

LUXEMBOURG European inventory on NQF 2018

Introduction and context

Luxembourg has the highest average spend on education by student per year among EU countries. Other strengths of the education and training system are a high rate of participation in early childhood education and care, the second highest of tertiary education attainment in the EU (52.7% in 2017 compared to the EU average of 39.9%), a rate of employment of recent graduates which is also above the EU average, and a very high percentage of adults participating in lifelong learning (17.2% in 2017, compared to the EU average of 10.9%). In contrast, student performance in school is a challenge, influenced by the ability of children to cope with the trilingual education system in the country. Levels of underachievement in reading, maths and science among 15 year olds are significantly higher than EU averages. The percentage of pupils leaving education and training early is low (7.3% in 2017), though national sources indicate that the figure is on the rise, with 13.5% of students dropping out in 2015 (European Commission, 2018). Grade repetition is a widespread phenomenon in the country, particularly in the vocational education and training (VET) sector. While it is often considered a measure of quality assurance, it has been shown to be a strong factor in school dropout and to have negative psychological impact on students. The VET Law was amended in 2016 and two new laws, one on secondary education and one on guidance, were adopted in July 2017. The new legislation aims to meet better the needs of learners and to improve student outcomes through a diverse set of measures (European Commission, 2017).

Starting in 2009, and based on an initial government go-ahead, detailed work continued during 2010 and 2011, resulting in an eight-level comprehensive Luxembourg qualifications framework (*Cadre Luxembourgeois de qualifications* (CLQ)) covering all types and levels of qualification.

The framework was referenced to the European qualifications framework (EQF) in 2012. Implementation of the CLQ was slow during 2013-14, partly reflecting the lack of a clear legislative basis and an agreed strategy shared by all stakeholders on how to proceed. The adoption, in November 2016, of a law on



recognition of professional qualifications (¹), established the CLQ as the formal reference point for recognition of professional qualifications acquired outside Luxembourg. This integration into the legislative structure signals official commitment to the framework and represents an important step towards full operational status.

Policy objectives

Increased transparency of qualifications is a key objective underpinning the CLQ, seen as contributing to the overall modernisation of national education and training. CLQ also serves as guidance for stakeholders across the education and training system and the labour market. The philosophy of the CLQ is to show that lifelong learning is not fragmented and that it should not be restricted to formal qualifications (INFPC, 2016). The initial scope of the framework, acting as a non-binding and a guiding tool for lifelong learning, has not changed: individuals will be able to position their qualifications in relation to others, in the context of lifelong learning. Providers of education and training, as well as certification bodies, will find it easier to position learning outcomes with a view to offering the learner training, or even a qualification, at the same level or higher (European Commission and Cedefop, 2018).

One element in favour of the CLQ is the geographic and labour market location of Luxembourg. Being host to a large number of workers from neighbouring countries like Belgium, Germany and France, Luxembourg sees the development of the CLQ as a way to aid comparison and recognition. The adoption of the 2016 law on recognition of professional qualifications (op.cit.) confirms this objective and establishes the CLQ as the main reference point to which foreign qualifications should be compared (see Articles 68 to 70). When the work started in 2009, development and implementation of the EQF was originally seen as an opportunity to make explicit the existing education and training levels and the relationships between them. This was considered important not only for qualifications users (to support lifelong learning for individuals and to enable employers to see the relevance of qualifications), but also for education and training providers. The explicit levels of learning outcomes

⁽¹⁾ Loi du 28 Octobre 2016 relative à la reconnaissance des qualifications professionnelles [Law of 28 October 2016 on the recognition of professional qualifications]. Journal Officiel, A231, 18.11.2016.

http://data.legilux.public.lu/file/eli-etat-leg-memorial-2016-231-fr-pdf.pdf



introduced by the framework are expected to function as a reference point for curriculum development and may help to improve overall consistency of education and training provision.

Level descriptors and learning outcomes

Luxembourg has introduced an eight-level reference structure. While the number of levels corresponds with the EQF, the descriptors reflect the national tradition and context. At each level, descriptors are differentiated according to knowledge, skills and attitude (*connaissances, aptitudes*). While the level of detail is higher, the relationship to the EQF can be clearly identified. This is, for example, the case for the third (attitude) column which is based on the principles of responsibility, autonomy and context (²) as with the EQF (³). The CLQ level descriptors are included as annex of the regulation of 17 February 2017 on the recognition of professional qualifications (⁴).

