
TEACHERS AND TRAINERS IN A CHANGING WORLD

Building up competences for
inclusive, green and digitalised
vocational education and training

LUXEMBOURG



Teachers and trainers in a changing world

Luxembourg

Building up competences for inclusive, green and digitalised vocational education and training (VET)



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CHAPTER 1. Introduction

In Luxembourg, decisions related to educational matters are taken on a national level by the Ministry of Education, Children and Youth (Ministère de l'Éducation Nationale, de l'Enfance et de la Jeunesse, MENJE). General objectives, teaching programmes, learning outcomes, certifications and questions regarding staff management are a matter of centralised government.

Following the reform of public administration introduced by the Law of 25 March 2015, different teacher careers have been put in place as of 1 October 2015 in the Luxembourgish educational system.

The amended Law of 30 July 2015 creating the Training Institute of National Education (IFEN, Institut de Formation de l'Éducation Nationale) and placing the initial and continuing professional development of teachers (including VET teachers) under its authority can be considered a milestone regarding teacher training in Luxembourg. The new Law of 1 August 2019 introduces a coherent initial training structure for all professionals in public education (primary and secondary school teachers, psychological and educational staff, employees and civil servants) in line with the overall reform of public administration agents. The programmes of the initial training are more personalised, responding to individual and subject-related training needs.

2020 should have been a year dedicated to the implementation of the 2019 Law, but due to the Covid-19 crisis some measures had to be taken in order to adapt, as a matter of urgency, the training and assessment arrangements of the initial and continuing training programmes.

Online trainings have experienced an unprecedented development and their implementation was a real challenge. Thanks to a constant involvement of all stakeholders (IFEN, Department for Coordination of Educational and Technological Research and Innovation (SCRIPT), teachers in training and trainers) the implementation of the new traineeship arrangements has been successful.

During the Covid-19 crisis, the professional chambers doubled their efforts to support tutors in companies in their mission.

CHAPTER 2. Types of teaching and training professionals

2.1. Main types

The recruitment and management of technical secondary education's staff (including VET) is the responsibility of the State. According to the needs of secondary schools, their civil servant teaching staff may be reinforced by permanent, either full-time or part-time, teachers engaged as public employees ⁽¹⁾ (*chargés d'enseignement à durée indéterminée*) who are members of the national reserve of secondary school teaching staff. In addition, fixed-term, full-time or part-time teachers (*chargés d'éducation à durée déterminée*) may be hired as public employees for replacement purposes.

Initial vocational education and training (*formation professionnelle initiale*) provides young people with a general, theoretical, and practical education allowing them to obtain a professional qualification documented by an official diploma or certificate.

In Luxembourg, initial vocational education and training is offered at the level of secondary education. Secondary VET prepares learners for professional life and studies in higher education.

Three-year pre-VET programmes provide 12- to 14-year-olds with general and practical knowledge based on learning outcomes and guidance. After successful completion of the lower cycle, learners can choose between:

- a) upper technical secondary education (*enseignement secondaire général*, ISCED 354) which are general and technical four- to five-year school-based programmes, leading to the technical secondary school leaving diploma (DFESG) in different fields: administrative and commercial, general technical, arts, healthcare and social professions, and tourism and innkeeper. In the national context these programmes are not regarded as VET programmes;
- b) VET programmes.

The VET programmes offer school-based 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 3 to 4 years, depending on the chosen orientation. There are three different programmes:

(1) Referred to as *chargés* in the rest of the document.

- (a) technician's programmes (*la formation de technicien*) leading to a technician's diploma (*diplôme de technicien*, DT) (ISCED 354, EQF 4). Vocational three-year programmes with apprenticeships at their core:
- (b) vocational programmes leading to a vocational aptitude diploma (*diplôme d'aptitude professionnelle*, DAP) (ISCED 353, EQF 3);
- (c) vocational programmes leading to a vocational capacity certificate (*certificat de capacité professionnelle*, CCP) (ISCED 353, EQF 2);

The proportion of general education, VET theory and practice in vocational programme curricula vary by trade/occupation and thus the involvement of secondary school teachers (A1), technical education teachers (A2) and masters of technical education (B1) varies accordingly.

2.2. VET schools

IVET programmes are offered in technical secondary schools or in mixed schools i.e. schools offering general and vocational programmes.

Some IVET programmes addressed to adults are offered by the National School for Adults (ENAD) and the National Centre for Continuous Vocational Training (CNFPC).

2.3. Teaching and training professionals by type of VET school

Secondary school teachers (A1), technical education teachers (A2) and masters of technical education (B1) are involved in all vocational programme curricula in proportion to the general education, VET theory and practice.

