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


The opinions expressed here do not necessarily reflect those of Cedefop.

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CHAPTER 1.
External factors influencing VET

1.1. Demographics

The population of the Netherlands totals 16 979 120 in 2016 (1). With a density of 504 inhabitants per square kilometre (2016) (2), the Netherlands is one of the most densely populated countries in the EU and the world.

The population is expected to grow slightly in the next decades. Around 2045, it is expected to reach 18 million. As in many other European countries ageing is a dominant trend. The share of the population over 65 (18.2% in 2016) is expected to increase to 26% in 2060, mostly at the expense of the share of the population aged 20-65. Until 2040 the youth dependency ratio and the old-age-dependency ratio will increase, but the increase in the ‘grey burden’ (old age dependency ratio) is much more pronounced than the growth of the ‘green burden’ (the young age dependency ratio). After 2040 the age structure of the population and – as a result – the dependency ratios are projected to be stable.

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

Source: CBS statline, extracted 18 September 2016.

Between 2000 and 2015 the population in the Netherlands grew with 6.5%. Compared to other EU countries it is mainly due to natural increase. This balance of birth and mortality accounted for 72 percent of the population growth. Until 2015 migration played a relatively small role (3).

In the first half of 2016 (4) the number of inhabitants in the Netherlands increased by almost 43 thousand. Almost 99 thousand immigrants arrived, which is 17 thousand more than in the first half of 2015. The number of emigrants was almost the same as in 2015: 64 thousand emigrants left. Natural population growth (births minus deaths) contributed 7.5 thousand.

Migrants and people with a migrant background constitute 21.7% of the total population (2015). Figure 2 shows that people born in non-western countries and those born in the Netherlands with at least one parent born in a non-western country account for most of the growth of the non-native population since 2000.

Figure 2. Composition of the population, in millions

Source: CBS statline, extracted September 2016.
Note: People with a migrant background are individuals born in the Netherlands with at least one parent born abroad. Western countries are countries in Europe (excluding Turkey), North America, Oceania and Indonesia and Japan. Non-western countries are countries in Africa, Latin-America and Asia (excluding Indonesia and Japan) and Turkey.

(3) CBS, 9-5-2016

(4) CBS – Hogere bevolkingsgroei door migratie, 1-8-2016
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 (5).

Figure 3 shows employment shifts since 2000 and compares national developments with EU trends. Whereas the employment share of services increases and the employment share of industry decreases both nationally and in the EU, the Netherlands appears to be a forerunner: the employment share of services is considerably higher and the employment share of industry is considerably lower. In 2015, services (commercial and non-commercial) made up more than 80% of employment.

Figure 3. **Employment shares in %, 2000-15**

![Graph showing employment shares from 2000 to 2015](image)

**Source:** Eurostat, 2016. lfsi_grt_a; extracted 22.9.2016.

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.

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(5) CBS (2015)
Medium level jobs decline due to the increased capacity of machines, and information and communication technology which takes over routine tasks. But while job polarisation mirrors trends in other countries, its magnitude is relatively small.

In 2015 the employed labour force consisted of 8.3 million people. Almost half of them, mostly women, worked 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 last decade. This is due to the (partial) elimination of early retirement schemes and because more women have entered the labour market. Employment of people over 65 has more than doubled in the last 10 years.

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

Source: CBS statline, extracted 23 September 2016.

Educational levels and labour market participation are correlated: the higher the educational level, the higher participation (Figure 5). Net labour market participation is higher for those with higher education. This might be explained by the fact that the qualifications provided by higher education better equip people for the demands of the 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 (ISCED 3-4) skilled is significantly higher than the EU average (\(^7\)). 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.

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

Educational attainment also has a significant impact on unemployment (Figure 6). While the overall 2015 unemployment rate was 6.9%, it was much higher for those with low skills (11.3% for ISCED 0-2) and much lower for those with tertiary education attainment (3.8% for ISCED 5-8). The unemployment rate for those with low and medium-level skills has also grown faster since 2008 than

\(^7\) It should be noted that while net participation in the Netherlands is relatively high, a large share of the employed has a part-time job.
the corresponding rate for those with a tertiary qualification. In 2015 unemployment rates have decreased for all educational attainment levels. Youth (>25) unemployment is 11.3% in 2015 and is below the EU average, which stood at over 20.4% in 2014.

Migrants and people with a migrant background from non-western countries (8) are most affected by unemployment: while in 2015 they accounted less than 11% of the total labour force, their share in the unemployed labour force was close to 23%. However in 2015 their unemployment ratio has decreased from 16.5% in 2014 to 15.2 in 2015 (CBS, 2016).

Since 2010, the long-term unemployment rate has almost doubled. According to national data, in 2015, 42.9% (39.2% in 2014) has been unemployed for over a year (CBS: 42,2 in 2015, Eurostat 42,9 in 2015).

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

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

There are several signs that the Dutch labour market is becoming more flexible. First, self-employment is on the rise, a trend that is opposite to what can be observed for the EU as a whole (Figure 3). Second, with more employees being employed at a temporary basis, the incidence of permanent contracts has

(8) Migrants from, or with a mother/father born in, Africa, Asia (exl. Japan and Indonesia).
decreased in the past years. National panel data suggests that the time span of temporary employment before gaining a permanent contract is also increasing: In 2004, 71% of workers had such a contract after working on a temporary contract basis for 4-5 years. While in 2014 only 58% of workers had a permanent contract during the corresponding time span. Finally, working at home (increasing since 2004 and a reality for one out of five workers in 2014) and being able to choose one’s own working hours (41% of workers in 2014) also signal increased labour market flexibility (9).