The decision to use the aforementioned concepts reflects gradual development of a learning-outcomes or competence-based approach in VET; the competence-based approach has a prominent position in VET reform. Use of learning outcomes (or *competences*) in education and training has varied between subsectors; there is a different degree of implementation in different education and training systems, most advanced in compulsory and vocational training (particularly following the Law on VET reform, 2008 (5)). Competences for

⁽²⁾ Attitudes refer to 'personal and social dispositions in work or study situations and for professional or personal development. Personal abilities are characterised by an autonomous, responsible disposition that allows critical consideration of one's own actions and the actions of other people; they also define the scope of a person's own development through either study or practice.' (Ministry of Education and Vocational Training and Ministry of Higher Education and Research, 2014, p.19).

⁽³⁾ Descriptors defining levels in the European qualifications framework (EQF): https://ec.europa.eu/ploteus/en/content/descriptors-page

⁽⁴⁾ Règlement grand-ducal du 17 février 2017 relatif à la reconnaissance des qualifications professionnelles [Regulation of 17 February 2017 on the recognition of professional qualifications]. *Journal Officiel*, Mémorial A241, 6.3.2017. http://data.legilux.public.lu/file/eli-etat-leg-memorial-2017-241-fr-pdf.pdf

⁽⁵⁾ The law of 19 December 2008 implementing vocational education reform modernises Luxembourg's system of initial and continuing vocational education and training. The main points of the reform consist of the reorientation of initial vocational education (IVET) towards a modular and competence-oriented structure. Luxembourg's Vocational Education and Training Act of 2008 defines competences as the totality of knowledge, skills and attitudes that are necessary in order to practise an occupation.



primary education are formulated in the *socle de competences* (skills base) (⁶); whereas for secondary and VET education competences are elaborated in the *acquis d'apprentissage* (Cedefop, 2016).

Recent years have brought about a change; most qualifications are described through learning outcomes. In initial vocational education, all qualifications have been described using learning outcomes and can be accessed via the register of the Ministry of Education and Vocational Training (⁷). In secondary VET, development of programmes (in cooperation with chambers) is based on the occupational profile (⁸), on the training profile (⁹) and on the training programme based on the training profile which:

- (a) defines the learning outcomes for each competence and regroups them by learning domain;
- (b) organises the learning domains and outcomes in modules and credits;
- (c) for curriculum, determines the content of the different modules (INFPC, 2016: 28).

Further work on standards and training profiles based on explicit learning outcomes will support coherence between qualifications and CLQ levels.

Higher education is organised in courses lasting one semester, each constituting assessable modules allocated credit points (European credit transfer and accumulation system). These courses are increasingly defined and described using learning outcomes. Learning outcomes are included in the new law regarding the organisation of the University of Luxembourg (10), which lays down that each programme requires specific objectives, based on the acquisition of certain knowledge, competences and transversal skills. Further, the obligation

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⁽⁶⁾ The socle de compétences defines a set of key competences referring to subjectindependent competences, and should be seen as the 'core set' of competences (KeyCoNet, 2013).

⁽⁷⁾ See http://programmes.myschool.lu

⁽⁸⁾ An occupational profile: lists the areas of activity as well as the activities and tasks of future occupations after two to three years of workplace experience (INFPC, 2016).

⁽⁹⁾ A training profile is based on the occupational profile by areas of competence: occupational and general competences (INFPC, 2016).

⁽¹⁰⁾ Loi du 27 juin 2018 ayant pour objet l'organisation de l'Université du Luxembourg [Law of 27 June 2018 on the organisation of the University of Luxembourg]. *Journal Officiel*, Mémorial A587, 11.7.2018.

http://legilux.public.lu/eli/etat/leg/loi/2018/06/27/a587/jo



to define learning outcomes is also included in the 2010 Grand-Ducal decree (11) on the organisation of short-cycle programmes and related student graduation.

