vertical monitoring and control, the education inspectorate (*Inspectie van het Onderwijs*) is in charge of external supervision, checking whether statutory provisions are met and quality assurance is in place. 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.

For horizontal dialogue, the executive board, using its chosen tools, is expected to develop and sustain good relations with important local/regional stakeholders: employers, local government and other regional organisations (MBO Raad, 2014).

2.2.6. Teachers and trainers

More than 60% of upper secondary VET teachers are educated at higher professional education (bachelor) level while 25% are university-trained, according to a 2015 survey. More than half the teachers in higher professional education are university graduates and about one in 10 has completed a PhD. In the past few years the share of teachers with a higher qualification at professional or university master level has slowly increased (Regioplan, 2015).

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 education staff in primary, general secondary, vocational secondary and general adult education. It requires schools to maintain a competence document for all teachers: this details teachers' competences and activities aimed at maintaining and improving them (OCW, 2011b).

Professionalisation of teachers is high on the policy agenda and substantial resources have been invested in raising standards. The policy measures in the action plan 'Teachers 2020: a strong profession' (*Actieplan Leraar 2020 – een krachtig beroep!*) (OCW, 2011a) respond to several challenges: an expected shortage of 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, 2011a). The action plan proposed the following actions:

- (a) strengthening the quality of current and future teachers by introducing a professional register. This will encourage teachers to maintain and improve their professional competences (OCW, 2011b). By 2018, registration will be mandatory for all education staff. (OCW, 2011a);
- (b) encouraging 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 appreciation and reward for excellent teaching. Schools will receive additional funding for promoting teachers to higher positions;
- (c) improving the quality of teacher training, by educating new teachers to a higher level and by stricter standards.

An agreement between social partners in upper secondary education was reached in 2009 on the introduction of a professional statute for teachers, with teachers and their team having a say on pedagogical and quality issues in the institute. 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.

The 'Teacher agenda 2013-20' (OCW, 2013) follows up on the action plan with concrete proposals developed after intensive consultation involving students, teachers, school management and teacher trainers. The proposals cover a range of issues including teacher training, pathways to becoming a teacher, professional development and HR policies in schools.

Trainers responsible for work-based learning in companies of upper secondary VET students (both in apprenticeship and the school-based track) must be qualified at least to the same level for which he/she is supervising work-based learning. Trainers must also 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	0.5-1	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

(*) MBO level: upper secondary level.

(**) ECTS: European credit transfer system (study points).

Source: Centre for expertise in vocational education and training in the Netherlands (ECBO).

2.3.1. VET programmes in lower secondary education

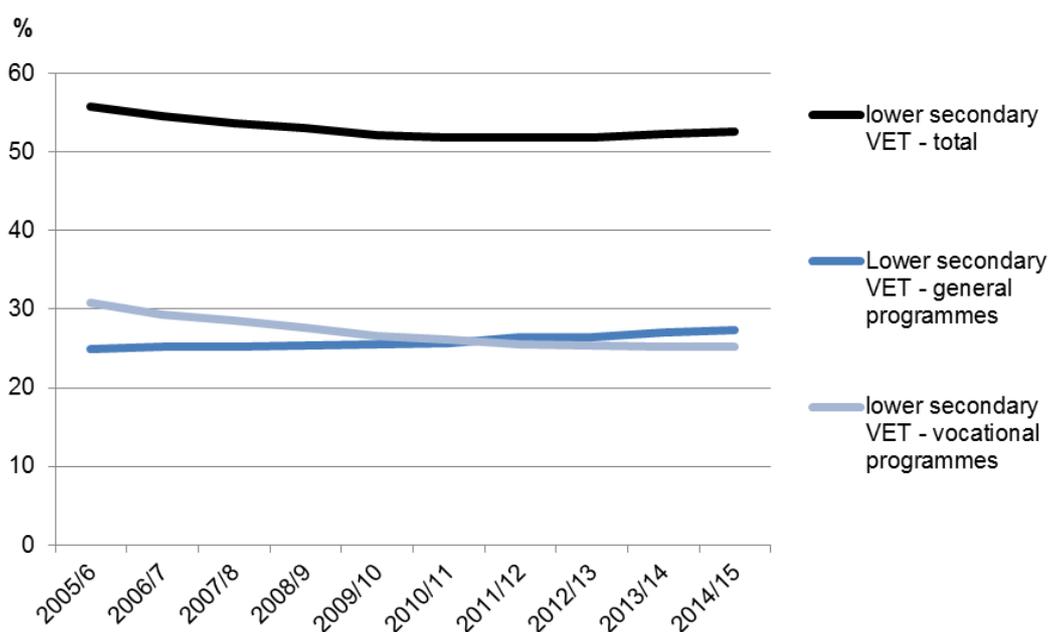
VET at lower secondary level is part of secondary education. Pre-vocational secondary education (VMBO, *voorbereidend middelbaar beroepsonderwijs*; EQF 1 or 2) lasts four years. Although part of VET, VMBO schools offer both vocational and general programmes. The first two years consist of general subjects. 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 the 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 the 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 predominantly 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 predominantly 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 past decade. While vocational pathways were most popular in the past, in 2014/15, most learners in the third year of secondary education were in one of the general pathways (Figure 13).

Figure 13. 15-year-olds in VMBO by programme orientation, 2005/6 to 2014/15



Source: Centre for expertise in vocational education and training in the Netherlands (ECBO), from register data.

Pupils in VMBO's pre-vocational-oriented pathways choose a programme in agriculture, technology, economy and business, health and welfare, or opt for an inter-sectoral programme. These vocational subjects are offered within schools. Internships are not obligatory but many schools offer them. To obtain the qualification, learners have to complete exams in Dutch and English as well as in

two sector-specific subjects (limited choice) and two optional subjects. The combination of national and school-based exams determines final grades. The national diploma obtained has no labour market currency as pupils are expected to continue in upper secondary VET (MBO) or general education (HAVO). Support, such as tutoring or homework support is available for VMBO pupils who need it (LWOO, *leerweg ondersteunend onderwijs*).

In 2016 new programmes will be introduced in VMBO. They will be new in terms of content (in sync with modern occupational practice and curriculum developments in MBO) and in terms of structure: over 30 programmes will be replaced by flexible programmes with fixed and optional modules.

For learners not capable of entering pre-vocational education, labour-market-oriented practical training (PRO, *praktijkonderwijs*, EQF 1) is available. About 40% of its participants transfer to upper secondary VET (MBO 1, entry level education; Section 2.3.2) to obtain an upper secondary VET diploma, but the share of learners managing this transition is decreasing. PRO pupils and those without formal diplomas are more or less unconditionally allowed to enter entry level (MBO 1) upper secondary VET programmes.

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

2.3.2. Upper and post-secondary (non-tertiary) VET programmes

Upper secondary VET programmes cater to the need of youngsters and adults; participant age 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 an emancipatory role.