1.3. Educational attainment

Eurostat data show that 30% of the population aged 15-64 in the Netherlands has a higher qualification, while a similar share of the population is low- or unqualified (Figure 7). This means that 4 out of 10 people are qualified at medium (ISCED 3-4) level. Increases in the educational attainment of the workforce since 2000 are driven by the rising share of young people with higher formal qualifications levels and older generations with lower skill levels gradually leaving the labour market. In 2015, tertiary attainment among 30-34 year olds was just above 45% and 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 level of education attained in 2015 (%)

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

https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2016/Aanbod_van_arbeid _2016 [accessed 3.05.2017].
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 field of study, 2015

Source: www.onderwijsincijfers.nl [accessed 3. 05. 2017].
Note: Shares include bachelor and master degrees.

Only one in ten higher VET bachelor graduates complete a part-time programme, and the share of graduates of part-time bachelor programmes has decreased in past years. Among vocational master graduates, part-time programmes are much more popular. Almost two-thirds of them take part in a part-time programme; they often combine study with work.

At upper secondary level, in 2013/2014, most VET graduates completed a level 4 programme leading to EQF4 (Figure 9). At this level, economics and care/welfare programmes are the most popular choices (10). Most graduates from upper secondary VET programmes in technology attain a qualification at EQF level 2 or 4. At level 1, most graduates were in combined (multisectoral)

(10) The area economics in upper secondary VET includes programmes in administration, logistics, retail, secretarial support, tourism, ICT, facility management and public order and security.
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, 2014/2015**

![Graph showing VET graduates by level and area of study](image)


Note: Provisional data.

1.4. **Lifelong learning in a knowledge economy**

Eurostat data show that the Netherlands is among the EU countries with the highest lifelong learning rates. Already since 2000, more than 15% of the adult (25-64) population has been involved in education or training (participation was 18.9% in 2015). This means that lifelong learning is well above the EU28 average (10.7% in 2015) and that the country has met the Education and Training 2020 (ET2020) 15% benchmark since long.

National data and reports provide detailed insights on the relevance and impacts of training and lifelong learning (\(^{11}\)). They confirm a high participation and

https://www.scp.nl/Publicaties/Alle_publicaties/Publicaties_2016/Aanbod_van_arbeid _2016 [accessed 3. 05. 2017]

suggest that lifelong learning is quite effective: In 2014 only 6% of the employed experienced problems in work due to lacking knowledge or competences (\(^\text{12}\)). Spill-over effects from participation in training appear significant. While it is mostly targeted towards employer or sectoral skill needs, 44% of the trained employed still expect that the knowledge they developed is also useful in another sector. And almost half of them shared what they learned with colleagues.

This does not mean that there are no bottlenecks: training participation is significantly below average among workers over 55, the low-skilled, employees with a temporary contract and people not having participated in training in the past. The gap in training participation and 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. In fact, national research clearly 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 and this proportion has increased since 2004, in particular among people with an upper secondary VET background. People learn most from challenging or new tasks and cooperation from more experienced colleagues.

There are trends that signal a transition to a more inclusive and stronger knowledge economy, although challenges remain. While still below average, training participation among ageing employees as well as 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 clearly lower among people with a flexible contract, they learn as much from work informally as employees with a permanent contract. Self-employed compensate their lower access to training by investing more time in self-study to acquire the skills they need (ROA, 2014).

\(^{12}\) Cedefop’s 2014 European Skills and Jobs (ESJ) survey found that 6% of adult employees in the Netherlands is underskilled. Analysis for all EU28 Member States showed that the chances of people starting a new job being underskilled are comparatively low in the Netherlands. See Cedefop (2015).
CHAPTER 2.
Provision of VET

2.1. VET in the Dutch education and training system

Figure 10. VET in the Dutch education and training system in 2016

NB: ISCED-P 2011.
Source: Cedefop and ReferNet the 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 can determine – within legal boundaries – what is taught and how. The Ministry of Education, Culture and Science and the Ministry of Economic Affairs (13) 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. 16 and 17 year olds (on August 1 of any year) without a general or basic vocational qualification at upper secondary level (in the diagram: at least VWO, HAVO or MBO-2, EQF 2) are required to continue learning, the so-called ‘qualification duty’ (kwalificatieplicht). This arrangement was introduced in 2008 to reduce early leaving from education and training.

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

(a) **primary education** (PO – primair onderwijs) at ISCED 1 is for pupils aged 4-12. Duration is eight years;

(b) **special education at primary and secondary level** (SO/VSO – speciaal onderwijs/voortgezet speciaal onderwijs) is for pupils aged 3 to 20 with learning or behavioural difficulties and/or mental, sensory or physical handicaps;

(c) **general secondary education** (AVO – algemeen voortgezet onderwijs), ISCED 2 and 3, includes three types:

(i) pre-university education (integrated lower and upper secondary programmes). (VWO – voorbereidend wetenschappelijk onderwijs) with a duration of six years and leading to EQF4 (ISCED 244 after three years; ISCED 344 after six). It prepares learners for higher education at research universities and higher professional education at universities of applied sciences. Age: 12-18 years, also accessible to adults;

(ii) Integrated lower and upper secondary general education programmes (HAVO – hoger algemeen voortgezet onderwijs) with a duration of five

(13) For green/agricultural education only.
years and leading to EQF4 (ISCED 244 after three years; ISCED 344 after five), duration is five years and prepares for further study in higher professional education. Upon completion, transfer to the fifth year of pre-university education is possible. Age: 12-17 years, also accessible to adults;

(iii) The two general programmes (the theoretical and mixed pathway) within pre-vocational education (VMBO – voorbereidend middelbaar beroepsonderwijs – theoretische en gemengde leerweg) leading to EQF 2 (ISCED 244). Their duration is four years and they prepare for further study in upper secondary vocational education (and partly in upper secondary general education). Age: 12-16 years, also accessible to adults. This type of education is discussed below as part of VET.

