Micro-Credentials in Latvia



Anita Līce

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Possibilities of Introducing Micro-Credentials in the Offer of Continuing Education Provided by Higher Education Institutions

Author: Dr. sc. admin. Anita Līce Year: 2021 Contracting entity: Academic Information Centre Valnu iela 2



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Introduction

Due to knowledge economy and rapid changes in the labour market, the demand for upskilling and reskilling grows, while learning opportunities, largely due to the increasing digitalization of adult education, are becoming more accessible. Higher education institutions, businesses, and other institutions have started to actively offer alternative credentials, including certificates recognized on the labour market, micro-credentials, and digital badges that help learners acquire new knowledge and skills, update the existing ones, and signal the competencies they already have.

Such educational offer particularly appeals to those who wish to acquire knowledge that is additional to their previous education, rather than obtaining an additional full degree, to obtain interdisciplinary knowledge, developing links to other degrees, or to become well-versed in the latest developments on the labour market. There may be a need for short, high-quality education programmes for both those with and without higher education. Such educational offer enables learners to exercise a degree of control over their own learning and development and to design their program of learning, in order to meet their self-identified skills gaps (Oliver, 2019), which is particularly important to adult learners.

Study fees, difficulties in combining work and studies, lack of appropriate education, and distance of the place of education are among the main reasons why people are reluctant to participate in adult education (Central Statistical Bureau, 2018). Therefore, in order for more adult learners to be willing to learn, the education programmes should be tailored to their needs, i.e., they should be modern and offer a relevant and meaningful content, and they should be sufficiently short, easily accessible, and delivered in a flexible way. Furthermore, the learners should be able to access them online or via a smartphone. They should be recognized in higher education, in order to enable their accumulation and recognition in a higher degree programme, and visible on the labour market. Also, they should possess sufficient esteem and prestige. All these issues are expected to be addressed by developing micro-credentials, which would be a proper response to the increasingly rapid changes in the labour market.

The development of the micro-credential offer has proven to be beneficial in terms of access to education, development of adult education, upskilling of workforce, as well as promotion of innovation and quality in education, including by creating new, flexible learning pathways and reviewing the educational offer (Kato et al, 2020; Oliver, 2019). Micro-credentials are useful as individual certifications to complement degree programmes, thus achieving higher employment and increasing the level of lifelong learning.

Despite an increasing volume of these new credentials, great uncertainty persists, and the approaches used vary from country to country. Therefore, over the recent years, the policy makers have focused on introduction of micro-credentials in education systems and their further development and recognition. The development of micro-credentials is one of the strategic educational priorities of the European Union (EU), and it is currently working towards the development of a common EU approach and recommendations of the European Council.

This study aims at identifying the situation in Latvia, in order to contribute to the consultation process of the EU and Latvia with regard to the development of micro-credentials.

Objectives of the study:

- 1. To clarify the concept of micro-credentials and to propose their definition in the context of Latvia.
- 2. To identify qualifications awarded in Latvia, which would qualify as micro-credentials.
- 3. To clarify the process for the recognition and quality assurance of micro-credentials.
- 4. To clarify the potential approach of Latvia to the alignment of micro-credentials with the Latvian Qualifications Framework.

Questions of the study:

- 1. What are micro-credentials?
- 2. What is their European context (definition and description)?
- 3. What could be the appropriate term in Latvia?
- 4. Which qualifications awarded in Latvia qualify as micro-credentials? Do the laws and regulations (if any) currently regulate the delivery mode?

- 5. Micro-credentials in education in Latvia their quality assurance and recognition.
- 6. What would be the potential approach of Latvia to the alignment of micro-credentials with the LQF?
- 7. What challenges have been defined in the context of Latvia?

This study is focused mainly on continuing education opportunities offered by higher education institutions (HEIs), i.e., institutions of higher education and colleges. However, also vocational education institutions and training centres play a great role in the upskilling and reskilling of adult learners, with the potential to strengthen this function by offering more flexible learning pathways and a more target-oriented offer tailored to their needs. The study covers short courses/programmes, e.g., courses offered in continuing education, modules, courses for secondary school pupils and adult learners that would lead to micro-credentials. The study does not, however, cover higher education programmes, irrespective of whether or not the HEIs offer to acquire them in continuing education.

In order to achieve the aim of the study, the following data collection methods were used: analysis of literature and laws and regulations; survey conducted among higher education institutions; in-depth interviews with experts, and their respective consultations. As for the survey of HEIs, a total of 47 responses from 43 higher education institutions (HEIs) – 24 institutions of higher education and 19 colleges – were received. 29 of them were State-owned HEIs, 13 – HEIs founded by legal entities, and 1 – branch of a foreign HEI. Responses were provided by 83% of the total number of HEIs in Latvia. 4 HEIs provided 2 responses, which, for the purpose of analysis, were combined in one response (in certain cases where the responses were conflicting, the most detailed, informed response or the most pessimistic evaluation was selected). The study included 2 in-depth interviews with experienced experts in charge of continuing education at institutions of higher education, as well as interviews with five experienced experts in vocational and higher education, employed by public authorities, an organization representing employers, and an educational institution, and their respective consultations.

The first chapter of the study report presents the concept and potential definition of micro-credentials, whereas the second chapter deals with the analysis of the micro-credential offer in continuing education, i.e., types of courses/programmes currently offered by institutions of higher education and colleges and the possibilities of implementing micro-credentials in higher education. The third chapter, on the other hand, describes the recognition of micro-credentials, the fourth chapter – the quality assurance of micro-credentials, but the fifth chapter – the alignment of micro-credentials with to the qualifications framework. The study covers both the international context and the experience of Latvia. At the conclusion of the study, conclusions have been drawn and answers to the questions of the study are provided.

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Abbreviations

AIC - Academic Information Centre HEIs - higher education institutions QAHE – Quality Agency for Higher Education USA – United States of America EHEA – European Higher Education Area ECTS credits - credits of the European Credit Transfer and Accumulation System EDCI – Europass Digital Credentials Infrastructure EC – European Commission EQF – European Qualifications Framework EMC – European MOOC Consortium EQAR - European Quality Assurance Register for Higher Education EQAVET - European Quality Assurance in Vocational Education and Training EU – European Union OECD - Organisation for Economic Cooperation and Development ESG - Standards and Guidelines for Quality Assurance in the European Higher Education Area ICT - information and communication technologies EP – education programme MoES - Ministry of Education and Science LQF – Latvian Qualifications Framework MOOCs - massive open online courses SECs - sectoral experts' councils NQF – national qualifications framework Sectoral QF - sectoral qualifications framework SEA – State Employment Agency PINTSA - National Tripartite Sub-council for Cooperation in VET and Employment SP – study programme NCE - National Centre for Education

SLC - State Language Centre

1. Term and definition of micro-credentials

This chapter focuses on the use of the term "micro-credential" and other terms with similar meaning and describes the common and different characteristics and components in the current micro-credential offer. It also includes a summary of the proposed definitions of micro-credentials and analysis of this term when used in Latvian.

1.1. Terms with similar meaning

There are several terms with a meaning similar as micro-credentials, such as extension courses, alternative credentials, digital badges, micro-certifications, mini degrees, nanodegrees, etc. Although the use of these terms may be recent, HEIs all around the world have long been offering academic certificates, typically hosted by continuing education schemes or extension services. For this purpose, many HEIs have established continuing education centres (OECD, 2019). The term "alternative credentials" was initially used in the United States of America (USA) to distinguish qualifications traditionally awarded by HEIS after completing a study programme (Kato et al., 2020). The Organisation for Economic Cooperation and Development defines the term "alternative credentials" as "credentials that are not recognised as stand-alone formal education qualifications by relevant national education authorities" and distinguishes three conceptually distinct forms of alternative credentials offered at the post-secondary or higher education level (ibid).

- 1. Certificates: Academic certificates recognising completion of organised learning activity may be awarded by educational institutions. These may or may not confer academic credits applicable towards degree programmes. Professional/industrial certificates are awarded by professional bodies, industries, or product vendors, typically following completion of an examination.
- 2. Digital badges are defined as digital pictograms or logos that can be shared across web to show accomplishment of certain skills and knowledge. A growing number of educational institutions and businesses, especially in the ICT sector, such as Microsoft and Security Academy, issue digital badges to those who have completed the courses.
- 3. Micro-credentials: individual certificates and digital badges offered by HEIs that share one common characteristic the implication that there is a related credential of greater scope on offer. In the USA, they are understood as a learning activity consisting of more than a single course but less than a full degree. Micro-credentials labelled differently across education providers, such as MicroMasters (edX), Nanodegree (Udacity), and Specialisation (Coursera).

