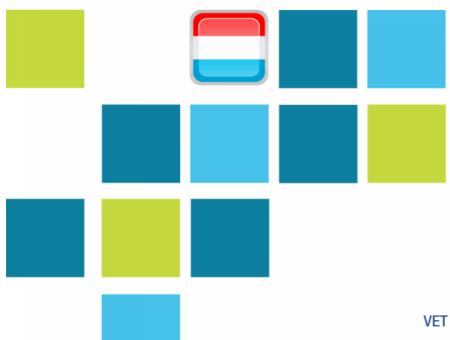


VOCATIONAL EDUCATION AND TRAINING IN EUROPE LUXEMBOURG

SYSTEM DESCRIPTION



VET IN EUROPE 2019

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Table of contents

- Chapter 1. Summary of main elements and distinctive features of VET.
- Chapter 2. Main challenges and policy responses.
- Chapter 3. External factors influencing VET.
 - 3.1. Demographics.
 - 3.2. Economics.
 - 3.3. Labour market.
- Chapter 4. Education attainment.
 - 4.1. Share of high, medium and low level qualifications.
 - 4.2. VET learner share of the total VET population.
 - 4.3. VET learners by level.
 - 4.4. Female share.
 - 4.5. Early leavers from education and training.
 - 4.6. Participation in lifelong learning.
 - 4.7. VET learners by age.
- Chapter 5. VET within education and training system.
- Chapter 6. Apprenticeship.
- Chapter 7. VET governance.
- Chapter 8. VET financing mechanisms.
- Chapter 9. Teachers and trainers.
 - 9.1. VET teacher types.
 - 9.2. Continuing professional development of teachers/trainers.
- Chapter 10. Shaping VET qualifications.
 - 10.1. Anticipating skill needs.
 - 10.2. Designing qualifications.
- Chapter 11. Quality assurance.
- Chapter 12. Validation of prior learning.
- Chapter 13. Incentives for learners.
- Chapter 14. Incentives for enterprises to boost their participation in VET provision.
- Chapter 15. Guidance and counselling.
- Vocational education and training system chart.
- VET Programme Types.
 - The lower cycle of technical secondary education (ISCED 244, EQF 1) is considered as pre-VET and lasts three years. It comprises the 'orientation programme' and the 'preparatory programme', designed for learners who struggle with the regular secondary education curriculum..
 - Integration classes (classe d'insertion) of the lower cycle of technical secondary education, EQF1, ISCED 244.
 - Technical school-based programmes (Diplôme d'enseignement secondaire général) leading to EQF level 4, ISCED 354.
 - Technician programmes (le diplôme de technicien), leading to EQF level 4, ISCED 354.
 - Vocational programmes leading to a vocational aptitude diploma (diplôme d'aptitude professionnelle, DAP) leading to EQF level 3, ISCED 353..
 - Vocational programmes leading to a vocational capacity certificate (certificat de capacité professionnelle, CCP) leading to EQF level 2, ISCED 353.
 - Optional preparatory module Modules préparatoires aux études techniques supérieures.
 - Higher technician programme (brevet de technicien supérieur, BTS) leading to EQF level 5, ISCED 554.
 - Professional bachelor programmes leading to EQF level 6, ISCED 655.
 - Professional master programme leading to EQF level 7, ISCED 757.
 - Master craftsperson programmes leading to EQF 5 and ISCED 453 Brevet de maîtrise..

• References.

CHAPTER 1.

Summary of main elements and distinctive features of VET

Luxembourg's education system (including VET) is shaped by the country's political, economic, demographic and linguistic particularities, and strongly influenced by its:

- relatively small territory;
- multinational population and workforce: almost half of the country's population have are foreign citizens (47%), among them the largest group being Portuguese (16%) and 24.6% from other European Union countries;
- multilingualism: there are three official languages (German, French and Luxembourgish);
- fast growing number of inhabitants since 1991 (the population has increased by 50% to a total of 602 000 inhabitants in 2018).

Distinctive features of VET (1)

Social partner involvement is a core principle in VET policy. The professional chambers act as independent policy institutes; they are represented in the tripartite advisory committee on vocational training and consulted on VET legislation. The 2008 reform reinforced their role, which includes involvement in developing and revising VET programmes. They also accompany enterprises and apprentices through practical training and organise CVET.

Learners have an opportunity to follow cross-border apprenticeship to acquire qualifications that Luxembourg's education system cannot offer; the number of learners is not always sufficient given the small size of the country. Practical training in a company based in Luxembourg is combined with learning at school in one of the neighbouring countries. Teaching in vocational programmes has been based on units and modules since the VET reform of 2008, which was implemented until 2013/14 (2) . Each module focuses on concrete professional situations; the learning outcomes to be acquired (competences and knowledge) are defined for each module.

Learner progression to general education or (pre-) VET in secondary education is guided based on achievements and interests, parents' opinions and the view of education staff, including a (pre-) VET representative.

Close ties with neighbouring countries, multilingualism in all spheres of life and the high share of foreign citizens with a mother tongue other than one of the three official languages have a strong impact on VET. Luxembourg provides more language training than any other country, in terms of both the number of foreign languages studied per learner and time spent in learning. Multilingualism is a strength but also a challenge: the official language used varies, depending on the type and level of education and training.

CHAPTER 2.

Main challenges and policy responses

Tackling youth unemployment and investment in skills are high on the policy agenda. Reinforced stakeholder involvement and youth guarantee measures aim to match young people's skills/qualifications better to labour market demand, and to target the low-skilled. In line with the Europe 2020 headline targets, national policies focus on keeping the share of early leavers from education and training below 10%. One of the challenges is to ensure education and training equity, irrespective of origin or socioeconomic status. One of the education ministry's priorities is to ensure a diversified offer to meet the needs of increasingly heterogeneous target groups. Implementation of the 2008 VET reform has revealed weaknesses in the system. Bringing about change was difficult: adapting to new realities was challenging for institutions, teachers and learners. Amendments to current legislation were developed to fine-tune the reform. The law of 22 June 2017 art. 12) which gives its legal basis to the House of Guidance (Maison de l'orientation) also foresees that each secondary school should develop its own clear and general guidance approach.

To give learners better opportunities in the labour market, the education ministry is expanding the apprenticeship offer in vocational and technician programmes.

There is a need for stronger links between the world of education and training and that of work. Emphasis has been put on dovetailing in-company and school-based training phases, and on strengthening on-the-job training requirements. In collaboration with professional chambers, the government promotes implementation of quality assurance in work-based learning. This implies defining the process that will ensure better quality without disrupting doing business.

Data from VET in Luxembourg Spotlight 2017 (3) .

CHAPTER 3.

External factors influencing VET

3.1 Demographics

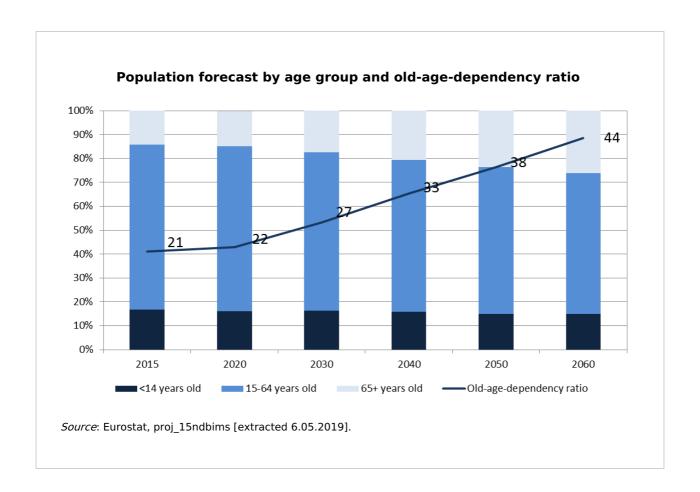
Population in 2018: 602 005 (4)

It increased by 12.1% since 2013 due to immigration (5) .

Luxembourg's population growth is mainly due to immigration, as the natural balance is relatively low. The share of foreigners in Luxembourg's total population is growing steadily.

As in many other EU countries, the population is ageing.

The old-age dependency ratio (6) is expected to increase from 21 in 2015 to 44 in 2060

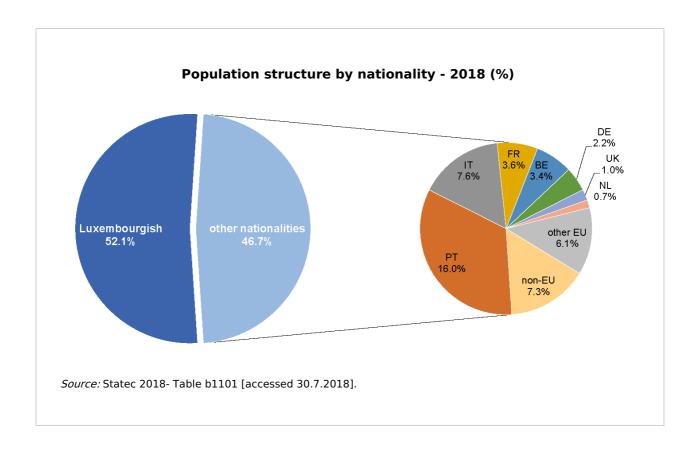


Demographic changes have an impact on VET.

In 2018, Luxembourg had 602 005 inhabitants. Since 1991 the population has increased by 50% mainly due to immigration, which has a major impact on VET.

The figure below shows that 47% of the country's population are foreign citizens (7). Their share has more than doubled in the past 25 years. In the first half of the 1960s most of the immigrants

came from Italy. However, since 1966, the immigrant population from Portugal increased from 1 100 to 82 400 in 2011 (8) and became the largest in the country. In 2018, the Portuguese community was 96 800 inhabitants (16.0%).



The share of the population with a foreign nationality and a mother tongue other than the official German, French and Luxembourgish languages is high. Multilingualism is one of the country's strengths but it is also a challenge for education and training. The high share of foreign nationals requires education and training and labour market integration policies. A public agency for integration (Office Luxembourgeois de l'Accueil et de l'Intégration) under the auspices of the Ministry of Family, Integration and the Greater Region implements this policy. This includes providing information on training in the official languages and information about the recognition of foreign diploma and secondary general education (9) and VET certificates and reports (10) .

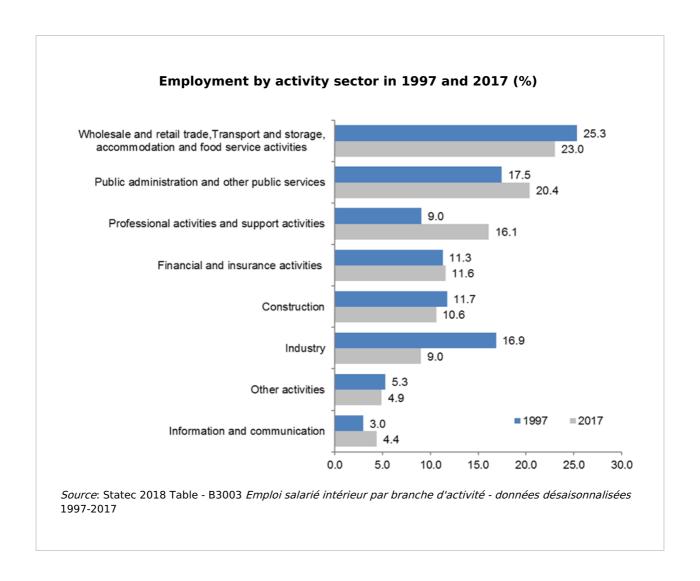
3.2 Economics

The economy has undergone structural changes in the past two decades (see Figure below). The industrial economy evolved into a service economy with jobs that often require tertiary level qualifications. Employment in the industrial sector decreased from 16.9% in 1997 to 9.0% in 2017. The service, professional, scientific and technical sectors and the administrative and support service sectors have had the highest growth, from 9.0% to 16.1%. Adapting VET provision to the constantly changing employment structure has been a challenge. In 2017, more than 40% of employment was concentrated in the following sectors:

- wholesale and retail trade;
- transport and storage;
- accommodation and food service activities;
- public administration and other public services.

The public administration includes civil servants and public employees from the State and

municipalities and permanent staff from national railways. In 2016, there were approximately 11 204 teachers; 4 931 of these were in secondary general and technical education (11) .

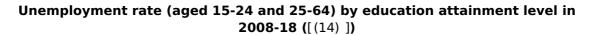


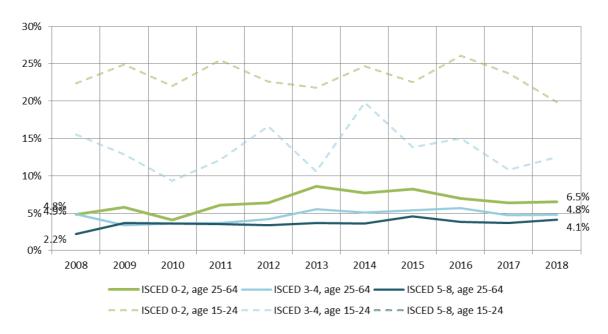
3.3 Labour market

Access to skilled craftsperson and commercial activities and some liberal professions is regulated.

Commercial activities and skilled craftsmanship in the territory require a business permit, issued if the manager satisfies qualification requirements and professional integrity. Qualification requirements for skilled craftsperson companies differ depending on the trade. For main craft trades such as baker/confectioner, dental technician, specialist in mechatronics, the manager must have a master craftsperson certificate (*brevet de maîtrise*) or a bachelor degree (if not linked to the core business it should be complemented with at least two years of professional experience), or a vocational aptitude diploma (*diplôme d'aptitude professionnelle*, DAP) completed by managing experience of six years in the field. For secondary craft trades such as dry-cleaner/launderer, heating mechanic, the manager must have a DAP or similar in a related field or three years' professional experience in the activity.

Total unemployment (12) (2017): 5.6% (7.6% in EU28), it increased by 1.4 percentage points since 2007 (13) .





NB: Data based on ISCED 2011; breaks in time series.

ISCED 0-2 = less than primary, primary and lower secondary education.

ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

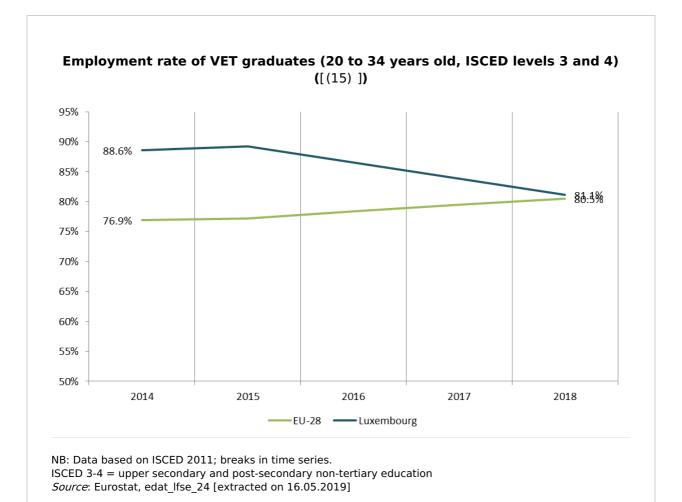
ISCED 5-8 = tertiary education.

Source: Eurostat, Ifsa_urgaed [extracted 16.05.2019].

Unemployment differed between those with low- and high-level qualifications only slightly for the age group 25-64 during 2008-18. In 2018 it was the lowest for VET graduates at ISCED levels 5-8 (4.1%) and highest for those at ISCED level 0-2 (6.5%). Since 2008 the unemployment rate of the age group 25-64 has increased for ISCED level 0-2 (by 1.7 percentage points) and 5-8 (1.9 pp.) but remained stable for VET graduates at ISCED level 3-4.

The age group 15-24, however, faced a much higher risk of unemployment during those years (2008-18), especially those having only ISCED level 0-2 who suffered unemployment of 22.4-19.9%.