(d) **lower secondary pre-vocational school-based programmes** (VMBO – voorbereidend middelbaar beroepsonderwijs - kaderberoepsgerichte of basisberoepsgerichte leerweg) leading to EQF 1 or 2 (ISCED 244). Their duration is four years and they prepare for further study in upper secondary vocational education. Age: 12-16 years. This type of education is discussed below as part of VET. Besides these programmes a separate practical, labour-oriented programme (PRO – praktijkonderwijs) is available for pupils not able to attain a diploma in a lower secondary pre-vocational programme (ISCED 253; age: 12-18/19 years, also accessible to adults);

(e) **upper secondary vocational education programmes** (ISCED 254, 353-354) (MBO – middelbaar beroepsonderwijs) for learners aged 16 or older consists of 2-4 year VET programmes in four areas of study at four levels (MBO 1-4, EQF 1-4). As part of the Dutch VET system, this type of education is discussed in more detail below;

(f) **higher (or tertiary) education** has a VET and a general (academic) strand:

(g) 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;

(h) scientific/university education (WO – wetenschappelijk onderwijs); offers bachelor programmes lasting three to four years (ISCED 645/EQF 6) and one-two year Master’s degree programmes (ISCED 747/EQF 7) to learners aged 18 and over. After completing a master degree programme, learners can continue in PhD programmes (ISCED 844, EQF8).
CVET comprises a range of vocational or more general courses for jobseekers, the unemployed, employees, self-employed people, and employers. Upper secondary IVET programmes can also function as CVET.

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

The education system has two tracks (Figure 10). After the first two years of secondary education (voortgezet onderwijs), young learners can follow:
(a) a general track, which starts in general secondary education (HAVO, VWO) and has direct transfer possibilities to higher education (HBO, WO); or
(b) a vocational track, which starts in lower secondary pre-vocational education (study year 3, VMBO) with transfer possibilities to upper secondary vocational education. Upper secondary vocational education (MBO 1-4) is the backbone of this track. For some students, MBO and the qualification providing labour market access is the end of initial VET. MBO 4 graduates can continue their studies in higher professional education (HBO). 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 on the basis of a cohort of pupils leaving primary education in 2014 (100%). Estimates approximately represent flows in one age cohort. The flows show that, although not very common in practice, learners can move from the vocational track to the general track and vice versa.

In the third year of secondary education, 45% of learners are in general programmes (HAVO/VWO), while 53% follows 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 last decade (from 34% in 2004/5 to 28% in 2014/15).

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

Source: www.onderwijsincijfers.nl [accessed]
2.2. Government regulated VET

2.2.1. Historical background

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

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

Educational expansion continued between 1970 and the mid-eighties/early nineties, a period where both upper secondary VET and higher professional education developed further. The 1986 higher professional education act (Wet op het hoger beroepsonderwijs) provided separate legislation for higher VET and ‘liberated’ it from the constraints of secondary education regulation. The idea of creating greater cohesion between higher professional and academic education that emerged in the 1970s came to fruition with the 1993 higher education and research act (Wet op het hoger onderwijs en wetenschappelijk onderzoek). Vocational education at secondary level also underwent significant changes during this period, culminating in the adult and vocational education act (Wet educatie en beroepsonderwijs) in 1996. This legislation provides a framework for school- and work-based (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. On the basis of 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 (IVET) is:
(a) the Secondary Education Act (WVO – Wet op het Voortgezet Onderwijs; 1968 with later amendments) for lower secondary general and pre-vocational education (VMBO – voorbereidend middelbaar beroepsonderwijs) as part of general secondary education;
(b) the Adult Education and Vocational Education Act (WEB – Wet Educatie en Beroepsonderwijs; 1996 with later amendments) for upper secondary vocational education (MBO – middelbaar beroepsonderwijs);
(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 (14) and makes 39 regions responsible for combatting it. Each municipality is part of one of these ‘registration and coordination’ regions. One municipality in each region (the so-called ‘contact municipality’) takes the lead by ensuring the identification and registration of early leavers and by coordinating their return to education or training programmes;

(b) the student finance act 2000 (Wet studiefinanciering, 2000, amended later) helps students over 18 in full-time education cover education costs. Since September 2015 a new student finance system applies to students in higher education (Section 2.2.4);

(c) the education supervision act (WOT – wet op het onderwijstoezicht, 2002, amended later) is the legal basis for the work of the education inspectorate (inspectie van het onderwijs). It obliges the inspectorate to conduct a periodical assessment of the quality of each educational institution;

(d) the professions in education act (Wet BIO – Wet op de beroepen in het Onderwijs, 2004) covers teachers, including instructors and teaching assistants, in primary, secondary and general adult education and for VET at lower/upper secondary level. It regulates minimum qualification requirements and continuing professional development of teachers.

2.2.3. Institutional VET framework

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

In the institutional VET framework, the Cooperation Organisation for Vocational Education, Training and the Labour Market (Samenwerkingsorganisatie Beroepsonderwijs Bedrijfsleven – SBB) has a key role. SBB optimises the links between VET and the labour market to deliver well-qualified professionals. The organisation is responsible for maintaining the qualifications for secondary VET, for accrediting and coaching companies offering work placements, and collecting suitable labour market information. Representatives from vocational education and social partners work together on the VET qualifications system, examinations, work placements, the efficiency of programmes and more. SBB also works on themes with a cross-regional and cross-sector focus.