The concept of micro-credential first appeared in about 2013, often in connection with digital badges, and it has subsequently become synonymous with certificates earned through the massive open online courses (MOOCs). It is now generally used to describe all manner of shorter form learning experiences, using a variety of names and brands, of all types, modes, and sizes (Oliver 2019).

A survey¹ conducted within the MICROBOL project² (Lantero et al., 2021) suggests that most European countries, asked to name an example of micro-credentials, mention study modules, study courses forming part of a degree programme (also those delivered online and offered additionally to the study programmes), as well as complementary courses developed for a specific purpose, and certificates. In slightly fewer cases, MOOCs, post-graduate education, continuing adult education, specialisation courses, and short adult education programmes were mentioned.

¹ A total of 35 countries participated in the survey conducted from 15 October to 25 November 2020.

² For more information, visit: https://microcredentials.eu/about-2/microbol/.

1.2. Similarities and differences in the micro-credential offer

While there is no common EU definition and agreement on requirements the education programmes should comply with for the learners completing them to be able to earn micro-credentials, according to Lantero et al. (2021), the understanding of this issue varies from country to country. Regardless of the various definitions of micro-credentials that can be found in the literature, Resei et al. (2019) identify some common characteristics of currently available micro-credentials:

- Limited length of learning activities leading to a micro-credential: larger than a single course, but less than a full degree.
- Labour market relevance: the focus is on the delivery of specific knowledge, skills, and competences that are useful in the labour market.
- Wider societal impact: the focus is on lifelong learning opportunities that are reasonably priced, short, and conveniently accessible.

Otherwise, micro-credentials vary quite widely in terms of other characteristics. Table 1 includes a summary of different approaches to deliver micro-credentials.

Delivery mode:	on-site / blended / online	
	HEIs / businesses and business organisations / other education	
Providers:	providers	
Credits:	credit-bearing / non-credit bearing	
Duration:	hours / months	
Time period:	self-paced / defined time period / defined shorter periods with a specified workload to be accomplished in each period	
Objective:	to recognise competences already acquired / to acquire new competences, skills, or qualifications	
Intended use:	continuing education / labour market (upskilling, reskilling)	
Prerequisites to take the course:	yes / no	
Assessment methods:	attendance / assignments / examination	
Integration and stackability:	standalone / integrated into a study programme / stackable into a larger credential	
Certificate, certification	paper / digital	

Table 1. Different approaches to deliver micro-credentials

Source: Orr et al, 2020

According to Cedefop (2010), different qualifications may be characterized in two dimensions (see Figure 1):

- 1) In terms of flexibility, pace, and convenience as contrasted with the solid and coherent continuum.
- 2) In terms of the dominating role in the governance and reform of qualifications of the supply side: education providers (ministries, municipalities, education institutions) or the education demand side (employers, employees).

In this system of dimensions, micro-credentials would be located in the top-right quadrant (see Figure 1), as the flexibility and demand are of great importance (Pouliou, 2021).



Figure 1. Scenario dimensions for qualifications and qualification systems Source: Based on Cedefop, 2010, p. 2010

As we can see, the delivery modes may vary widely, while their intended use, objective, and effects are similar – an efficient lifelong learning system which helps individuals rapidly acquire knowledge, skills or competences that can be immediately used on the labour market. Thus, the micro-credentials depend largely on the labour market component and the appropriate delivery mode.

1.3. Definition of a micro-credential

At the date of preparing this Report, the EU was still working towards the development of a single definition of a micro-credentials³. Since then, various attempts have been made to formulate an appropriate operational definition. The published versions of the definitions of micro-credentials are listed below.

- I. "A micro-credential splits learning into smaller units, which are certified separately" (SurfNET, 2019).
- II. "A micro-credential is a certification of assessed learning that is additional, alternate, complementary to or a formal component of a formal qualification" (Oliver, 2019).
 Oliver (ibid) also offers a simplified definition for everyday use: "A micro-credential is a certification of assessed learning that is less than a formal qualification."
- III. Definition within the EU Erasmus+ project MICROBOL⁴: "A micro-credential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by HEIs or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable⁵" (Lantero et al., 2021).

³ The public consultation process takes place until 13 July 2020. See: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12858-Micro-credentials.

⁴ For more information, visit: https://microcredentials.eu/about-2/microbol/.

⁵ For more information, visit: https://www.coe.int/en/web/higher-education-and-research/lisbon-recognition-convention.

- IV. The extended definition offered by the Micro-credentials Higher Education Consultation Group of the European Commission (hereinafter – EC Consultation Group): "A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against certain standards. The proof is contained in a certified document that lists the following elements:
 - 1) Name of the holder.
 - 2) Achieved learning outcomes.
 - 3) Assessment method.
 - 4) Awarding body.
 - 5) Qualifications framework level, where applicable.
 - 6) Credits gained.

Micro-credentials are owned by the learner, are shareable, credit-bearing/portable and may be combined into larger credentials. Their quality is assured in line with harmonized quality standards" (Shapiro Futures et al., 2020a). They are awarded upon the completion of courses done on-site or online, or in a blended format (European Commission, n.d.).

The definition offered by the EC Consultation Group may be the most detailed one, but the author points out one shortage – there is no clear relevance to the labour market, considered a significant component by several researchers in the field of micro-credentials (see the previous section). Therefore, the definition may be too open to interpretation in terms of what type of learning outcomes and education programmes should be applicable to micro-credentials: general or specific, academic or vocational. A definition that would include this aspect could be formulated as follows:

A. "A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience *useful on the labour market*. These learning outcomes have been assessed against *certain standards*. A micro-credential is credit-bearing and may be combined into a larger credential."

In the context of Latvia, **the use of learning outcomes on the labour market is most directly ensured by vocational education.** In vocational education, a *profession standard* determines the main work tasks in the relevant profession and the general and professional knowledge, skills, attitudes, and competences necessary for their performance. Vocational qualification requirements are developed and harmonized for the related professions and specialisations of the relevant profession.⁶

Accordingly, **micro-credentials in vocational education** could be defined more narrowly:

B. "A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience *useful on the labour market*. These learning outcomes have been assessed against *a part of the profession standard or vocational qualification requirements*. A micro-credential is credit-bearing and may be combined into a larger *vocational qualification*."

Such definition of a micro-credential (option B) in vocational education would cover both the certifications for the acquisition of modules or sets of modules and professional development programmes, including parts of a vocational qualification⁷. This definition could be equally well applied to both the vocational secondary education and higher education.

Given the **distinguishment between academic and professional study programmes** in higher education, the definition B for higher education may apply only to professional study programmes. However, irrespective of the fact that the academic study programmes are regulated by other regulations (on the State academic education standard) and they do not meet the mandatory requirements for professional study programmes regarding the awarding of a professional qualification, **the legal framework does not preclude the development of practically oriented academic study programmes (and in practice there are cases),** where the acquired knowledge, skills, and competences

⁶ In accordance with Section 24 of the Vocational Education Law.

⁷ After approval of the amendments to the Vocational Education Law, see Clause 2.2.2.

can be successfully used in the labour market (e.g., accounting, analysis, and audit study programme that leads to Bachelor of Social Science in Accounting and Taxation). Therefore, micro-credentials, that can be actually used in the labour market, may be also developed on the bases of academic study programmes, e.g., by compiling the relevant study courses or developing special short programmes **that do not offer a component of a vocational qualification** in line with the Sectoral QF. The definition A, which is formulated more widely, covers such cases.

1.4. Term in Latvian

There might be some issues with the translation of the term "micro-credentials" into Latvian. There is no official translation of this term into Latvian yet. However, in a European Commission translation⁸ into Latvian, the term "*mikroapliecinājumi*" is used. The State Language Centre (SLC) (A. Krastiņš, written consultation of 7 July 2020) has explored this matter in more detail and **suggests translating this term, looking into its very substance, based on its equivalent** "*microqualifications*" in French.

Furthermore, the SLC also points out that the terms "qualification" and "credential" are often used as synonyms, even though there are significant differences between them in terms of their semantics:

- Qualification a qualification; learning outcome; set of knowledge.
- Credential a certificate; a document evidencing the acquisition of a qualification.

In Latvian, the term "qualification" is used in both senses – as an official certification recognising the acquisition of learning outcomes and in a broader sense (Academic Information Centre, 2016, p. 13):

- 1) Official outcome of the assessment and recognition process, i.e., a documented certified assessment obtained after the competent authority has found that an individual has acquired learning outcomes in accordance with previously established standards.
- 2) Experience and knowledge of an individual in a specific field.