Employment of 20 to 34-year-old VET graduates is high rate, but decreased between 2014 and 2018, from 88.6% to 81.6%. However, it was always higher than the EU-28 average which was 76.9% in 2014 but increased to 80.5% in 2018.



The employment rate of VET graduates (20 to 34 years old, ISCED levels 3 and 4) (16) decreased between 2014 and 2018 by 7.5 percentage points; it increased from 76.9% to 80.5% across the EU-28.

The employment rate of all graduates aged 20 to 34 years was 85% in 2014 and decreased by 1.3 percentage points to 83.7% in 2018. Whereas the employment rate of VET graduates was still above that of all graduates in 2014, in 2018 the employment rate of VET graduates was the below that of all graduates (17) .

^[4] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 28.1.2019].

^[5] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 28.1.2019].

^[6] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).

^[7] Foreign citizens residing in Luxembourg can obtain Luxembourgish nationality by naturalisation. Legislation requires them to attend citizenship training and to pass an oral Luxembourgish language exam.

^[8] The latest population census available from 2011.

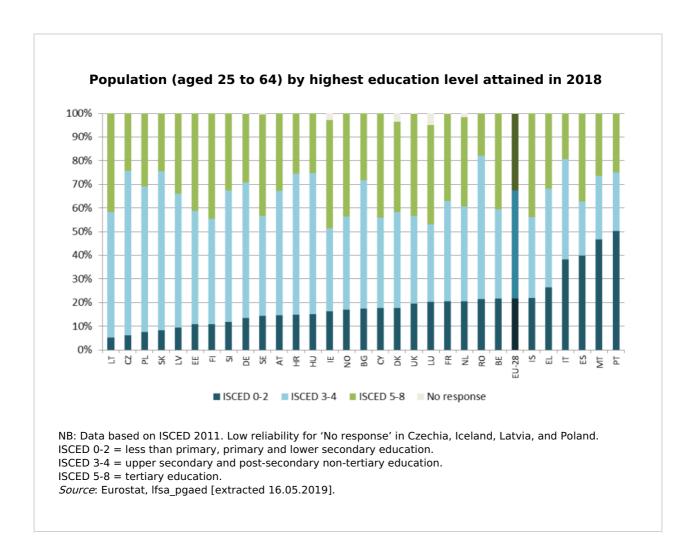
- [9] General education is nationally referred to as 'classical' education.
- [10] This information is also easily accessible at www.guichet.lu and www.lifelong-learning.lu [accessed 23.1.2019].
- [12] Percentage of active population, 25 to 74 years old.
- [13] Eurostat table tps00203 [extracted 25.1.2019].
- [14] Time series for the 15-24 group must be considered with caution due to the small number of observations taken into account.
- [15] Time series must be considered with caution due to the small number of observations taken into account.
- [16] Time series must be considered with caution due to the small number of observations taken into account.
- [17] NB: Break in series. Eurostat table edat_lfse_24 [extracted 16.5.2019].

CHAPTER 4.

Education attainment

4.1 Share of high, medium and low level qualifications

Among the working population aged 25-64, 41.9% had ISCED level 5-8, above the EU-28 average of 32.2%, but only 32.8% had ISCED level 3-4, 12.9 percentage points below the EU-28 level. 20.4% of the population only had a low or no qualification (ISCED 0-2), 1.4 percentage points below the EU-28 average.



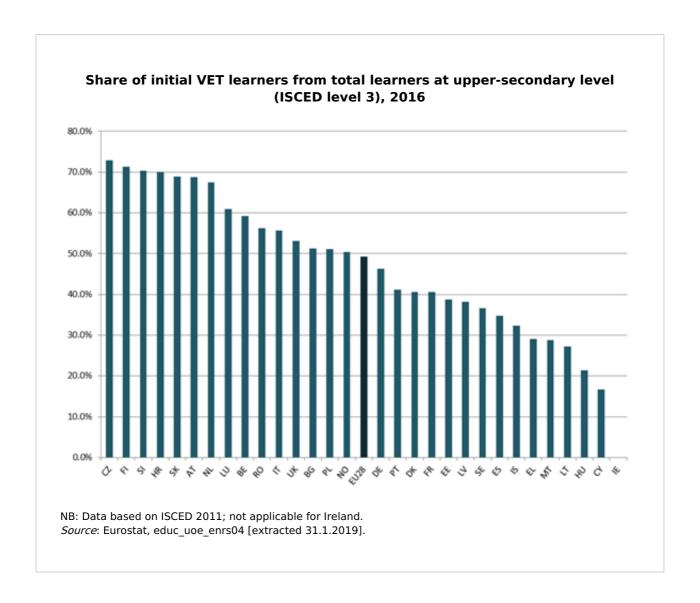
4.3 VET learners by level

Share of learners in VET by level in 2016

lower secondary	upper secondary	nost-secondary
lower secondary	apper secondary	pose secondary

Not applicable 61.0% 100%

Source: Eurostat, educ_uoe_enrs01, educ_uoe_enrs04 and educ_uoe_enrs07 [extracted 31.1.2019].

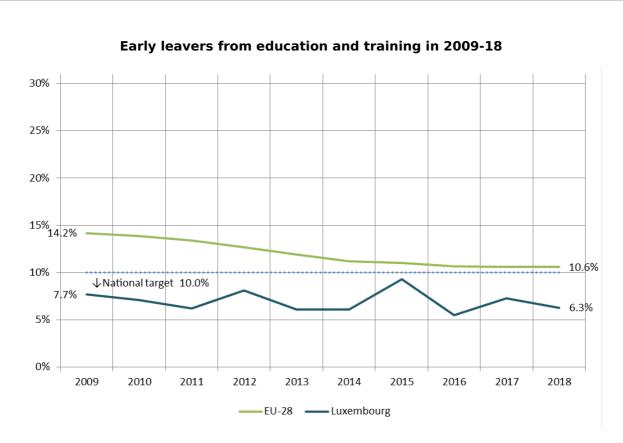


4.4 Female share

In 2016/17, in lower, middle and upper technical secondary programmes (27 221 learners), there were more males (53%) than females (47%).

4.5 Early leavers from education and training

The share of early leavers from education and training has fallen from 7.7% in 2009 to 6.3% in 2018. It is below the national target for 2020 of no more than 10%, and the EU-28 average of 10.6% (2018).



NB: Share of the population aged 18 to 24 with at most lower secondary education and not in further education or training; break in series.

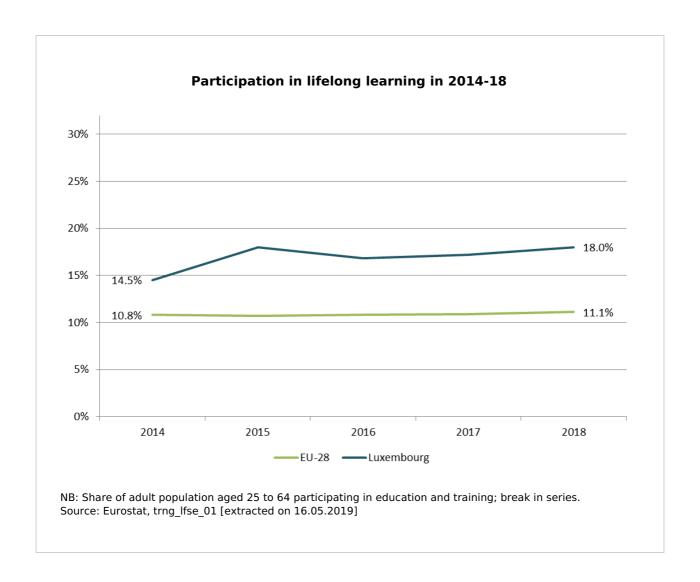
Source: Eurostat, edat_lfse_14 [extracted 16.5.2019] and European Commission:

https://ec.europa.eu/info/2018-european-semester-national-reform-programmes-and-stability-convergence-programmes en [accessed 14.11.2018].

However, these data are subject to important variations due to the small sample size in the country and may not allow easy identification of the causes of early school leaving at national level. In response to the lack of reliable data, the national education authorities produce annual statistics based on administrative data and on a survey of early school leavers. These data indicate a higher early leaving rate for those up to age 25 (13.5%) (18) for 2015 than the rate calculated via the labour force survey for this year. The share of early leavers is relatively high among the migrant population, especially for those not having one of the three national languages as mother tongue.

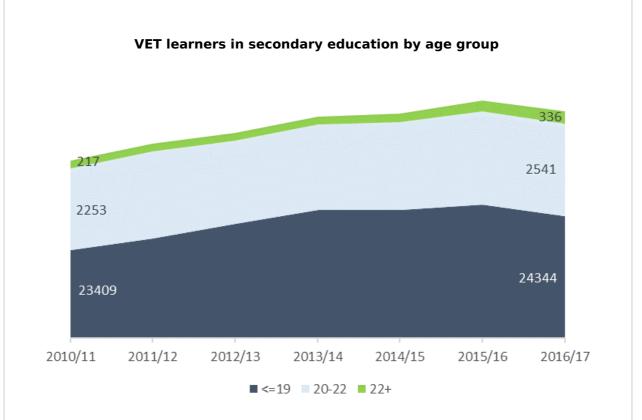
4.6 Participation in lifelong learning

Lifelong learning offers training opportunities for adults, including early leavers from education.



Participation in lifelong learning in Luxembourg has been increasing in the past decade. While it was at 14.5% in 2014, it increased to 18.0% in 2018, almost seven percentage points above the EU-28 average.

4.7 VET learners by age



NB: VET learners include learners from lower, medium and upper technical secondary education

Source: National data.

CHAPTER 5.

VET within education and training system

The education and training system comprises:

- pre-school education (ISCED level 0);
- primary and lower secondary education (ISCED levels 1 and 2);
- upper secondary education (ISCED level 3);
- post-secondary non-tertiary education (ISCED level 4);
- higher education (ISCED levels 5, 6, 7 and 8).

School attendance is compulsory between 4 and 16, i.e. for at least 12 years, including two years of pre-school education. At the end of primary education (*enseignement primaire*), learners receive an end-of-cycle report, stating the level attained for each competence domain. Learners are guided towards either general or vocational secondary education by dedicated councils, which include a teacher working in VET (19) . The guidance takes account of learning achievement (based on the end-of-cycle report), parent and teacher opinions and performance in standardised basic skills tests (in relation to the national average).

Secondary education comprises two types with different objectives:

- general secondary education (*enseignement secondaire classique* ESC) which conveys general knowledge in humanities, mathematics and natural sciences and prepares for higher education studies;
- vocational secondary education, nationally referred to as technical secondary education (enseignement secondaire général) which gives access to higher education and/or to the labour market.

Various programmes at post-secondary and tertiary levels are available as general; others as vocational pathways (20) .

The Luxembourgish VET system comprises initial and continuing VET which are composed of several VET learning options:

- school-based learning;
- practical training at school;
- in-company training in form of apprenticeship or short term work placements.

The dual system is an important feature of secondary VET (hereafter referred to as technical secondary education), which implies a strong relationship between school-based education and work-based learning in enterprises.

In technical secondary education (*enseignement secondaire général*, ISCED 353 and 354) learners are prepared both for professional life and enrolment in higher education. It is divided into three cycles:

- (a) the lower cycle (cycle inférieur);
- (b) the medium cycle (cycle moyen);

(c) the upper cycle (cycle supérieur).

A preparatory programme (*programme préparatoire*) supports learners who find it difficult to adapt to secondary education.

After successful completion of the lower cycle, learners can choose between technical, vocational and technician programmes. Depending on the programme, duration varies between six and eight years. Since 2013/14, all technical secondary programmes are based on principles implemented with the 2008 VET reform, providing also the possibility for learners to move from one type of secondary education to another. Tuition is in French, German and Luxembourgish.

Depending on the occupation, secondary VET programmes may be provided in technical secondary schools or in mixed schools that offer both technical and general secondary education. While most VET learners in 2016/17 attended public schools (86.9%), some were enrolled in private schools that apply national curricula (12.1%) or in private/international schools that do not apply them (1%).

Lower cycle

The lower cycle of technical secondary education (ISCED 244, EQF 1) is considered as pre-VET and lasts three years. It offers learners an orientation phase in which they can decide on their further education pathway. Upon successful completion, they can continue in the medium cycle of technical, technician or vocational programmes.

Practical activities in workshops make up an important part of the technical secondary programmes and focus on supporting learners in choosing their career.

Depending on their performance at the end of primary school, learners are directed to a preparatory (*préparatoire*) or orientation (*orientation*) path.

Medium and upper cycles

The medium and upper cycles of technical secondary education offer (mainly) school-based VET programmes, apprenticeships and similar schemes. Learners acquire occupational qualifications for which a certificate or a diploma is awarded. Schooling includes various training schemes, which last from six to eight years, depending on the chosen orientation. There are four different programmes within these cycles:

- (a) technical programmes (*régime technique*) leading to a technical secondary school leaving diploma (*diplôme de fin d'études secondaires générales*) (ISCED 354, EQF 4);
- (b) vocational programmes leading to a vocational capacity certificate (*certificat de capacité professionnelle*, CCP) (ISCED 353, EQF 2);
- (c) vocational programmes leading to a vocational aptitude diploma (*diplôme d'aptitude professionnelle*, DAP) (ISCED 353, EQF 3);
- (d) technician programmes (*régime de la formation de technicien*) leading to a technician diploma (*diplôme de technicien*, DT) (ISCED 354, EQF 4).

^[19] Following the Law of 29 August 2017 (SCL, 2017d) on secondary education 'general secondary education' is nationally referred to as 'classical secondary education' (éducation secondaire classique - ESC) while 'technical secondary education' is referred to as 'general secondary education' (éducation secondaire générale - ESG). However, to allow comparison at EU level, the previous terminology will be kept.

^[20] Based on: INFPC (2019). Vocational education and training in Europe: Luxembourg.

Cedefop ReferNet VET in Europe reports 2018.

http://libserver.cedefop.europa.eu/vetelib/2019/vocational_Education_Training_Europe_L

CHAPTER 6.

Apprenticeship

Learners can choose between three different training programmes which (can) include an apprenticeship contract and lead to different qualifications:

- vocational capacity certificate (*certificat de capacité professionnelle*, CCP) at EQF level 2 always includes an apprenticeship contract. This programme is designed for learners facing difficulties in being accepted on another programme and lead to semi-skilled worker skills;
- vocational aptitude diploma (*diplôme d'aptitude professionnelle*, DAP) at EQF level 3 can be done under an apprenticeship contract or an internship contract. They provide the graduate access to the labour market as a skilled worker;
- technician programme (*diplôme de technician, DT*) at EQF level 4 which are school-based and include a job placement of 12 or more weeks. They are mostly organised under an internship contract but can also be organised under an apprenticeship contract. This programme offers in-depth and diversified competences and a higher part of general education than the vocational programmes.

Learners are responsible for finding a training place in an enterprise. The vocational guidance service of the public employment service (Agence pour le Développement de l'Emploi, ADEM) supports young people through counselling and a central register of all available apprenticeship places.

Once the learner has signed a contract with a company, (s)he has the legal status of an apprentice and receives an apprenticeship allowance which varies between EUR 400 and 1 300 depending on the trade/profession learned (21) . Upon successful completion of an academic year, learners receive a premium allowance based on a monthly rate of EUR 130 for CCP or EUR 150 for DAP and DT. The best apprentices receive an award which also includes a prize of EUR 1 500.

Enterprises offering apprenticeship places need to comply with certain criteria, verified by the professional chambers. Financial support and an award to encourage their engagement are available. VET trainers, who receive special training, supervise the apprentices in the training companies. In accordance with the amended VET legislation of 2008, an apprenticeship is based on key principles such as:

- qualitative assessment of learning outcomes (transcript of acquired and non-acquired skills rather than marks in figures);
- modular system allowing apprentices who fail a required module to continue their training and catch up at a later stage during their apprenticeship (22) .