The Ministry of National Education recruits adult educators for general education (A1), technical education (A2) and practical education (B1) in the framework of public classical and technical secondary education for adults. According to needs, recruitment is spread out among the institutions concerned: National School for Adults (ENAD) and National Centre for Continuous Vocational Training (CNFPC) ⁽²⁾.

⁽²⁾ Some adult educators also work in the National Institute for Languages (INL).

CHAPTER 3. Teaching and training professionals in school-based settings

3.1. Legislation

The Law of 30 July 2015 ⁽³⁾ creating the Training Institute of National Education (IFEN, Institut de Formation de l'Éducation Nationale) can be considered a milestone regarding teacher training in Luxembourg. The institute was called upon to organise the professional induction as well as CPD for the whole teaching staff as well as socio-educational staff of the National Education. Its mission is to coordinate and organise professional development for all teachers and adult educators involved in primary and secondary education as well as to advise and support schools in drawing up continuing training plans.

This Law was amended in 2019 (Law of 1 August 2019 ⁽⁴⁾) with the aim to align the training arrangements with the overall reform of public administration agents while specifically addressing the training needs of teachers. Following this new legal provisions, the initial training programmes of teachers in secondary education (including IVET) were amended.

- a) The initial training programme of teachers has been reduced from 3 years to 2 years.
- b) A one-year further development period (*période d'approfondissement*) has been added during the first year of work in the field, during which trainees are supported by an educational adviser.
- c) The training programme is more individual: during the induction phase and the further development period, trainee teachers can choose a number of modules in order to meet individual and subject-related training needs. Their initial training and work experience may allow trainees to obtain exemptions from courses or, at the most, a one-year reduction in the duration of their initial training programme to become a teacher.
- d) Emphasis is given to formative assessment and less on summative assessment.
- e) Certification of basic legal and regulatory knowledge validates the general part of the training which has been increased to 30 hours.

⁽³⁾ <http://data.legilux.public.lu/eli/etat/leg/loi/2015/07/30/n2/jo>

⁽⁴⁾ <http://legilux.public.lu/eli/etat/leg/loi/2019/08/01/a563/jo>

Since the school year 2016/2017, the conditions of employment and work of *chargés* have been defined by the Law of 23 July 2016 ⁽⁵⁾ on the creation of a national reserve of secondary school teaching employees which was subsequently amended by the Law of 1 August 2019. During the first three years, the permanent *chargés* shall follow the three-year training organised by IFEN.

Regarding the employees training:

- a) during the first year, summative assessment leads to the delivery of a teacher training certificate (*certificat de formation pédagogique*). Employees who receive this certificate and pass the exam to become a teacher as a civil servant will reduce their initial training period by one year;
- b) support for employees during their training period has been increased.

The Law of 19 December 2008 ⁽⁶⁾ allows the different training institutes (National Institute of Languages (INL), National School for Adults (ENAD) and Centre national de formation professionnelle continue (CNFPC)) to recruit adult trainers as an additional professional category. Following the Grand-Ducal Regulation of 24 August 2016 ⁽⁷⁾, the provisions of the Law of 30 July 2015 are applicable to the training of adult trainers.

The Grand-Ducal Regulation of 25 August 2015 ⁽⁸⁾ establishes a competence framework consisting of nine professional competences to be developed during the initial training period of teachers.

3.2. Qualification and competence requirements

There are different teacher careers (both for civil servants and employees) in place in the Luxembourgish in school-based settings (see Table 1).

Table 1. **Teacher careers**

Type of teacher	Type of teaching	Required diploma
Secondary school teachers A1	Technical, general secondary education and adult education	Bachelor/Master
Technical secondary school teachers A2	Technical secondary and adult education	Bachelor
Master of technical education B1	Technical secondary and adult education	Master craftsman's diploma

Source: INFPC/MENJE- 2021.

⁽⁵⁾ <http://legilux.public.lu/eli/etat/leg/loi/2016/07/23/n22/jo>

⁽⁶⁾ <http://data.legilux.public.lu/eli/etat/leg/loi/2008/12/19/n19/jo>

⁽⁷⁾ <http://data.legilux.public.lu/eli/etat/leg/rgd/2016/08/24/n3/jo>

⁽⁸⁾ <http://legilux.public.lu/eli/etat/leg/rgd/2015/08/25/n2/jo>

Besides the required diploma (see Table 1) and the language requirements (mastery of the three administrative languages), there are no additional specific access or training requirements for VET teachers which are indeed the same as for teachers in secondary education.