Similarly, also the employees of educational institutions and general public understand the term "qualification" in both senses. The survey conducted by AIC (Ramiņa et al., 2020) suggests that most people associate this term with a set of knowledge, skills, and competences, while slightly less individuals consider it a certificate. Both meanings are intrinsically linked, as in the context of the Latvian Qualifications Framework (LQF), a "qualification" is a certificate evidencing the acquisition of "knowledge, skills, and competences" through learning or studies that lead to further education and/or employment (Latvian Qualifications Database, n.d.). However, this term has not been separately defined in the relevant laws and regulations in Latvia (the Education Law offers only the definition of the term "vocational qualification", which is a documented assessment evidencing the acquisition of education and professional skills relevant to a specific profession) (Ramiņa et al., 2020).

Orr et al. (2020, p. 38) suggest that the term "micro-credential" does not always refer only to a "certification", but also covers the following aspects:

- 1) Learning activities (including short learning courses) that may lead to a micro-credential (certification).
- 2) Certification/ certificate/ credential that recognises the learning activities and the learning outcomes resulting from these learning activities.

In the light of the aforementioned, the author agrees with the recommendation by the SLC to translate the term "micro-credential" into Latvian as *"mikrokvalifikācija"*.

 $^{^{8} \}qquad \text{See: https://ec.europa.eu/education/education-in-the-eu/european-education-area/a-european-approach-to-micro-credentials_lv}$

2. The existing and the desired micro-credential offer

In this chapter, micro-credentials are analysed in the global context, providing examples of the development of micro-credentials in different countries and the current EU policies. It also describes the situation in Latvia, i.e., continuing education opportunities prescribed by the regulatory framework, the offer of continuing education provided by institutions of higher education and colleges, and the factors limiting and promoting continuing education in accordance with the outcomes of the survey conducted among the HEIs and the related interviews. This description aims at drawing conclusions on the compliance of various existing types of continuing education with the status of micro-credentials (see Chapter 6).

In the context of the development of micro-credentials, also the development of vocational secondary education, intended amendments to the Vocational Education Law, as well as examples of the labour market demand in several sectors indicating to shortages in the existing continuing education system have been analysed.

2.1. International experience

Alternative credentialing has become an important activity carried out by the institutions of higher education around the world, and it remains on a steep upward path. A survey conducted among the institutions of higher education in the USA suggests that alternative credentials are offered by 94% of institutions profiled, while one in five institutions offers digital badges, mostly in business-related domains. 64% of respondents see alternative credentialing as an important strategy for their future (Fong et al., 2016). The institutions of higher education actively offer online learning, thus removing the distance barrier and reducing the costs, even more so due to the Covid-19 pandemic. It is clear that the development of micro-credentials and digitalisation of continuing education offered by institutions of higher education are intrinsically linked.

Online learning

The asynchronous nature of online learning appeals to those who prefer to learn at their pace and time. Offering micro-credentials online also provides the opportunity to extend catchment from the usual geographical constraints to a much broader audience. Many mature working learners could also benefit from an "international" experience, as they are often not able to travel, leave their employment, or disrupt family arrangements, which is usually the case for young people who do so to acquire international education. Therefore, online micro-credentials need thoughtful design to ensure that learners are prompted to engage with their peers in different cultures (Oliver, 2019). The opportunities offered by online learning appeal to more adult learners, and the educational institutions all over the globe have become aware of that, which is why they have commenced to restructure their educational offer.

The impact of the pandemic and the boom of the MOOCs

The Covid-19 pandemic has significantly increased the interest of learners in micro-credentials, which is evidenced by both the efforts of institutions of higher education to restructure their activity to ensure more efficient micro-credentialing and the boom of MOOC platforms. The Coimbra Group of universities and the German Rectors' Conference have issued collective outlooks in which they express support for more flexible and modular programmes, and for recognition by means of micro-credentials in the light of the current crisis (Orr, 2020). Due to the pandemic, the MOOC platforms experienced an immense increase in course enrolments. Out of the total number of course enrolments in any MOOC platform, one third of them is attributable to year 2020 alone. The MOOC providers Coursera, edX, and FutureLearn registered as many new users within one month, i.e., in April 2020, as they did during the whole of 2019. Coursera gained the largest number of new learners, enrolling 35 million between mid-March and end of July (Shah, 2020). In the 1st quarter of 2021, Coursera made \$88.4 million, which is 64% more than they had made a year earlier (Shah, 2021a). Apparently, given that people had more

spare time, they looked for learning opportunities that offer easy access, short courses, and affordable fees.

Innovations in higher education

Micro-credentials may promote innovation in higher education, similarly as the MOOCs so far. Worth mentioning are the numerous benefits for many countries and institutions of higher education resulting from early engagement in the provision of MOOCs. For instance, the institutions of higher education recognise that the engagement in the provision of MOOCs has resulted in pedagogical innovations in terms of short, practical offer for adult learners, flexible online learning opportunities, quality assurance, and the assessment and recognition of learning outcomes. The development of micro-credentials has contributed to the identification of new target groups and their needs and establishment of new partnerships, thus strengthening the social role of European institutions of higher education (Shapiro Futures et al., 2020). Oliver (2019) lists other benefits provided by MOOCs and micro-credentials:

- They can help reset degree programmes and trigger changes to academic culture.
- The level of resourcing for creating MOOCs, which are open to the world, is generally much higher than the usual investment in curriculum design and implementation. Also, they have a higher production value and usually a longer shelf-life.
- They can be reused in degree programmes.
- They can be used to test learning technologies or innovations, or to transform teaching practice.

According to Kolowich (2013), three quarters (73%) of the surveyed USA professors, who had previously taught a MOOC, agreed that their experience changed the way they would teach on-campus course in the future. Thus, micro-credentials facilitate both the development of educational offer and the improvement of the skills of the academic staff and the development of internal processes.

International trends regarding the development of micro-credentials

Listed below are some prominent examples describing international trends regarding the development of micro-credentials:

- In 2008, around 80 Spanish institutions of higher education offered free learning content that triggered the development of the MOOC platform MiridiaX, which has become a driving force for innovations in the higher education sector in Spain.
- The Springboard+ project in Ireland, which offers free or subsidised courses at the level of higher education (courses or study programmes), was commenced in 2011 as part of the government's Human Capital Initiative. As the employment opportunities improved, the project evolved into a workforce training project in economic sectors with the largest shortage of highly qualified specialists and areas with emerging technologies, e.g., ICT, High End Manufacturing, Data Analytics, Robotics, Artificial Intelligence⁹. It calls the institutions of higher education for innovative, flexible programme delivery models which include short, targeted courses to encourage the higher education system to respond more rapidly to the changes in the demand for skills and technologies (ibid). Over 450 modular courses of max. 30 credits of the European Credit Transfer and Accumulation System (ECTS) are being provided (Lantero et al., 2021).
- The Irish government also provides funding to a project¹⁰ implemented across 7 universities, which aims at establishing a national framework to support flexible and rapid development of short courses (micro-credential offer) across the entire university system. The project will provide a basis for meaningful higher education system change to support skills development. The micro-credentials will be accredited by each institution of higher education and aligned with the Irish National Qualifications Framework (NQF).

⁹ For more information, visit: https://hea.ie/skills-engagement/springboard/.

¹⁰ For more information, visit: https://www.iua.ie/press-releases/iua-press-release-5th-oct-iua-breaks-new-ground-with-e12-3-million-mc2-micro-credentials-project-under-hci-pillar-3/.

- The cooperative association of Dutch educational and research institutions SURF has developed a platform that enables awarding of digital credentials "edubadges" to students.¹¹
- EIT Food, established by the European Institute of Innovation and Technology (EIT), has developed a competency framework that helps the workforce, entrepreneurs, and job seekers in the food sector identify and acquire the necessary knowledge and skills. In collaboration with the leading universities and businesses in the food sector, EIT Food has developed a set of learning opportunities, including free online courses that can be combined depending on the specificity of the profession and individual career growth. The certification system guarantees high-quality, innovative, interdisciplinary, and cross-sectoral learning experience and provides the opportunity to plan individual learning paths.¹²
- In 2019, the University of Illinois at Urbana-Champaign announced that it plans to shut down its residential Master's in Business Administration (MBA) programme to focus on the MOOCbased programme called iMBA delivered in partnership with Coursera. Since 2016, the programme has enjoyed growing popularity, with applications up from 1100 to 3200 in 2019. The total cost for the iMBA is \$22,000, whereas a traditional MBA can easily cost \$80.000 or more. Students who choose the iMBA earn the same degree as those in the residential programme (Pickard, 2019). Currently, it is one of the most popular Coursera online study programmes, with 4500 applicants and 1500 graduates in 2020 (Shah, 2021).
- According to Coursera, 4000 institutions of higher education around the world use Coursera for studies. Due to the pandemic, in 2020, Coursera made the majority of their course catalogue available free to the HEIs through Coursera for Campus¹³. This resulted in 2.7 million students joining, 70% of them on mobile devices. Some HEIs award academic credits for completing Coursera courses (see Figure 2).