Learn more about apprenticeships in the national context from the European database on apprenticeship schemes by Cedefop: http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/apprenticeship-schemes/scheme-fiches

[21] https://www.lllc.lu/fr/formation-professionnelle-initiale/indemnites-d-apprentissage-nouveau-regime-dt-dap-ccp

CHAPTER 7.

VET governance

The Ministry of National Education, Children and Youth (23) is responsible for all types of education, including initial and continuing VET. Initial and continuing higher education is under the Ministry of Higher Education and Research (24). In cooperation with the Ministry of Labour, Employment and the Social and Solidarity Economy (25), the Ministry of National Education, Children and Youth is also responsible for training measures for the unemployed.

Higher education is under the responsibility of the higher education ministry.

Cooperation between the State and the social partners is a core principle in VET. As stated in the law reforming VET (26), social partners are essential stakeholders who contribute to its organisation and implementation. The professional chambers' opinion is systematically sought on laws and regulations on economic, financial and social policy: labour law, social security, taxation, the environment, initial and continuing vocational training, and education. Development and periodic revision of programmes are ensured by curriculum teams.

There are five professional chambers in Luxembourg. The Chamber of Commerce (27), Chamber of Trades and Skilled Crafts (28) and Chamber of Agriculture (29) represent employers. The Chamber of Employees (30), and Chamber of Civil Servants and Public Employees (31) represent wage earners. These chambers act as independent policy institutes; they are involved in Luxembourg's legislative procedures and are officially consulted on education matters. They are represented both at national (Economic and Social Council, Tripartite Advisory Committee on Vocational Training) and at European level (Cedefop Governing Board, Advisory Committee on Vocational Training). In contrast to trade unions and employers' associations, membership in the professional chambers is compulsory (with an annual subscription) for all employees and private companies.

The professional chambers were created by law in 1924 (32) and in 1964 (Chamber of Civil Servants and Public Employees (33) . They are public establishments, legal persons governed by civil law. Although the professional chambers are supervised by the government, they enjoy financial autonomy. Since 1929, the chambers have been involved in initial education, especially with regard to VET preparing for an occupation. They also have substantial powers regarding apprenticeships; in 1945, their remit in the establishment, supervision and termination of apprenticeship contracts was extended. Their power and involvement were reinforced by the 2008 law reforming VET (34) . Their involvement in vocational training includes:

- identifying training needs;
- guidance and information on training;
- determining the professions or trades offered in VET;
- training offers;
- organising training;
- designing framework training programmes;
- assessing training programmes and the training system;
- qualifications and validating experience acquired.

Professional chambers have established a platform for supervisors/tutors where they can find all the necessary support during apprenticeship. They have also created the label 'training enterprise' to put the companies committed to training young people into the limelight.

The Chamber of Commerce and the Chamber of Trades and Skilled Crafts have appointed apprenticeship counsellors for each trade and profession. Their main mission is to inform

companies and apprentices about vocational training issues (legislation, organisation, programmes, class visits). They also assist enterprises and apprentices in practical process where they:

- can intervene as mediators in case of disagreement or conflict between the company, the school or the apprentice;
- participate in organisation of intermediary tests and support the relationship between the school and the company in case of difficulties;
- are available to apprentices who need to reorient themselves and find an appropriate apprenticeship;
- follow their evaluation and, if needed or concerned, take part in the class council and in the disciplinary councils;
- signal irregularities in legislation on vocational training to the competent institutions.

The professional chambers are also authorised by law to organise continuing training courses.

The Education Ministry has created two new structures, to improve the adaptation of schools to the needs of learners and the professional world.

A National Programme Council (35) was created alongside the National Observatory of School Quality at the beginning of 2018, to allow more exchanges and debates about educational matters and to build a bridge between the educational and professional worlds. It should represent the voice of society in discussions about school programmes. The council has eight members (at least three men and at least three women), chosen according to their experience and expertise in different fields such as culture, economics, ecology, associations and others (36) .

- [23] Ministère de l'Éducation Nationale, de l'Enfance et de la Jeunesse (MENJE). Hereinafter referred to as education ministry.
- [24] Ministère de l'Enseignement Supérieur et de la Recherche (MESR). Hereinafter referred to as higher education ministry.
- [25] , Ministère du Travail, de l'Emploi et de l'Économie Sociale et Solidaire (MTE). Hereinafter referred to as labour ministry.
- [27] Chambre de Commerce.
- [28] Chambre des Métiers.
- [29] Chambre d'Agriculture.
- [30] Chambre des Salariés.
- [31] Chambre des Fonctionnaires et Employés Publics.
- [35] Conseil national des programmes.
- [36] This section is based on: INFPC (2019). Vocational education and training in Europe:
 Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

 http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

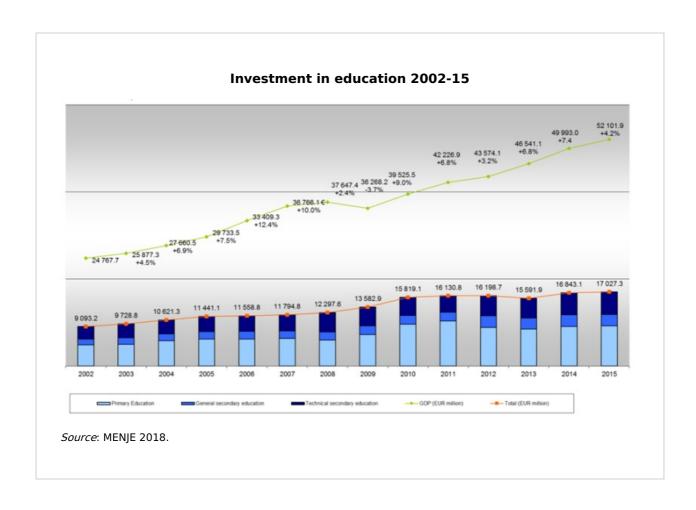
CHAPTER 8.

VET financing mechanisms

Total total government expenditure for public education in percentage of GDP increased from 4.8% in 2008 to 5.0% in 2017 (37). Luxembourg devotes the highest level of financial resources to education per learner among the OECD (38) countries. At secondary level, the expenditure per learner is EUR 18 484, while the OECD average is about EUR 8 080 (39)], [(40) .

In 2017, funding for initial public education was EUR 2.09 billion (41), shared between the three levels of initial education: primary, general secondary, and technical secondary. Education is financed at two levels: central government and local administrations (106 municipalities).

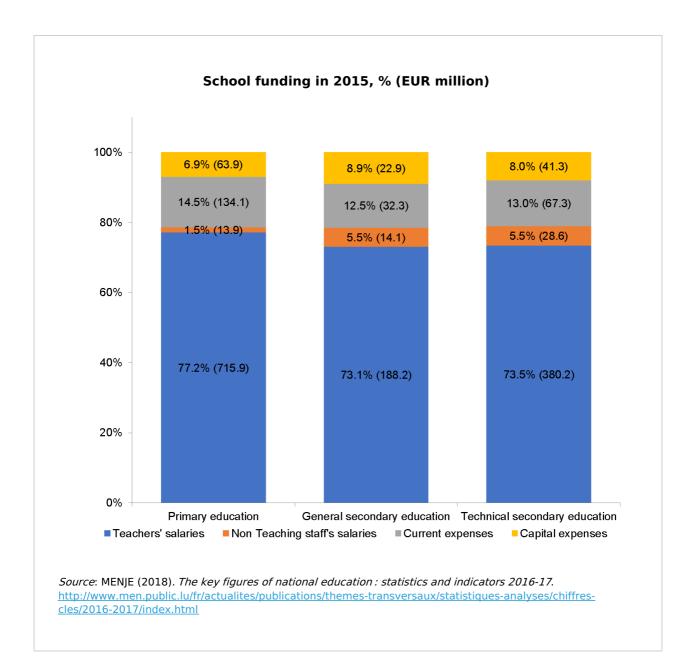
In 2015, more than half (54.5%) of the funding went to primary education (EUR 928 million). At secondary level, expenditure on technical education was higher (EUR 517 million, 30.4% of total funding) than general education (EUR 258 million, 15.1% of total funding). It covered remuneration of teachers, administrative and technical staff, operating costs and investments.



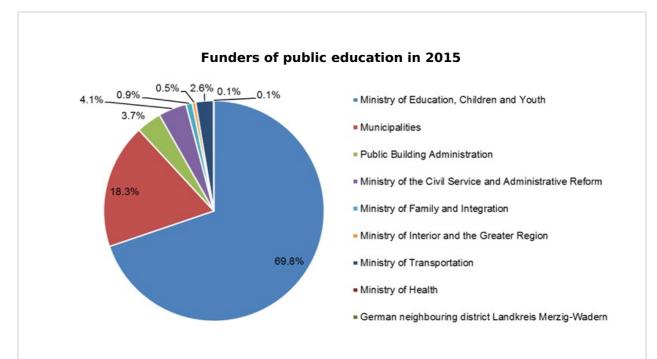
Public funding for general and VET schools was slightly, but constantly, increasing up to 2012. In 2013, it fell by 3.7% but increased in 2014 (+8%) and remained stable in 2015 (+1%). There was a break in time series in 2009; since then the State has been fully in charge of remunerating primary education teachers, previously shared between the State and the communes.

Public funding includes:

- teachers' salaries;
- non-teaching staff salaries;
- current expenses (goods and services to ensure the daily functioning of educational services; school allowances; care of children outside school hours at municipal level for extra-curricular and after-school activities; the costs incurred by school medicine and school transport);
- capital expenses (movable and immovable assets).



As shown in the above figure, salaries make up the highest costs of all education programmes (73-77%). The share is greater in primary education (77%) than in secondary education. The share of current expenses is higher in primary (14.5%) education than in general (12.5%) or in technical (13.0%) secondary education, possibly because care of children outside school hours at municipal level is costlier at this level.



Source: MENJE (2018). *The key figures of national education: statistics and indicators 2016-17*. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffrescles/2016-2017/index.html

According to the latest available data, total central government expenditure (the cumulative expenditure of the various ministries and administrations involved in the financing of education) was nearly EUR 1 390 million. With a total contribution of 81.7%, the State is the primary funder of education in Luxembourg. The 106 communes contribute 18.3%, or about EUR 311 million.

Apart from national funds, money spent on public education can also come from foreign sources. The Schengen-Lyzeum Perl is a German and Luxembourgish high school set up in 2007, located in Germany close to the border. Learners can acquire the general and technical secondary school leaving diplomas (administrative and commercial division). The Landkreis Merzig-Wadern (LKMV), a German neighbouring district, pays 60% of the running costs and 50% of the building maintenance and investment in school equipment. The Luxembourg State pays the other part.

Funding for individuals in higher education

The government offers higher education learners financial support in the form of a grant and a loan (basic grant: EUR 1 000, mobility grant: EUR 1 225, grant on social criteria: EUR 0 to 1 900, family grant: EUR 250, student loan: EUR 3 250, registration fee: EUR 0 to 1 850) per academic semester: the grant and loan proportions depend on the applicant's income (42) . Tuition fees are taken into account when calculating the financial support. In each academic year, higher education learners apply for the support twice: before the winter and summer semesters (43) .

Funding continuing VET

Continuing training for employees or for individuals (private initiative) is normally funded by the enterprises or individuals themselves. However, in some sectors, companies must pay a levy to sectoral training providers to benefit from specific access conditions and prices. Companies may also contribute to training centres voluntarily to benefit from specific access conditions and prices. Companies and individuals can receive support and incentives for CVET, often non-financial but linked to working time arrangements.

Funding training for the unemployed and other vulnerable groups

Training for the unemployed and other groups excluded from the labour market is supported by the labour and the education ministries. The labour ministry finances training schemes run by the national centres for continuing vocational training and training schemes run by private centres under contract with the labour and the education ministries. The public employment service also provides financial support for different training programmes for job seekers.

Some projects for job seekers are jointly financed by the European Social Fund. Most are focused on job segments with a high development potential, such as Fit4coding (development of skills for the IT sector) or Fit4 Greenjobs (in cooperation with Institute for Construction Training - IFSB) (44) .

- [37] Eurostat Table gov_10a_exp [accessed 7.11.2018].
- [38] OECD Table 10.1787/ca274bac-en [accessed 7.11.2018].
- [40] European Central Bank Euro foreign exchange reference rate as on 3 June 2016 EUR/USD=1.1154, https://www.ecb.europa.eu/stats/exchange/eurofxref/html/index.en.html [accessed 9.1.2019].
- [42] http://portal.education.lu/etudes/Laide-financi%C3%A8re [accessed 6.3.2017].
- [44] This section is based on: INFPC (2019). Vocational education and training in Europe:

 Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

 http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

CHAPTER 9.

Teachers and trainers

9.1 VET teacher types

The Law of 25 March 2015 established different teacher careers in the Luxembourgish educational system.

Teacher career

Type of teacher	Type of teaching	Required diploma
Secondary school Teachers	Technical and general secondary	BA and MA
A1	education	
Technical education	Technical secondary education	BA
Teachers A2		
Master of technical	Technical secondary education	Master craftsman diploma or
education B1		BTS

There are no additional specific access or training requirements for VET teachers beyond a diploma and language requirements (proficiency in the three administrative languages). Recruitment procedures and training provisions for teachers in general secondary education are the same as for teachers in technical secondary education.

All teacher applicants must have a relevant bachelor or master degree for the subject that is being taught. They must pass an examination, and complete a three-year induction course at the Training Institute of National Education (Institut de formation de l'Éducation nationale, IFEN) created in 2015 (45). During the induction course, future teachers are already teaching at secondary schools while attending a teacher education programme at the IFEN. The induction course ends with a final examination.

Luxembourg University has provided a master degree in secondary education since the 2016-17 academic year, accessible to students holding a bachelor degree in maths, Romance or German languages, who wish to develop the necessary didactic skills to teach in class. Trainee teachers can thereby acquire teaching skills before applying for the examination at the IFEN. The programme includes courses in educational sciences, sociology of education, and psychology, to provide learners with the necessary skills to understand and meet the challenges of teaching in a multicultural and multilingual school system. Four options are available: maths, French language and literature, German language and literature, Luxembourgish language and literature.

The Chamber of Commerce has a training programme for teachers providing continuing vocational training, to facilitate the transfer and appropriation of knowledge by learners. This programme provides fundamental tools for effective teaching, as well as specific aspects to help perfect teachers' pedagogic approaches.

The law of 19 December 2008 stipulates that an enterprise offering training or apprenticeship has to designate one or more tutors to mentor apprentices throughout their apprenticeship. The tutor is in charge of the practical training and the pedagogic supervision of the apprentice. He is also appointed as the contact person for the apprenticeship counsellor and the competent professional chamber with regard to the progress of the apprentice. The law has increased the responsibility of the tutor for training and assessment of the apprentices. The training of tutors has become central to increasing and assuring the quality of initial and continuing vocational training and in promoting the recognition of diplomas and certificates across the borders. Participation in tutor training is mandatory for each enterprise involved in the training of one or

more apprentices. Each tutor has to undergo three-day training, organised by the competent professional chamber. A trainer holding a master craftsperson diploma (*Brevet de Maîtrise*) or equivalent is exempted from this mandatory training. The training Tuteur en Entreprise (Tutor in company) comprises a legal section, a pedagogic section and a section on assessment. It gives tutors useful tools to set up a training path, manage the relationship with the apprentice, identify the mission of the tutor and be able to help apprentices integrate in the working world and the enterprise (46) .

9.2 Continuing professional development of teachers/trainers

The Training Institute of National Education (IFEN) designs, implements and evaluates the professional insertion (internship) and the continuing professional development of teachers and psycho-social staff in education.

Continuing professional development has become increasingly important over the years and is now considered a professional duty in the Luxembourgish education system. A new regulation has entered into force, in which the minimum mandatory continuing training for secondary school teachers has been increased to 48 hours over three years. Within the SCHiLW framework (*Schulinterne Lehrer/innen-Weiterbildung* - School teachers' continuing training), the IFEN supports secondary schools that are willing to set up training plans (*plans de formation*, not compulsory). These plans contribute to greater coherence between the school's objectives and teachers' training activities.