Secondary teachers in career A1 should hold a Master and at least the Bachelor or the Master should be in relation with the subject taught. Masters preparing for the profession of teacher are also accepted (*Lehramt*, Master in Secondary Education, etc.). The University of Luxembourg offers training leading to a Master in Secondary Education (EQF7). This academic programme focuses on disciplinary didactics. It is addressed to students holding a BA in a specific subject, who wish to be trained in didactics in this field. As future teachers will be able to acquire thorough knowledge in pedagogy and didactics, some courses may be exempted from the initial training programme of their teacher career. The Master is offered in German language and literature, in French language and literature as well as in Mathematics. It also focuses on the specific challenges of the Luxembourgish multicultural and multilingual school context.

Technical secondary school teachers (A2) should hold either a Bachelor or a recognised diploma certifying at least three years of study in their field of expertise.

Masters (in French, *Maître-instructeur*) of technical education B1 should hold a Master Craftsperson Diploma (*brevet de maîtrise*) or higher technician's certificate or foreign diploma attesting at least two years of study in relation to the required field.

To get access to the civil servant career, candidates first have to pass the preliminary tests on the three national languages (Luxembourgish, French and German) and then enrol for the examination on languages and subject-specific questions (*concours*) organised by the Ministry of Education.

Permanent *chargés* should also master the three national languages while fixed-term *chargés* will have to prove command of two out of the three national languages.

3.3. Initial training programmes

Depending on the type of teacher career (civil servants or employees), different categories of professional training exist alongside, but all teachers are recruited by the national education authority. Only permanent *chargés* will have to undergo this training cycle.

3.3.1. Teachers in the civil servant career

The 2-year initial training programme (induction phase) consists of general training, specific training and training in professional practice (see Table 2). These components are closely linked for a coherent and systemic combination and pace of theory and practice. During the first year, the general training consists of a 30-hour module on legislation whereas the specific training consists of 124 hours of mandatory training modules (common core modules and field-specific didactic modules) and 24 hours of training modules to choose from. During the second year, specific training consists of 48 hours of mandatory training modules and 24 hours of training modules to choose from. During both years, trainees benefit from regular coaching by their pedagogical adviser (tutor) and practical training is organised in the form of job shadowing and peer groups.

At the end of the induction phase, during the first year following their appointment, new teachers benefit from a one-year period of further development training (*période d'approfondissement*) during which they are coached by an educational adviser and must follow 48 hours of training modules to choose from and participate in practical training courses. During the induction phase, trainees will be exempted from teaching a certain number of weekly lessons (8 lessons during the first year and two lessons during the second year) and during the further development phase, they are exempted from one lesson per week.

Table 2. Initial training of civil servant teachers in secondary education

	Induction phase		Further development phase
	Year 1	Year 2	
General training	30 h		
Specific training (incl. modules to choose from)	148 h	72 h	
Practical training			
- Coaching	On a regular basis	On a regular basis	On a regular basis
- Job shadowing	2 sessions/year	2 sessions/year	2 sessions/year
- Peer groups	3 sessions/year	3 sessions/year	3 sessions/year
Summative assessment	Exam on legal framework	Practical test	
Formative assessment	- Written works - Pedagogical action-research project - Portfolio assessment	- Pedagogical action-research project - Portfolio assessment	

Source: IFEN/INFPC - 2021.

There is a first summative assessment after the first year of the induction phase which consists of an examination on legislation. The specific training and the practical training are assessed by:

- a) a practical test at the beginning of the second year of induction (it consists of an observation of a lesson in a classroom for which the teacher trainee is given a teaching task);
- b) formative assessments:
 - (i) the portfolio is evaluated in the 1st and 2nd year by the trainee's didactic and pedagogical advisers. It reflects the evolution of the training as well as the development of competences and the reflection processes in respect of the professional practice. It is a professional development tool that reinforces the link between theoretical and practical training. It contains a CV, a training action plan, an assessment by the adviser, a list of mentoring activities, different documents related to the secondary school where the practical part of the training takes place;
 - (ii) Two written works on the design and implementation of learning situation due during the 1st year which are assessed by trainers appointed by the Institute's director. A first one on the design and the implementation of a series of lessons with an a-posteriori analysis. A second one on the design, the implementation and an a-posteriori reflection on assessment of learners;
 - (iii) a pedagogical action-research project assessed by a trainer appointed by the Institute's director.

3.3.2. Permanent *chargés*

During the first year, the permanent *chargés* are exempted from teaching 8 lessons and must attend the Teacher Training Certificate courses (170 hours of which 24 hours of training courses to choose from). During the second year, the permanent *chargés* are exempted from teaching 2 lessons and must follow the Early Career Training Cycle courses (60 hours of which 24 hours of training courses to choose from). The objective of these two years of induction phase is to complete the theoretical training in the pedagogical fields and to strengthen professional skills in a supervised environment. At the end of the induction phase, during the third year, they are exempted from teaching 1 lesson and benefit from a one-year period of further development (*période d'approfondissement*) as is the case for civil servants.