Figure 2. Universities awarding academic credits for completing Coursera courses Source: Shah, 2021.

- A growing number of employers and professional associations are designing their own competency-based educational offers. For instance, Google has introduced a new online certificate in IT support jobs intended for jobseekers at entry-level and middle-skill jobs, available through Coursera. It can be completed in eight months, but students can move at their own speed. Google has brought together a consortium of more than 20 employers (including Bank of America, Walmart, GE Digital) who are interested in hiring completers of its certificate (Oliver, 2019).

¹¹ For more information, visit: https://www.surf.nl/en/edubadges-issuing-digital-certificates-to-students?dst=n5048.

¹² For more information, visit: https://www.eitfood.eu/projects/professional-development-framework un https://www.eitfood.eu/education. ¹³ For more information, visit: https://www.coursera.org/campus/basic?utm_campaign=website&utm_content=c4cf-top-banner-

The European MOOC Consortium (EMC)¹⁴ has been established, and it includes the largest MOOC platforms in Europe, such as EduOpen (Italy), Future Learn (Great Britain), FUN-MOOC (France), Miríadax (Spain and Latin America), and OpenupEd/ European Association of Distance Teaching Universities (EADTU). Together they represent a network of 400 HEIs and offer nearly 3000 MOOCs.

Micro-credentials in the EU

The development of micro-credentials has become a significant EU priority in education. On 1 July 2020, the European Commission published the new European Skills Agenda¹⁵. One of its 12 actions is related to micro-credentials and the objective to support their quality, recognition, and take-up across the EU.

The Communication on achieving the European Education Area by 2025¹⁶, adopted by the European Commission on 30 September 2020, points out the role of higher education and vocational education in supporting lifelong learning and reaching out to a more diverse student body, and the Commission plans to provide support with the Erasmus+ programme and other EU funds. More flexible and modular learning opportunities would be useful not only for professionals, who wish to complement the curriculum, but also for students at Bachelor, Master and Doctoral levels. A growing number of adults, with or without a higher education degree, need to reskill and upskill through more flexible alternatives than a full degree programme (European Commission, 2020). Micro-credentials are mentioned also in the EU Digital Education Action Plan¹⁷ (European Commission, n.d.).

Also, by the end of 2021, it is planned to adopt the Council Recommendations on building confidence in micro-credentials and measures to be taken by 2025 in order to facilitate their wider use, recognition, and portability. Thus, micro-credentials could become a common EU certificate standard for short programmes offered by institutions of higher education.

Common micro-credential framework across the EU

The wide range of approaches to micro-credentials and their forms may be confusing. The programmes at Bachelor and Master level may give the learners and employers a more or less clear idea of what they include. The wide range of MOOCs, specialisations, nanodegrees, etc., on the other hand, may lead to confusion and diminish confidence in this type of education. Therefore, attempts are being made to standardise the micro-credentials.

The EU points out the need for a common approach and standards for the following reasons (European Commission, n.d.):

- It is necessary to provide more flexible learning opportunities in the light of the rapid changes in the labour market, especially due to the digital and green transitions triggered by Covid-19.
- They will help to significantly widen learning opportunities and strengthen the lifelong learning dimension in higher education, offering more flexible, learner-centered forms of education.
- A wider use of micro-credentials will enable the social, economic, and pedagogical innovation.
- They will provide access to flexible, modular learning opportunities in Europe, ensuring harmonized quality standards, and allow the learners to have this type of courses recognised more easily.

The development of a common EU micro-credential framework is expected to build on existing EU and European Higher Education Area (EHEA) transparency and quality assurance tools, including the European Qualifications Framework (EQF), Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), EQAVET, ECTS, Lisbon Recognition Convention and the Diploma Supplement, Council Recommendation on promoting mutual recognition of qualifications and learning outcomes acquired through prior learning and experience, and Europeas. European University

¹⁴ For more information, visit: https://emc/eadtu.eu/.

¹⁵ https://ec.europa.eu/social/main.jsp?catId=1223.

¹⁶ https://ec.europa.eu/education/resources-and-tools/document-library/eea-communication-sept2020_en.

¹⁷ https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en.

Alliances, whereas illustrative programmes could be launched within the framework of the European Universities Alliances (Shapiro Futures et al., 2020a).

Meanwhile, the European MOOC Consortium (EMC) has published a Communication (EMC, n.d.) on a common approach to the provision of micro-credentials among those institutions of higher education forming part of the EMC. This approach has the following specifications:

- Have a total study time of 4 6 ECTS / 100 150 hours.
- Be levelled at Level 6, 7 or 8 in the EQF (or the equivalent NQF levels) (eventually, with options for Levels 4 or 5 in combination with ECTS).
- Provides a rigorous summative assessment in accordance with the academic standards, either directly following successful completion of the course or via recognition of prior learning.
- Operates a reliable method of ID verification at the point of assessment.
- Provides a certificate supplement that sets out the course content, learning outcomes, total study hours, EQF level, and number of ECTS earned.

Meanwhile, EMC (ibid) points out that these courses should be designed so that they are suited to learners who will need to fit study around full-time work and familiar responsibilities. Also, they should have a direct relevance to the labour market, combining theoretical approaches and practical application, and they should preferably be approved by a reliable and well-known employer.

Micro-credentials in other areas of education

At the EU level, the micro-credentials are currently mostly analysed at the level of higher education, while recognizing that they might or do already exist in vocational secondary education and in the business sector. Cedefop also agrees that micro-credentials in vocational education are generally nothing new, but they respond to the future trends. It is a new and flexible way to recognise skills and competences, and a tool to encourage the learners and employees to acquire and collect certificates, stacking them like lifelong learning "blocks" (Pouliou, 2021).

Level 5 of the European Qualifications Framework could represent a window of opportunity for the development of micro-credentials, especially for skilled professionals with vocational qualification and a need to upgrade their knowledge and skills in a specific field/specialization/related profession (Shapiro Futures, 2020b). There is a considerable scope in this area for cooperation between public and private institutions, which could facilitate the technological and non-technological innovation capacity of the workforce and businesses.

2.2. Experience of Latvia

2.2.1. Formal and non-formal education programmes in the offer of continuing education provided by HEIs

The Law on Institutions of Higher Education defines the role of higher education institutions in ensuring continuing education, i.e., they promote continuing education studies and participate in the activities of continuing education (Section 5). In this context, the Law provides for an opportunity for the institutions of higher education and colleges to deliver studies outside of study programmes, offering any individual to apply for a course or module in accordance with a procedure established by the HEI. In practice, the role of HEIs in providing continuing education is even greater, as many HEIs offer not only this opportunity, but also other formal and non-formal education programmes and courses.

The continuing education opportunities provided by HEIs could be categorized as follows:

- 1. **Stand-alone study courses**¹⁸ **or study modules**¹⁹ which form part of the study programmes offered by HEIs. The institutions of higher education often call this option the "open university". Thus, every individual, depending on their previous education attainment, may acquire knowledge and skills offered by study programmes delivered at the HEIs. For those students, on the other hand, who are unable to continue their studies due to academic or financial debts, this opportunity allows maintaining a link to the HEI and continue their studies within the limits of their capacities. Pursuant to the Law on Institutions of Higher Education, a person who has registered at an institution of higher education or college for the acquisition of an individual study module or study course shall be an **attendee** (Section 59² of the Law on Institutions of Higher Education). Accordingly, these persons have a special status, other than the status of a student.
- 2. Formal or non-formal education programmes that are specially developed and offered additionally to the existing offer of study programmes. The procedure for delivering formal education programmes for adults is prescribed by the Education Law, Vocational Education Law, Law on Institutions of Higher Education, and other laws and regulations. The institutions of higher education usually offer such education programmes depending on their objective, type, and duration:
 - a) Vocational continuing education programmes that lead to a vocational qualification.
 - b) Professional development programmes.
 - c) Non-formal education programmes which allow the learners to acquire or upgrade their knowledge, skills, and competences necessary to perform their work duties or to attain personal goals. They may be organized in different forms as courses, conferences, lectures, seminars, or working groups.

For specific examples of continuing education courses/programmes, including the less popular ones, indicated in the survey conducted among HEIs, see Annex 3.

Continuing education regarding specific professions

As for the regulated professions, in certain cases, there might be specific types of education programmes, which must be acquired as part of the certification, recertification, or professional development for the professional to be able to practice the respective profession.

In accordance with the Law on the Regulated Professions and the Recognition of Vocational Qualifications (Section 1), a *vocational qualification certificate* is a document issued by an authorized institution in accordance with the procedures specified by law, which:

- 1. Certifies the vocational qualification or specific level of the vocational qualification; or
- 2. Certifies that the owner thereof has successfully fulfilled the certification requirements for the acquisition of a specific profession or professional specialization (including work involving new materials, machinery, and technology).