(14) For students under 18 the compulsory schooling act (Leerplichtwet, 1969) applies.
<table>
<thead>
<tr>
<th>Function</th>
<th>VMBO (ISCED-2)</th>
<th>MBO (ISCED-3/4)</th>
<th>HBO (ISCED-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation/financing</td>
<td>Ministry of Education</td>
<td>Ministry of Education/Ministry of economic affairs</td>
<td>Ministry of Education/Ministry of economic affairs</td>
</tr>
<tr>
<td>Qualification development</td>
<td>Design: national level</td>
<td>Design: sectoral level by Sector Chambers (social partners &amp; VET) within the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB).</td>
<td>Design: school level</td>
</tr>
<tr>
<td></td>
<td>Validity: national</td>
<td></td>
<td>Validity: national</td>
</tr>
<tr>
<td>Curricula development</td>
<td>School level</td>
<td>School level</td>
<td>School level</td>
</tr>
<tr>
<td>Examination</td>
<td>Partly central/national; partly school exams</td>
<td>School exams; external contribution of trainers in enterprises Central examination of Dutch language and basic maths (August 2015 onwards)</td>
<td>School exams</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>Internal</td>
<td>Internal</td>
<td>Internal: self-evaluation.</td>
</tr>
<tr>
<td></td>
<td>External: Inspectorate</td>
<td>External: Inspectorate; special attention: exams</td>
<td>External: accreditation of HBO-programmes by NVAO**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>European level: use of Dublin level descriptors</td>
</tr>
<tr>
<td>Promotion of interests by associations of schools***</td>
<td>VO Council</td>
<td>MBO Council</td>
<td>Association of Universities of Applied Sciences</td>
</tr>
</tbody>
</table>

** 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 level.

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 the development and maintenance of qualifications and accreditation and quality monitoring of companies offering work placements.

In 2012 the government announced a budget cut for these centres of expertise. As result a new organisation model has been developed and implemented in August 2015. The legal tasks of the 17 VET expertise centres
have been transferred to SBB. Fine-tuning between VET and labour market representatives now takes place within eight ‘sector chambers’ under SBB. In each sector chamber VET and social partners are equally represented.

2.2.4. Funding
Total expenditure on education by the government, households, enterprises and non-profit organisations made up 6.2% of GDP in 2014. Government expenditure on education has decreased from 6.0% of GDP in 2010 to 5.5% in 2014 (CBS Statline, 2015).

In 2014 government expenditure represents 69% of all spending on upper secondary VET. Companies (23%) and households (9%) pay the rest. Total expenditures on upper secondary VET have steadily increased since 2000. In real terms, expenditures in 2014 were 1.6 billion Euro higher than in 2000 (Onderwijsincijfers.nl, abstracted September 2016).

The funding arrangements for VET are as follows:

(a) in pre-vocational education and training (VMBO) the funding principle is block grant funding. It gives schools considerable freedom in deciding how to spend available resources. They receive a fixed amount per student plus a fixed amount per school. Part of funding rewards good performance based on national targets agreed on sector level with governing bodies. There are also extra financial incentives for students at risk;

(b) in upper secondary VET (MBO) the principle is block grant funding based in part on number of students per course/learning path and in part on number of certificates awarded per institution. In 2014 ‘cascade funding’ was introduced. Schools receive money for each student for a maximum of 6 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 (Section 2.5.2). 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 for 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 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 (e.g. to reduce early leaving from education and training).

The student finance act 2000 (Wet studiefinanciering) helps students over 18 in full-time education cover education costs. The system for upper secondary VET students comprises 4 financing components: a basic grant, a supplementary grant (depending on parental income), a free/discounted public transportation cards and a loan. Learners do not have to pay back the basic grant, supplementary grant and public transportation fees, pay back the supplementary grant and public transportation fees when they graduate within 10 years.

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 an internal, vertical and a horizontal dimension. The internal dimension refers to the organisation of internal management and control; the vertical dimension stands for the accountability relations between schools and the government; the horizontal dimension captures the (accountability) relations between a school and its local stakeholders. Governance in VET is regulated by law (WEB) and in a governance code (MBO Raad, 2014).

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

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

Horizontal dialogue: Using self-chosen tools the executive board 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 of the teachers in higher professional education are university graduates and about one in ten of them has completed a Ph.D. 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) (2006) regulates competence standards for teachers and other educational staff in primary, general secondary, vocational secondary and general adult education. It requires schools to maintain a competence document for all teachers. This document details teacher’s competences and activities aimed at maintaining and improving them (OCW, 2011a).

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

(a) strengthening the quality of current and future teachers by introducing a professional register that will encourage them to maintain and improve their
professional competences (OCW, 2011a). By 2018, registration will be mandatory for all educational staff. (OCW, 2011b);

(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 showing 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 using stricter standards.

Already earlier (2009) an agreement between social partners in upper secondary education was reached on the introduction of a professional statute for teachers. In this statute the internal right of say is established for teachers and their team 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 that were 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 in school based track) must be qualified at least at the same level for which he/she is supervising work-based learning. Furthermore, trainers must be able to share their expertise with students and are required to have pedagogical skills (validated by diplomas/certificates). The quality of the trainers is one of the criteria for accreditation of companies providing work-based learning. Accreditation is one of the legal tasks of the Cooperation Organisation for Vocational Education, Training and the Labour Market (SBB). Training for trainers is offered by private providers.

2.3. Regulated VET programmes

Table 2 lists the different VET programmes available in the Netherlands along with their duration and classification according to ISCED and EQF. The programmes are discussed below.
Table 2. Classification of VET programmes in pre-vocational, upper secondary vocational and higher professional education