Subsidised VET programmes at upper secondary level are offered by 43 regional, multisectoral VET colleges (ROC, *regionale opleidingscentra*), 12 specialist trade colleges (*vakscholen*: specific to a branch of industry), 11 agricultural training centres (AOC, *agrarische opleidingscentra*) and one school for people with disabilities in hearing, language and communication. AOCs are financed separately by the Ministry of Economics. Private, non-subsidised providers can offer VET programmes as long as such programmes are accredited by the ministry, making upper secondary VET an open system. Subsidised education institutions can also offer commercial training, paid for by employers and/or employees.

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

(a) learning pathway: school-based or apprenticeship (dual pathway);

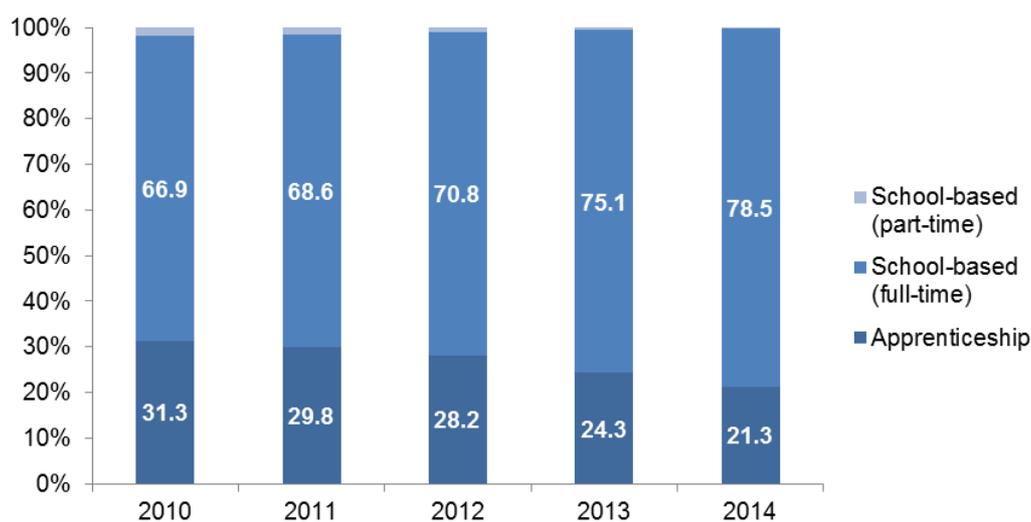
- (b) programme level: entry level, basic vocational education, professional education and middle management education;
- (c) area of study ('sector'): green/agriculture, technology, economics and care/welfare.

2.3.2.1. *Learning pathway*

In the school-based pathway (BOL, *beroepsopleidende leerweg*) practical periods in companies make up at least 20% of study time up to a maximum of 59%. In the dual or apprenticeship pathway (BBL, *beroepsbegeleidende leerweg*), training takes place in companies at least 60% of study time. School-based and dual pathways in upper secondary VET lead to the same diplomas. Participation in each responds to the economic cycle: during economic boom, the number of students in the dual pathway increases, while it decreases in the school-based pathway; the opposite happens during economic recession. Participants in the school-based pathway are mainly youngsters, while almost 50% of those following a dual pathway are 24 or over. A contract (an employment contract in most cases) with a firm is mandatory to enrol in the dual/apprenticeship track. There is no such obligation for the school-based track.

Most learners participate in the school-based pathway, which also appears to be gaining popularity (Figure 14). The share of learners in apprenticeship is decreasing.

Figure 14. **Participation in upper secondary VET by learning pathway, 2010-14**



Source: Onderwijs in Cijfers [extracted 28.10.2015].

VET legislation mandates accreditation of companies offering work placements to VET students. Accreditation 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 ⁽¹⁰⁾.

2.3.2.2. Programme level

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

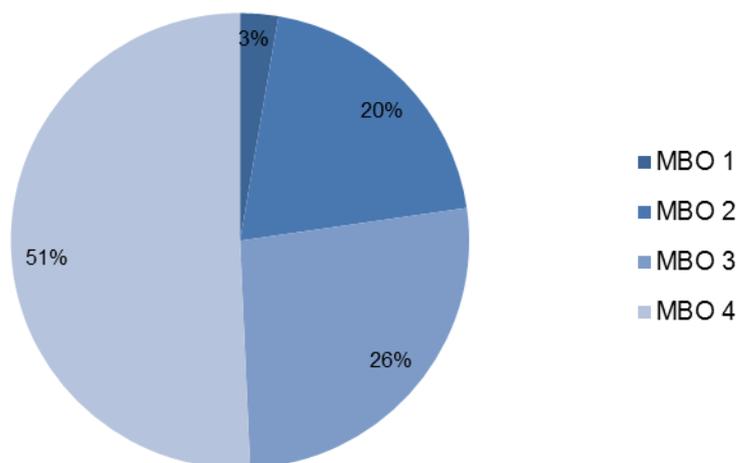
- (a) entry level (*entreeopleiding*) programmes last maximum one year (ISCED 254, EQF 1). In 2014 they replaced the MBO 1 'assistant training' (*assistentenopleiding*) and broader work-oriented programmes for vulnerable groups (assistant with a job market qualification, *arbeidsmarktgekwalificeerde assistent*). With introduction of 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 enter programmes at the next level (MBO 2), as well as guiding youngsters not capable of making this step to work. Within four months of starting an entry course, youngsters over 17 are told whether or not 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- to 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 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;

⁽¹⁰⁾ Names and addresses of the accredited companies are available on a national website: <http://www.stagemarkt.nl/>

- (c) MBO 3 ‘professional VET’ (*vakopleiding*) programmes last two to three years. They prepare people to carry out tasks independently (ISCED 353, EQF 3). Access requirements are a pre-vocational secondary education certificate/diploma (excluding basic level pre-vocational education), or 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 (middle management and specialist training) is possible (see below);
- (d) MBO 4 ‘middle-management’ (*middenkaderopleiding*) programmes mainly last three years (some programmes are for four years). They prepare people to carry out tasks independently and with responsibility (ISCED 354, EQF 4). Access requirements are the same as those for MBO 3 programmes. Progression to 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*);
- (e) MBO 4 ‘specialist training’ (*specialistenopleiding*) programmes at post-secondary (non-tertiary) level last one to two years (ISCED 453; EQF 4). Access requirements are a completed MBO 3 or 4 programme. Progression to higher professional education, especially dual or part-time pathways, is possible.

Of the 453 800 learners in upper secondary VET programmes in 2014, most were in MBO 4 programmes (Figure 15). Most were in a school-based track. Apprentices are predominantly found at levels 2 and 3. Only a few upper secondary VET learners were in an entry-level programme.