The abovementioned certification requirements often include the acquisition of a specific education programme. Examples of two most popular professions, i.e., teachers and medical practitioners, are described below.

Pursuant to the Cabinet Regulation on **procedure for improving the professional competence of educators**²⁰, a professional competence improvement programme (in certain cases) is required to work as an educator and to teach another subject. For educators providing general, vocational, and interest-related education, the improvement of their professional competence is mandatory, i.e., a programme of at least 36 hours must be acquired within three years (Paragraph 15). The academic staff of institutions of higher education and colleges, on the other hand, must acquire professional development programmes

Study course - an outline of a system of knowledge, skills, and competences corresponding to the study programme, organised at a specific level and in a specific amount, for which learning outcomes have been defined for the achievement of which credit points are awarded. (Section 1 of the Law on Institutions of Higher Education)

Study module - a component of the study programme which is created by combining study courses or parts thereof, which have a common goal and achievable learning outcomes. (Section 1 of the Law on Institutions of Higher Education)
 Cabinet Regulation "Regulations on Education and Vocational Qualification of Educators and Procedure for Improving Their Professional

²⁰ Cabinet Regulation "Regulations on Education and Vocational Qualification of Educators and Procedure for Improving Their Professional Competences" of 11 September 2018. See: https://likumi.lv/ta/id/301572-noteikumi-par-pedagogiem-nepieciesamo-izglitibu-unprofesionalo-kvalifikaciju-un-pedagogu-profesionalas-kompetences-pilnveides.

of 160 academic hours, which may include international mobility, as well as participation in conferences and seminars (Paragraph 16).

HEIs delivering pedagogical study programmes in coordination with the MoES shall be entitled to develop and deliver:

- A professional development programme for educators of at least 72 hours. "Following its completion, an educator shall acquire a certificate in pedagogy, special education, pre-school curriculum, and didactics or a certificate of an educator career consultant, or an educator shall be allowed to deliver a vocational education subject module." (Sub-Paragraph 21.3).
- A professional development programme for educators of at least 160 hours. "Following its completion, an educator shall acquire a certificate that entitles him to teach another subject." (Sub-Paragraph 21.4).

The professional development programmes for educators, developed by the MoES, are coordinated in accordance with the profession standard "Teacher".

The Medical Treatment Law distinguishes two types of **certificates to be issued to medical practitioners:**

- 1) Certificate of a medical practitioner certifies the professional proficiency of the relevant person and indicates that the medical practitioner as a specialist is competent to independently engage in the practice of medical treatment (specialist practice) in the relevant field (Section 1, Paragraph 4). It shall permit the medical practitioner to engage in medical treatment (Section 28).
- 2) Certificate of medical and diagnostic methods certifies the professional proficiency of the relevant person and indicates that the medical practitioner in addition to the competence specified thereto in laws and regulations is entitled to independently apply the medical or diagnostic method indicated in the certificate (Section 1, Paragraph 5¹).

In both cases, the document is issued by professional organizations and associations. Registered medical practitioners who have acquired a continuing education programme complying with the official requirements or the relevant medical treatment or diagnostic methods, respectively, have the right to apply for one of the aforementioned certificates (Section 26 of the Medical Treatment Law).

2.2.2. Intended changes to vocational education: Introducing principles of microcredentials?

For more than a decade, the vocational secondary education has been undergoing a reform which, similarly as the micro-credentials, aims at reflecting the current learning opportunities and flexible learning pathways in the labour market, which would be suitable for professional development and continuing education for already qualified specialists. Further work is under way on the implementation of improvements in the curriculum of vocational education, strengthening the involvement of employers in the execution of an order, and its implementation, including the introduction of a modular approach to the implementation of education programmes. The modules are based on learning outcomes consisting of a set of knowledge, skills, and competences that can be assessed and demonstrated. In order to determine whether the learners in vocational education have acquired the necessary knowledge, skills, and competences during the learning process, a vocational qualification examination is organized after completing a vocational education programme (at LQF Levels 2 - 4). The competent authorities are still working on the development of the curriculum of vocational education, updating the sectoral qualifications frameworks, profession standards, requirements for vocational qualifications, and the content of vocational education examinations, developing and implementing modular programmes at vocational education institutions, as well as developing learning resources and methodological materials.²¹

Until now, the measures for the implementation of a reform in vocational education, including within the framework EU-funded projects, have been more actively implemented in vocational education,

²¹ Within the framework of the EST project "Enhancement of the Sectoral Qualifications System for the Development and Quality Assurance of Vocational Education" (No. 8.5.2.0/16/I/001).

which has facilitated the updating of SQFs, profession standards, and vocational qualification requirements, as well as the development and implementation of modular programmes.

Intended amendments to the Vocational Education Law to ensure flexible learning pathways

Amendments to the Vocational Education Law are currently planned, in order to enshrine the new approaches already implemented in vocational education, as well as to reflect the objectives of the upcoming reform. The Parliament (*Saeima*) is currently evaluating the following suggestions²²:

- To establish a *module* as an *independent component* of a vocational education programme.
- To establish that *module programmes* shall include *learning outcomes and their levels* to be acquired within the module.
- To provide the possibility for learners to acquire not only a vocational qualification, but also a *component of a vocational qualification* following the completion of a modular programme.
- To define the vocational qualification as a formalised outcome of the assessment and recognition process, evidenced by a State-issued document outlining the learning outcomes acquired by an individual in accordance with a previously established profession standard or requirements for the vocational qualification.
- To define the component of a vocational qualification as a unit or set of units of learning outcomes, the acquisition of which leads to a professional qualification.
- To define the *related profession* as another profession sharing the knowledge, skills, and competences at one or several LQF levels.
- To clarify that the *vocational qualification requirements* in related professions and specializations *shall be expressed in components of a vocational qualification.*
- To define the professional development as a type of vocational education that allows an individual to acquire or upgrade a component of a vocational qualification included in the SQF (or established by the relevant ministry if there is no SQF in place). Previously, the professional development was defined in a broader sense, and it was not considered a component of a vocational qualification.
- To establish the "procedure for recognizing and assessing a unit or a set of units of learning outcomes acquired through previous learning", recognizing it as a function of the Cabinet of Ministers.

During the interview, an expert in vocational education explained that the differing approaches to different levels of education, i.e., vocational secondary education and professional higher education, were deliberately removed when developing and discussing the amendments to the Vocational Education Law.

Also, the interviewed experts in vocational education recognized that, in vocational education, the concept of the micro-credential can be viewed as a component of a vocational qualification. Other findings by the experts include the following:

- The vocational education system should be designed so that everything, that can be broken down into smaller units, could be fractioned, thus allowing to acquire a vocational education in stackable components.
- Components of qualifications (micro-credentials) should be discussed with the relevant sector to ensure that they are designed in such a way as to ensure that their acquisition would allow an individual to carry out a specific work. They may be included in an electronic catalogue (based on the SQF). However, an official approval by the National Tripartite Sub-council for Cooperation in VET and Employment (PINTSA) is not required, as it is the case for professions and specializations included in the SQF.

²² In accordance with the draft law for second reading "Amendments to the Vocational Education Law" (No. 895/P. 13), May 2021.

 In order to ensure more efficient accounting of vocational qualifications and components thereof, a vocational qualification code system is being developed, which will ensure more efficient analysis of data on education and employment of graduates.

Thus, the intended amendments to the Vocational Education Law reflect the introduction of the micro-credentials and the relevant principles in vocational education (both vocational secondary education and professional higher education), without the need to even mention the micro-credentials. It may be assumed that a certificate evidencing the acquisition of a module and a certificate evidencing the acquisition of a component of a vocational qualification (to be awarded following the completion of several modules or a professional development programme) qualify as micro-credentials.

Although these amendments have not yet been adopted and their final wording may differ, the current wording of the amendments and those formulated herein fairly clearly show the intentions of the policymakers and the legislator, which, hopefully, will be materialized.

Intended changes to the Vocational Education Law regarding continuing vocational education and professional development

Currently, pursuant to the Vocational Education Law (Section 27), continuing education programmes may lead to:

- Level 2 vocational qualification (VQ) (a person shall be admitted without limitation of their previous education).
- Level 3 vocational qualification (following the acquisition of vocational education or secondary education).
- Level 4 vocational qualification (at least 1st professional higher education acquired following the completion of a programme delivered by a HEI) (Section 27 of the Vocational Education Law).