Stakeholder involvement and institutional arrangements

LQF development and implementation is being coordinated by the Ministry of National Education, Children and Youth, which also acts as EQF/NCP in cooperation with the Ministry of Higher Education and Research. As the bodies responsible for formal qualifications, both of these ministries (in conjunction with the bodies mentioned below) are responsible for quality assurance of the relevant qualifications. Apart from the NCP's natural connection with the Ministry of Higher Education, which ensures the link with all the parties involved, including the University, there is also a link with the social partners. Consultation and active involvement of the various parties concerned has benefitted from this centralised situation (Ministry of Education and Vocational Training and Ministry of Higher Education and Research, 2014).

Although framework responsibilities are clearly defined, there is cooperation among the various stakeholders on different aspects of the framework. Qualifications referenced at levels 1 to 4 are the responsibility of the Ministry of National Education, Children and Youth (12), while at levels 6 to 8 they are the responsibility of the Ministry for Higher Education and Research; at level 5 they are the responsibility of the Ministry for National Education, Children and Youth together with the Chamber of Trades for the master craftsman's diploma (Ministry of Education and Vocational Training; Ministry of Higher Education and Research, 2014). Social partner involvement is a core principle in VET policy; the professional chambers (13) are independent policy institutes and with the 2008 reform their role is reinforced (Cedefop, 2017). Chambers act as partners for

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⁽¹¹⁾ Règlement grand-ducal du 23 février 2010 relatif à l'organisation des études et à la promotion des étudiants des formations sanctionnées par l'obtention du brevet de technicien supérieur [Decree of the Grand Duchy of 23 February 2010 regarding the organisation of short cycle programmes in higher education]. *Journal Officiel*, Mémorial A30, 8.3.2010. http://legilux.public.lu/eli/etat/leg/rgd/2010/02/23/n1/jo

⁽¹²⁾ Previously described as Ministry for Education and Vocational Training.

⁽¹³⁾ The Grand Duchy of Luxembourg has five professional chambers: three chambers of employers (chamber of commerce, chamber of trades, chamber of agriculture) and two chambers of employees (chamber of employees and chamber of civil servants and public-sector employees).



official consultation and are directly associated with the legislative and executive procedure of the Grand Duchy.

The Department for Coordination of Educational and Technological Research and Innovation (SCRIPT) – under the authority of the education ministry – and its School Quality Development Agency (Agence pour le Développement de la Qualité Scolaire, ADQS) are responsible for quality assurance of school education (INFPC, 2016). External evaluation of the education system is outsourced to the University of Luxembourg. A National Observatory of School Quality (14) was also created in January 2018 at the Ministry of National Education, Children and Youth to report on the school system; it produces findings based on research and recommendations (Cedefop, forthcoming).

Quality assurance in higher education uses external evaluation as there is no national quality assurance agency. Instead, the Ministry of Higher education and Research has outsourced this process to foreign agencies and experts. The University of Luxembourg is evaluated every four years (15), with the focus of evaluation alternating between research and learning and teaching. The Minister of Higher Education and Research commissions a foreign EQAR-registered agency to perform the institutional evaluation (16). The 2009 Law (17) on the organisation of higher education provides for external quality assurance of private higher education institutions and their programmes, as well as the short-cycle programmes of secondary schools. Private higher education institutions and their programmes are also evaluated every five years by a foreign EQAR-registered (18) agency commissioned by the Minister of Higher Education and

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⁽¹⁴⁾ Observatoire national de la qualité scolaire: http://www.men.public.lu/fr/actualites/articles/communiques-conferencepresse/2018/02/08-observatoire/index.html

⁽¹⁵⁾ Loi du 27 juin 2018 ayant pour objet l'organisation de l'Université du Luxembourg [Law of 27 June 2018 on the organisation of the University of Luxembourg]. *Journal Officiel*, Mémorial A587, 11.7.2018. http://legilux.public.lu/eli/etat/leg/loi/2018/06/27/a587/jo

^{(&}lt;sup>16</sup>) The bachelor, master and PhD programmes offered by the University of Luxembourg, created by law, are automatically recognised.