Figure 15. Participation in upper secondary VET by level, 2014

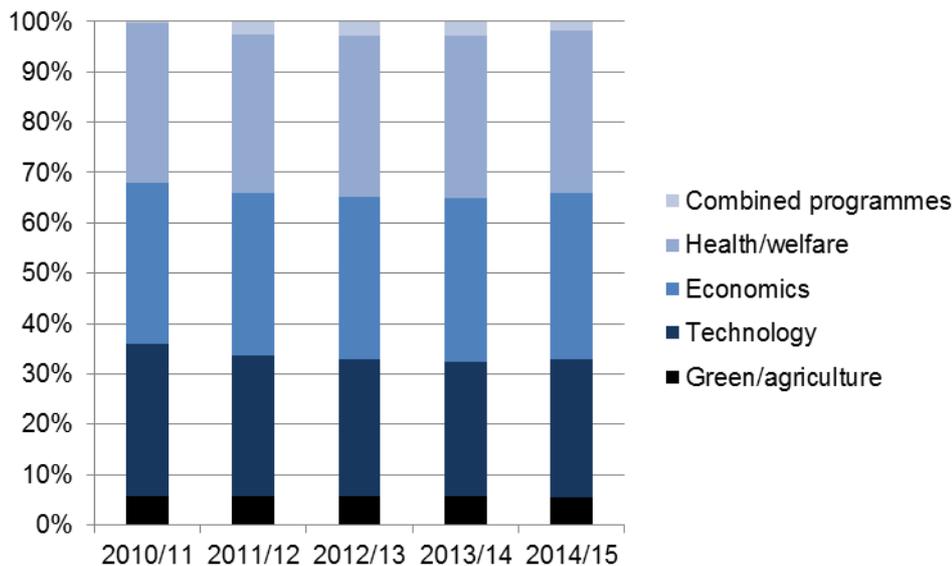


Source: Onderwijs in Cijfers [extracted 11.11.2015].

2.3.2.3. 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 (Figure 16).

Figure 16. Participation in upper secondary VET by area of study, 2010-15



Source: ECBO on the basis of register data.

2.3.3. VET at tertiary level (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 institutions offer study programmes leading to bachelor degrees (ISCED 655, EQF 6) as their core business. Higher professional education providers also offer master 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

established in the regular education system in September 2013. AD programmes (120 ECTS, normal duration two years) are part of bachelor programmes (240 ECTS, normal duration four years), so that further progression in higher education for AD graduates is possible, although it has been decided that the automatic right to continue in a bachelor programme will be replaced by a system based on admission criteria (OCW, 2013a).

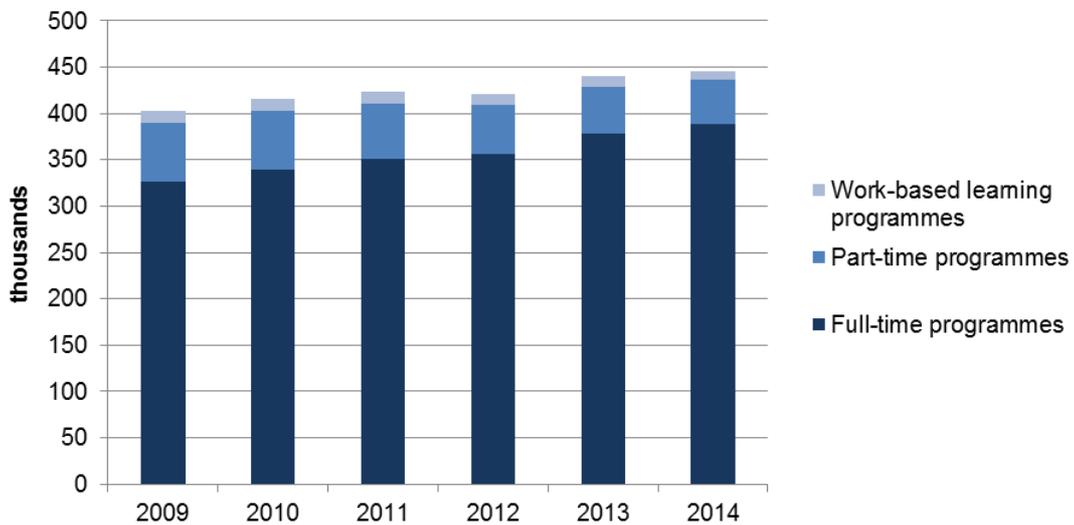
AD programmes are of particular interest to those with a VET qualification at upper secondary level. In 2013 the total number of students in an AD programme was 5 475 (Onderwijs in Cijfers, 2015). Their share in the total number of learners in higher professional education is small (1.2%) but growing. Given that AD degrees cater well to the needs of upper secondary VET graduates and the employed, it is expected that AD learners could form up to 15% of inflow to higher VET in 2020 (Onderwijs in Cijfers, 2015).

Enrolment in professional higher education (HBO) is steadily increasing (Figure 17), reaching 445 000 in 2014. Most of the increase is due to growing participation in full-time programmes. Enrolment in part-time and work-based (dual) programmes is falling. It is expected that both size and diversity of the student population will continue to increase in the next few years. New legislation has been introduced in 2013 (*Wet Kwaliteit in verscheidenheid*, Quality Through Diversity Act), which urges higher VET providers to differentiate in terms of programme offer (AD programmes, broad 'comprehensive' bachelor programmes and dual learning pathways) and orientation (stronger ties with research-based universities, cooperation with upper secondary VET and stronger focus on applied research). Intake procedures and guidance to support students in their education choice are being strengthened.

Higher VET programmes are open to learners aged 17 and above. Admission requires an upper secondary general education (HAVO or VWO) or VET qualification (MBO 4). Half of MBO 4 graduates continue to higher VET.

Some bachelor programmes apply additional admission criteria relating to the subjects learners studied previously. 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 VET providers the possibility to apply stricter admission criteria for MBO 4 students for specific programmes.

Entrance to a university bachelor programme is possible after completing the first year of a professional bachelor programme. 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.

Figure 17. **Students in higher professional education, 2009-14**

Source: Onderwijs in Cijfers [extracted 11.11.2015].

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 past 10 years, in dual learning pathways. 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.

Responsibility for curriculum development and assessment is in the hands of the higher VET providers. 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 VET diplomas 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. After peaking at 75% in 2003, success rates have been gradually declining; the average in 2014 was 64%.

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 measures encouraged training and procedures for validation of prior learning. This tax facility was then replaced by a subsidy system.

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

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

The unemployed 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, individuals have a say in choosing the most appropriate routes back to work, particularly through training components such as job application courses/programmes paid by these agencies. The unemployed aged 50 and over can apply for training vouchers which must be used for training to improve the chances of finding work. Many training providers are active in the non-formal CVET (off-the-job) market for employees. Most are private commercial training providers, covering more than three quarters of the training market, plus a smaller share publicly funded VET providers that offer training paid for by employers or employees. There is little reliable statistical information available about informal on-the-job learning (workplace learning).

As most CVET is provided by commercial training companies and financed by employers and/or employees, it is not easy to obtain a comprehensive overview of the training market. The most recent evidence covering 2014 is based on a survey among private training providers (Rosenboom and Tieben, 2015) carried out on behalf of their sector association (NRTO, *Nederlandse raad voor training en opleiding*).

Calculations based on the survey suggest that private CVET providers had a turnover of EUR 3.4 billion, 6% more than in 2010. In 2014 there were fewer

providers (16 000) than in 2010 (19 000), meaning that average turnover has increased. The survey shows that larger training providers in particular increased their turnover. The economic crisis has driven less well-performing providers to exit the market.