The amendments²³ to the Vocational Education Law provide for **a broader access to continuing vocational education at the level of higher education**, stipulating that the continuing education programme shall lead to a vocational qualification corresponding to the LQF Levels 2, 3, 4, 5, 6, and 7, in accordance with the vocational qualifications included in the NQF (if they are not included in the NQF, the vocational qualification shall be defined by the respective ministry, taking into account the LQF). These changes are supported by the representatives of employers and the SEC²⁴.

Also, these amendments involve the extension of rights for technical schools that allow them to deliver professional development programmes and continuing vocational education programmes at the level of higher education, which, in turn, lead to a vocational qualification which corresponds to the LQF Level 5.

Thus, by acquiring the missing component and without duplicating the long vocational education programmes, the individuals with a vocational qualification will have the opportunity to acquire additional qualifications they require, i.e., knowledge, skills, and competences, that would be assessed, credit-bearing, and certified in an official document. It is especially important in the context of both the lifelong learning and professional development, and a small labour market, where one specialist must often assume different work duties requiring competences which are often covered by different vocational qualifications.

Specific examples across different sectors, where the continuing vocational education at the level of higher education has a key role, are outlined below.

²³ In accordance with the draft law for second reading "Amendments to the Vocational Education Law" (No. 895/P. 13), May 2021.

²⁴ Based on the interview and support letters available in the database of draft laws maintained by the Parliament (*Saeima*).

2.2.3. Examples of the need for continuing vocational education at the level of higher education across different sectors

The importance of continuing vocational education at the level of higher education is amply illustrated by several examples described by Beperščaite (2021).

Metalworking

Through the emergence of new technologies in the metalworking industry, welding and the scope thereof have become an important part of the manufacturing process. Most engineering products (in transport, power generation, oil and gas, mechanical engineering, processing, construction, and other sectors) are based on welding. Many companies in Latvia have obtained the ISO 9001 certification for their quality management systems. However, such certification does not necessarily demonstrate that the company is able to produce products of the required quality.

In 2007, the European Welding Federation (EWF) and the International Institute for Welding (IIW) created a common manufacturer certification system, developing guidelines and international standards (ISO 3834 – Quality requirements for fusion welding of metallic materials; LVS EN 1090 + A1:2012 – Execution of steel structures and aluminium structures; ISO 14731 – Welding coordination – Tasks and responsibilities), thus ensuring uniform requirements for manufacturing and specialists.

The survey of January 2021 conducted by the Association of Mechanical Engineering and Metalworking among the companies suggests that, in 2020, 45 specialists with an international qualification (IWE, IWT, IWS) were required in mechanical engineering and metalworking alone (specialists are required also in other industries).

The NQF includes vocational qualifications in welding that correspond to the LQF Levels 5 and 6 and can be acquired only through continuing education:

- LQF Level 5 vocational qualification "Welding Technologist (IWT)" as a specialization of the LQF Level 4 vocational qualification "Mechanical Engineering Technician" or "Industrial Equipment Mechanic", or the LQF Level 5 vocational qualification "Mechanical Engineering Specialist".
- LQF Level 6 vocational qualification "Welding Engineer (IWE)" as a specialization of the LQF Level 6 vocational qualification "Mechanical Engineer".

So far, the industry has found a solution in collaboration with the German institutions, providing the training at the Riga Vocational School No. 3, whereas the education document is issued not by a Latvian educational institution, but a German educational institution.

Engineering industry

The SQF for the metalworking, mechanical engineering, and engineering industry at the LQF Level 4 includes the vocational qualifications "Diagnostician of Vehicles" and "Technical Assessor of Land Vehicles", which, by their nature, are qualifications to be acquired through continuing education corresponding to the LQF Level 5.

As for the qualification "Diagnostician of Vehicles", the SQF stipulates that this vocational qualification can be only acquired following the acquisition of the vocational qualification "Car Mechanic" or "Heavy Vehicle Mechanic". It would not be appropriate to acquire this vocational qualification at the college level, as the specific nature of the work of a diagnostician is not related to the management of a car service or another type of establishment, which is provided for in higher education programmes. Furthermore, following the acquisition of this qualification, it is not possible to ensure succession to the LQF Level 5. Also, there are no other countries where a programme leading to the qualification "Diagnostician of Vehicles" (or an equivalent one) would be implemented at the EQF Level 5 as an initial higher education programme. In Estonia, Switzerland, and Germany, this qualification is acquired through continuing education at the EQF Level 5, provided that the person has already acquired the qualification "Car Mechanic" or another qualification of this sector. As for the qualification "Technical Assessor of Land Vehicles", the SQF stipulates that this vocational qualification can be only acquired following the acquisition of the vocational qualification "Car Mechanic" or "Heavy Vehicle Mechanic". Furthermore, the person requires work experience in vehicle repairs of at least 5 years. Considerations on the competences and continuing of education at the LQF Level 6 are similar to those of the vocational qualification "Diagnostician of Vehicles".

Construction

A working group established within the framework of a procurement organized by the Ministry of Economics has developed several LQF Level 6 and 7 profession standards and proposals for updating the Sectoral Qualifications Framework for the Construction Industry. The LQF Level 5 also includes the vocational qualifications "Civil Engineering Construction Manager" with the specializations "Transportation Construction Manager", "Hydromelioration Construction Manager, and "Construction Manager of Harbour and Marine Hydraulic Structures", as well as the qualifications "Building Construction Manager" and "Engineering Communications Construction Manager". These professions have a common curriculum and a specialized curriculum. While carrying out the professional activity, a person often faces a situation, where following the acquisition of a construction manager's certificate in one specific construction field, it is also necessary to acquire a certificate in another field. The most rational solution is the possibility to obtain a certificate corresponding to another specialization through continuing education. Similar situations can be observed also at the LQF Levels 6 and 7.

ICT

As for the acquisition of the LQF Level 5 vocational qualification "Information Systems Security Specialist", the SQF stipulates that the person must have the LQF Level 5 vocational qualification "Computer Systems and Networks Administrator" or another vocational qualification, or an academic degree in the ICT field.

The applicants with a vocational qualification or academic degree at the LQF Levels 5 to 7 do not need to repeat the respective higher education programme. The most rational solution would be the acquisition of this qualification through continuing education.

Timber industry

The LQF Level 5 vocational qualification "Woodworking Technologist" can be acquired if the person has the LQF Level 4 vocational qualification "Wood Production Technician" or specific practical experience in this industry. The acquisition of a continuing education programme would be the most appropriate way of obtaining this qualification.

Printing and media technologies

According to the Association of Latvian Printing Companies, the implementation of a LQF Level 5 education programme at a vocational education institution (at the Riga State Technical School) for the acquisition of the vocational qualification "Production Technologist (in Printing and Media Technologies)" is the only possible solution to provide the industry with specialists that meet the industry-related requirements.

Construction, energy, and environmental engineering

The SQF for the Construction Industry includes the LQF Level 5 vocational qualification "Engineering Communications Construction Manager" and the LQF Level 6 qualification "Engineering Communications Construction Engineer", which also involves water, gas, and heat supply systems and heating systems.

The SQF for the Energy Industry includes the LQF Level 6 vocational qualification "Heat, Gas, and Water Technology Engineer" and the LQF Level 7 qualification "Lead Engineer in Heat, Gas, and Water Technologies".

The SQF for the Chemical Industry and the Allied Industries (in the environmental sector) includes the LQF Level 5 vocational qualification "Water and Waste Management Specialist" and the LQF Level 6 qualification "Environmental Engineer".

The sectoral experts believe that the possibility to acquire LQF Level 5, 6 or 7 vocational qualifications through continuing education can help prevent the fragmentation in education and facilitate the development of rational offers.

2.2.4. Offer of continuing education provided by HEIs: Current situation

Out of the 43 HEIs (24 institutions of higher education and 19 colleges; 29 State-owned HEIs, 13 - HEIs founded by legal entities, and 1 - branch of a foreign HEI), only 1 institution of higher education and 4 colleges indicated that they do not provide continuing education (4 out of which were State-owned HEIs and 1 - a HEI founded by legal entities) (see Figure 3).



Figure 3. Number of HEIs offering continuing education opportunities (N=43)

In terms of the type of education programme, **most institutions of higher education and colleges offer the acquisition of non-formal education programmes through continuing education** (29 HEIs or 67%), courses (25), and professional development programmes (20). The professional development programmes are relatively rare (offered by 9 HEIs (21%), 7 of which were colleges). Almost as few HEIs also offer modules or sets of modules (8 HEIs, 6 of which were institutions of higher education (see Figure 4).

As for the courses and modules, the interviewed HEI experts explained that the HEIs allow the learners to acquire any courses and modules from the entire HEI offer through continuing education. No particular courses or modules are highlighted or advertised.