<table>
<thead>
<tr>
<th>Dutch level (*)</th>
<th>ISCED level</th>
<th>Nominal duration (**) in years</th>
<th>NLQF / EQF level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower secondary; study year 3 and 4</td>
<td>244</td>
<td>2</td>
<td>1 and 2</td>
</tr>
<tr>
<td>Upper secondary: MBO 1</td>
<td>254</td>
<td>0.5-1</td>
<td>1</td>
</tr>
<tr>
<td>MBO 2</td>
<td>353</td>
<td>2-3</td>
<td>2</td>
</tr>
<tr>
<td>MBO 3</td>
<td>353</td>
<td>3-4</td>
<td>3</td>
</tr>
<tr>
<td>MBO 4</td>
<td>354</td>
<td>3-4</td>
<td>4</td>
</tr>
<tr>
<td>MBO 4/specialist degree</td>
<td>453</td>
<td>1-2</td>
<td>4</td>
</tr>
<tr>
<td>Tertiary: associate degree (AD)</td>
<td>554</td>
<td>2 (120 ECTS)</td>
<td>5</td>
</tr>
<tr>
<td>Tertiary: bachelor</td>
<td>655</td>
<td>4 (240 ECTS)</td>
<td>6</td>
</tr>
<tr>
<td>Tertiary: master</td>
<td>757</td>
<td>1-2 (60-120 ECTS)</td>
<td>7</td>
</tr>
</tbody>
</table>

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

### 2.3.1. VET programmes in lower secondary education

VET at lower secondary level is part of secondary education. 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 theoretical learning pathway, apart from 10 to 15% of study time dedicated to vocational subjects. Progression routes in upper secondary VET are the same as for theoretical learning pathway;
(c) advanced level vocational learning pathway (VMBO-KL – *kaderberoepsgerichte leerweg*, EQF 2). Preparation for long courses in upper secondary VET (*MBO* 3 and 4) with dominantly vocational subjects;
(d) basic level vocational learning pathway (VMBO-BL – *basisberoepsgerichte leerweg*, EQF 1). Preparation for short courses in upper secondary VET (*MBO* 2) with dominantly vocational subjects. Within this pathway, pupils with learning difficulties can follow a dual track, combining learning and working.

The share of 15-year olds participating in VMBO programmes has declined slightly in the last decade. Whereas the 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 12. *15-year-olds in VMBO by programme orientation (2005/6-2014/15)*

![Figure 12](image)

Source: ECBO on the basis of 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 successfully 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, is available for VMBO pupils who need it (**LWOO- leerweg ondersteunend onderwijs**).

In 2016 new programmes are introduced in VMBO. They are new in terms of content (in sync with modern occupational practice and curriculum developments in MBO) and in terms of structure (over 30 programmes are replaced by 10 programmes with fixed general and optional modules). Career orientation and guidance will be an important part of the newly developed programmes.

For learners not capable of entering pre-vocational education, labour market-oriented practical training (**PRO - praktijkonderwijs**, EQF 1) is available. About 40 percent of its participants transfer to upper secondary VET (**MBO** 1, entry level education; see paragraph 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 facilitate progression, **VMBO** schools can offer **MBO** entry level and level 2 programmes under the condition that they cooperate with upper secondary VET colleges.

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

Upper secondary VET programmes cater to the need of youngsters and adults. The age of its participants ranges from 16 to 35 and over. The average age of upper secondary VET participants is slightly higher than in higher education, meaning that it fulfils 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 for 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 their programmes are accredited by the ministry, making upper secondary VET an open system. Subsidised educational institutions can also offer commercial training, paid for by employers and/or employees.

Three structural elements determine the provision of MBO programmes, 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%. 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: in a period of economic boom, the number of students in the dual pathway increases while it decreases in the school-based pathway; the opposite happens during an economic recession. Participants in the school-based pathway are mainly youngsters, while almost 50% of those following a dual pathway are 24 or over. To enrol in the dual/apprenticeship track a contract (an employment contract in most cases) with a firm is mandatory. There is no such obligation for the school-based track.

Most learners participate in the school based pathway, which also appears to be gaining popularity (Figure 14). The share of apprentices is decreasing due to the economic recession. However, more structural reasons like upward mobility and growing preferences from youngsters and employers for school based education, could not be excluded (Schipperheyn, 2016).

Figure 13. Participation (%) in upper secondary VET by learning pathway, 2011-15

Source: www.onderwijsincijfers.nl [accessed 3. 05. 2017].
VET legislation mandates accreditation of companies offering work placements to VET students. The accreditation process is one of SBB’s legal tasks and has to be obtained for each qualification – for training places in the dual track and the school-based track. Names and addresses of the accredited companies are available on a national website (stagemarkt.nl).

2.3.2.2. Programme level

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

(a) entry level (entreeopleiding) programmes last maximum one year (ISCED 254, EQF 1). In 2014 they replaced the MBO 1 ‘assistant training’ (assistentenopleiding) and broader work-oriented programmes for vulnerable groups (assistant with a job market qualification – arbeidsmarktgekwalificeerde assistent). With introducing entry level courses, admission is limited to school leavers from lower secondary education without a diploma. Entry level courses are aimed at qualifying youngsters to entering programmes at the next level (MBO 2), as well as guiding youngsters not capable to make this step, to work. Within four months after starting an entry course youngsters over 17 are told whether 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 the definition of early school leaving which means that students who leave education before obtaining a diploma at MBO 2 (or equivalent) are defined as early school leavers. Access requirements are at least a basic pre-vocational education diploma, a completed entry level (MBO 1) programme, or proof of successful completion of the first three years of upper secondary general education or pre-university education. Until 2014 no access requirements applied, but this has changed since the introduction of entry level (MBO 1) programmes. Progression to MBO 3 and (for some students to) level 4 programmes is possible;

(c) MBO 3 ‘professional VET’ (vakopleiding) programmes last two to three years. They prepare people to carry out tasks independently (ISCED 353, EQF 3). Access requirements are (1) a pre-vocational secondary education
certificate/diploma (excluding basic level pre-vocational education), or (2) proof of successful completion of the first three years of upper secondary general education or pre-university education. Progression to programmes at MBO 4 level is possible (see below);

(d) MBO 4 ‘middle-management’ (middenkaderopleiding) programmes predominantly last three years (some programmes have a duration of four years). They prepare people to carry out tasks independently and with responsibility (ISCED 354, EQF 4). Access requirements are the same as those in place 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-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 450 000 learners in upper secondary VET programmes in 2015, most were in MBO 4 programmes (Figure 15). Most were in a school-based track. Apprentices are predominantly found at level 2 and 3. Only a few upper secondary VET learners were in an entry-level programme.