^{(&}lt;sup>17</sup>) Loi du 19 juin 2009 portant organisation de l'enseignement supérieur [Law of 19 June 2009 on the organisation of higher education]. *Journal Officiel*, Mémorial A153, 1.7.2009. http://legilux.public.lu/eli/etat/leg/loi/2009/06/19/n1/jo

⁽¹⁸⁾ EQAR is the European quality assurance register for higher education.



Research (¹⁹). Short-cycle programmes offered by secondary schools are evaluated by an expert group nominated by the Minister of Higher Education and Research, which is an ENQA (²⁰) affiliate member. For both foreign private HEIs and their programmes, and for short-cycle programmes in secondary schools, only accredited programmes and institutions are officially recognised by the state.

The VET Law of 2008, which lays down the basic objectives of vocational education and training and also covers the main aspects of quality assurance, is currently under revision, expected to be completed by 2020 (Cedefop, forthcoming).

Recognising and validating non-formal and informal learning and learning pathways (21)

The development of validation systems In Luxembourg has been closely related to national lifelong learning strategy. Legislation recognises an individual right for all individuals to benefit from the validation of formal, non-formal and informal learning, (under some conditions) (²²). This process is known as 'validation of prior experiential learning' or *validation des acquis de l'expérience* (VAE) and has been operational since 2010 (²³). The current legal framework on validation consists of several laws, covering secondary technical and vocational education, advanced technician diplomas and the University of Luxembourg. VAE arrangements are in place for formal qualifications awarded through the 'general secondary education' system in Luxembourg (including technical and vocational education, to be distinguished from 'classical secondary education', not covered

(19) Based on the evaluation report of the agency, the Minister decides on accreditation and refusal of accreditation.

(21) This section draws mainly on input from European Commission et al. (forthcoming).

(23) VAE has become a known way of obtaining a formal qualification based on formal, non-formal and informal learning outcomes or, in other words, based on the individual life and work experience of the person. Even if the procedure is not perfect, the path one has to follow is clearly set up (implementation of the 2012 Council recommendation on validation of non-formal and informal learning, one-off report Luxembourg)

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⁽²⁰⁾ ENQA is the European Association for Quality Assurance in Higher Education.

^{(&}lt;sup>22</sup>) Validation can lead to access to, or acquisition of, full or partial qualifications, provided that the candidate can supply evidence that the total length of prior experiential learning amounts to at least 5 000 hours over a minimum of three years and is effectively related to the targeted qualification.



by VAE) (²⁴), post-secondary non-tertiary education qualifications such as master craftsperson certificates, and higher education qualifications (both short-cycle degrees and qualifications awarded by the University of Luxembourg). Since 2016, new legal provisions (²⁵) guarantee the right to individualised guidance to VAE candidates for qualifications under the responsibility of the Ministry of National Education.

Vocational and technical qualifications can be acquired through validation. An exception is the secondary general school leaving certificate (*Diplôme de fin d'études secondaires générales*, DFESG)) that cannot be acquired through validation. In higher education, qualifications at levels 6 to 8, only parts of qualifications or modules can be recognised through validation. Any type of prior experiential learning relevant to the targeted qualification, whether it is the result of formal, non-formal or informal learning activities in the education and training sector, the labour market or the third sector, can be used to apply for validation. The Ministry of National Education takes responsibility for the implementation of VAE in relation to secondary level vocational and technical qualifications as well as master craftsperson certificates.

In higher education, the Ministry for Higher Education holds general responsibility for validation arrangements, but VAE procedures are decentralised, with a key role played by the short-cycle higher education providers (*lycées*) for the advanced technician diplomas (BTS) and the University of Luxembourg for bachelor, master and PhD programmes. The new law on the University of

^{(&}lt;sup>24</sup>) Following adoption of the law of 29 August 2017, the Luxembourgish secondary education includes both 'classical' secondary education (*enseignement secondaire classique*) and 'general' secondary education (*enseignement secondaire général*), corresponding to vocational and technical education, the latter giving access to higher education. Source: Eurydice online database:

https://eacea.ec.europa.eu/national-policies/eurydice/content/secondary-and-post-secondary-non-tertiary-education-32_en