Many HEIs develop and deliver special education programmes based on external request (24 HEIs or 56%, 19 of which were institutions of higher education) and education programmes for the certification of the members of a specific profession (16 or 37% of all HEIs). Only 3 HEIs offer training that leads to an international certificate. Also, only some institutions of higher education have indicated that they implement MOOCs (3).

The HEIs offer both short courses/programmes closely related to a specific study programme in terms of the curriculum (19 HEIs) and courses/programmes not related to study programmes (15 HEIs).



Figure 4. Types of continuing education programmes offered by HEIs. One education programme may correspond to different types

The interviewed expert explained that, for several years, the most popular courses/programmes offered by the HEI are the professional development programmes for educators, business management, and social science courses/programmes.

The examples of continuing education opportunities mentioned by the HEIs are summarized in Annex 3, which well describes the diversity of the offer of HEIs and its relevance to the study directions implemented at the institution of higher education or college.

Comparing the examples mentioned during the survey, the short programmes²⁵ delivered at the Riga Graduate School of Law are the ones most similar to the micro-credentials offered on international MOOC platforms. These short programmes are developed and offered as part of a development collaboration project. They consist of several study courses adapted to the needs of the short programme and its target audience, e.g., in a shortened form, where necessary, focusing on the necessary topics in the curriculum and complementing the programmes with study visits. Following the completion of these programmes, the learner is issued a certificate, which can be used later to earn a master's degree. One of the programmes may be acquired online. Worth mentioning is the fact that the institution of higher education delivers academic study programmes, but this does not prevent it from offering also practically oriented short programmes.

Target groups

The most frequently mentioned target groups of continuing education are specific professions, any adult, as well as graduates. Another important target group for the institutions of higher education are the secondary school pupils who are often offered preparatory courses. The employers, unemployed persons, and job seekers were mentioned less frequently (see Figure 5).

 $^{^{25}}$ $\,$ For more information, visit: https://www.rgsl.edu.lv/lv/programmas.



Figure 5. Target groups of continuing education

In terms of target groups, there are no significant differences between State-owned and private HEIs.

During the interviews, the experts of the institutions of higher education indicated that there are fields that are more appealing to adult learners than young learners for initial studies, e.g., gardening. Also, the adult learners show a strong interest in topical subjects in the industry, e.g., biological agriculture.

Delivery mode: on-site or online

Over the past 2 years, the blended delivery mode (combining both the on-site and online delivery mode) has been the most popular mode of delivering continuing education courses/programmes among all HEIs (see Figure 6).





A relatively smaller number of HEIs deliver programmes on-site or online only.

Study fee and discounts

Asked whether the HEIs offer any continuing education courses/programmes free of charge, 17 HEIs (40%) responded in the affirmative, while 15 HEIs – in the negative. The aforementioned examples include courses offered within the framework of EU-funded and other projects, courses requested by donors or procured courses (e.g., provided by the Latvian National Centre for Culture, the Ministry of Culture, MoES), and, in certain cases, also courses funded by the HEI (mostly short learning experiences, e.g., seminars and lectures).

18 HEIs (42%) offer some kind of discounts, while 22 HEIs do not offer any. Discounts are offered to the graduates (in amount of up to 100%), students, members of a specific profession (e.g., seafarers, educators), the HEI teaching staff, persons with special needs, members of the same family, and employers who are collaboration partners, as well as in accordance with the conditions of the project, in the framework of which the learning is offered.

2.2.5. Future plans of HEIs regarding continuing education

Asked about the future plans of HEIs, the absolute majority of the institutions of higher education and colleges affirmed that they **intend to broaden** their offer: 19 institutions of higher education (79% of the surveyed institutions of higher education) and 14 colleges (74% of all colleges) (see Figure 7).



Figure 7. Plans of the institutions of higher education to broaden the offer of continuing education for the next 2 years

3 HEIs indicated that they will broaden the offer of continuing education, taking into account the following preconditions:

- Capacity of the employees.
- Additional financial resources, which would allow to reduce the study fees.
- Complex competition conditions between the State-owned and private HEIs, given that the State-owned institutions of higher education are subject to a more complicated coordination process.

Also, the HEIs have mentioned that, when developing an offer:

- The HEIs carry out market research and establish cooperation with companies.
- The HEIs consider the development of distance learning courses.
- The HEIs seek to cover all study directions implemented at the institution of higher education.

In a year's time, the HEIs intend to broaden their offer of continuing education courses/programmes to be delivered **online** (Figure 8). Nearly half of all HEIs (20 HEIs or 47%) intend to increase the number of the courses/programmes delivered in both a blended mode and only online. 17 HEIs (40%), on the other hand, intend to increase only the number of programmes delivered in a blended mode.



Figure 8. Plans to increase the offer of continuing education online in a year's time

Only 1 institution of higher education and 1 college indicated that they do not intend to increase the offer of continuing education online.

2.2.6. Factors limiting and promoting continuing education

As for the **main challenges and difficulties** faced by the HEIs in offering continuing education, the majority of the HEIs mentioned the workload and lack of internal human resources, as well as insufficient financial support for adult education and a low demand. Only 7 HEIs (16%) had difficulties with too complex administrative requirements, while only a few HEIS mentioned the strategic aims of HEIs and insufficient support of the managerial staff of the HEIs (see Figure 9).



Figure 9. Main difficulties/challenges in offering continuing education opportunities (number of HEIs)

Other obstacles included:

- Low solvency ratio of the target group.
- Lack of professional lecturers.
- Covid-19 pandemic and restrictions, due to which the courses were suspended (due to their practical nature).
- Failure to provide information on the demand (procurements, announcements) in a timely manner.

During the interview, an HEI expert elaborated on the significance of the capacity of internal human resources of the HEI:

"At the institutions of higher education, lifelong learning is not as popular as one might think. If there is no investment, by at least recruiting staff that focuses on the organisation of continuing education and development of new products and a new offer, very little will be undertaken at own initiative. Each faculty should have the respective persons in charge. Some of them have training centres with a specific staff, and that is when we instantly see results."

Similarly, the HEIs have also described several factors that could contribute to wider range of continuing education programmes (see Figure 10).



Figure 10. Factors that could contribute to a wider range of continuing education programmes (number of HEIs)

The most frequently mentioned **factors contributing** to continuing education included:

- Availability of human resources (additional staff for both the organization and delivery of study programmes, taking into account the full workload of the full-time teaching staff).
- Financial resources (national support programmes, increase in the demand).
- Demand (on the part of both the customers and learners).
- Training (training seminars, training for continuing education providers on the development, licensing, and accreditation of programmes, consultations and recommendations on the necessary documentation and certificates, including the digital ones).
- Time (new programmes approved in a timely manner and more timely information on the demand for EU-funded projects).

The interviewed HEI experts acknowledged that, for the time being, the institutions of higher education do not see adult education as the main priority. Furthermore, there are often insufficient financial resources and no time even for outreach activities. However, there are also positive development trends, such as the provision of adult education as a priority in the strategy of the institution of higher education.

The experts explained that **it is easier to outreach the attendees**, as they are involved in the existing study programmes, and they learn together with the students. The attendees must meet the same requirements as the students, and the only difference between the attendees and students is the fact that the attendees are not entitled to scholarships.

The availability of human resources is a crucial factor for the development and organization of the offer of other types of education, as the workload of the high-skilled teaching staff is very high. The role of the administrative staff is also of great importance, as it is possible to develop the offer of continuing education only if a certain number of work hours are dedicated to the organizational work.

As for the involvement of the institutions of higher education in the procurements to meet the demand for continuing education by the governmental authorities, the experts indicated that it is very important to **include quality criteria in public procurements and avoid from determining the lowest price principle as the main one.** That way, the educational institutions could compete with each other in terms of quality rather than the lowest price. So far, the experience in this area differs from institution to institution.

In order to improve the access to information on continuing education opportunities and the student outreach, one HEI expert suggested to **collect information online**, on a shared user-friendly platform (on an existing one, if possible, e.g., Europass) and to organize a common advertising campaign, as currently it is very difficult for the learners to find information on learning opportunities. The only exception is the project "Enhancing the Professional Competence of Employees: Regulations on Implementation" co-funded by the EU, which allowed to create the site macibaspieaugusajiem.lv and to implement a successful outreach campaign. However, a project-based approach is not sustainable and comprehensive.

2.2.7. Opinion on implementation of micro-credentials in higher education

During the interviews, the HEI experts expressed the view that there are several approaches to the implementation of micro-credentials, including the following:

- 1) **To enhance the existing system, enshrining the principles related to micro-credentials** (including by ensuring flexible learning pathways, a wide range of professional development opportunities, efficient recognition of prior learning, and the possibility to combine the certificates into a larger credential).
- 2) To transform the existing forms of learning into micro-credentials, in order to contribute to their prestige and recognition. For instance, for the time being, the professional development programmes only lead to a certificate of completion of a programme, not a vocational qualification, which is not attractive in the labour market.