Figure 14. Participation (%) in upper secondary VET by level in 2015

Source: www.onderwijsincijfers.nl [accessed 3.05.2017].
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).

![Participation (%) in upper secondary VET by area of study (2010-15)](image)

**Figure 15.** 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 educational institutions offer study programmes leading to bachelor degrees (ISCED 655, EQF 6) – as their core business. Higher professional education providers also offer master’s programmes (ISCED 757, EQF 7) for bachelor graduates. The range of master programmes on offer is expected to increase in the next decade.

In addition to bachelor and master programmes, successful pilot projects with short-cycle higher education programmes (‘associate degree’ or AD, ISCED
554, EQF 5) were introduced a few years ago. These programmes were implemented in the regular education system in September 2013. AD programmes (120 ECTS; normative duration two years) are part of bachelor programmes (240 ECTS; normative duration four years), so that further progression in higher education for AD graduates is possible. However, in 2016, the Minister proposed to end this connection. In the future AD will have a stand-alone position. Consequently, these programmes will be able to respond better to labour market needs. A greater variety of them will also better suit the needs of mbo-students and employees (15).

AD programmes are of particular interest to those with a VET qualification at upper secondary level. In 2015 the total number of students in an AD programme was 5 982 (Onderwijs in cijfers, 2016). Their share in the total number of learners in higher professional education is small (1.3%) but growing (Onderwijs in cijfers, 2015).

Until 2014 enrolment in professional higher education (HBO) was steadily increasing. However, in 2015 the total number of students decreased (Figure 17). In 2015 learners was 442 thousand. Economics and programmes in education saw the greatest decrease (16).

New legislation was introduced in 2013 (Wet Kwaliteit in verscheidenheid - Quality through diversity act), which urges the 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 a stronger focus on applied research). Intake procedures and guidance to support students in their educational 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). Especially the percentage of upper secondary vocational education pupils (MBO 4) to enrol in a professional higher education programme is decreasing. In 2011 38 percent of the graduated students in mbo4 continued in higher professional education. This share decreased in 2015 to 32 percent (17).

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

Figure 16. Students (in 1 000s) in higher professional education, 2010-15

![Chart showing students in higher professional education, 2010-15](source: www.onderwijsincijfers.nl [accessed 3. 05. 2017].)

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

Higher professional education provides programmes for professions requiring both theoretical knowledge and specific skills. They are almost always closely linked to a particular profession or group of professions and most programmes include an internship. Higher professional education can also be attended part-time as part of professionally oriented adult education, and, for the last ten 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.

The 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 to 75% in 2003, success rates have been gradually declining. The average success rate in 2015 was 66%.

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

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

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

Many training providers are active in non-formal CVET (off-the-job) market for employees. Most are private commercial training providers covering more than three quarters of training market and a smaller share are publicly funded VET providers that offer training on a commercial basis paid 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 (See Rosenboom, 2015) carried out on behalf of their sector association (NRTO – Nederlandse raad voor training en opleiding).

Calculations based on the survey result suggest that private CVET providers had a turnover of 3.4 billion Euro, 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 in particular larger training providers 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 5 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 and upper secondary (MBO) or tertiary (HBO) VET diploma, but most of the training 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 the fields of 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 of 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 about 125 of these funds (Mares, 2014), which are foundations governed by social partners. Most funds are financed by a payroll levy. Employers pay this levy to the training fund for their sector and can benefit from reimbursements for the costs of training their employees. Not all funds operate in the same way. Some funds limit their activities to the distribution of financial resources while others pursue active labour market policy. To stimulate participation in education and training, the funds use a variety of measures to cover the costs of training, training leave or examinations (Van der Meijden, 2013).

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

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% takes initiatives to sustain or expand apprenticeship places. Most funds devote far less attention to helping 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. Labour market position has a strong impact on lifelong learning participation. Those outside the labour force participate least. A decade ago, participation of employed and unemployed people in lifelong learning was almost equal. While the participation rate of unemployed has been decreasing in 2009 - 14, in 2015 this participation increased again (Figure 18).
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 a training course offered by a government funded provider. Most lifelong learning at 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, 2015). Most participants in non-government-funded lifelong learning take part in shorter training courses. In 2012, about 25% lasted less than a week and 25% lasted 1 week to 6 months. 30 percent had a duration of 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 four headings: raising efficiency, raising accessibility, 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 implemented measures 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 with a maximum duration of three years, MBO 2 with a maximum duration of two years) to achieve faster transit through the VET track, while increasing studyload (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 efficiency of Dutch VET is the 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 programs without a real job perspective.
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 the employed graduates have not been successful in finding a job at a level appropriate to their qualification (18).

2.5.2. Raising accessibility

New legislation to ‘ensure the right of enrolment in VET for all’ (Wetsvoorstel aanmelddatum en toelatingsrecht mbo) was adopted in 2016. This legislation is supposed to become into force by 2017. The main reason for this legislation is to tackle problems in the transition from secondary education to upper secondary VET, as one third of the early school leavers drop out during the transition period because of wrong study choices and unclear intake procedures in upper secondary VET schools. The purpose of this Act is to smoothen the transition from secondary to upper secondary VET (mbo) and to strengthen the position of the student in negotiation processes. This can be achieved by better (study) guidance before and during transition, by bringing forward the registration date (the first of April) for students switching from prevocational secondary education to upper secondary VET and by giving students the right to enrol in a course according to their preference (19).