Half of the CVET courses offered by private training providers last five days or less and the market share of short courses is increasing. The share of longer courses offered by private providers decreased between 2010 and 2014 (from 17.3% to 12.9%). About 30% of the courses lead to a sectoral or professional qualification and 15% to an upper secondary (MBO) or tertiary (HBO) VET diploma, but most courses on offer do not lead to an official qualification. Most courses are delivered in a classroom setting, but the importance of blended learning approaches is increasing.

Among the courses leading to a VET qualification, programmes in economics, commercial, management and administration and those in health and care are the most popular. Among courses on offer not leading to an official qualification, those focusing on communication/personal effectiveness, management, staff training and trade-specific technical skills are the most popular. Private CVET providers expect an increase in the training offer for the health and care sector and for the energy/sustainable development sectors.

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 125 of these funds (Mares, 2014), which are foundations governed by social partners; most are financed by a payroll levy. Employers pay this levy to the training fund for their sector and can benefit from reimbursement of the costs of training their employees. Not all funds operate in the same way. Some limit their activities to distribution of financial resources while others pursue active labour market policies. They use a variety of measures to cover the costs of training, training leave or examinations to stimulate participation in education and training (Van der Meijden and Van der Meer, 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 development of effective human resource management policies at sector level. Other activities focus on job-to-job mobility and improving working conditions and safety at work.

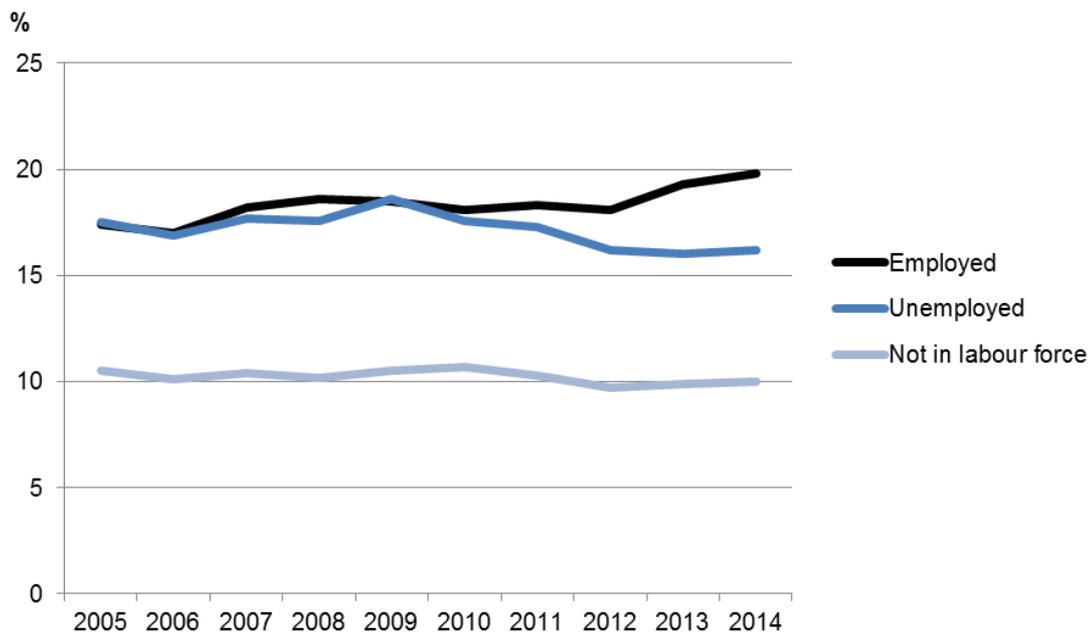
Tackling youth unemployment is also on the agenda of many training funds. According to a 2014 survey, more than half of the funds support projects to help young people find employment and 61% have initiatives to sustain or expand

apprenticeship places. Most funds devote less attention to helping the older unemployed reintegrate into the labour market.

2.4.3. Lifelong learning participation

The structure and organisation of CVET shapes lifelong learning opportunities and participation. The labour market position also has a strong impact on lifelong learning participation, with those outside the labour force participating least. A decade ago, participation of the employed and unemployed in lifelong learning was almost equal. However since 2009 the participation of the unemployed has been decreasing while that of the employed increased (Figure 18).

Figure 18. Lifelong learning participation by labour market position (25-65 year-olds)



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

Source: Onderwijs in Cijfers [extracted 6.11.2015].

Most 25- to 65-year-old participants in lifelong learning (80%) take part in courses at private non-government-funded education and training providers. Only 20% of lifelong learners are in training offered by a government-funded provider. Most lifelong learning from government-funded providers (60% of participants) is higher education, often part-time courses provided by higher education institutes. Government-funded providers also have an important role in education and training for low-skilled adults. In relative terms, more low-skilled adults are found

in government-funded education than in education and training offered by private non-government-funded providers (CBS/OCW, 2015).

Participation in non-government lifelong learning activities strongly depends on education background. In 2012, 7.9% of adults with an EQF 1 qualification participated in non-government-funded lifelong learning; the corresponding participation rate for those with a qualification at EQF level 5 or above was 17.3% (CBS, 2015b). Most participants in non-government-funded lifelong learning take part in shorter training courses. In 2012, about 25% lasted less than a week, 25% had lasted one week to six months and 30% minimum one year (CBS/OCW, 2015).

2.5. Recent policy developments

Recent policy developments shaping the nature and provision of Dutch VET can be summarised under three headings: raising efficiency, addressing early leaving and youth unemployment, and learning by monitoring.

2.5.1. Raising efficiency

Recently amendments have been made to the general Adult Education and Vocational Education Act (*Wet Educatie en Beroepsonderwijs*, WEB). In line with the VET policy action plan 'Focus on craftsmanship 2011-15' (*Focus op Vakmanschap 2011-15*) the measures implemented to raise the efficiency of VET:

- (a) introduce new funding principles for VET providers, combining per capita funding with incentives rewarding faster programme completion;
- (b) curtail training length in upper secondary VET (for most MBO 4 programmes length is curtailed from four to three years; MBO 3 lasts maximum three years, MBO 2 maximum two years) to achieve faster transit through the VET track, while increasing study load (for some of the relevant programmes), as a result of the compulsory introduction – with central exams in the near future – in Dutch language, maths and – at level 4 only – English;
- (c) introduce entry level programmes, replacing MBO 1 courses. Entry level courses are separated from MBO 2, 3 and 4 courses and only open for early school leavers without prior qualifications. This policy change was prompted by the huge intake of students without a diploma into VET colleges and intensive supervision required for some youngsters. This development had a major impact on financial resources of institutes and their organisational capacity, adversely affecting teaching at levels 2, 3 and 4 (Oudeman Committee, 2010);

- (d) end the possibility of non-qualified inflow in MBO 2. Entry to MBO 2 is now only open for youngsters having obtained a pre-vocational (VMBO) diploma or an admission certificate to the fourth year of secondary general education (HAVO/VWO).