Table 3. Initial training of permanent *chargés*

	Induction phase		Further development phase
	Year 1	Year 2	
Teacher Training Certificate courses	170 h (incl. 24 h of training courses to choose from)		
Early Career Training Cycle courses (incl. modules to choose from)		60h (incl. 24 h of training courses to choose from)	
Practical training - Coaching - Job shadowing - Peer groups	On a regular basis 2 sessions/year 3 sessions/year	On a regular basis 2 sessions/year 3 sessions/year	On a regular basis 2 sessions/year 3 sessions/year
Summative assessment	Exam on legal framework Practical test		
Formative assessment	- Written works - Portfolio assessment	- Portfolio assessment	

Source: IFEN/INFPC

In order to obtain the Teacher Training Certificate, permanent *chargés* must sit an exam on legislation and a practical test. They must also produce two papers assessed by trainers appointed by the Institute's director. Their portfolio (see 3.3.1) is assessed during the first and second year by the trainee's didactic adviser and pedagogical adviser.

3.4. Requirements for continuous professional development

CPD has gained considerable importance over the years and is now considered a professional duty in the Luxembourgish educational system. According to the law, teachers in secondary education shall attend 48 hours of continuing training over a period of three years

There are several ways for IFEN to identify training needs in the framework of VET teachers' CPD.

The continuing training offer is drawn up by the IFEN in collaboration with and upon request by the school staff who are consulted yearly. The IFEN tries to respond to individual needs identified at different levels, as well as to political

decisions, and is in regular contact with the national vocational commissions ⁽⁹⁾. IFEN's training offer is very varied and includes among other courses related to the teacher's discipline, pedagogical issues and learners' well-being.

Within the SCHiLW framework (*Schulinterne Lehrer/innen-Weiterbildung* – in-school continuing training for teachers), the IFEN supports secondary schools that are willing to set up training plans (plans de formation), which are however not compulsory. These plans contribute to a better coherence between the school's objectives and teachers' training activities. Each secondary school which organises training activities in the framework of SchiLW has to appoint two training delegates (*délégué à la formation continue*), who coordinate the training activities held in their school. They are appointed by the Minister for a renewable three-year term on joint proposal of the school director and the IFEN. The IFEN ensures the training, monitoring and professional exchange among training delegates.

At least 24 hours (half of the mandatory 48 hours) of continuing training should either concern priority training areas (defined by regulation) or be part of the secondary school's internal training plan. Among the 8 current priorities there are: “teaching and learning within a competency-based approach”, “ICT technologies”, “teamwork and communication”. A maximum of 24 hours should belong to the domain of disciplinary knowledge. Any training courses chosen by a teacher which do not clearly belong to his/her profile should be approved by the school director.

Ministry of Education staff do not pay any fees for training organised by the IFEN.

Continuous professional development is provided according to the training objectives and the availability of the teachers being trained: seminars (one-off training), training days, conferences, sequential continuing training (introductory module followed by a practical phase which may or may not be accompanied by a phase of exchange and intensification), coaching, peer learning, exchanging networks. In a period of rapid technological change, it is essential that VET teachers continuously update their professional skills and knowledge, to ensure learners leave the VET system with skills that can be put into practice immediately. With the Covid-19 crisis, online training has experienced an unprecedented growth

⁽⁹⁾ National vocational commissions (*commissions nationales de formation*) exist for each trade and profession of IVET; they:

- give advice or make proposals as regards the courses programme, timetable, teaching language, didactic materials as well as on the framework programmes and assessment framework;
- propose elaborate and revise course content for the modules included in the programmes they are responsible for;
- issue opinions on the framework programs and assessment criteria that fall within their competence.

that has required a great deal of flexibility on the part of the IFEN, as well as on the part of the participants and trainers. IFEN can also provide financial support for the registration fees for continuing education courses offered by other operators.

3.5. Data on teachers and trainers in school-based settings

In the 2019/2020 school year, the IFEN has been the venue for the initial training programme of 421 teachers in secondary education including VET (see Table 4).