The continuing training offer is elaborated by the IFEN in collaboration with school staff, who are consulted annually, and upon their request. IFEN endeavours to meet individual needs that have been identified at various levels, as well as political decisions. Continuing professional development is therefore organised according to training objectives and the availability of the teachers being trained, such as seminars (one-off training courses), training days, conferences, sequential continuing training (introductory module followed by a practical phase which may or may not be accompanied by an exchange and intensification phase). In a period of rapid technological change, it is essential that VET teachers continuously update their vocational skills and knowledge, to ensure trainees leave the VET system with skills that can be put into practice immediately.

In order to contribute to the academic success of learners, training offered aims to develop, in priority, the following teachers' professional skills:

- priority 1: teaching and learning in a competence-based approach;
- priority 2: teaching and learning language skills in a multilingual context;
- priority 3: information and communication technologies;
- priority 4: teamwork and communication;
- priority 5: personal professional development;
- priority 6: school development;
- priority 7: school management;
- priority 8: socio-educational work.

Each year new continuing training courses are proposed in order to answer to individual needs or needs identified at regional or national level.

^[46] This section is based on: INFPC (2019). Vocational education and training in Europe:

Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

CHAPTER 10.

Shaping VET qualifications

10.1 Anticipating skill needs

VET standards are developed in cooperation between the education ministry and the professional chambers. Curricula are based on occupational standards and informed by skill needs in enterprises. The following institutions ensure VET provision in line with labour market needs:

- Permanent Labour and Employment Committee (Comité Permanent du Travail et de l'Emploi): the ministries of education and labour, cooperate through this committee. It is responsible for reviewing the labour market situation regularly. Its working methods include analysis of job supply and skills demand;
- Training Observatory: established in 2012 by the National Institute for the Development of Continuing Vocational Training (INFPC); it provides the government and social partners with detailed statistics and reliable qualitative analyses on training issues; these are useful insights for public policy and private strategies in the lifelong learning domain;
- Employment Observatory: established by the labour ministry; analyses labour market data, publishes a labour market dashboard and organises annual conferences on relevant labour market issues and employment;
- Competence Observatory: to help improve initial and continuing training offers, the
 University of Luxembourg competence centre (previously Luxembourg International
 University Institute Institut Universitaire International Luxembourgeois, IUIL), in
 cooperation with companies, identifies and anticipates competence needs in sectors and
 occupations. Analyses cover the trade, law, health, food and catering sectors, management,
 socio-professional integration and green professions;
- Business Federation of Luxembourg: since 1997 has conducted annual surveys (47) on skill needs, alternatively in the industrial and in the information technology and communication sectors. It explores skill needs of enterprises to achieve a good balance between vocational training supply and labour market demand. The survey is the basis for the *Qualifications of tomorrow* (*Les qualifications de demain*) publication. It offers forecasts of enterprise skill requirements for replacements and new job openings, and the associated qualification levels. The publication provides young people and their parents with insights into education paths and encourages public authorities, professional chambers and other VET actors to take account of enterprises' training needs in CVET (48) .

See also Cedefop's skills forecast (49) and European Skills Index (50)

10.2 Designing qualifications

The development of the VET qualifications is based on the following elements:

- occupational profile: lists the areas of activities as well as the activities and tasks of future occupations after two to three years of workplace experience;
- training profile: based on the occupational profile by areas of competence: occupational and general competences;
- training programme based on the training profile:
- defines the learning outcomes for each competence and regroups them by learning domain;
- organises the learning domains and outcomes in modules and credits;

- curriculum: determines the content of the different modules.

The main bodies responsible for designing qualifications are curriculum teams and national vocational commissions (51) . A curriculum team is associated with a specific profession or group of professions; training centres and schools are equally represented. The education minister decides on the maximum number of representatives for each team. The curriculum team:

- develops and revises programmes for the trades and professions it is responsible for;
- ensures consistency between the objectives of school-based and work-based training;
- provides guidelines and procedures for continuous assessment of learners at school and in the workplace, in cooperation with the respective committees. The guidelines and procedures feed into evaluation frameworks adopted by the education minister;
- develops and evaluates the 'integrated project' (*projet integré*) that replaces the former final exams. The project aims to check whether the learner has developed the complex competences needed to solve a real or simulated work situation.

National vocational commissions (*commissions nationales de formation*) exist for each division, trade and profession of general and technical secondary education; they propose course content, methods and evaluation criteria to the education minister. The commissions are made up of:

- a teacher from each school where vocational or technician programmes are offered;
- a representative of the national general education commissions, designated by the minister;
- a representative of each professional chamber associated to the training;
- representatives of the higher council of health professions and employer representatives in the case of health sector professions;
- employer representatives of education and social institutions, in the case of social sector professions.

A Division for Curriculum Development (52) was created within the Department for Coordination of Educational and Technological Research and Innovation (SCRIPT) within the Ministry of Education, to simplify the implementation of the 2008 reform. It provides support to the national commissions of programmes in elementary and secondary education, as well as the curriculum teams and national vocational commissions of vocational training, assisting in their tasks, developing and adapting curricula. This division coordinates the work of national commissions, guarantees the implementation and supervises the coherence and consistency of curricula. The division works in close collaboration with various stakeholders to guarantee the scientific framework of curriculum development. It also works in collaboration with the recently installed National Programme Council.

The development and implementation of the European qualifications framework for lifelong learning (EQF) is seen as an opportunity to make explicit the existing education and training levels and the links between them. The key objective of the eight-level national qualifications framework (*cadre luxembourgeois des qualifications*, CLQ) is to increase the transparency of qualifications. The CLQ serves as a non-binding guiding framework for stakeholders: individuals, education and training providers, and the labour market.

The CLQ was referenced to the EQF and the qualifications framework in the European higher education area (QF-EHEA) in 2012. Beginning in 2014, a committee represented by the education ministry and the higher education ministry published a report which detailed the links between the CLQ and the EQF and to the QF-EHEA. Levels 6-8 include qualifications awarded by Luxembourg University only. VET qualifications have been assigned to EQF levels 2-5, with the higher technician and the master craftsperson certificate, for instance, at the latter.

The philosophy of the CLQ is to show that lifelong learning is not fragmented and that it should not be restricted to formal qualifications. The referencing report, however, only reflects formal education and training, which is changing and moving towards a learning outcomes approach. Once this change is complete, a new report reflecting an adjusted lifelong learning framework,

including qualifications acquired through non-formal and informal learning, will be published (53)

.

- [48] This section is based on: INFPC (2019). Vocational education and training in Europe:
 Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

 http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf
- [49] http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast
- [50] https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index
- [53] Based on: INFPC (2019). Vocational education and training in Europe: Luxembourg.

 Cedefop ReferNet VET in Europe reports 2018.

 http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

^[47] This survey is conducted in collaboration with the Luxembourg Bankers' Association, the Luxembourg Confederation of Commerce, the Chamber of Commerce and the education ministry, with support from the European Union (EURES).

CHAPTER 11.

Quality assurance

A national approach to quality assurance has been devised, and evaluation and review procedures are in development stage. There is no real quality framework, but legislation and the current organisation take the quality component into account.

Quality standards for VET providers are part of legislation and are used for accreditation and funding. Guidelines and standards are used to promote a culture of continuous improvement. Over the past 10 years, the education and training system has been overhauled to provide the resources needed to cope with the challenges of a rapidly changing environment. Administrative structures have been changed to allow modern school management with a degree of autonomy. In 2004, the legislation promoted partnership-based school community approaches and school initiatives to improve the quality of education. For VET programmes the education ministry coordinates the implementation of the EQAVET recommendation (54) .

National indicators related to the 10 proposed by the recommendation are used and monitored nationally. While most are applied in IVET, their use for CVET, which is not monitored centrally, varies by sector or provider.

Secondary education - School development plan, PDS ([(55)])

The school development plan (PDS) was introduced by the law of 15 December 2016 (56) .

Schools should describe their school and extracurricular activities in the school development plan to outline their profile and analyse their general situation, as well as constantly to develop and innovate. This approach covers domains that may help their learners receive the best quality education. Each school should elaborate its own steps in a series of areas that are critical for success.

Seven domains are foreseen for secondary education:

- organisation of pedagogical support. Each learner should have access to remedial measures that meet their needs and capabilities;
- supervision of children with specific needs to provide tailor-made solutions for their needs and support their learning process;
- partnerships with parents to improve their involvement in the schooling process and create a partnership culture between families and schools;
- integration of information and communication technologies (ICT) to prepare learners for the challenges of the employment market influenced by ICT;
- psycho-social support for learners who face problems at school, or have psychological or family problems, to prevent school dropouts/failure;
- relevant guidance for learners to help them make the right choices, according to their profiles;
- extracurricular activities to guarantee equal access for all learners to non-formal learning opportunities, in addition to mainstream classes.

For each of these domains, national objectives have been defined in a national reference framework. Secondary schools are free to choose the domains and objectives they need to focus on.

The school development plan also contains:

definition of at least one objective from the description and analysis mentioned above;

- an action plan for each objective (persons in charge, resources needed, schedule, evaluation criteria);
- an evaluation and continuous adaptation of the current PDS.

Following the law of December 2016 (57) , as of the 2017/18 school year each secondary school should elaborate a PDS produced by a school development committee (58) . The school development committee is coordinated by the school directorate and includes school staff appointed by the director for a three-year period that may be renewed. Its mission is to analyse and interpret the school's data, to identify the school's priority needs, to define school development strategies, to elaborate the school charter, the profile and the PDS, and to ensure internal and external communication, while establishing a triennial plan for the continuing training of its high-school staff.

The Division for the Development of Schools (59) from the Department for Coordination of Educational and Technological Research and Innovation (SCRIPT) was set up according to the law of 14 March 2017 (60) . Its mission is to accompany schools in their general approach to school development and, more specifically, to elaborate and implement the PDS, collaborating with various departments, educational structures, national and international partners, who may to optimise the quality of schools. The Division for the Development of Schools has provided several transversal tools, such as a website (61) dedicated to the development of schools, forms allowing schools to coordinate and follow up their PDS, and adaptable questionnaires to facilitate data collection about the perception of school actors.

The school development committee has been working on the PDS since September 2017; it was then adopted by the Education Ministry in September 2018.

A National Observatory of School Quality (62), created at the start of 2018, is responsible for evaluating and supervising the quality of the education system. It is an independent structure. The observatory systematically evaluates the quality of the school system and the implementation of education policies. It does not assess the individual work of teachers, but the organisation and operation of schools and the Ministry of Education. The observatory is composed of eight observers, from public or private sectors, who are totally independent. They visit schools and meet representatives for various school stakeholders, such as parents, learners and teachers, and have exchanges with Education Ministry departments. The Observatory produces an annual activity report and at least one thematic report on a priority area. Every three years, it produces a national report on the school system with its findings and recommendations.

These reports are transmitted to the Government and the Chamber of Deputies and made accessible to the public.

The Division for Data Analysis of The Department for Coordination of Educational and Technological Research and Innovation (SCRIPT) is commissioned to collect and analyse data on the quality of the education offer by analysing school reports or in the context of a project. The results of the surveys may be consulted during the elaboration of a PDS or before making decisions to improve the school's organisation. This division organises national and international standardised tests. Standardised tests elaborated by the Luxembourg Centre for Educational Testing (University of Luxembourg) and common tests are used as instruments of formative or summative evaluation or the individual learner guidance process. International tests like the OECD's PISA (Programme for international student assessment), the IEA's ICILS (International computer and literacy study) generate results which help with the governance of the education system.

Tertiary education

Short-cycle programmes leading to higher technician certificates (BTS) (63) are evaluated externally before being accredited by the higher education ministry for a period of five years. After this time, the accreditation has to be renewed through a new evaluation. This procedure

should ensure that the programmes are relevant to the related professional sector (64) .

The university is largely free to design and implement its own quality assurance processes. At Luxembourg University, quality culture and regular quality control through internal and external evaluation of teaching, research and technical, administrative and logistics services are key elements. External audit of the University of Luxembourg has been conducted every four years since 2008 by an external evaluation committee. The independent Committee of External Evaluation is appointed by the Minister for Higher Education and Research.

The University of Luxembourg produces a key performance indicators report in the frame of a multiannual development contract between the Luxembourgish government and the university (2014-17) (65); this includes publications per researcher, bachelor degrees awarded, master degrees awarded, and master recruitment rate.

Luxembourg has been a member of the European quality assurance register for higher education (EQAR) since 2008 (66) .

Continuing VET

Even though there is no real quality framework, quality is a major concern and is covered in the legislation and in the organisation of CVET. Quality will be a major issue in the future of CVET.

The white paper on the national lifelong learning strategy (67), defines six cross-cutting key principles and related measures and recommendations for implementation. These include developing the quality of lifelong learning and establishing a framework for the quality of adult education and training. This framework will be based on:

- a quality label awarded to training providers that meet specified criteria in structure and content of the training offer;
- accreditation of training offers. A working group on training provider accreditation was set up in 2014.

A quality label for municipal governments and non-profit associations can be awarded in CVET by the education minister for a five-year period (68) . Courses must be of general interest in so-called areas of general education and social advancement. They must meet educational and financial quality criteria. Objectives and course content must be in line with the priorities for adult education.

Quality criteria and priorities are defined for periods of up to five years by the education ministry based on the advice of the Adult Education Advisory Committee (69) . The committee consists of the persons in charge of the Adult Education Department, two representatives delegated by schools offering evening classes, a representative of the Department of Vocational Education and a private sector representative. The committee may also involve adult training experts in its work.

While some private providers commit to quality assurance approaches, a large part of adult education is not subject to systematic evaluation or quality assurance (70) .

- [54] See EQAVET recommendation at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009H0708(01)&from=EN [accessed 6.3.2017].
- [55] Plan de développement de l'établissement scolaire (PDS).
- [58] Cellule de développement scolaire (CDS).
- [59] Division du développement des établissements scolaires.
- [61] https://portal.education.lu/developpementscolaire/Accueil-Lyc%C3%A9es
- [62] Observatoire national de la qualité scolaire.

- [63] Brevet de technicien supérieur.
- [65] Contrat d'établissement pluriannuel entre l'Etat et l'Université du Luxembourg, 2014-17.
- [66] Although there are no agencies registered in Luxembourg three foreign EQAR agencies operate in the country.
- [69] Commission Consultative à l'Éducation des Adultes.
- [70] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018. http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

CHAPTER 12.

Validation of prior learning

The 2008 legislation (71) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience.

Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (72) . A recent law (73) modifying the 2008 legislation, specifies that during validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the minister. Validation is possible for technical school-based programmes, all VET diplomas and certificates as well as for the master craftsmanship. If all conditions are met, the process leads to a certificate or diploma, or to a part thereof. Experience must be directly related to the requested certification. At higher technician certificate level, an ad hoc evaluation committee is set up for each individual asking for recognition of prior learning.

At university level, validation of non-formal and informal learning allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty.

Formal VET leads to seven European qualification levels (1 to 7). The 2008 legislation (74) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience.

For more information about arrangements for the validation of non-formal and informal learning please visit Cedefop's European database (75) .

^{[75] &}lt;a href="http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning">http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning

CHAPTER 13. Incentives for learners

Individual training leave

The objective of individual training leave is to ease access to continuing training. Employees working in a company for at least six months, self-employed workers and individuals in a liberal profession (and having been affiliated to the social security system for at least two years) can benefit from 80 days of paid leave during their entire career, but not more than 20 days per two years. Employers can have salaries reimbursed by the government. Training must be provided by an institution issuing certificates recognised by the government. The employee is required to submit a request to the education ministry which then approves the leave – stating the number of days granted – or refuses it.