Another initiative to raise Dutch VET efficiency is introduction of an assessment procedure to evaluate the effectiveness of the variety of the programs offered by upper secondary VET providers (MBO colleges) in the light of regional labour market developments (2015). Its aim is to prevent schools enrolling too many students in popular programmes without a real job prospect. An assessment procedure can be organised, for instance, when at least 30% of the graduates of a programme are still unemployed one and a half years after graduation, or when at least 50% of employed graduates have not been successful in finding a job at a level appropriate to their qualification (OCW, 2015).

2.5.2. Tackling early leaving and youth unemployment

A key feature of recent youth unemployment policies was the appointment of a 'youth unemployment ambassador' for the period 2013-15. She was appointed to stimulate employers, municipalities and other stakeholders to improve job opportunities for young people. The work of the ambassador complemented more traditional measures, such as:

- (a) improving VET quality and effectiveness (Section 2.5.1);
- (b) reducing early leaving from VET (Section 2.5.2);
- (c) monitoring dropouts at least a year after they have left school to keep this group in focus and guide them back to school or a job;
- (d) supporting MBO colleges in conducting exit interviews with graduates, to help them in their choice between study and employment options;
- (e) investing in regional initiatives to fight youth unemployment with training and job coaching programs;
- (f) investing in sector initiatives to create extra learning places for students in dual VET;
- (g) tax measures for companies employing unemployed youth;
- (h) agreements with employers to create more learning places for young people.

The 2015-16 youth unemployment agenda (Parliament letter, 2015a) follows up the successes achieved and includes two broad lines of action:

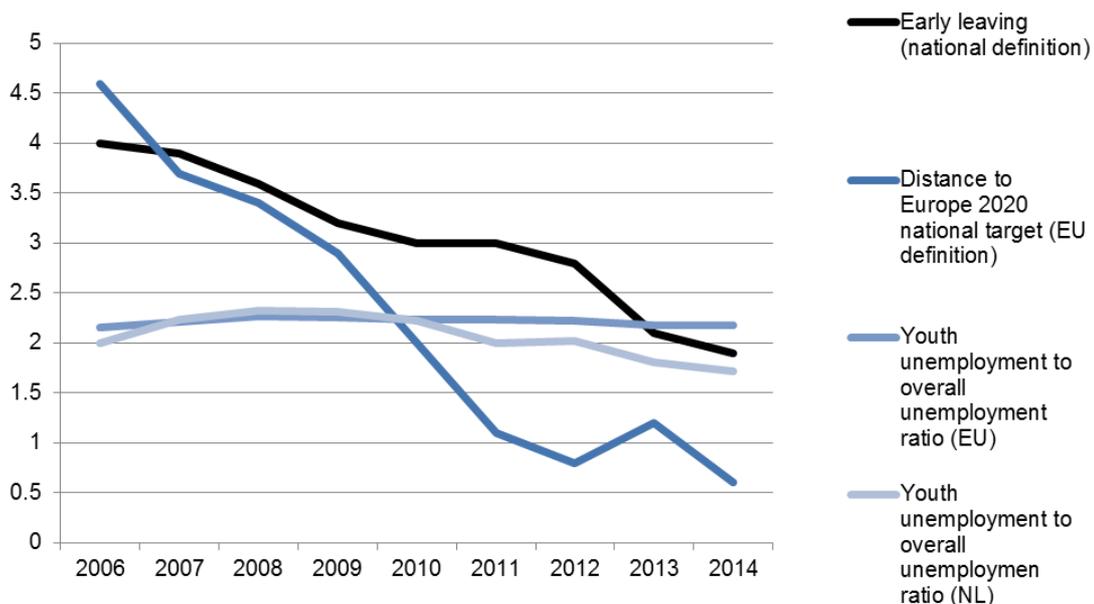
- (a) increasing the budget for career orientation programmes, stimulating the development of job and career competences in VET and strengthening links between VET and the labour market;

- (b) stronger cooperation at regional level and more job coaching facilities for vulnerable groups and young people living in deprived areas. Agreements to offer placements, traineeships and internships to this group in particular will be concluded with employers.

Both youth unemployment and general unemployment have been declining recently, while labour market participation has increased. It is not clear, and is the topic of public debate, whether these declines are causally linked to the youth unemployment measures taken in recent years or mostly due to an improving economy.

What is clear is that early leaving, an important precursor to youth unemployment, has declined substantially and that the Netherlands has moved closer to its EU 2020 target for early leaving from education and training (Figure 19).

Figure 19. **Early school leaving and relative youth unemployment ratio, 2006-14**



Source: CBS Statline and Eurostat [extracted 10.10.2015].

Looking back to developments in the past few years, it is difficult to disentangle the favourable effects of policy from negative impacts of the economic crisis on unemployment. In relative terms, however, there appears to be some improvement. While the youth unemployment rate has been double that for overall unemployment in the EU as a whole for many years, in the Netherlands the youth unemployment/overall employment ratio has been declining since 2010.

2.5.3. Learning by monitoring

Quality agreements concluded between all MBO colleges and the Ministry of Education in 2015 aim to support rapid and comprehensive implementation of measures and encourage colleges to increase their performance in terms of early school leaving, completion rates, quality of (guidance of) workplace learning and professionalisation of teachers (OCW, 2014). In return, schools receive additional (partly performance-based) funding for four years (2015-18). The budget for performance-based funding will increase over time (up to EUR 210 million in 2018). The money will only be available to colleges which have been successful in reducing early school leaving, increasing programme completion rates and raising the quality of (guidance of) workplace learning.

Account managers (ministry officials) will be responsible for monitoring progress based on information already available from various sources in the student population, the programmes and their outcomes, and institution finances.

This principle of incentive-led policy already proved successful in reducing early school leaving in VET, when additional funding was made available to MBO colleges on condition of reducing the number of early school leavers. Within 10 years the number of new school dropouts in VET fell from 71 000 in 2002 to less than 28 000 in 2012 (Parliament letter, 2015a).

Another similarity to early school leaving policies implemented in recent years is use of monitoring systems. Over the years, government has stimulated the development of regional networks of schools (including MBO colleges) and municipalities to combat early school leaving. By introducing a unique registration number for each child and improving registration and follow up, it is possible to generate early school leaving intelligence at national and regional levels. National government and regional networks have developed systems of producing annual plans and targets to be evaluated and amended for the next round in a collective 'learning by monitoring process' (Bokdam et al., 2015).

Learning by monitoring is indicative of a much wider trend in Dutch VET: increasing use of research and intelligence to improve VET quality and effectiveness. This does not only involve specialist professional researchers, but includes stimulating teachers to obtain a master degree and encouraging them to engage in research activities. This is intended to reduce the gap between education research and education practice. The first research day for vocational teachers was organised in 2015. It helped teachers share their experiences and research results, activities that are important to give research a more prominent role in Dutch VET and to encourage a more 'inquiring approach' to practice.

CHAPTER 3.

Shaping VET qualifications

3.1. Anticipating skills needs

Robust methodology, deployed by trusted organisations, enhances the quality of evidence produced by skill needs anticipation exercises and builds stakeholder trust in the process and suggested shifts in policy. Assigning responsibility for 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 jointly steered by key national education and labour market stakeholders.

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 a report on the labour market by education and occupation (ROA, 2013) 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 (*Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven*, SBB) to match information on demand and supply in the labour market, at sectoral and regional level.