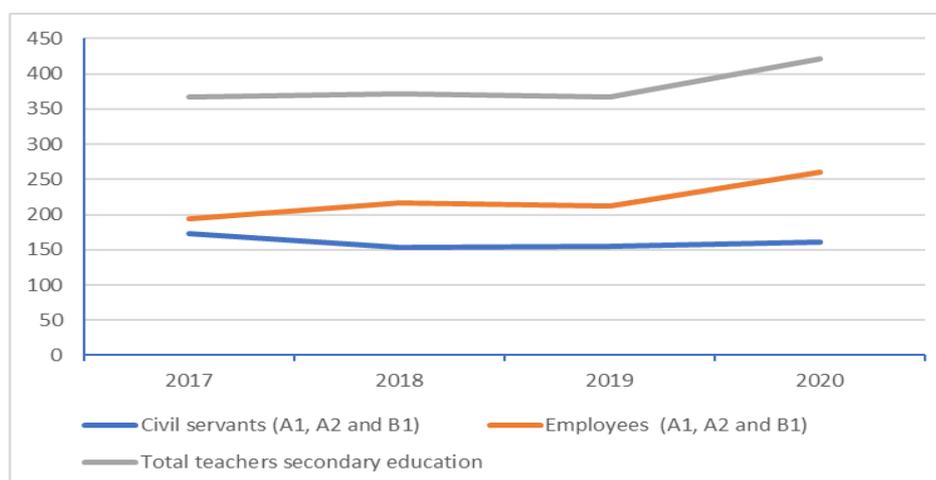
Table 4. **Number of trainees in the initial training programme in 2020**

Promotion 2020	A1	A2	B1	Total
Civil servants	136	11	14	161
Employees	187	62	11	260
Total	323	73	25	421

Source: IFEN - 2021

The number of teacher trainees in the initial training programme for secondary education has grown by 15% in 2020 (see Figure 1) mainly due to a growing number of employees (+23%).

Figure 1. **Evolution of the number of trainees in the initial training programme for secondary education**



Source: IFEN

26 616 participants from secondary education (38.8% of total participants) have taken part in continuing training at the IFEN (including participants following the initial training programme who decided to follow some of these training modules).

CHAPTER 4. Training professionals in work-based settings

4.1. Definitions

When a company wishes to hire an apprentice, it must appoint a tutor. The tutor is in charge of the practical training and the pedagogical supervision of the apprentice. The tutor is also the contact person for the competent professional chamber with regard to the progress of the apprentice.

4.2. Legislation

The law of 19 December 2008 stipulates that a company offering training or apprenticeship must have “the right to train” by fulfilling a number of conditions defined according to the Grand-Ducal Regulation of 3 August 2010 ⁽¹⁰⁾. The company must be established in Luxembourg and its activities registered in the commercial, industrial, agricultural or craft sector. It must have at least 3 years' professional experience in the profession or trade of the apprenticeship in which the apprenticeship is to be carried out, which must be listed in the Grand-Ducal Regulation determining the professions and trades in the context of vocational training.

The company must appoint one or more tutors aged over 21 to mentor apprentices all along their apprenticeship. The Law has increased the responsibility of the tutor with regard to the training and assessment of the apprentices. The number of apprentices for whom a tutor is responsible is also provided for. Each tutor has to undergo a three-day paid training, organised by the competent professional chamber. A trainer holding a Master craftsman's diploma (*brevet de maîtrise*) or equivalent is exempted from this mandatory training. The training “tutor in company” (*tuteur en entreprise*) comprises a legal part, a pedagogical part and a part 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 into the labour market. The training of tutors has become central in order to increase and assure the quality of initial and continuing vocational training. Following the amended Law of 12 July

⁽¹⁰⁾ <http://data.legilux.public.lu/eli/etat/leg/rgd/2010/08/03/n5/jo>

2019¹¹, the requirements training providers must fulfil in order to obtain a training authorisation are included in the Labour Code.

During the Covid-19 crisis, from summer to 31 December 2020, the Chamber of Trades and Crafts made the "Tutor in company" training free of charge to support companies responsible for the training of apprentices in their training efforts. Tutors from companies under the responsibility of the Chamber of Commerce were offered part of the "Tutor in company" training by way of distance learning.

4.3. Provisions for continuous professional development

There is no official CPD for tutors in companies. However, there is a toolbox available on the WinWin website where they can find useful information. There is also an Infobox on the Chamber of Trades and Crafts website (¹²).

The apprenticeship advisers of the professional chambers are available to give support or answer any questions the tutors may have.

During the Covid-19 crisis, the professional chambers created an information system sending emails to the tutors to inform the companies of any changes in the apprenticeship organisation and regularly updated their websites and their FAQ sections. They organised regular online meetings to inform about the existing support for the organisation of apprenticeship. An "apprenticeship" hotline was set up where tutors had the possibility to contact the Chamber of Trades and Crafts' apprenticeship advisers.

4.4. Data on trainers in work-based settings

Even if it remained stable between 2019 and 2020, the number of participants in training "tutor in company" has grown (+11.7 %) between 2018 and 2021.