Language training leave

Language training leave allows employees, the self-employed and individuals in a liberal profession of all nationalities to learn Luxembourgish for social and professional integration. The courses take place during normal working hours. The maximum paid leave is 200 hours over a professional career. Each leave hour entitles employees to a compensatory allowance equal to their average hourly salary paid by the employer. The employer advances the allowance and is reimbursed 50% by the State. The request must be sent to the labour ministry by the employer prior to the start of the course; the leave can be deferred by the employer if it disrupts company operations.

Unpaid training leave and personal working time arrangement

The 2006 Grand Ducal regulation on the organisation of working time (*organisation du temps de travail*) (76) stipulates a general obligation to reach an agreement on access to CVET through inter-occupational social dialogue to be signed between the trade union federations and the Union of Enterprises. Organising working hours within a flexi-time arrangement and unpaid leave for vocational training purposes is part of this regulation.

Unpaid training leave releases a worker from duties to take part in professional training. The agreement applies to private sector employees who have been employed for at least two years, regardless of the type of employment contract. During the leave, the employment contract is suspended. The employer can refuse the unpaid leave, if the applicant is a high-level executive or if the company has fewer than 15 employees. The employer can also defer the unpaid leave for up to one year where the leave is no more than three months or for up to two years where the leave exceeds three months.

Employees working flexi-time may request amendment of their working time to support participation in training. The employer can refuse to grant such an amendment based on operational needs or impact on the efficient organisation of the business.

Tax exemptions

Every income tax payer may deduct expenses for professional development from taxable income. Such expenses must have a direct link with the business activity performed by the employee and allow improving professional knowledge. They must be paid by the participant and refund claimed through a tax declaration (77) .

Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

 $\frac{http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_L_uxembourg_2018_Cedefop_ReferNet.pdf$

CHAPTER 14.

Incentives for enterprises to boost their participation in VET provision

State shared funding for CVET

A company can receive State funding (operated by the education ministry) for investment in CVET. Private companies established in Luxembourg that undertake most of their activities inside the country are eligible. The training targets:

- employees affiliated with the national social security system;
- persons bound to the company by an employment contract (fixed-term or permanent);
- subcontractors working for the applicant company;
- owners of craft, trade, industry, agriculture or forestry companies.

Investment in training is capped according to the size of the company:

- at 20% of total payroll for companies with 1 to 9 employees;
- at 3% of total payroll for companies with 10 to 249 employees;
- at 2% of total payroll for companies with more than 249 employees.

The share of funding is calculated based on the investment in CVET (78). Companies receive direct grants: 15-35% of investment (depending on employee profiles).

Support for learning Luxembourgish

Private sector companies legally established in the country can partly recover the costs associated with learning Luxembourgish. Eligible costs include training fees and the costs of study materials and are paid by the labour ministry.

Funding for additional apprenticeship places

The fund for employment provides financial support for the creation of apprenticeship places to encourage enterprises to hire apprentices. It partly reimburses the apprenticeship allowance (27% for vocational DAP programme (79) and 40% for the vocational CCP programme (80)) and covers the employer's share of social security costs for the apprentice (81) . Applications for financial support must be submitted by the enterprises and the apprentice to the public employment service before 1 July of the year following the year in which the learning ended.

Apprenticeship award for a training company

Since 2013, the award for the best training company has been presented each year during the apprenticeship graduation ceremony to the company that commits itself most to apprenticeships (creation of apprenticeship places, follow-up of apprentices) (82).

^[79] Vocational aptitude diploma (diplôme d'aptitude professionnelle, DAP).

^[80] Vocational capacity certificate (certificat de capacité professionnelle, CCP).

[82] This section is based on: INFPC (2019). Vocational education and training in Europe:
Luxembourg. Cedefop ReferNet VET in Europe reports 2018.

http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf

CHAPTER 15.

Guidance and counselling

Most guidance services offered during secondary education, operate within the guidance house (*maison de l'orientation*, 2012). The initiative centralises administrations and counselling services that help people move into working life. It focuses on young people but anyone can find information and advice there. The guidance house includes:

- a. the vocational guidance service of the public employment service (Adem) which provides information on trades/professions and apprenticeship placement;
- b. the Psycho-Social and Educational Accompaniment Centre (CePAS) which helps learners in their school or career guidance and may provide psychological support;
- c. the National Youth Service (SNJ) which supports the acquisition of practical experience through the voluntary Youth Service;
- d. the Local Bureau for Youth (Antennes locales pour jeunes) which offers individual coaching to achieve school or professional projects;
- e. the school reception centre for newcomers for 12 to 17 year-old immigrant learners;
- f. the Centre of Documentation and Information on Higher Education (CEDIES).

This centralisation ensures better coordination of services and stakeholders, while improving visibility.

In 2017 the Guidance Forum (Forum orientation) was set up this is a national council in charge of establishing a national information and guidance strategy. It includes ministries, social partners, directors of secondary schools, parent and learner representatives. The guidance forum has adopted the following definition of guidance:

'Guidance refers to a series of activities that enable the citizen, at any time in his/her life:

- to identify his/her abilities, skills and interests;
- to make informed decisions as regards his/her studies and training choices as well as his/her professional activities.

The shared goal is to foster personal fulfilment and the development of society.'

Since 2017, every secondary school must develop its own general guidance approach. The approach has to be in accordance with the reference framework for school and professional guidance elaborated by the guidance house (83) . In each secondary school, a guidance unit is responsible for the implementation of the guidance process set out in the school's development plan (PDS). It is composed of at least two members of teaching staff,

two educational or psychosocial staff and at least one guidance counsellor.

The Higher Education Documentation and Information Centre (Centre de Documentation et d'Information sur l'Enseignement Supérieur) is available to people who require general information about higher education.

The web portal Anelo (84) is an information and exchange platform for all young people preparing for training, studies or work experience. It centralises information on:

- trades and professions (85);
- the steps to follow during a job search;
- ePortfolio tool that allows young people to gather important documents and certificates showing their strengths and skills;

- how to gain practical experience in the world of work (jobs for students, volunteer services);
- where to find information on guidance and support.

The Anelo Web portal and the various connected sites are now being managed by the Guidance House Coordination Department. They are also in charge of promoting the portal and training courses to help young people use the various tools on Anelo.

The Youth guarantee (86) was launched in June 2014. It commits national authorities (National Employment Agency, Local Action for Youth, National Youth Service) to offer young people between 16 and 25 high-quality guidance to help them find a job, make it possible to return to school or an apprenticeship, or to offer work experience in projects on a voluntary basis. Each is offered support tailored to his/her background, personal situation and aspirations. Diversification of the school offer is the main priority for education policies in Luxembourg. A recent reform provides growing autonomy to schools to boost this diversification and to support individual school efforts to innovate.

Choosing the right school is becoming more challenging for learners; the MENJE has launched a platform www.mengschoul.lu to help young people and their parents. The platform is for learners going into secondary education, as well as for those going into higher secondary education and foreign learners joining the Luxembourgish school system. The platform is based on a standardised detailed portrait of each school. An interactive map allows users to filter secondary schools according to the innovative projects on offer; other filters allow users to select the school programmes. This tool helps parents and learners to compare VET schools and their specificities to make the best choice. [(87)]

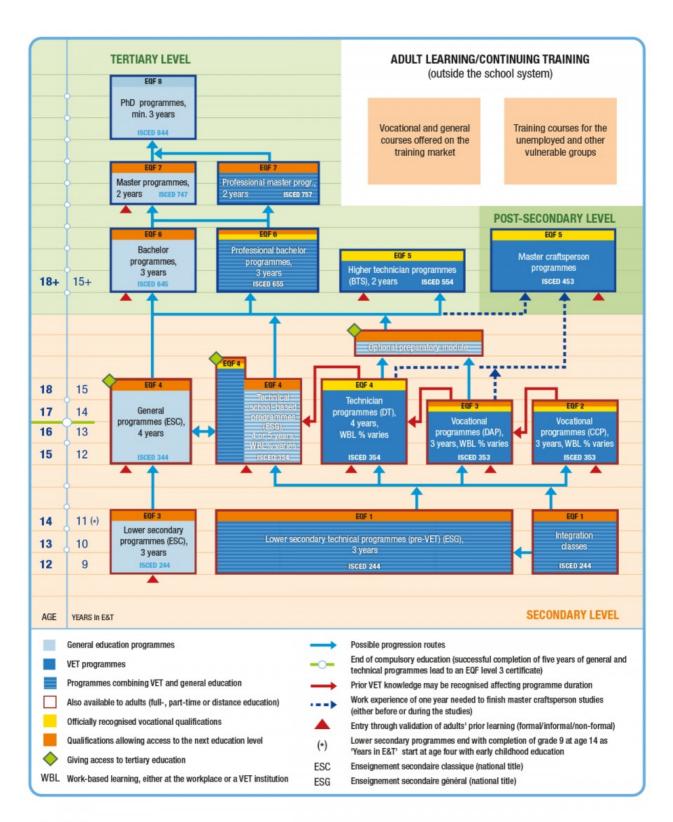
Please see:

- guidance and outreach Luxembourg national report (88);
- Cedefop's labour market intelligence toolkit (89);
- Cedefop's inventory of lifelong guidance systems and practices (A1) .
- [84] https://www.anelo.lu/
- [85] http://beruffer.anelo.lu
- [86] http://www.jugendgarantie.lu/
- [87] Based on: INFPC (2019). Vocational education and training in Europe: Luxembourg.

 Cedefop ReferNet VET in Europe reports 2018.

 http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg_2018_Cedefop_ReferNet.pdf
- [88] http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach
- [89] http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere

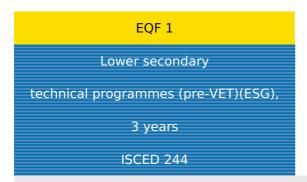
Vocational education and training system chart



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Luxembourg, 2019.

VET Programme Types



The lower cycle of technical secondary education (ISCED 244, EQF 1) is considered as pre-VET and lasts three years. It comprises the 'orientation programme' and the 'preparatory programme', designed for learners who struggle with the regular secondary education curriculum.

EQF level	1	ISCED-P 2011 level	244
Usual entry grade	9 (90)	Usual completion grade	11 (91)
Usual entry age	12	Usual completion age	14
Length of a programme (years)	3		
Is it part of compulsory education and training?	School attendance is compulsory between 4 and 16 years.	Is it part of formal education and training system?	
Is it initial VET?		Is it continuing VET?	

Is it offered free of charge?



Is it available for adults?



Adults may attend the last year of the lower secondary education programme and then access the technical and technician programme as well as a vocational programme.

ECVET or other credits

Information not available

Learning forms (e.g. dual, part-time, distance)

'<u>Orientation programmes'</u> (<u>Les classes inférieures de la voie</u> d'orientation)

In the 'orientation programme' classes (three years: 7G, 6G and 5G) of general education (languages, mathematics, human and social sciences, natural sciences) the learners' knowledge is deepened. The language of instruction is German, except for mathematics and the French language course, which are taught in French. During the second year, language courses (French and German) as well as mathematics are taught on two levels: in a basic course or in an advanced class. The choice of enrolment in one of the two courses is made according to the level of competence of the learner and the orientation advice from the class council. In the last year (5G), English is also taught on two levels. The orientation programme includes workshops in secondary schools that allow the learner to discover several trades and occupations. This is complemented by placements and visits in companies.

The preparatory programme (*Les classes inférieures de la voie de preparation*):

The lower grades of the preparatory programme (three years: 7P, 6P and 5P) are for learners who, in one or more disciplines, have not reached the core competence referred to at the end of cycle 4 of primary education. They prepare learners for later transition to the orientation programme or vocational training. German, French, mathematics, general culture, physical education and sports and practical learning in workshops are taught in modules spread over three years of teaching. These allow the learner to progress at his own pace and capitalise on a maximum of modules for the subsequent training envisaged.

These two lower secondary programmes are distinguished by their general orientation, the relative importance of the subjects taught and the teaching methods.

Candidates have the choice between daytime and evening courses.

Main providers

Secondary schools and national school for adults.

Share of work-based learning provided by schools and companies Information not available

Work-based learning type (workshops at schools, in-company training / apprenticeships) Programmes include workshops that allow learners to discover several trades and occupations. This is complemented by placements and visits in companies.

Main target groups

Programmes are available for young people and also for adults.

The mediator for school maintenance, inclusion and integration was set up in mid-2018 (92) . The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs, and the integration of children from immigrant backgrounds into the mainstream school system.

Entry requirements for learners (qualification/education level, age)

Young people must have successfully finished primary education.

Candidates should be 17 or more and have a school level allowing access to the last year of lower secondary education.

Assessment of learning outcomes

The different functions of assessment are given in detail:

- formative evaluation: helping the learner to become aware of their strengths and weaknesses while documenting their learning process;
- certification of the learner's individual knowledge and competences at the end of a learning period;
- serve as a basis for the learner's guidance.

With a view to these objectives, the quarterly school reports (*bulletins trimestriels*) are complemented by a report supplement (*complément au bulletin*).

The quarterly report includes for each taught subject the average (out of 60) of classwork notes and other tests or assignments. The supplement to the report gives information on the progress of the learner in the different areas of competence of the taught subjects, giving an unencrypted assessment. This assessment by skills area offers a differentiated and nuanced view of the learners' abilities.

At the end of each quarter (or semester), the parents (or the adult learner) receive a report (bulletin) detailing:

- quarterly (or each semester) marks of the subjects taught;
- the general quarterly (or each semester) mark;
- remedial measures for unsatisfactory results.

The report at the end of the school year also includes further details:

- each subject's annual mark;
- the general annual mark:
- promotion decision (positive or not) towards the higher class (at the third year of the lower cycle of technical secondary education).

Diplomas/certificates provided

Not applicable

Examples of qualifications

Not applicable

Progression opportunities for learners after graduation

After successful completion of the lower cycle, learners can choose between technical, vocational and technician programmes.

Destination of graduates

Information not available

Awards through validation of prior learning



General education subjects



Languages, humanities and social sciences, mathematics and natural sciences

Key competences

Mathematics, languages

Application of learning outcomes approach



Teaching by competences is applied in the lower classes of technical secondary.

Competences refer to the ability of a learner to implement an organised set of knowledge, skills, and attitudes to provide an adequate response to a problem.

Competences sets describe the knowledge and competences that learners must master in a sustainable way at the end of the two last years of lower cycle of technical secondary education.

For language and mathematics, these sets are divided into two levels: basic set and advanced set.

The set of competences differ from the teaching programme, which describe the contents treated in each domain (maths, French, history...).

Share of learners in this programme type compared with the total number of VET learners

Lower technical secondary education in 2016/17 represented 46.9% (93) of total learners in technical education (lower, medium and upper level) (94) .

The total number of learners in lower technical secondary education has remained stable since 2011/12; at that time 12 915 learners attended lower technical secondary education and 12 760 in 2016/17.