⁽²⁵⁾ Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle [Law of 24 August 2016 modifying the amended law of 19 December 2008 on the reform of vocational training]. *Journal Officiel*, Mémorial A175, 1.9.2016. http://data.legilux.public.lu/file/eli-etat-leg-memorial-2016-175-fr-pdf.pdf#page=1&zoom=auto,-12,318

Règlement grand-ducal du 15 décembre 2017 portant sur l'accompagnement par entretiens personnalisés du candidat sollicitant la validation des acquis de l'expérience [Regulation of the Grand Duchy of 15 December 2017 on the personalised interviews of the candidate seeking the validation of acquired experience]. *Journal Officiel*, Mémorial A1080, 18.12.2017.

http://legilux.public.lu/eli/etat/leg/rgd/2017/12/15/a1080/jo



Luxembourg, affecting VAE, was being discussed at the parliament and came into force on 1 August 2018.

The small size of the country aids informal coordination between different validation stakeholders. Validation is a regular topic of discussion in Luxembourg, with changes to the legislative framework on validation and improvements in the provision of orientation and guidance to validation candidates being considered. The value of learning outcomes from non-formal and informal contexts is largely accepted in Luxembourg. This is due to the high value attributed to lifelong learning and to the consensual political culture of Luxembourg, with social partners and stakeholders involved in the validation process concerning (Houot, 2016).

Changes are expected in the coming years, creating an overarching legal framework with general principles for validation for all sectors.

NQF implementation

The CLQ was adopted by the Government Council in September 2010. Following completion of the referencing of the NQF to the EQF in mid-2012, implementation has slowed. While the CLQ can be described as having reached an early operational stage, the lack of a clear legislative basis was considered a drawback. In November 2016, an important milestone was reached with the adoption of the Law on recognition of professional qualifications, which establishes the CLQ as the formal reference point for recognition of professional qualifications acquired outside Luxembourg (Cedefop, 2018). The ministry of Education has been using the CLQ since 2016 for the registration/recognition of foreign diplomas, in which the national diploma register decides for each recognised diploma on an equivalent NQF level (²⁶). The ministry also requests the inclusion of an NQF/EQF level on each issued diploma supplement.

Some qualifications posed challenges in terms of levelling. The vocational aptitude diploma (*Diplôme d'aptitude professionnelle*, DAP) that can be acquired through apprenticeships has been assigned to the CLQ/EQF level 3, and the master craftsman qualification (²⁷) to CLQ/EQF level 5 (European Commission

⁽²⁶⁾ This is done according to national and European standards.

^{(&}lt;sup>27</sup>) The master craftsperson qualification (*brevet de maîtrise*; ISCED 453, EQF 5) entitles the holder to settle in the craft industry as self-employed and to train apprentices. The qualification confers the title of master craftsperson in the particular trade. The master craftsperson qualification does not give any access right for higher



and Cedefop, 2018). This is different in the frameworks of the German-speaking countries where these types of qualification were referenced to EQF levels 4 and 6 respectively.

A comprehensive national database of qualifications has not yet been set up. It will be possible to create a database when qualifications acquired outside formal education and training are aligned to the framework. Currently there are registers of available VET programmes/qualifications (²⁸) and higher education programmes and diplomas (²⁹). Only Europass supplements (³⁰) include an NQF/EQF level and there are no immediate plans to indicate NQF and EQF levels on new certificates and diplomas.

So far, the CLQ's communication efforts have not been oriented towards the general public as the framework is known to a certain number of actors in education and the labour market. In order to assist short-cycle programme providers with the concept of learning outcomes, the ministry (in cooperation with a national expert) organised a workshop on this topic in 2017. Within the framework of the revision of the (national) diploma supplement template, the ministry has informed higher education stakeholders about the importance of learning outcomes, providing related material. Disseminating CLQ on a wider level and to larger target groups is the key challenge for the next period.

Referencing to the EQF

Luxembourg referenced its qualifications levels to the EQF and the QF-EHEA in June 2012; a referencing report was published in 2014.

Important lessons and future plans

While a solid basis for the NQF has been established in Luxembourg, implementation slowed following the referencing to the EQF in 2012. This was

education; progression opportunities depend on the certificate gained at secondary level (INFPC, 2016).