Table 5. Number of participants in the training "tutor in company"

Promotion 2020	2018	2019	2020	2021
Chamber of Commerce	386	422	426	396
Chamber of Trades and Crafts	57	76	62	99
Total	443	498	488	495

Source: Chamber of Commerce and Chamber of Trades and Crafts -- 2021

(¹¹) <http://legilux.public.lu/eli/etat/leg/loi/2019/07/12/a497/jo>

(¹²) <https://www.cdm.lu/mon-apprentissage/formation-initiale/infos-patrons>

Note: Most tutors from company belonging to the Chamber of Trades and Crafts hold a Master craftsman's diploma (brevet de maîtrise) or equivalent and are thus exempted to follow the training "Tutor in company".

CHAPTER 5. Partnerships between schools and companies

5.1. Examples of practice

To enable teachers to best prepare pupils for the labour market, the IFEN offers courses in various fields such as professional guidance and introduction to the national labour market ⁽¹³⁾. In the framework of their cooperation with the IFEN, whenever secondary schools require specific training for teachers involved in specific trades or occupations, the IFEN will either implement new training offers or offers access to training courses delivered by other training providers. These new training courses may be delivered by employees of enterprises from the concerned sectors. For instance, IFEN offers a training “Smart meters – the new smart electricity meters” which is delivered by Creos Luxembourg, the company that owns and manages the electricity and natural gas networks in Luxembourg.

5.2. Cooperation between VET schools and companies

In the Luxembourgish tripartite ⁽¹⁴⁾ structure, the Ministry of Education, Children and Youth (MENJE) develops the standards for VET together with the professional chambers which represent the employers and the employees. This means that the link with the labour market is made in practice through the drawing up of the curricula, which are based on labour market demands. The Law of 19 December 2008 has confirmed this tradition by anchoring the partnership between these institutions. The partnership covers guidance offered to learners, organisation of training courses, assessment of training programmes, development of validation of prior learning, and selection of the professions or trades covered by initial vocational education and training. The partnership also involves communication between stakeholders involved in teacher training and professional chambers, who can then adjust teacher training to the needs of the labour market and inform in-company trainers.

⁽¹³⁾ <https://ssl.education.lu/ifen/liste-formations?dispDomaine=9&idSsDomaine=2644>

⁽¹⁴⁾ Luxembourg's so-called 'tripartite' social model is based on an institutionalised and continuous dialogue between the government, employers, and trade unions on important economic and social issues with a view to finding a consensus.

For instance, the main responsible bodies for shaping VET qualifications, the Curriculum committee ⁽¹⁵⁾ and the National vocational training commissions (see 3.4), are made up of schools' members and training institutions ⁽¹⁶⁾ or representatives of each professional chamber associated to the training.

VET programmes can be done under an apprenticeship contract or are school-based and include an internship contract. The apprenticeship or internship contract is signed between the learner, the company/tutor and the school (for the internship contract). It defines the main responsibilities and obligations of all signatories among which the commitment of the company/tutor to ensure the education and professional training of the apprentice in accordance with the training programme established by the Ministry of Education. Trainers in company are appointed by companies and the ones who do not hold a Master craftsman's diploma have to undergo a three-day paid training, organised by the competent professional chamber. The share of time spent by the tutor in companies in managing the apprentice or the trainee depends also on the enterprise.

Another form of institutionalised cooperation is ensured thanks to the professional chambers' apprenticeship advisers (*conseillers à l'apprentissage*). The advisers are in direct and permanent contact with training companies, apprentices, parents, as the case may be, and school establishments. Their mission is to accompany enterprises and apprentices all along their training path and to provide all the information relating to vocational training (legislation, organisation, programmes, learning logbook (*carnet d'apprentissage*), etc.) through the documentation of work, offering individualised advice and visits in class. The apprenticeship advisers report on and coordinate the evolution of trades and contribute to the constant adaptation of the VET programmes.

There is no legal obligation, but during the apprenticeship some teachers and company tutors may decide to set up a closer cooperation in order to monitor and coordinate more closely the training delivered to the learners.

⁽¹⁵⁾ A curriculum team committee:

- develops and revises the framework 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 national commissions. The guidelines and procedures feed into evaluation frameworks adopted by the minister of Education.
- develops and evaluates the 'integrated project' (*projet intégré*) 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.

⁽¹⁶⁾ Enterprises or public administration offering an apprenticeship or a training.

The quality common assessment framework model is followed by IFEN. This model includes the evaluation of all teacher's trainers including those coming from companies. Trainers delivering training at IFEN receive feedback to improve their training.

5.3. Hybrid teachers and trainers

In IVET, there is no official category of hybrid teachers/trainers.

5.4. Data on cooperation and hybrid teachers

There is no regular data collection on numbers of cooperation and partnerships between schools/centres and companies/enterprises.