- [92] SCL (2018b). Loi du 18 juin 2018 portant: (1) Institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaires; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo
- [93] 2016/17.
- [94] MENJE (2018a). Les chiffres clés de l'Éducation nationale: statistiques et indicateurs 2016-2017 [Key figures of national education: statistics and indicators 2016-17]. Luxembourg: MENJE. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffres-cles/2016-2017/index.html

Integration classes

ISCED 244

Integration classes (classe d'insertion) of the lower cycle of technical secondary education, EQF1, ISCED 244

EQF level	1 ISCED-P 2011 level		244
Usual entry grade	9 (95)	Usual completion grade	11 (96)
Usual entry age	12	Usual completion age	14
Length of a programme (years)	3		
Is it part of compulsory education and training?	School attendance compulsory between 4 at 16 years.	system?	
Is it initial VET?	~	Is it continuing VET?	
Is it offered free of charge?	\	ls it available for adults?	Adults may attend the last year of the lower secondary education programme and then access the technical and technician programme as well as a vocational programme.
ECVET or oth	ner credits r	formation not avail	able
Learning forms (e.g. Information not available dual, part-time, distance)		able	
Main	providers r	formation not avail	able
Share of w learning po schools and o	rovided by	nformation not avail	able

Work-based learning type (workshops at schools, in-company training / apprenticeships)	Information not available		
Main target groups	Programmes are available for young people and also for adults. For the latter, the completion corresponds to a completion of lower technical secondary education.		
	Integration classes (<i>classe d'insertion</i>) of the lower cycle of technical secondary education have been created for learners who have a good academic record in their country of origin, but do not have a sufficient command of the languages used for tuition. Based on language skills gaps, learners receive intensive support in learning French or German.		
	The mediator for school maintenance, inclusion and integration was set up mid-2018 (97) . The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs and the integration of children from immigrant backgrounds into the mainstream school system.		
Entry requirements for learners (qualification/education level, age)	Information not available		
Assessment of learning outcomes	Information not available		
Diplomas/certificates provided	Information not available		
Examples of qualifications	Not applicable		
Progression opportunities for learners after graduation	Those who complete the integration classes can continue their studies in one of the following programmes: - vocational programme (CCP), ISCED 354, EQF 4;		
	- vocational programme (DAP) ISCED 354, EQF 4;		
	- technician programme (DT) ISCED 354, EQF 4;		
	- technical programme ISCED 354, EQF 4.		
Destination of graduates	Information not available		
Awards through validation of prior learning	Information not available		
General education subjects	Information not available		
Key competences	Information not available		

Application of learning outcomes approach

Teaching by competences is applied in the lower classes of technical secondary.

Competences refer to the ability of a learner to implement an organised set of knowledge, skills, and attitudes to provide an adequate response to a problem.

Competences sets describe the knowledge and competences that learners must master in a sustainable way at the end of the last two years of lower technical secondary education.

For language and mathematics, these sets are divided into two levels: basic set and advanced set.

The set of competences differ from the teaching programme, which describe the contents treated in each domain (maths, French, history...).

Share of learners in this programme type compared with the total number of VET learners Information not available

^[97] SCL (2018b). Loi du 18 juin 2018 portant: (1) institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaires; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo

EQF 4
Technical
school-based programmes (ESG),
4 or 5 years,
WBL % varies
ISCED 354

Technical school-based programmes (Diplôme d'enseignement secondaire général) leading to EQF level 4, ISCED 354

EQF level	4	ISCED-P 2011 level	354
Usual entry grade	12 (98)	Usual completion grade	15 (99)
Usual entry age	15	Usual completion age	18 or 19
Length of a programme (years)	4-5		
Is it part of compulsory education and training?	School attendance is compulsory between 4 and 16 years.	Is it part of formal education and training system?	
Is it initial VET?	This programme is not considered as IVET at national level.	Is it continuing VET?	×
Is it offered free of charge?	✓ .	Is it available for adults?	\
ECVET or other credits	nformation not available		

ECVET or other credits Information not available			
Learning forms (e.g. dual, part-time, distance)	The curriculum includes general and technical education; the latter includes practical and theoretical classes. The share of the technical part depends on the grade and on the chosen field and varies from approximately 25 to 65%.		
Main providers	Secondary schools		
Share of work-based learning provided by schools and companies	Share of work-based learning (100) depends on the grade and on the chosen field and varies from approximately 25 to 65%.		

Work-based learning type (workshops at schools, in-company training / apprenticeships)

- practical training at school
- in-company practice for some programmes

Main target groups

Programmes are available for young people and some of them also for adults.

The mediator for school maintenance, inclusion and integration was set up mid-2018 (101). The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs and the integration of children from immigrant backgrounds into the 'main-stream' school system.

Entry requirements for learners (qualification/education level, age)

Information not available

Assessment of learning outcomes

Learner assessment is mainly based on summative evaluations, i.e. periodical tests on contents which have been taught recently. Depending on the subjects, one, two or three tests per term may be organised.

The quarterly report includes for each taught subject the average (out of 60) of classwork notes and other tests or assignments.

At the end of each quarter (or semester), the parents (or the adult learner) receive a report (bulletin) mentioning among others:

- quarterly (or each semester) marks of the subjects taught;
- general quarterly (or each semester) mark;
- remedial measures in case of unsatisfactory results.

The report at the end of the school year also includes further details:

- each subject's annual mark;
- general annual mark;
- promotion decision (positive or not) towards the higher class.

Diplomas/certificates provided

Learners who succeed in technical programmes are awarded a technical secondary school leaving diploma (*diplôme de fin d'études secondaires générales*). This diploma confers the same rights as that from general secondary education; depending on the strand and section, graduates can enter the labour market or pursue higher education.

Examples of qualifications

Work in the administrative field in private companies or public institutions.

Progression opportunities for learners after graduation

Depending on the strands followed (referred to nationally as 'divisions'), graduates have the following progression opportunities:

- a) administrative and commercial: graduates can pursue higher education in economics, law and accounting. They may work in administration in private companies or public institutions);
- b) healthcare and social professions: graduates can pursue higher education in these professions. Graduates in nursing education can continue their education as midwife or medical technical assistant in radiology. Graduates in educator training can continue their studies as a state-certified educator for a period of one year;
- c) general technical: graduates can pursue higher education in their specialties: engineering, natural science, architecture, design and sustainable development, computer science, environmental sciences);
- d) division of arts: graduates can pursue higher education in the same domain;
- e) division of tourism and hospitality: graduates can pursue higher education while preparing for the profession of manager in hospitality.

Destination of graduates

Information not available

Awards through validation of prior learning



The 2008 legislation (102) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning (validation des acquis de l'expérience) is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience. Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (103). A recent law (104) modifying the 2008 legislation, specifies that during validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the Minister. Validation is possible for technical school-based programmes, all VET diplomas and certificates as well as for master craftsmanship. If all conditions are met, the process leads to a certificate or diploma or to a part thereof. Experience must be directly related to the requested certification. At higher technician certificate level, an ad hoc evaluation committee is set up for each individual asking for recognition of prior learning (105).

General education subjects



The curriculum includes general and vocational (nationally referred to as technical) education; the latter includes practical and theoretical classes. The share of the technical part depends on the grade and on the chosen field and varies from approximately 25 to 65%.

Key competences

Information not available

Application of learning outcomes approach

information not available

Share of learners in this programme type compared with the total number of VET learners

Technical programmes (medium and upper level) represents 48.7% (106) of all medium and upper secondary technical education (107) .

The total number of learners in technical secondary education (medium and upper levels) has increased since 2011/12. At that time 5 677 learners attended technical secondary education programme, with the number increasing to 7 043 in 2016/17.

- [100] Nationally referred to as technical learning.
- [101] SCL (2018b). Loi du 18 juin 2018 portant: (1) institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaires: (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo
- [102] SC (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A, 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [103] SCL (2010b). Règlement grand-ducal du 11 janvier 2010 portant organisation de la validation des acquis de l'expérience pour la délivrance des brevets, diplômes et certificats prévue au chapitre V de la loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 6.

 http://legilux.public.lu/eli/etat/leg/rgd/2010/01/11/n1/jo
- [104] SCL (2016c). Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 175. http://legilux.public.lu/eli/etat/leg/loi/2016/08/24/n1/jo
- [105] SCL (2016b). Loi du 23 juillet 2016 modifiant la loi modifiée du 19 juin 2009 portant organisation de l'enseignement supérieur, fixant les modalités du cycle d'études d'enseignement supérieur aboutissant à la délivrance du brevet de technicien supérieur. *Mémorial* A 143. http://www.legilux.public.lu/leg/a/archives/2016/0143/a143.pdf#page=2
- [106] 2016/17.
- [107] MENJE (2018a). Les chiffres clés de l'Éducation nationale: statistiques et indicateurs 2016-2017 [Key figures of national education: statistics and indicators 2016-17]. Luxembourg: MENJE. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffres-cles/2016-2017/index.html

EQF 4

Technician programmes (DT),

4 years,

WBL % varies

ISCED 354

Technician programmes (le diplôme de technicien), leading to EQF level 4, ISCED 354

EQF level	4	ISCED-P 2011 level	354
Usual entry grade	12 (108)	Usual completion grade	15 (109)
Usual entry age	15	Usual completion age	18
Length of a programme (years)	4		
Is it part of compulsory education and training?	School attendance is compulsory between 4 and 16 years.	Is it part of formal education and training system?	
Is it initial VET?		Is it continuing VET?	X
Is it offered free of charge?	✓ .		

ECVET or other credits

Information not available

Learning forms (e.g. dual, part-time, distance)

This technician programme is mainly offered as a full-time track (filière de plein exercice), where all training occurs in an education institution and includes a minimum job placement of 12 weeks. The offer of programmes in the concomitant track (learning in school and in an enterprise takes place in parallel throughout the year - filière concomitante) or mixed track (theoretical and practical training in school in the first years and last year with the concomitant track - filière mixte) has been extended since 2015/16.

Main providers

- Secondary schools
- Companies/training centres

Share of work-based learning provided by schools and companies Information not available

Work-based learning type (workshops at schools, in-company training / apprenticeships)

- practical training at school
- in-company practice

Main target groups

Programmes are available for young people and some of them also for adults.

The mediator for school maintenance, inclusion and integration was set up in mid-2018 (110) . The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs and the integration of children from immigrant backgrounds into the mainstream school system.

Entry requirements for learners (qualification/education level, age)

Orientation towards vocational programmes takes place at the end of third year of lower technical education upon decision of the class council based on the assessment reports of the whole academic year.

Assessment of learning outcomes

Since the entry into force of the 2008 reform, the technician (and also vocational) programmes have been organised into modules. For each module, an assessment framework has been set up. It distinguishes compulsory and optional skills and specifies indicators and minimum standards. At the end of the module, learners take an exam to assess the acquisition of required skills for the module and receive an assessment report (bulletin), which indicates whether the module has been passed (unsuccessful, successful, very successful).

Technician and vocational programmes also foresee integrated projects in the middle (only for vocational programmes leading to the vocational aptitude diploma and the technician programme) and at the end (111) . These integrated projects aim to monitor whether the learner has developed the complex skills needed to solve a real or simulated work situation. An integrated project can be spread over a maximum duration of three days (24 hours) for programmes leading to vocational aptitude diploma and technician programmes. This project allows learners to demonstrate the acquisition of required skills in a professional situation. The intermediary and the final integrated projects are a compulsory module for these programmes.

An interim assessment sheet is drawn up at the end of

- 1. the second academic year of normal four-year training;
- 2. the first academic year of normal training of three years.

The assessment is based on the learner's results in the compulsory modules as planned in the curriculum from the start. Neither the placement in companies nor the intermediate project is taken into account.

A final assessment is made at the end of the programmes taking into account compulsory modules followed since the interim assessment. Neither the final integrated project nor the intermediate project is taken into account.

Assessments are successful if the following conditions are met:

For a DT (other training durations):

- 85% success in compulsory modules (112);
- 85% success in compulsory vocational modules;
- success of all fundamental modules.

For a DT (other training duration of training: one year). For other training periods:

- 90% success in the compulsory modules of the last two years of training:
- 90% success of compulsory vocational modules;
- success of all fundamental modules.

Diplomas/certificates provided

The technician diploma certifies that the holder is competent to perform the trade/profession in question. It differs from the programme leading to the vocational aptitude diploma (DAP) (113) by in-depth and diversified competences as well as in-depth general education.

Examples of qualifications

Information not available

Progression opportunities for learners after graduation

Technician programme graduates may progress to the third year of the general upper secondary programme or follow a one-year optional preparatory module allowing them to enter tertiary education.

Destination of graduates

Information not available

Awards through validation of prior learning



The 2008 legislation (114) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience. Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (115). A recent law (116) modifying the 2008 legislation, specifies that during the validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the minister. Validation is possible for all VET diplomas and certificates as well as for the master craftsmanship. If all conditions are met, the process leads to a certificate or diploma or to a part thereof. Experience must be directly related to the requested certification.

General education subjects



In comparison to the vocational DAP programme, the technician programme offers more in-depth general education

Key competences

Information not available

Application of learning outcomes approach



The major VET reform of 2008 (117) was implemented between 2010/11 and 2013/14. Among the key principles of the reform is also that teaching by subject is replaced with teaching by units and modules. Each module focuses on concrete professional situations; the learning outcomes to be acquired (competences and knowledge) are defined for each module.

Share of learners in this programme type compared with the total number of VET learners In 2016/17 the number of learners following technician programmes (medium and upper level) was 24.2% (118) of all learners following medium and upper secondary technical education (119) .The total number of learners in technician programmes (medium and upper level) has slightly increased since 2011/12. At that time 3 378 learners attended technical secondary education programmes, with the number increasing to 3 504 in 2016/17.

- maintien, à l'inclusion et à l'intégration scolaires; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo
- [111] SCL (2016e). Règlement grand-ducal du 31 août 2016 portant sur l'évaluation et la promotion des élèves de la formation professionnelle. *Mémorial* A 187. http://legilux.public.lu/eli/etat/leg/rgd/2016/08/31/n1/jo
- [112] Compulsory modules comprise fundamental and complementary modules.
- [113] Diplôme d'aptitude professionnelle (DAP).
- [114] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A, *220*, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [115] SCL (2010b). Règlement grand-ducal du 11 janvier 2010 portant organisation de la validation des acquis de l'expérience pour la délivrance des brevets, diplômes et certificats prévue au chapitre V de la loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 6.

 http://legilux.public.lu/eli/etat/leg/rgd/2010/01/11/n1/jo
- [116] SCL (2016c). Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 175. http://legilux.public.lu/eli/etat/leg/loi/2016/08/24/n1/jo
- [117] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [118] 2016/17
- [119] MENJE (2018a). Les chiffres clés de l'Éducation nationale: statistiques et indicateurs 2016-2017 [Key figures of national education: statistics and indicators 2016-17]. Luxembourg: MENJE. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffres-cles/2016-2017/index.html

EQF 3

Vocational programmes (DAP),

3 years,

WBL % varies

ISCED 353

Vocational programmes leading to a vocational aptitude diploma (diplôme d'aptitude professionnelle, DAP) leading to EQF level 3, ISCED 353.

EQF level	3	ISCED-P 2011 level	353
Usual entry grade	12 (120)	Usual completion grade	14 (121)
Usual entry age	15	Usual completion age	17
Length of a programme (years)	3		
Is it part of compulsory education and training?	School attendance is compulsory between 4 and 16 years.	Is it part of formal education and training system?	
Is it initial VET?	V	Is it continuing VET?	X .

Is it offered free of charge?

Is it available for adults?



Adults (those 18 years old and above), having left school more than one year before and willing to learn a trade or to change their career, can follow an 'adult apprenticeship' leading to the vocational aptitude diploma DAP (122). This is available both to job holders and seekers registered at the public employment service. Upon proof of certain work experience, a dedicated committee may guide the adult learner to a suitable grade. The committee includes representatives of the education ministry, Vocational Training Service, labour ministry, guidance service of the employment service, Chamber of Commerce, Chamber of Trades and Skilled Crafts, Chamber of Agriculture, and Chamber of Employees.

Theory training takes place in a technical secondary school or at the national continuing vocational training centre. The practical part is apprenticeship in an enterprise. Adult apprentices receive allowances equal to the minimum wage for unskilled workers (EUR 1 922.96, 1 January 2016) as defined in a 2010 regulation (123) .

The 2008 reform introduced a modular system for apprenticeship, which guarantees the validity of any module acquired during initial training for a certain period, aiding access to lifelong learning.

Vocational programmes for adults: evening classes

Within vocational programmes, employed adults can attend the first year a vocational aptitude diploma (DAP) as administrative and commercial agent. The theoretical part is provided through evening classes in a technical secondary school or in the national continuing vocational training centre. The practical part is acquired through full-time employment in a company. After the first year DAP evening class, adults can continue the second and third year DAP classes under an adult apprenticeship contract.