The labour market information generated caters to the needs of several stakeholders. Youth and jobseekers benefit by being able to base their education choices on mid-term labour market perspectives of different education tracks.

Websites as well as education guides ⁽¹¹⁾ help them make education and training decisions. Different groups of policy-makers benefit from labour market information for youth ⁽¹²⁾ available for each labour market region; the information helps decisions on whether to open new education tracks or amend existing ones. It also helps companies and their sector organisations, giving 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 eight sector chambers within SBB take on this task. Education 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 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 Ministry of Education and developed by the Foundation for Curriculum Development in the Netherlands (*Nationaal expertisecentrum leerplanontwikkeling*, SLO);
- (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:
 - (i) social partners develop and determine/validate vocational/occupational standards. This process takes place in committees at subsectoral level referred to as ‘market segments’ in the national context ⁽¹³⁾;

⁽¹¹⁾ For example, www.studiekeuze123.nl, www.kansopwerk.nl, and www.keuzegids.org

⁽¹²⁾ *Basiscijfers Jeugd*: <https://www.s-bb.nl/publicaties/basiscijfers-jeugd/basiscijfers-november-2015>

⁽¹³⁾ Cooperation organisation for vocational education, training and the labour market (SBB): information on the market segments: <https://www.s-bb.nl/samenwerking/marktsegmenten>

- (ii) social partner and VET representatives develop qualification profiles (educational standards as output), which are adopted by the Ministry of Education/Ministry of Economics. This is done within the eight sector chambers within SBB;
- (iii) VET colleges develop curricula in cooperation with training firms, based on qualification profiles;
- (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.

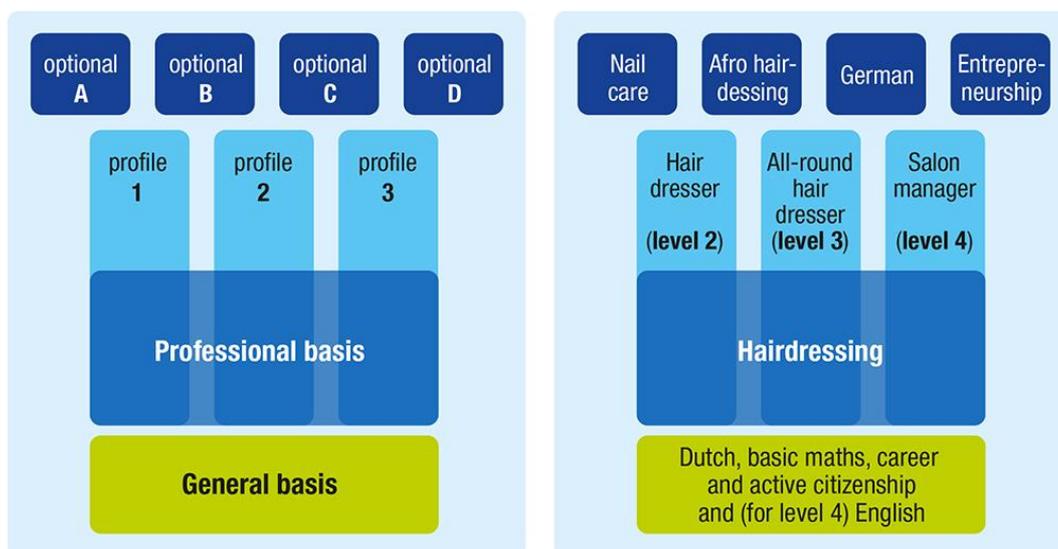
3.2.1. Qualification and curriculum development in upper secondary VET

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.

The qualification system has recently been revised and will be implemented in August 2016. Qualifications are clustered for better transparency and functionality. Definitions 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 (Figure 20). As a result of the reform, 176 qualifications and 489 profiles will remain, a reduction of almost 25%.

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 education institutions jointly develop them to respond quickly 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 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 or include commercial skills in their programmes (Parliament letter, 2014b).

Figure 20. **Upper secondary VET qualifications in the new qualification structure – hairdressing example**



NB: The new qualification structure will be obligatory from August 2016.

Source: Cooperation organisation for vocational education, training and the labour market (SBB), <http://www.s-bb.nl>

The eight sector chambers within the cooperation organisation for vocational education, training and the labour market (*Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven*, SBB) 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 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 2016/17 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 (Parliament letter, 2014b).

3.3. Qualifications framework

The Netherlands qualifications framework (*Nederlands Kwalificatieraamwerk*, NLQF) has been set up to support lifelong learning and mobility, providing transparency and aiding comparison of qualification levels nationally and internationally. The eight-level framework supports employers, enabling 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, helping them better understand their capacities.

The NLQF was referenced to the European qualifications framework (EQF) in 2011 (higher education framework linked to QF-EHEA in 2009) and was formally adopted mid-2012. The framework links to qualifications regulated by three ministries (education, economic affairs and health/welfare) as well as qualifications awarded outside public regulation and developed by stakeholders (mainly) in the labour market. During 2012-14 significant progress has been made towards including qualifications from this latter group (Cedefop, 2015b). The national coordination point developed criteria and procedures to include them and by mid-2014 a first set was included in the NLQF. Since 2015, after the approval of the Ministry of Education, labour market relevance has become a criterion for determining whether a qualification is substantial and can be included in the NLQF. Previously only qualifications requiring at least 400 hours of learning could be included in the framework.

In 2014, the Ministry of Education initiated revision of existing legal texts underpinning Dutch education and training to make sure that the role of the NLQF is reflected. This revision will also support inclusion of NLQF and EQF levels in certificates and qualifications. In the public consultation phase in 2015, key stakeholders reacted positively to the draft legislation.

3.4. Assessment and validation

Mechanisms in the Netherlands to recognise formal learning in government-regulated VET include the following:

- (a) in lower secondary VET (VMBO), central, national examinations and school examinations are held, which are important for gaining a diploma. The education inspectorate supervises school exam quality;
- (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 examinations quality (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;
- (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 past 15 years. A comprehensive validation system that encompasses all education levels and sectors is in place.

Discussion on how to improve and diversify (individualise) the validation system is currently in progress. In line with discussions and proposals made in the past few years, from 2016 onwards there will be 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 higher education 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;
- (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 higher education. Validation supports access to education and training at all levels. Although both VET and higher education qualifications can, in theory, be obtained through validation, in practice this depends on demand and is currently most common in VET.

For the education route, the government supports the build-up of an infrastructure within the VET colleges and higher education institutes to develop and improve validation procedures. In future, the Ministry of Education will no longer have a coordinating role in quality assuring in validation for the labour market; social partners have prepared a quality label for providers offering this. Validation in the education route is assigned to the education inspectorate or NVAO (Parliament letter, 2015b).

Individuals 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).