2.5.3. Tackling early leaving and youth unemployment

The 2015-16 youth unemployment agenda (20) follows up on the successes achieved in previous agendas and includes two broad lines of action:
(a) increasing the budget for career orientation programs, stimulating the development of job and career competencies in VET and strengthening the links between VET and the labour market;
(b) stronger cooperation at a 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.

Youth unemployment and unemployment in general have been declining recently, while labour market participation has increased. It is not clear and topic of public debates whether these declines are causally linked to the youth unemployment measures taken in the last years or for the most part 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 EU2020 target for early leaving from education and training (Figure 19).
Looking back to developments in the last 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 the overall unemployment rate in the EU as a whole for many years, in the Netherlands the youth unemployment/overall employment ratio has been declining since 2010.

2.5.4. Learning by monitoring
Quality agreements concluded between all MBO colleges and the Ministry of Education in 2015 aim to facilitate a rapid and comprehensive implementation of the measures and encourage the colleges to increase their performance in terms of early school leaving, completion rates, quality of (guidance of) workplace learning, excellence programmes and professionalisation of teachers (OCW, 2014a). In return, schools receive additional (partly performance-based) funding for 4 years (2015-18). The budget for performance-based funding will increase over time (up to 210 million euros in 2018). The money will only be available to colleges who 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 on the student population, the programmes and their outcomes, and the finances of the institutions.

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 under the condition of a reduction of the number of early school leavers. Within ten years the number of new school drop outs in VET fell from 71 000 in 2002 to less than 28 000 in 2012 (21).

Another similarity to the early school leaving policies implemented in recent years is the 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 by improving registration and follow up, it is possible to generate early school leaving intelligence on national and regional level. 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' (22).

Learning by monitoring is indicative of a much wider trend in Dutch VET: an increasing use of research and intelligence to improve VET quality and effectiveness. Not only by involving specialist professional researchers, but also by stimulating teachers to obtain a master's degree and by encouraging them to engage in research activities. This is intended to reduce the gap between educational research and educational practice. The first research day for vocational teachers was organised in 2015. It helped them 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.

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CHAPTER 3.
Shaping VET qualifications

3.1. Anticipating skills needs

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

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

Two approaches to skills anticipation can be distinguished: top-down and bottom-up. In the top-down approach, a general forecasting model covering the whole labour market uses national data sources to generate information relevant for policy makers and for guidance purposes. Every second year, ROA publishes the report ‘The labour market by education and occupation in 20xx’ (e.g. ROA, 2015) 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 generated labour market information caters to the needs of several stakeholders. Youth and jobseekers benefit by being able to base their education...
choices on the mid-term labour market perspectives of different education tracks. Websites such as www.studiekeuze123.nl, www.kansopwerk.nl and www.kansopstage.nl, as well as education guides (www.keuzegids.org) help them make education and training decisions. Different groups of policy makers benefit from labour market information for youth (Basiscijfers Jeugd - https://www.s-bb.nl/publicaties/basiscijfers-jeugd/basiscijfers-juni-2016) available for each labour market region as the information helps ease decisions on whether to open new education tracks or amend existing ones. The information also helps companies and their sector organisations, as it gives them a chance to act on expected skills shortages in the near future. Public and private employment services use the information to shape training policies for their beneficiaries.

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

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

3.2. Designing qualifications and curriculum development

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

(a) in lower secondary pre-vocational education: examination syllabi are laid down in a framework by the 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 sub-sectoral level referred to as ‘market segments’ in the national context (23);

(23) See https://www.s-bb.nl/samenwerking/marktsegmenten [accessed 3. 05. 2017].
(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. Qualifications are clustered for better transparency and functionality. Definitions of qualifications are broadened, with a general part (language-, numeracy-, citizenship- and career management skills), a basic vocational part applicable for all occupations in the qualification, several profile modules (specific for the profile within the qualification) and optional modules (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 educational institutions jointly develop them to quickly respond to innovations or emerging needs within their region. The modules can be defined every three months and then immediately offered to students. Regions will be afforded some leeway to draft optional modules to respond to regional needs and/or to help learners progress through the education and training system. The options will also allow them to provide coursework in German, to include commercial skills in their programmes or to include skills relevant for continuation in professional higher education (Parliamentary Letter, 2014).
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 the quality of learning in enterprises, interpret and validate information on VET and the labour market. Each sectoral chamber is supported by representatives of the different labour market segments that form part of the sector.

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

Starting with the 2016/2017 school year, and in addition to the revision of the qualification system, more experimentation will be allowed for cross-overs, in which innovative training programmes can be created that go off the beaten path by combining parts of several qualifications. Institutions with a programme offer that is insufficient to offer demonstrable job prospects will be allowed to engage in such experiments (Parliamentary Letter, 2014).
3.3. Qualifications framework

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

The NLQF was referenced to the European Qualifications Framework (EQF) in 2011 (HE framework linked to QF-EHEA in 2009) and was formally adopted mid-2012. The 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, 2015). 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 Education Ministry, labour market relevance has become a criterion for determining whether a qualification is substantial and can be included in the NLQF. Previously only qualifications which require 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

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

(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 quality of school exams;

(b) in VET at upper secondary (MBO) level, assessment of learning results is the responsibility of schools. The law stipulates that companies providing work-based learning have to be involved. Qualification standards serve as benchmarks for assessments. The education inspectorate supervises quality of examinations (content, level and procedures at programme level);
(c) in both lower and upper secondary VET the introduction of obligatory central examinations in Dutch language and basic maths will be carried out in phases;
(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 fifteen 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 on-going. In line with discussions and proposals made in the last 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 HE qualifications. This type of validation is most used. The certificate offers no legal right for exemptions for learning or exams in formal VET of Higher professional education (see below);
(b) validation for education: Accreditation/certification of prior learning (APL) – a formal procedure in which a candidate can get his/her learning outcomes assessed against a national qualification standard to obtain a formal qualification in VET or HE. Validation supports access to education and training at all levels. Although both VET and HE qualifications can in theory be obtained through validation, in practice this depends on demand and is currently most common in VET.