CHAPTER 6. National and EU-funded projects and initiatives

6.1. Digital skills for remote and blended teaching

Mastering ICT applied to teaching is one of the core competences listed in the Competence framework (see Section 3.1) to be developed during the initial training period of teachers.

On 10 March 2020, the Ministry of Education introduced a new framework of reference, the “Media compass” (*Medienkompass*). It provides practical guidelines for digital education to teachers. The reference framework is part of the initiative “Simply digital - Future competences for strong children” (“*einfach digital - Zukunftskompetenze fir stark Kanner*”) introduced in February 2020. Training for better use of digital equipment as well as the creation and adaptation of distance-learning courses were two major areas of development for the continuing education offered by the IFEN in 2019-20.

The IFEN offers a range of training courses organised in four sections ⁽¹⁷⁾:

- a) technological skills: mastery of ICT (mastering technological tools and their pedagogical and didactic use);
- b) media education: responsible use of media and development of a critical, relevant and civic approach to media use;
- c) use of tablets: the pedagogical and didactic use of tablets in the different subjects and areas of learning;
- d) distance teaching and learning which has been introduced in March 2020 following the first lockdown in the context of the Covid-19 crisis.

Owing to the circumstances, the IFEN accelerated the development of online training courses which were either an adaptation of the existing face-to-face training courses, new training courses or access to training courses offered by other training providers.

A website called www.schouldoheem.lu has been set up to offer pedagogical resources and online tools for teachers, learners, and parents. It has a teachers' corner where teachers may find material for the development of skills during the Covid-19 crisis: webcasts, DigiSnacks (one-hour virtual meetings to share practices and pedagogical tools related to digital technology), a selection of IFEN courses, a peer to peer helpdesk, an access to the IFEN's e-library. A webinar was held to support VET teachers to develop knowledge on distance-teaching for

(17) <https://ssl.education.lu/ifen/formation-continue> - *Medienpädagogik - Medienerziehung*

practical courses (Best practices – “How do I teach job-specific actions in distance learning?”) ⁽¹⁸⁾. This interactive online event was offered in cooperation with several stakeholders, namely the VET directorate of the Ministry of Education, together with SCRIPT and IFEN.

In 2020, the SCRIPT collaborated with a private provider in order to professionalise and harmonise the digital offer and thus created a platform for sharing and exchanging didactic and pedagogical content that can be arranged separately or linearly according to the needs of the teachers. VIESO (Life and society – *vie et société*) course material for secondary education is already available on the platform ⁽¹⁹⁾.

6.2. Green skills for sustainability

The IFEN courses catalogue has a section “Sustainable development education - Environment” (*Education au développement – Environnement*) ⁽²⁰⁾ where teachers can find specific training courses in relation to the Luxembourg Agenda 2030 on sustainable development. This enables teachers to raise learners' awareness of global contexts and challenges (poverty, inequality, climate change, sustainability and Agenda 2030, etc.) and promote competences, especially critical thinking.

There is a national web platform dedicated to sustainable development education ⁽²¹⁾ where organisations and institutions active in the field of Education for Sustainable Development (ESD) may exchange and share information and good practices. The main objectives of the platform are to propose activities in relation with ESD and offers didactic material and to allow the elaboration of interdisciplinary educational projects.

In 2016, the project on “Promotion of entrepreneurship in secondary education” was launched, which supports the development of “Entrepreneurial Schools” (*écoles entrepreneuriales*). In 2020, the original Entrepreneurial Schools project was redesigned and resulted in the national Sustainable Entrepreneurial Schools label coordinated by the Department for Coordination of Educational and Technological Research and Innovation (SCRIPT) in collaboration with the General Directorate for Small and Medium-Sized Enterprises. During the 2020/21 school year, training was offered to teachers belonging to secondary schools

⁽¹⁸⁾ <https://schouldoheem.lu/fr/news/general/2020-04/formation-best-practices-wie-vermittle-ich-berufsspezifische-handlungen-im>

⁽¹⁹⁾ www.vieso.lu

⁽²⁰⁾ <https://ssl.education.lu/ifen/liste-formations?dispDomaine=13&idSsDomaine=1305>

⁽²¹⁾ <https://bne.lu/>

committed to the Sustainable Entrepreneurial Competence to get familiar with the label, its philosophy, its criteria and to be introduced to activities carried out by the partners involved in the project. For secondary schools wishing to further increase their teachers' awareness of sustainable entrepreneurship, tailor-made IFEN training courses may be organised.