3.5. Macro-effectiveness of VET provision

The Ministry of Education determines provision (learning departments for broad fields related to the labour market) in lower secondary pre-vocational education. New programmes will be introduced in VMBO in 2016. Because of 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 education offer to the student population, the offer of regional MBO colleges and labour market developments (Parliament letter, 2014a)

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 focusing on macro-efficiency. Its key aim is to arrive at an optimal offer of qualifications at national and regional levels to meet labour market needs effectively and efficiently. The work has been entrusted to SBB. Review of the qualifications framework, which will become effective in 2016, has led to reduction in qualifications of 25%. The expectation is that a reduced number of qualifications will make it easier for students to select a programme, and will support schools to work more efficiently.

In higher professional education, schools develop their own programmes (in cooperation with partners in the labour market). These programmes are accredited by the NVAO. The Ministry of Education 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 methodology for internal and external evaluation have been devised. So far, upper secondary IVET and higher VET (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 Ministry of Education, through the education inspectorate and VET providers themselves, is responsible for quality assurance in upper secondary VET. The VET law mandates VET providers to set up a quality assurance system. They are relatively free to design and implement 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.

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 participate in setting VET goals and objectives and their involvement in monitoring and evaluation has been agreed. An advisory committee of all important VET stakeholders meets several times a year to discuss further developments. All EQAVET indicators are used ⁽¹⁴⁾.

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 pathways, distance learning and modularisation. The consensus is that while upper secondary VET is of good basic quality, there is a need to be more ambitious. Extra (partly performance-based) funding is foreseen for the coming years 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 2015-18 drafted by VET providers themselves. The plans focus on intensifying language and basic maths instruction, professional staff development, and preventing early leaving from education and training; they include concrete targets wherever possible.

⁽¹⁴⁾ EQAVET leaflet:
http://www.eqavet.nl/_images/user/Eqavet_Leaflet_NL.p_20131030151118.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 pathway (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]
CVET	Continuing VET
DUO	Dienst Uitvoering Onderwijs [service institution education]
ECBO	Expertisecentrum beroepsonderwijs [Centre for expertise in vocational education and training in the Netherlands]
EQF	European qualifications framework
HAVO	hoger algemeen voortgezet onderwijs [upper secondary general education]
HBO	hoger beroepsonderwijs [higher professional education]
IVET	initial VET
LFS	labour force survey
MBO	middelbaar beroepsonderwijs [upper secondary vocational education]
NLQF	Nederlands Kwalificatieraamwerk) [Netherlands qualifications framework]
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]
OCW	Ministry of Education, Culture and Science
QF-EHEA	qualifications frameworks in the European higher education area
PRO	praktijkonderwijs [practical labour-oriented education]
ROA	Researchcentrum voor Onderwijs en Arbeidsmarkt [Research Centre for Education and the Labour Market]
ROC	regionaal 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]
VET	vocational education and training
VMBO	voorbereidend middelbaar beroepsonderwijs [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]

References

[URLS accessed 4.12.2015]

- Bokdam J.; Van den Ende, I.; Gelderblom, A. (2015). *Monitoring en evaluatie vsv-beleid: Jaarrapport 2014 [Monitoring and evaluation of policies to tackle early leaving from education and training]*. Zoetermeer: Panteia. <http://www.aanvalopschooluitval.nl/userfiles/file/2015/Panteia%20vsv%20monitor%20en%20evaluatie%20jaarrapport%202014.pdf>
- Borghans, L.; Fouarge, D.; De Grip, A.; Van Thor, J. (2014). *Werken en leren in Nederland. [Working and learning in the Netherlands]* ROA-R-2014/3. Maastricht: Maastricht University, School of Business and Economics. http://roa.sbe.maastrichtuniversity.nl/roanew/wp-content/uploads/2014/05/ROA_R_2014_3.pdf
- CBS (2014). *Demografische kerncijfers per gemeente [Demographic indicators by municipality]*. <http://www.cbs.nl/NR/rdonlyres/68092452-2D41-416C-B5D5-C77737DBDE80/0/demografischekerncijfers2014.pdf>
- CBS (2015a). *Statistics Netherlands: higher contribution exports to GDP and more jobs*. Web magazine, 22.1.2015. <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>
- CBS (2015b). *Uitgaven voor onderwijs 2013: trends en ontwikkelingen [Education expenditure 2013: trends and developments]*. Web article 2015. <http://www.cbs.nl/NR/rdonlyres/FBF5357C-DC94-43EE-89BE-B5BDF9226C3F/0/2015uitgavenvooronderwijs2013.pdf>
- CBS/OCW (2015). *Een leven lang leren: stand van zaken [Lifelong learning: state of play]*. <http://www.onderwijsincijfers.nl/binaries/onderwijs-incijfers/documenten/publicaties/2015/09/09/leven-lang-leren/factsheet-III-definitief.pdf>
- Cedefop (2015a). *Skills, qualifications and jobs in the EU: the making of a perfect match? Evidence from Cedefop's European skills and jobs survey*. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/3072>
- Cedefop (2015b). *National qualifications framework developments in Europe: anniversary edition*. Luxembourg: Publications Office. http://www.cedefop.europa.eu/files/4137_en.pdf
- Mares, D. (2014). Tweede O&O-monitor, met successtories [Second monitor sectoral training funds, success stories]. *VM-update*, November 2014, pp. 18-20. <http://www.vanspaendonck-wispa.nl/attachments/article/463/VM-update-2014november-10.pdf>

- MBO Raad (2014). *Branchecode goed bestuur in het MBO [Branch code on good governance in upper secondary VET]*.
http://www.mboraad.nl/media/uploads/document/Branchecode_goed_bestuur_in_het_mbo_2014.doc.pdf
- OCW (2010). *Actieplan MBO: focus op Vakmanschap 2011-2015. [Action plan for upper secondary VET: focus on craftsmanship 2011-15]*.
<http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2011/02/16/actieplan-MBO-focus-op-vakmanschap-2011-2015.html>
- OCW (2011a). *Teaching 2020: a strong profession*.
https://www.educ.cam.ac.uk/centres/flf/about/events/pastflfseminars/PDFs/Teaching_2020_The_Netherlands_Ministry.pdf
- OCW (2011b). *Working in education 2012*.
<http://www.government.nl/files/documents-and-publications/reports/2013/02/27/working-in-education-2012/ocw-wio12-wio-en-compleet-final2-los.pdf>
- OCW (2013). *Lerarenagenda 2013-2020: de leraar maakt het verschil [Teacher agenda 2013-20: the teacher makes the difference]*.
http://www.delerarenagenda.nl/binaries/delerarenagenda/documenten/publicaties/2015/01/01/lerarenagenda-oktober-2013/lerarenagenda_v02.pdf
- OCW (2014). *Concept regeling kwaliteitsafspraken MBO [Concept scheme quality agreements in upper secondary VET]*.
<http://www.rijksoverheid.nl/ministeries/ocw/documenten-en-publicaties/regelingen/2014/10/02/concept-regeling-kwaliteitsafspraken-MBO.html>
- OCW (2015). *Policy regulation macro-effectiveness upper secondary VET*.
<https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/regelingen/2015/07/01/ontwerp-beleidsregel-macrodoelmatigheid-beroepsonderwijs/ontwerp-beleidsregel-macrodoelmatigheid-beroepsonderwijs.pdf>
- Oudeman Committee (2010). *Naar meer focus op het mbo! [Towards more focus on upper secondary vocational education]*.
<http://www.rijksoverheid.nl/ministeries/ocw/documenten-en-publicaties/rapporten/2010/11/30/naar-meer-focus-op-het-mbo.html>
- Parliament letter (2014a). *Kamerbrief over fundamenteel vmbo [Lower secondary pre-vocational education]*.
<https://www.rijksoverheid.nl/documenten/kamerstukken/2014/12/15/kamerbrief-over-fundamenteel-vmbo>
- Parliament letter (2014b). *Ruim baan voor vakmanschap: een toekomstgericht mbo [Giving way to craftsmanship: a future-oriented upper secondary VET]*.
<https://www.rijksoverheid.nl/ministeries/ministerie-van-onderwijs-cultuur-en-wetenschap/documenten/kamerstukken/2014/06/02/kamerbrief-over-een-toekomstgericht-middelbaar-beroepsonderwijs>