- (28) http://www.lifelong-learning.lu/Detail/Article/Diplomes/registre-des-titres-et-homologation/en
- (29) Register of higher education diplomas: http://www.mesr.public.lu/enssup/registre_des_titres/index.html
- (30) The Europass website is directly linked to the website of the national Erasmus+ agency, which is also the national Europass Center.



caused by the lack of a clear legal basis and some uncertainty among stakeholders over the role to be played by the CLQ at national level. The CLQ can be considered to have reached an early operational stage. Adoption of the 2016 Law on recognition clarified the position of the CLQ at national level and provided the basis for a development towards more advanced operational status. Discussions continue on strengthening the role CLQ as a lifelong learning tool while no political decision has been taken yet.

The development of procedures for inclusion of qualifications from outside formal education and training system and setting up a comprehensive national database of qualifications are being considered.

Main sources of information

- The Ministry of National Education, Childhood and Youth acts as EQF NCP: http://www.men.public.lu/fr/index.html
- Luxembourg qualifications framework
 http://www.men.public.lu/fr/actualites/grands-dossiers/formation-adultes/clq/index.html
- Information on IVET qualifications of the Ministry of Education and Vocational Training:

http://portal.education.lu/programmes

- Register of VET programmes/qualifications
 http://www.lifelong-learning.lu/Detail/Article/Diplomes/registre-des-titres-et-homologation/en
- Register of higher education diplomas:
 http://www.mesr.public.lu/enssup/registre_des_titres/index.html
- Ministry of Higher Education and Research; Ministry of National Education, Childhood and Youth (2014). Report on referencing the Luxembourg qualifications framework to the European qualifications framework for lifelong learning and to the qualifications framework in the European higher education area.

https://ec.europa.eu/ploteus/sites/eac-eqf/files/Referencing%20report.pdf



Luxembourg qualifications framework (CLQ)

NQF levels	Qualification types	EQF levels
8	Doctoral diploma (Phd) (Doctorat) Certificate following specific training course in medicine (Diplôme de formation spécifique en médecine générale)	8
7	Master diploma (Master)	7
6	Bachelor diploma (Bachelor)	6
5	Master craftsman diploma (Brevet de maîtrise)	5
	Advanced technician diploma (Brevet de technicien supérieur) Specialised advanced technician diploma (Brevet de technicien supérieur spécialisé)	
4	Upper secondary general education school leaving certificate (Diplôme de fin d'études secondaires) Technical secondary school leaving certificate (Diplôme de fin d'études secondaires techniques) Technician diploma (Diplôme de technicien)	4
3	Vocational aptitude diploma (Diplôme d'aptitude professionnelle – DAP) Certificate attesting completion of middle cycle technical secondary education (Certificat de réussite du cycle moyen de l'enseignement secondaire technique) Certificate attesting completion of five years secondary education (Certificat de réussite de 5 années d'enseignement secondaire)	3
2	Vocational capability certificate (Certificat de capacité professionnelle – CCP)	2
1	Certificate attesting completion of lower cycle, technical secondary education (Certificat de réussite du cycle inférieur de l'enseignement secondaire technique)	1

Source: Law 231/2016 on the recognition of professional qualifications. Official Journal of the Grand Duchy of Luxembourg, No 4263, 18.11.2016. http://data.legilux.public.lu/file/eli-etat-leg-memorial-2016-231-fr-pdf.pdf



Abbreviations

ADQS	School Quality Development Agency
BTS	Brevet de technicien supérieur [Advanced Technician's Diplomas]
CLQ	Cadre Luxembourgeois des qualifications – CLQ (Luxembourg qualifications framework)
DAP	Diplôme d'aptitude professionnelle [Vocational aptitude diploma]
ENQA	European Association for Quality Assurance in Higher Education
EQAR	European Quality Assurance Register for Higher Education
EQF	European qualifications framework
LLLC	Luxembourg Lifelong Learning Centre
NQF	national qualifications framework
QF-EHEA	qualifications framework for the European higher education area
VAE	validation des acquis de l'expérience [validation of non-formal and informal learning]
VET	vocational education and training

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