Vocational programmes for adults: on-the-job training

The nursing assistant vocational aptitude diploma can be obtained through on-the-job training. This training is suitable for those with some work experience in the care sector, who have not had the opportunity to undertake IVET. The three-year training course leads to a nursing assistant DAP. Applicants must fulfil admission criteria such as professional experience of minimum 2 500 hours in the care sector, an employment contract (minimum 50% part-time) and the agreement of their employer.

Learning forms (e.g. dual, part-time, distance)

- school-based learning;
- work practice (practical training at school and in-company practice);
- apprenticeships.

DAP Vocational programmes can be followed in one of three different tracks:

- a) the concomitant track (*filière concomitante*), where learning in school and in an enterprise takes place in parallel throughout the apprenticeship. Depending on the profession, the two parts can be organised as day-release (such as two days per week in school and three days in an enterprise) or block-release (for example, nine weeks at school and nine weeks in enterprise); the allocated time may also vary depending on the profession;
- b) the mixed track (*filière mixte*) which is suitable for some professions. This programme offers theoretical and practical training in school in the first year. After successful completion of the school-based part, training is continued in line with the concomitant track;
- c) the full-time track (*filière de plein exercice*), where all training occurs in an educational institution, with 12 weeks of practical training or more within an apprenticeship or internship contract.

The shares of general education, VET theory and practice in vocational programme curricula vary by trade. Vocational learning ratios (practical training in companies and in vocational training school) for each trade/profession are defined by the education ministry on the advice of professional chambers.

Main providers

Technical secondary schools

Share of work-based learning provided by schools and companies

Varies

Work-based learning type (workshops at schools, in-company training / apprenticeships)

- practical training at school
- in-company practice

Main target groups

Programmes are available for young people and also for adults.

The mediator for school maintenance, inclusion and integration was set up mid-2018 (124) . The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs and the integration of children from immigrant backgrounds into the mainstream school system.

Entry requirements for learners (qualification/education level, age) Guidance towards vocational programmes takes place at the end of the last year of lower technical education upon decision of the class council based on the assessment reports of the whole academic year.

Except for admission criteria, there are no differences between apprenticeships for adults and young people. Those aged 18 and above, having left school more than one year before and willing to learn a trade or to change their career, can follow an 'adult apprenticeship' leading to DAP.

Assessment of learning outcomes

Since the entry into force of the 2008 reform, the technician (also vocational and technical) programmes have been organised into modules. For each module, an assessment framework has been set up. It distinguishes compulsory and optional skills and specifies indicators and minimum standards. At the end of the module, learners take an exam to assess the acquisition of required skills for the module and receive an assessment report (bulletin), which indicates whether the module has been passed (unsuccessful, successful, very successful).

Vocational and technician programmes also foresee integrated projects in the middle (only for vocational programme leading to the vocational aptitude diploma and the technician programme) and at the end (125). These integrated projects aim to monitor whether the learner has developed the complex skills needed to solve a real or simulated work situation. An integrated project can be spread over a maximum duration of three days (24 hours) for programmes leading to vocational aptitude diploma and technician programmes. This project allows learners to demonstrate the acquisition of required skills in a professional situation. The intermediary and the final integrated projects are a compulsory module for these programmes.

An interim assessment sheet is drawn up at the end of

- 1. the second academic year of normal four-year training;
- 2. the first academic year of normal training of three years.

The assessment is based on the learner's results in the compulsory modules as planned in the curriculum from the start. Neither the placement in companies nor the intermediate project is taken into account.

A final assessment is made at the end of the programmes taking into account compulsory modules followed since the interim assessment. Neither the final integrated project nor the intermediate project is taken into account.

Assessments are successful if the following conditions are met:

For a DAP (other training durations):

- 85% success in compulsory modules (126);
- 85% success in compulsory vocational modules;
- · success in all fundamental modules.

For DAP (other training duration of training: one year). For other training periods:

- 90% success in the compulsory modules of the last two years of training;
- 90% success in compulsory vocational modules;
- success in all fundamental modules.

Diplomas/certificates provided

Graduates receive the vocational aptitude diploma (diplôme d'aptitude professionnelle, DAP). This diploma certifies that the holder has the skills to perform the trade/profession in question as a skilled worker on the labour market. DAP graduates may also progress to the third year of a technician programme in the same field of study, the third year of the technical programme, or enter a master craftsperson programme. Subject to completing supplementary preparatory modules they can also pursue higher technical studies (études techniques supérieures, ISCED 550 or 650).

Examples of qualifications

Hairdresser, assistant nurse, administrative and commercial agent, butcher, bricklayer, architectural drafter, aircraft mechanic.

Progression opportunities for learners after graduation

DAP graduates may progress to the third year of a technician programme in the same field of study, the third year of the technical programme, or enter a master craftsperson programme. Subject to completing supplementary preparatory modules they can also pursue higher technical studies (*études techniques supérieures*, ISCED 550 or 650).

Destination of graduates

Information not available

Awards through validation of prior learning



The 2008 legislation (127) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning (validation des acquis de l'expérience) is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience. Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (128). A recent law (129) modifying the 2008 legislation, specifies that during the validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the Minister. Validation is possible for all VET diplomas and certificates as well as for the master craftsmanship. If all conditions are met, the process leads to a certificate or diploma or to a part thereof. Experience must be directly related to the requested certification.

General education subjects



The general education for the DAP programme includes a module on citizenship education as well as French or German. In comparison to the curricular of the CCP programme, credit units and modules are more detailed and extensive.

Key competences



The general education for the DAP programme includes a module on citizenship education as well as French or German.

Application of learning outcomes approach



The major VET reform of 2008 (130) was implemented between 2010/11 and 2013/14. Among the key principles of the reform is that teaching by subject is replaced with teaching by units and modules. Each module focuses on concrete professional situations; the learning outcomes to be acquired (competences and knowledge) are defined for each module.

Share of learners in this programme type compared with the total number of VET learners

Vocational programmes (medium and upper level) DAP and CCP are 27.1% (131) of medium and upper secondary technical education (132) .

The total number of learners in vocational programmes (medium and upper level) has decreased since 2011/12. At that time 4 360 learners attended technical secondary education programme, with the number decreasing to 3 914 in 2016/17.

- [124] SCL (2018b). Loi du 18 juin 2018 portant: (1) institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaire; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo
- [125] SCL (2016e). Règlement grand-ducal du 31 août 2016 portant sur l'évaluation et la promotion des élèves de la formation professionnelle. *Mémorial* A 187. http://legilux.public.lu/eli/etat/leg/rgd/2016/08/31/n1/jo
- [126] Compulsory modules comprise fundamental and complementary modules.
- [127] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [128] SCL (2010b). Règlement grand-ducal du 11 janvier 2010 portant organisation de la validation des acquis de l'expérience pour la délivrance des brevets, diplômes et certificats prévue au chapitre V de la loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 6.

 http://legilux.public.lu/eli/etat/leg/rgd/2010/01/11/n1/jo
- [129] SCL (2016c). Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 175. http://legilux.public.lu/eli/etat/leg/loi/2016/08/24/n1/jo
- [130] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [131] 2016/17.
- [132] MENJE (2018a). Les chiffres clés de l'Éducation nationale: statistiques et indicateurs 2016-2017 [Key figures of national education: statistics and indicators 2016-17]. Luxembourg: MENJE. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffres-cles/2016-2017/index.html

EQF 2

Vocational programmes (CCP),

3 years,

WBL % varies

ISCED 353

Vocational programmes leading to a vocational capacity certificate (certificat de capacité professionnelle, CCP) leading to EQF level 2, ISCED 353

EQF level	2	ISCED-P 2011 level	353
Usual entry grade	12 (133)	Usual completion grade	14 (134)
Usual entry age	15	Usual completion age	17
Length of a programme (years)	3		
Is it part of compulsory education and training?	School attendance is compulsory between 4 and 16 years.	Is it part of formal education and training system?	
Is it initial VET?	\	Is it continuing VET?	

Is it offered free of charge?



Is it available for adults?



Adults (18 years old and above) having left school more than one year before and willing to learn a trade or to change their career, can follow an 'adult apprenticeship' leading to CCP. This is available both to job holders and seekers registered at the public employment service. Upon proof of certain work experience, a dedicated committee may guide the adult learner to a suitable grade. The committee includes representatives of the education ministry, Vocational Training Service, labour ministry, guidance service of the employment service, Chamber of Commerce, Chamber of Trades and Skilled Crafts, Chamber of Agriculture, and Chamber of Employees.

Theory training takes place in a technical secondary school or at the national continuing vocational training centre. The practical part is apprenticeship in an enterprise. Adult apprentices receive allowances equal to the minimum wage for unskilled workers (EUR 1 922.96, 1 January 2016) as defined in a 2010 regulation (135) .

The 2008 reform introduced a modular system for apprenticeship, which guarantees the validity of any module acquired during initial training for a certain period, aiding access to lifelong learning.

ECVET or other credits

Information not available

Learning forms (e.g. dual, part-time, distance)

- school-based learning;
- work practice (practical training at school and in-company practice);
- apprenticeships.

Vocational CCP programmes can be followed in the concomitant track (*filière concomitante*), where learning in school and in an enterprise takes place in parallel throughout the apprenticeship. Depending on the profession, the two parts can be organised as day-release (such as two days per week in school and three days in an enterprise) or block-release scheme (for example, nine weeks at school and nine weeks in an enterprise); the allocated time may also vary depending on the profession;

The shares of general education, VET theory and practice in vocational programme curricula vary by trade. Vocational learning ratios (practical training in companies and in vocational training school) for each trade/profession are defined by the education ministry on the advice of professional chambers.

Main providers

- Technical secondary schools
- Companies

Share of work-based learning provided by schools and companies

Varies

Work-based learning type (workshops at schools, in-company training / apprenticeships)

- practical training at school
- in-company practice

Main target groups

Programmes are available for young people and also for adults.

The mediator for school maintenance, inclusion and integration was set up mid-2018 (136) . The mediator's role is to deal with complaints about learners at risk of dropping out of school, the inclusion of learners with special educational needs and the integration of children from immigrant backgrounds into the mainstream school system.

Entry requirements for learners (qualification/education level, age)

Guidance towards vocational programmes takes place at the end of the third year of lower technical education upon decision of the Class Council based on the assessment reports of the whole academic year.

Except for admission criteria, there are no differences between apprenticeships for adults and young people. Those 18 years old and above, having left school more than one year before and willing to learn a trade or to change their career, can follow an 'adult apprenticeship' leading to CCP.

Assessment of learning outcomes

Since the entry into force of the 2008 reform, the technician (also vocational and technical) programmes have been organised into modules. For each module, an assessment framework has been set up. It distinguishes compulsory and optional skills and specifies indicators and minimum standards. At the end of the module, learners take an exam to assess the acquisition of required skills for the module and receive an assessment report (bulletin), which indicates whether the module has been passed (unsuccessful, successful, very successful).

CCP also foresee integrated projects at the end of the programme (137) . These integrated projects aim to monitor whether the learner has developed the complex skills needed to solve a real or simulated work situation. An integrated project can be spread over a maximum duration of three days (24 hours) for programmes leading to vocational aptitude diploma and technician programmes. For programmes leading to a vocational capacity certificate, the integrated project is spread over a maximum duration of two days. This project allows learners to demonstrate the acquisition of required skills in a professional situation. The intermediary and the final integrated projects are a compulsory module for these programmes.

An interim assessment sheet is drawn up at the end of

- 1. the second academic year of normal four-year training;
- 2. the first academic year of normal training of three years.

The assessment is based on the learner's results in the compulsory modules as planned in the curriculum from the start. Neither the placement in companies nor the intermediate project is taken into account.

A final assessment is made at the end of the programmes taking into account compulsory modules followed since the interim assessment. Neither the final integrated project nor the intermediate project is taken into account.

Assessments are successful if the following conditions are met, for the CCP: 80% success in compulsory modules.

Diplomas/certificates provided

This apprenticeship programme prepares learners for the labour market and leads to the vocational capacity certificate (*certificat de capacité professionnelle*, CCP). This certificate attests that the holder has the social and basic practical skills for a trade/profession as a semi-skilled worker. After two years of working experience in this trade/profession, the holder is considered a skilled worker.

Examples of qualifications

Automotive mechanic assistant, florist assistant, gardener assistant, plasterer, sales assistant, hairdresser (at a lower level than if acquired over the DAP programme).

Progression opportunities for learners after graduation

This programme prepares learners for the labour market and leads to the vocational capacity certificate (*certificat de capacité professionnelle*, CCP). It is designed for learners with learning difficulties who cannot access studies leading to a vocational aptitude diploma (*diplôme d'aptitude professionnelle*, DAP) or a technician diploma (*diplôme de technician*, DT). This certificate attests that the holder has the social and basic practical skills for a trade/profession as a semi-skilled worker. After two years of working experience in this trade/profession, the holder is considered a skilled worker. Learners graduating from CCP can progress to the second year of the DAP programme in the same field. By decision of the class council, the learner can even be admitted to the last year of the DAP programme in the same field (138) .

Destination of graduates

Information not available

Awards through validation of prior learning



The 2008 legislation (139) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning (validation des acquis de l'expérience) is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience. Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (140). A recent law (141) modifying the 2008 legislation, specifies that during the validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the Minister. Validation is possible for all VET diplomas and certificates as well as for the master craftsmanship. If all conditions are met, the process leads to a certificate or diploma or to a part thereof. Experience must be directly related to the requested certification. At higher technician certificate level, an ad hoc evaluation committee is set up for each individual asking for recognition of prior learning (142)

General education subjects



Key competences



The general education part includes a module on citizenship education.

Application of learning outcomes approach



The major VET reform of 2008 (143) was implemented between 2010/11 and 2013/14. Among the key principles of the reform is that teaching by subject is replaced with teaching by units and modules. Each module focuses on concrete professional situations; the learning outcomes to be acquired (competences and knowledge) are defined for each module.

Share of learners in this programme type compared with the total number of VET learners

Learners following one of the vocational programmes DAP and CCP (medium and upper level) are 27.1% (144) of all medium and upper secondary technical education learners (145) .

The total number of learners in vocational programmes (medium and upper level) has decreased since 2011/12. At that time 4 360 learners attended technical secondary education programme, with the number decreasing to 3 914 in 2016/17.