Within the educational route, the government supports the build-up of an infrastructure within the VET colleges and higher education institutes to further implement and improve validation procedures. In the future, the education ministry will no longer have a coordinating role in quality assuring in validation for the labour market. Social partners have therefore prepared a quality label for providers offering validation for the labour market. Validation in the educational route is assigned to the education inspectorate or NVAO (24).

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

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. 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 educational offer to the student population, the offer of regional MBO colleges and labour market developments (25).

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 have an optimal offer of qualifications at national and regional level to meet labour market needs effectively and efficiently. The work has been entrusted to SBB. The review of the qualification framework became effective in 2016, has led to a reduction of 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 programmes themselves (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 a 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

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\(^{(25)}\) See [https://www.rijksoverheid.nl/documenten/kamerstukken/2014/12/15/kamerbrief-over-fundamenteel-vmbo](https://www.rijksoverheid.nl/documenten/kamerstukken/2014/12/15/kamerbrief-over-fundamenteel-vmbo) [accessed 3. 05. 2017].
inspection, the latter based on self-evaluation, review and accreditation. A common quality assurance framework for VET providers is in place and applies to workplace learning. For recognised CVET courses (in the official registry) offered by private providers the same rules apply as in IVET.

The education ministry through the education inspectorate and VET providers themselves are responsible for quality assurance in upper secondary VET. The VET law 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 consisting of all important VET stakeholders meets several times a year to discuss further developments. All EQAVET indicators are used (26).

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 has a 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 and 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, preventing early leaving from education and training and include concrete targets wherever possible.

(26) See http://www.eqavet.nl/_images/user/Eqavet_Leaflet_NL.p_20131030151118.pdf [accessed 3. 05. 2017].
## List of abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AD</td>
<td>associate degree</td>
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<tr>
<td>AOC</td>
<td>agrarisch opleidingscentrum [agricultural training centre]</td>
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<td>AVO</td>
<td>algemeen voortgezet onderwijs [general secondary education]</td>
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<td>BAO</td>
<td>basisonderwijs [primary education]</td>
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<tr>
<td>BBL</td>
<td>beroepsbegeleidende leerweg [dual pathway (apprenticeship training) in which learning and working are combined]</td>
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<td>BOL</td>
<td>beroepspoleidende leerweg [school-based full-time or part-time programmes with practical periods in enterprises]</td>
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<td>BVE</td>
<td>beroepsonderwijs en volwasseneneducatie [upper secondary vocational education and general adult education]</td>
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<tr>
<td>DUO</td>
<td>Dienst Uitvoering Onderwijs [Service Institution Education]</td>
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<td>HAVO</td>
<td>hoger algemeen voortgezet onderwijs [upper secondary general education]</td>
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<td>HBO</td>
<td>hoger beroepsonderwijs [higher professional education]</td>
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<td>LFS</td>
<td>Labour force survey</td>
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<td>MBO</td>
<td>middelbaar beroepsonderwijs [upper secondary vocational education]</td>
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<tr>
<td>NVAO</td>
<td>Nederlands-Vlaamse Accreditatie Organisatie [Dutch-Flemish Accreditation Organisation]</td>
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<td>NRTO</td>
<td>Nederlandse Raad voor Training en Opleiding [Dutch Council for Training]</td>
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<td>O&amp;O fonds</td>
<td>Opleidings- en Ontwikkelfonds [Training and Development Fund]</td>
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<td>OU</td>
<td>Open Universiteit [Open University]</td>
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<tr>
<td>PRO</td>
<td>praktijkonderwijs [practical labour oriented education]</td>
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<tr>
<td>ROA</td>
<td>Research Centre for Education and the Labour Market</td>
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<tr>
<td>ROC</td>
<td>regionale opleidingscentrum [regional, multisectoral training centre]</td>
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<td>SBAO/SO</td>
<td>speciaal basisonderwijs/speciaal onderwijs [special (primary) education]</td>
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<td>Acronym</td>
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References


MBO Raad (2014). Branchecode goed bestuur in het MBO [branche code on good governance in MBO].


https://www.educ.cam.ac.uk/centres/lfl/about/events/pastlflsupperseminars/PDFs/Teaching_2020_The_Netherlands_Ministry.pdf

http://www.delerarenagenda.nl/binaries/delerarenagenda/documenten/publicaties/2015/01/01/lerarenagenda-oktober-2013/lerarenagenda_v02.pdf


Van der Meijden and van der Meer (2013). Sectorfondsen voor opleiding en ontwikkeling: van pepernoten naar spekkoek - Vierde meting van de Monitor O&O-fondsen [sectoral funds for training and development: fourth edition of training and development funds monitor].


http://www.aanvalopschooluitval.nl/userfiles/file/2015/Panteia%20vsv%20monitor%20jaarrapport%202014.pdf

ROA (2015). De arbeidsmarkt naar opleiding en beroep tot 2020 [The labour market by education and occupation until 2020]

https://www.rijksoverheid.nl/ministeries/ministerie-van-onderwijs-cultuur-en-wetenschap/documenten/kamerstukken/2014/06/02/kamerbrief-over-een-toekomstgericht-middelbaar-beroepsonderwijs


http://www.ecbo.nl/3_2098_De-ontwikkeling-van-de-instroom-in-de-bbl.aspx
Core VET(-related) legislation

Industrial, technical and domestic education act (1921): superseded.
Secondary education act (1968)
  http://wetten.overheid.nl/BWBR0002399
  http://wetten.overheid.nl/BWBR0002628
Work councils act (1971):
  http://wetten.overheid.nl/BWBR0002747
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
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<td><a href="http://www.mboraad.nl">www.mboraad.nl</a></td>
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