- Parliament letter (2015a). *Kamerbrief agenda aanpak jeugdwerkloosheid 2015 [Youth unemployment agenda]*.
<https://www.rijksoverheid.nl/documenten/kamerstukken/2015/03/31/kamerbrief-agenda-aanpak-jeugdwerkloosheid-2015-2016>
- Parliament letter (2015b). *Kamerbrief over voortgang Leven Lang Leren [Progress in the field of lifelong learning]*.
<http://www.kenniscentrumevc.nl/evc-professionals/nieuws/366-kamerbrief-over-voortgang-leven-lang-leren>
- Regioplan (2015). *Onderwijs werkt! Rapportage van een enquête onder directie/management en docenten uit het po, vo, mbo en hbo [Education works! Report of a survey among management and teachers in primary, secondary, and upper secondary and higher VET]*.
http://www.regioplan.nl/media/pdf/id/1343/file_name/14034-onderwijs-werkt-2015.pdf
- ROA (2013). *De arbeidsmarkt naar opleiding en beroep tot 2018 [The labour market by education and occupation until 2018]*.
http://www.roa-maastricht.nl/cms/wp-content/pdf_publications/2013/ROA_R_2013_11.pdf
- Rosenboom, N.; Tieben, B. (2015). *Marktmonitor private opleiders van beroepsopleidingen en trainingen: Eindrapport [Monitor private VET providers: final report]*. Amsterdam: SEO Economisch Onderzoek.
http://www.seo.nl/uploads/media/2015-14_Marktmonitor_private_opleiders_van_beroepsopleidingen_en_trainingen_01.pdf
- Van den Berge, W.; Ter Weel, B. (2015). *Baanpolarisatie in Nederland [Job polarisation in the Netherlands]*. CPB policy brief 2015/13. Den Haag: Centraal Planbureau.
<http://www.cpb.nl/sites/default/files/publicaties/download/cpb-policy-brief-2015-13-baanpolarisatie-nederland.pdf>
- Van der Meijden, A.; Van der Meer, M. (2013). *Sectorfondsen voor opleiding en ontwikkeling: van pepernoten naar spekkoeke - Vierde meting van de Monitor O&O-fondsen [Sectoral funds for training and development: fourth edition of training and development funds monitor]*. Hertogenbosch: ECBO.
<http://www.ecbo.nl/stream.aspx?file=/downloads/publicaties/ecbo.14-161-Sectorfondsen-voor-opleiding-en-ontwikkeling.pdf>
- Vlasblom, J.D; Van Echteld, P.; De Voogd-Hamelink, M. (2015). *Aanbod van arbeid 2014: arbeidsdeelname, flexibilisering en duurzame inzetbaarheid. [Labour supply 2014: participation, flexibilisation and employability]*. Den Haag: Sociaal en Cultureel Planbureau.
<http://www.scp.nl/dsresource?objectid=38210&type=org>

Core VET(-related) legislation

Industrial, Technical and Domestic Education Act (1921): superseded

Secondary Education Act (1968)

<http://wetten.overheid.nl/BWBR0002399>

Compulsory Schooling Act (1969)

<http://wetten.overheid.nl/BWBR0002628>

Apprenticeship Act (1969): superseded.

Work Councils Act (1971):

<http://wetten.overheid.nl/BWBR0002747>

Higher Professional Education Act (1986): superseded

Higher Education and Research Act (1993)

<http://wetten.overheid.nl/BWBR0005682>

Adult Education and Vocational Education Act (1996)

<http://wetten.overheid.nl/BWBR0007625>

Student Finance Act (2000)

<http://wetten.overheid.nl/BWBR0011453>

Regional Registration and Coordination Act (2001)

<http://wetten.overheid.nl/BWBR0013111>

Education Supervision Act (2002)

<http://wetten.overheid.nl/BWBR0013800>

Professions in Education Act (2006)

<http://wetten.overheid.nl/BWBR0016944>

Quality and Diversity in Higher Education Act (2013)

<http://wetten.overheid.nl/BWBR0033693>

Websites

Ministry of Education, Culture and Science (OCW)	www.rijksoverheid.nl/ministeries/ocw
Ministry of Economic Affairs (EZ)	www.rijksoverheid.nl/ministeries/ez
Ministry of Social Affairs and Employment (SWZ)	www.rijksoverheid.nl/ministeries/szw
Social security and labour market services agency	www.uwv.nl
Education Council	www.onderwijsraad.nl
Statistics Netherlands (CBS)	www.cbs.nl
Statistical information (CBS Statline)	www.statline.cbs.nl
Statistical information on education in the Netherlands	www.onderwijsincijfers.nl
Eurostat	http://ec.europa.eu/eurostat
Cooperation organisation for VET and the labour market (SBB)	www.s-bb.nl
Dutch council for secondary education	www.vo-raad.nl
The Netherlands Association of VET Colleges	www.mborraad.nl
Netherlands Association of Universities of Applied Sciences	www.vereniginghogescholen.nl
Research Centre for Education and the Labour Market (ROA)	http://roa.sbe.maastrichtuniversity.nl
Centre for Expertise in Vocational Education and Training (ECBO)	www.ecbo.nl
ReferNet Netherlands	www.refernet.nl

Vocational education and training in **the Netherlands**

Short description

This short description aims to contribute to better understanding of vocational education and training (VET) in the Netherlands, providing an insight into its main features and highlighting recent VET policy developments. VET in the Netherlands is comprehensive and flexible and has good labour market outcomes. The Dutch experience shows that an effective VET system requires regular adjustments to keep meeting labour market and society needs. Striking a good balance between the system's accessibility, quality and efficiency is a constant challenge. In recent years, policies have focused on reducing early leaving from education and training and streamlining qualifications. Recent policies aim at increasing quality and efficiency by reducing programme duration and by strengthening performance-based funding. These and other measures benefit from a tradition of evidence-informed policy and practice.

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**CEDEFOP**European Centre for the Development
of Vocational Training

Europe 123, 570 01 Thessaloniki (Pylea), GREECE
PO Box 22427, 551 02 Thessaloniki, GREECE
Tel. +30 2310490111, Fax +30 2310490020, E-mail: info@cedefop.europa.eu

visit our portal www.cedefop.europa.eu



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