- [136] SCL (2018b). Loi du 18 juin 2018 portant: (1) institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaires; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548. http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo
- [137] SCL (2016e). Règlement grand-ducal du 31 août 2016 portant sur l'évaluation et la promotion des élèves de la formation professionnelle. *Mémorial* A 187. http://legilux.public.lu/eli/etat/leg/rgd/2016/08/31/n1/jo
- [138] SCL (2016e). Règlement grand-ducal du 31 août 2016 portant sur l'évaluation et la promotion des élèves de la formation professionnelle. *Mémorial* A 187. http://legilux.public.lu/eli/etat/leg/rgd/2016/08/31/n1/jo
- [139] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [140] SCL (2010b). Règlement grand-ducal du 11 janvier 2010 portant organisation de la validation des acquis de l'expérience pour la délivrance des brevets, diplômes et certificats prévue au chapitre V de la loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 6.

 http://legilux.public.lu/eli/etat/leg/rgd/2010/01/11/n1/jo
- [141] SCL (2016c). Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 175. http://legilux.public.lu/eli/etat/leg/loi/2016/08/24/n1/jo
- [142] SCL (2016b). Loi du 23 juillet 2016 modifiant la loi modifiée du 19 juin 2009 portant organisation de l'enseignement supérieur, fixant les modalités du cycle d'études d'enseignement supérieur aboutissant à la délivrance du brevet de technicien supérieur. *Mémorial* A 143. http://www.legilux.public.lu/leg/a/archives/2016/0143/a143.pdf#page=2
- [143] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A 220, 3273-3288. http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2
- [144] 2016/17.
- [145] MENJE (2018a). Les chiffres clés de l'Éducation nationale: statistiques et indicateurs 2016-2017 [Key figures of national education: statistics and indicators 2016-17]. Luxembourg: MENJE. http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/chiffres-cles/2016-2017/index.html

Optional preparatory module - Modules préparatoires aux études techniques supérieures

EQF	level	Not applicable	ISCED-P 2011 level	Not applicable
Usual entry g	ırade	14 or 15 (146)	Usual completion grade	15 or 16 (147)
Usual entr	y age	18 or 19	Usual completion age	Not applicable
Length of a progra (y	mme ears)	Not applicable		
Is it part of compu education and trai		X	Is it part of formal education and training system?	Information not available
ls it initial	VET?	Information not available	Is it continuing VET?	Information not available
Is it offered free of cha	rge?	✓ .	Is it available for adults?	V
ECVET or other credits	Infor	mation not available	2	
Learning forms (e.g. dual, part-time, distance)	- sch	nool-based learning (English, German, French and	Maths)
Main providers	Information not available			
Share of work-based learning provided by schools and companies	Information not available			
Work-based learning type (workshops at schools, in-company training / apprenticeships)	Information not available			
Main target groups	Prog	rammes are availab	le for young people and also f	or adults.
	set u abou learr	up mid-2018 (148) . ut learners at risk of ners with special edu	maintenance, inclusion and in The mediator's role is to deal dropping out of school, the inducational needs and the integrunds into the mainstream sch	with complaints clusion of ation of children
Entry requirements for learners (qualification/education level, age)	Learners must have graduated from a technician programme or hold a vocational aptitude diploma (DAP) to enter these optional preparatory modules.			
Assessment of learning outcomes	Information not available			

Diplomas/certificates provided	In order to certify access to higher technical studies in the corresponding specialty, learners must have passed all the preparatory modules in a language (German, French or English) and all the preparatory modules in mathematics as described in the timetable of the curricula concerned.
Examples of qualifications	Not applicable
Progression opportunities for learners after graduation	Successful completion of the optional preparatory modules provides the graduates access to tertiary programmes.
Destination of graduates	Information not available
Awards through validation of prior learning	Information not available
General education subjects	Information not available
Key competences	Information not available
Application of learning outcomes approach	Information not available
Share of learners in this programme type compared with the total number of VET learners	Information not available.

^[148] SCL (2018b). Loi du 18 juin 2018 portant: (1) institution d'un service de médiation au maintien, à l'inclusion et à l'intégration scolaires; (2) modification de la loi modifiée du 6 février 2009 relative à l'obligation scolaire. *Mémorial* A 548.

http://legilux.public.lu/eli/etat/leg/loi/2018/06/18/a548/jo

EQF 5
Higher technician
programmes (BTS),
2 years
ISCED 554

Master craftsperson programmes leading to EQF 5 and ISCED 453 - Brevet de maîtrise.

EQF level	5	ISCED-P 2011 level	453
Usual entry grade	Applicants , who must be at least 18, must hold one of the following qualifications:	Usual completion grade	Not applica
	 vocational aptitude diploma (Diplôme d'aptitude professionnelle - DAP) technician's diploma (Diplôme de Technicien - DT) general secondary school leaving diploma (Diplôme de fin d'études secondaires classiques - DFESC) technical secondary school leaving diploma (Diplôme de fin d'études secondaires générales - DFESG) Any other post-secondary qualification (higher technician's certificate (Brevet de technicien supérieur - BTS), bachelor, master) A foreign diploma or certificate recognised by the Ministry of Education, Children and Youth 		
sual entry age	18+	Usual completion age	Not applical
Length of a programme (years)	Information not available		
Is it part of compulsory education and training?		Is it part of formal education and training system?	√ .
it initial VET?	X	Is it continuing VET?	X

Is it offered free of charge?

The registration fee for preparatory courses is EUR 600 per year of registration.

Is it available for adults?



The registration fee for exams is EUR 300 per exam session.

ECVET or other credits	Information not available
Learning forms (e.g. dual, part-time, distance)	Courses are organised in the evenings on weekdays and weekends. They are held either at the training centre of the by the Chamber of Trades and Skilled Crafts, or in secondary schools, or in the National Centre for Continuing Vocational Training (CNFPC).
Main providers	Programmes are organised by the Chamber of Trades and Skilled Crafts
Share of work-based learning provided by schools and companies	Information not available
Work-based learning type (workshops at schools, in-company training / apprenticeships)	The courses in professional theory are specific to each trade. They consist, in principle, of three different modules. The Chamber of Trades and Skilled Crafts proposes the module that the candidate must follow for the current year. There is a list with the trades for which preparatory courses are offered. In some trades, complementary courses, compulsory and subject to fees, have to be followed.
Main target groups	Programmes are available for young people and also for adults.
Entry requirements for learners (qualification/education level, age)	To access these programmes, learners are required to have successfully completed at least EQF level 3 in any trades or occupations. Learners should also have at least one year of work experience to be able to take the final exam.
Assessment of learning outcomes	The master craftsperson programmes is organised in modules and the candidates are free to adapt their training to their own pace. When registering, they choose the modules they would like to follow during the school year. As the maximum duration to finalise the master craftsperson programmes is six years, the Chamber of Trades and Skilled Crafts proposes course planning that allows regular progression, while preserving a margin of safety
Diplomas/certificates provided	Graduates receive the master craftsperson qualification.
Examples of qualifications	Graduates can settle in the craft industry as self-employed and to train apprentices. The qualification confers the title of master craftsperson in the particular trade.
Progression opportunities for learners after graduation	The master craftsperson qualification does not give any access right for higher education; progression opportunities depend on the certificate gained at secondary level.

Destination of graduates

Information not available

Awards through validation of prior learning



The 2008 legislation (149) reforming VET stipulates that everyone has the right to have his/her prior learning and occupational experience validated to obtain a professional qualification. Validation of prior learning (validation des acquis de l'expérience) is a procedure that recognises the value of learning at school (incomplete qualifications), non-formal and informal learning, and work experience. Individuals who have at least three years (5 000 hours) of paid, unpaid or voluntary work (whether continuous or not) directly related to the requested qualification may request certification from the education ministry (150). A recent law (151) modifying the 2008 legislation, specifies that during the validation of prior learning the education ministry will offer support to candidates through either collective workshop or personalised interviews with a coach nominated by the Minister. Validation is possible for all VET diplomas and certificates as well as for the master craftsmanship. If all conditions are met, the process leads to a certificate or diploma or to a part thereof. Experience must be directly related to the requested certification.

General education subjects

Information not available

Key competences

The preparatory courses for the master craftsperson programmes are organised in the following fields:

- business organisation and management, and applied pedagogy;
- professional theory and practice.

Application of learning outcomes approach

information not available

Share of learners in this programme type compared with the total number of VET Information not available

[154] www.bts.lu

EQF 6	
Professional bachelor	
programmes,	
3 years	

ISCED 655

Higher technician programme (brevet de technicien supérieur, BTS) leading to EQF level 5, ISCED 554

EQF	level	5	ISCED-P 2011 level	554
Usual entry ç	grade	15-17 (152)	Usual completion grade	17 and later (153)
Usual entr	y age	19-20	Usual completion age	21-22
Length of a progra (y	mme ears)	2		
Is it part of compu education and trai		\mathbf{X}_{i}	Is it part of formal education and training system?	✓ .
Is it initial	VET?	Information not available	Is it continuing VET?	Information not available
Is it offered free of cha	rge?	\mathbf{X}_{i}	Is it available for adults?	V
		Registration fees		
ECVET or other credits	120	credits		
Learning forms (e.g. dual, part-time, distance)	Infor	mation not available	е	
Main providers		ic and private secon gnised by the State.	dary schools, and technical se	econdary schools
Share of work-based learning provided by schools and companies	Infor	mation not available	e	
Work-based learning type (workshops at schools, in-company training / apprenticeships)	inclu		ate; they provide both theoreti tion (like languages) and train	
Main target groups	Prog	rammes are availab	le for young people and also f	or adults.

Entry requirements for learners (qualification/education level, age)

To be admitted to the programme, learners require either a general or a technical secondary school leaving diploma (*diplôme de fin d'études secondaires classique*, *diplôme de fin d'études secondaires général*es), or a technician diploma (*diplôme de technicien* – DT) complemented by optional modules.

Assessment of learning outcomes

The BTS programme is organised in modules spread over four semesters. Each module has between 5 and 20 ECTS credits and can be composed of different courses with at least one ECTS credit.

Attendance at courses, practical training courses and any other pedagogical activities organised as part of the training is compulsory.

Each course is subject to knowledge assessment that results in a grade. The score is either the result of a continuous assessment carried out during the six-month period, or of a final examination carried out exclusively during an examination session, or by these two assessment modes combined.

Diplomas/certificates provided	Graduates receive the higher technician certificate (<i>brevet de technicien supérieur</i> , BTS;
Examples of qualifications	Nurse, paediatric nurse, responsible for exploitation of automated installations, game artist, character designer
Progression opportunities for learners after graduation	Graduation from the higher technician programme does not provide progression possibilities to any other programme.
Destination of graduates	Information not available

Awards through validation of prior learning

Validation of non-formal and informal learning (*Validation des acquis de l'expérience* – VAE) allows experience to be recognised with a view to obtaining all or part of a higher technician certificate (*Brevet de Technicien Supérieur* – BTS).

VAE is for everyone, regardless of age, level of study or professional status. The prerequisite is to have completed at least three years or 5 000 hours of paid, unpaid or voluntary work directly related to the requested certification, whether continuous or not.

In order to identify the diploma matching his/her experience, the applicant is advised to consult the list and obtain information from the schools and colleges in question. Some BTS qualifications are not yet accessible through VAE.

The validation application and registration application should be sent to the Head of the school/college in question in order to obtain the diploma. The validation application is accompanied by a portfolio which must set out, with reference to the diploma sought, the knowledge, aptitude and skills that the applicant has gained through experience.

Based on the proposal of the college director, the ministry appoints an ad hoc committee for each training programme.

This committee assesses the validation request and the portfolio and interviews the applicant. It may request a placement into a professional situation (whether real-life or simulated). While deliberating, it assesses the knowledge acquired through experience with regard to the curriculum of the desired diploma.

The ad hoc committee may take one or several of the following decisions:

- exemption from producing one of the certificates set out by Article 10 (1) of the Law of 19 June 2009 (setting out the terms and conditions for higher education courses of study leading to a higher technician certificate (BTS));
- registration, provided that an additional part of the curriculum is completed;
- exemption from attending some of the training modules or classes comprising the modules;
- exemption from compliance with some of the validation measures;
- exemption from all of the modules, classes and examinations leading to the diploma being granted.

General education subjects	Information not available
Key competences	Information not available
Application of learning outcomes approach	Information not available

Share of learners in Information not available this programme type compared with the total number of VET learners

[157] http://www.lifelong-learning.lu/Detail/Article/Diplomes/pour-les-diplomes-universitaires----bachelor-et-master/en and http://legilux.public.lu/eli/etat/leg/loi/2009/06/19/n1/jo

EQF 7	
Professional master	
programme,	
2 years	
ISCED 757	

Professional bachelor programmes leading to EQF level 6, ISCED 655

EQF	level	6	ISCED-P 2011 level	655
Usual entry <u>զ</u>	grade	16-17 (155)	Usual completion grade	19-20 (156)
Usual entr	y age	19-20	Usual completion age	21-22
Length of a progra (y	mme ears)	3		
Is it part of compu education and trai	-	\mathbf{X}_{i}	Is it part of formal education and training system?	✓ ,
Is it initial	VET?	Information not available	Is it continuing VET?	Information not available
Is it offered free of cha	rge?	Information not available	Is it available for adults?	
ECVET or other credits	180	to 240 credits		
Learning forms (e.g. dual, part-time, distance)	- app	idemic teaching olied courses ernship abroad and/	or case studies	
Main munidana		·		
Main providers	Infor	mation not available	e 	
Share of work-based learning provided by schools and companies	Infor	mation not available	e	
Work-based learning type (workshops at	- pra	ctical training at sch	nool	
schools, in-company training /	- in-c	company practice at	proad	
apprenticeships)	- cas	e studies		
Main target groups	Prog	rammes are availab	le for young people and also f	or adults.

Entry requirements for learners (qualification/education level, age) Assessment of learning outcomes Diplomas/certificates provided Examples of qualifications Progression opportunities for learners are graduation Destination of graduates Awards through validation of prior learning of gearning Earning Awards through validation of prior learning Ceneral education subjects Key competences Application of learning outcomes Professional bachelor (bachelor professionnel). Information not available Progression to professional or academic Master programme is possible. At university level, validation of non-formal and informal learning allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty (157) . Information not available Application of learning outcomes approach Share of learners in this programme type compared with the		
Diplomas/certificates provided Graduates receive an application-oriented bachelor degree (professional bachelor, bachelor professionnel). Examples of qualifications Progression opportunities for learners after graduation Destination of graduates Awards through validation of prior learning allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty (157) . General education subjects Key competences Information not available Application of learning outcomes approach Share of learners in this programme type	learners (qualification/education	accessible to holders of a general or technical secondary leaving
provided (professional bachelor, bachelor professionnel). Examples of qualifications Progression opportunities for learners after graduation Destination of graduates Awards through validation of prior learning learning allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty (157). General education subjects Key competences Information not available Application of learning outcomes approach Information not available	_	Information not available
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allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty (157). General education subjects Key competences Information not available Application of learning outcomes approach Information not available Share of learners in this programme type		Information not available
Key competences Information not available Application of learning outcomes approach Share of learners in this programme type	validation of prior	allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor,
Application of learning outcomes approach Share of learners in this programme type Information not available		Information not available
outcomes approach Share of learners in Information not available this programme type	Key competences	Information not available
this programme type	• • • • • • • • • • • • • • • • • • • •	Information not available
total number of VET learners	this programme type compared with the total number of VET	Information not available

[160] http://www.lifelong-learning.lu/Detail/Article/Diplomes/pour-les-diplomes-universitaires---bachelor-et-master/en and http://www.lifelong-learning.lu/Detail/Article/Diplomes/pour-les-diplomes-universitaires---bachelor-et-master/en and http://legilux.public.lu/eli/etat/leg/loi/2009/06/19/n1/jo

Master craftsperson

programmes

ISCED 453

Professional master programme leading to EQF level 7, ISCED 757

EQF	level	7	ISCED-P 2011 level	757
Usual entry grade		19-20 (158)	Usual completion grade	20-21 (159)
Usual entry age		21	Usual completion age	23
Length of a program	mme ears)	2		
Is it part of compu education and train		\mathbf{X}_{i}	Is it part of formal education and training system?	Information not available
Is it initial \	VET?	Information not available	Is it continuing VET?	Information not available
Is it offered free of cha	rge?	Information not available	Is it available for adults?	
ECVET or other credits	60 to	120 credits		
Learning forms (e.g. dual, part-time, distance)	Information not available			
Main providers	Infor	mation not available		
Share of work-based learning provided by schools and companies	Information not available			
Work-based learning type (workshops at schools, in-company training / apprenticeships)	Information not available			
Main target groups	Programmes are available for young people and also for adults.			
Entry requirements for learners (qualification/education level, age)	Learners need to hold a (professional) bachelor degree to enter the professional master programme.			
Assessment of learning outcomes	Information not available			

Graduates receive an application-oriented master degree (professional master, <i>Master professionnel</i>).			
Information not available			
Graduates holding a professional master programme can progress to academic PhD programmes.			
Information not available			
At university level, validation of non-formal and informal learning allows experience to be recognised with a view to accessing various bachelor or master university studies. The request is considered by a board of examiners whose members are appointed by the chancellor, following recommendation of the dean of the relevant faculty (160).			
Information not available			

[149] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. *Mémorial* A, 220, 3273–3288.

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