The Sustainable Entrepreneurial Schools' online platform ⁽²²⁾ offers teachers the possibility to discover activities to encourage learners to find their way in a world that is constantly changing and in which sustainable and creative thinking is increasingly important. The “You(th)Start Challenges” project makes activities/exercises that are based on a three-dimensional model called “TRIO model” (Core Entrepreneurial Education, Entrepreneurial Culture and Entrepreneurial Civic Education) available to teachers. These activities and exercises allow learners to develop entrepreneurial skills.

6.3. Preventing early leaving from VET

The IFEN and the CePAS (Centre for psychosocial and educational support) offer secondary schools upon their request to devise a tailor-made coaching and training system for school retention and dropout prevention aimed at multidisciplinary teams. The objective is to root the schools' pedagogical, psycho-social, educational and managerial practices to support learners in a collaborative environment.

As teachers and school staff are best placed to identify learners presenting a risk of dropping out, they should be well prepared to be able to detect warning signs and react accordingly. The IFEN offers a series of training courses which place the learners at the core: learner welfare, behavioural problems, relationship development / social-emotional development, developmental support, support for children and young people, emotional and sexual health and vocational and educational guidance.

(22) <https://entrepreneurship.lu/>

CHAPTER 7. National surveys of teaching and training populations

The Law of 30 July 2015 adds the quality approach to IFEN's missions. Within the framework of its quality approach ⁽²³⁾, the IFEN carries out a periodic evaluation of the initial and continuing training programmes. This approach involves first collecting the opinion of IFEN's trainees and trainers and then analysing the data collected to identify potential needs and expectations. In 2020, the questionnaires sent to the teachers attending training have been revised and adapted to evaluate the quality of each type of training (initial training programme or CPD). Since the 2020/2021 school year, the questionnaires have only been available online after each course. They allow continuous monitoring of the quality of the services provided at different levels by the IFEN.

In 2020, the IFEN carried out a specific three-step survey (April, May and July) on the online offer addressed to trainees (IFEN (2021)). The aim was to better identify the needs, to adapt the online courses' offer and to quickly remedy the shortcomings reported by participants or trainers. The trainers were informed of the feedback of the trainees in order to adapt their courses.

Since September 2020, the questionnaires used in the context of the quality approach have included specific questions regarding online courses, thus allowing long-term follow-up.

The National Observatory for School Quality is carrying out a national study on teachers' and learners' well-being and how it is influenced by the Covid-19 crisis (ONQS (2021)). The target audience is made up of all teachers and learners in initial education, secondary education and competence centres.

⁽²³⁾ Based on the EFQM (*European Foundation of Quality Management*).

CHAPTER 8. Conclusions

The role of teachers and trainers in VET and the need to support their CPD have been the subject of major reforms and debates in the Luxembourgish political framework. Important reforms, such as setting up a systematic and coherent approach for initial and continuing professional development for all actors in National Education, independent of their status, aim at increased coherence and continuity between initial and continuing training of teachers. The amendments made to the initial training programmes by the Law of 2019 have been implemented with the adaptations made necessary by the sanitary situation. The coming years will allow to consolidate this implementation by taking advantage of the new solutions that had to be put in place.

Digital skills and green skills should remain of vital importance in the teachers' initial and continuing training. Teachers play a key role in moving towards economies and societies that are not only green, digital and competitive but also inclusive, fair and resilient. Thus, the various possibilities for exchange between education stakeholders should provide an opportunity to identify areas where teacher training programmes need to be improved or developed. The "*Bildung am Dialog*" (Education in dialogue) initiative launched by the Ministry provides an opportunity to collect the views of all stakeholders. As part of this dialogue, a survey will be carried out among parents, secondary school learners, teachers and staff in education and care facilities. It will focus on the experiences made during the crisis and the resulting perspectives.

A future pan-European survey of VET teachers, trainers, school principals and in-company trainers could address questions on their well-being and on the entire initial and continuing training programme. They could also be questioned on how they evaluate the cooperation with the business world and if they have any suggestions for improvement.

List of abbreviations

CCP	vocational capacity certificate (<i>certificat de capacité professionnelle</i>)
CePAS	centre for psychosocial and educational support
CNFPC	national centre for continuous vocational training
CPD	continuing professional development
DAP	vocational aptitude diploma (<i>diplôme d'aptitude professionnelle</i>)
DT	technician's diploma (<i>diplôme de technicien</i>)
ENAD	national school for adults
EQF	European qualification framework
ESD	education for sustainable development
ICT	information and communication technology
ISCED	international standard classification of education
IFEN	training institute of national education (Institut de Formation de l'Éducation Nationale)
MENJE	Ministry of Education, Children and Youth
ONQS	The National Observatory for School Quality
SCRIPT	Department for Coordination of Educational and Technological Research and Innovation
VET	vocational education and training

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