The experts in vocational education held that, in vocational education (both vocational secondary education and higher professional education), *micro-credentials* in terms of their nature are already considered a *component of a vocational qualification (certification of its acquisition)*. A component of a vocational qualification may be acquired following the completion of both a stand-alone module, a set of modules and a professional development programme. The modules or a set of modules should provide a set of learning outcomes useful on the labour market. As for the modular vocational education programmes already developed by the National Centre for Education (NCE), the experts in vocational education acknowledged the following:

"If the industries have worked well [have actively participated in the development of modular programmes] and arranged the modules in a way that meets the labour market needs, then the module certificates already count well on the labour market and there is a strong demand for them."

"It is not difficult to develop modular study programmes, based on the current profession standard [form]."

Benefits of implementing the approach to micro-credentials in education in general:

- Flexibility, specific curriculum, and time required for the acquisition of a qualification. The employed population has no time for long, general education programmes.
- Breaking down of the long education programmes and qualifications into separate components and efficient recognition of the components in larger qualifications, which is a challenge in higher education in Latvia.
- Progress towards a clearer distinction between education programmes and vocational qualifications.

Arguments put forward by the experts regarding the implementation of the approach to microcredentials only in vocational education:

- Orientation towards the labour market and compliance with the requirements, which are coordinated with the employers. The HEIs may shape the general, academic component of a higher education programme as they deem fit, taking into account its specific nature and preserving the academic freedom. The professional component, however, meets previously identified labour market needs, which is ensured through the compliance with the profession standard or the vocational qualification requirements.
- Reflection of professional development opportunities to acquire the component of vocational education necessary for employment in a flexible and quick manner (e.g., "A finishing technician could have five micro-credentials as a component of a vocational qualification. In this way, it would be possible to address the issue of interdisciplinary qualifications.").
- In Latvia, the term "qualification" is more associated with vocational education and vocational qualifications, which would facilitate the perception and understanding of the nature of the reform.

Asked whether a separate status/term of *micro-credentials* should be provided for in the regulatory framework, the interviewed experts were not convinced of it and did find that it would bring an added value.

3. Recognition of micro-credentials

This section deals with the recognition of micro-credentials in education and the labour market, including the use of elements relevant to the recognition, such as the document to be issued on the acquisition of a course/programme, awarding of credits, description of learning outcomes, methods for the assessment of learning outcomes, as well as the recognition procedures and practice. It also includes a summary of international experience, recommendations, and the situation in Latvia, based on the outcomes of the survey and interviews conducted among the HEIs.

3.1. Document to be issued for the acquisition of education

3.1.1. International experience

It results from the proposal for the definition of a micro-credential, as provided by the EC Consultation Group, that the proof evidencing the acquisition of learning outcomes shall be contained in a certified document that lists the following elements: name of the holder; achieved learning outcomes; assessment method; awarding body; qualifications framework level, where applicable; credits gained (Shapiro Futures, 2020a). This information could be included also in the certificate supplement, similarly as in the diploma supplement or certificate supplement referred to in the EMC recommendations (EMC, n.d.).

Digital credentials

In view of the technological development and the growing prevalence of adult education worldwide, there is ongoing development and improvement regarding the digital transcripts, identity verification, and digital credentials.

The international MOOC platforms often offer their own systems to provide verified certificates. However, there are also private initiatives²⁶ available, which are aimed at educational institutions. The European Commission is **developing the Europass Digital Credentials Infrastructure (EDCI)**²⁷ to support efficiency and security in how credentials such as qualifications and other learning achievements can be recognized across Europe. This solution is expected to support the Member States and HEIs in issuing authentic digital credentials, including diplomas and micro-credentials.

Since these solutions are improving and becoming more cost effective, the education providers should consider trialling or adopting these as they mature (Oliver, 2019).

Industry endorsements

Engagement with employers and endorsement by employers are crucial in order to ensure better relevance of micro-credentials to the labour market (Oliver, 2021; Orr et al., 2020). An industry endorsement would help winning learners' confidence in the fact that micro-credentials have been developed to provide employment opportunities in the relevant field, similarly as an endorsement by the best regarded education providers that help winning learners' confidence in the academic status of micro-credentials (Oliver, 2021).

3.1.2. Experience of Latvia

Documents to be issued for completing courses/programmes delivered by the HEIs in continuing education are listed in Table 4.

²⁶ For instance, see: info.credly.com/, www.surf.nl/en/edubadges-issuing-digital-certificates-to-students.

²⁷ For more information, visit: https://europa.eu/europass/lv/what-are-digital-credentials.

Type of education programme	Document to be issued for completing an education programme	Mandatory information	Sample document
Study course or study module	Certification of completion of a study course or study module (in accordance with Section 59 ² of the Law on Institutions of Higher Education).	Details on the certification holder, name of the college or institution of higher education, title of the study course or study module, credits earned , name, surname, and qualification of the lecturer delivering the study course or study module, amount of work delivered, and the assessment of learning outcomes (Section 59 ² of the Law on Institutions of Higher Education).	Sample certification (Lifelong Learning, n.d.) (Drawn up in accordance with the Vocational Education Law).
Continuing vocational education programme	Certification of vocational qualification	Details on the certification holder, name of the educational institution, fact that the learner has passed the qualification examination , title of the awarded qualification , level of the vocational qualification , and the respective LQF level.	Annex 4 to the Cabinet Regulation No. 451 <u>"Procedures by which State- recognised Documents Certifying</u> <u>Vocational Education and Vocational</u> <u>Qualification and Documents Certifying</u> <u>Acquisition of a Part of an Accredited</u> <u>Vocational Education Programme Are</u> <u>Issued"</u> of 21 June 2005.
Professional development programme	Certification of professional development accompanied by a supplement – transcript.	Details of the certification holder, name of the education institution, and the code and title of the education programme. The transcript shall include also the duration of the programme, courses acquired (including the traineeship and tests) and their description (including the number of hours and assessment).	Annex 5 to the Cabinet Regulation No. 902 <u>"Procedures by which</u> <u>Documents Certifying the Professional</u> <u>Development and Acquisition of</u> <u>Professional Education Are Issued"</u> of 29 November 2005.
Professional development programmes for educators delivered by HEIs	Certificate	Details on the certificate holder, entitlement, institution delivering the programme, title of the programme, amount, and date of its approval by the MoES.	Annex 2 to the Cabinet Regulation No. 569 <u>"Regulations on Education and</u> <u>Vocational Qualification of Educators</u> and the Procedures for the Improvement <u>of Their Professional Competence</u> " of 11 September 2018.
Non-formal education programme	Certification of completion of a non- formal education programme	Not specified in detail.	Sample certification – recommended (Lifelong Learning, n.d.).

Table 2. Documents to be issued for completing an adult education programme

For the summary of responses provided by the HEIs (in free form), see Table 5. The table above shows that the documents issued by the HEIs for completing different continuing education courses/programmes are usually called *certificates* or *certifications*.

Table 3. Documents and digital credentials to be issued for acquisition of education

	Document to be issued for acquisition of education	Digital credential on the acquisition of education
Study courses and modules	Certification (in accordance with Section 59 ² of the Law on Institutions of Higher Education)	Yes, but not always 5 2 No 13 4 N/A 2 10 0 5 10 15 20 Institution of higher education College

Short courses/programmes related to a SP in terms of the curriculum	Certificate (13 HEIs) Certification (10) Statement (2) Attestation (1) Diploma issued by the Evangelical Lutheran Church of Latvia (1)	Yes, but not always 2 1 No 10 4 N/A 10 12 0 5 10 15 Institution of higher education Colleg	20 25 ge
Courses/programmes not related to a SP in terms of the curriculum	Certification (17) Certificate (8) Statement (2)	Yes, but not always No 9 6 N/A 5 11 0 5 10 1 Institution of higher education College	15 20 1e

Additional comments provided by the respondents:

- To issue a document of completion of a professional competence development programme, accompanied by the description of the programme.
- To issue a document of completion of separate study courses, accompanied by a copy of the minutes of the examination, which includes a description provided by the Commission.

During the interview, the HEI expert mentioned that the possibility of acquiring a vocational qualification (as in the context of continuing vocational education programmes) is more appealing than the acquisition of a programme that does not lead to a vocational qualification (e.g., professional development). In her experience, there have been questions from employers – collaboration partners about the type of document to be issued following the completion of a programme. She acknowledged that this issue could be addressed through introduction of micro-credentials.

Many HEIs also offer **digital credentials** (12 – at least in some cases). The explanations and examples provided in the comments mostly describe the practice of **converting standard documents**, that are otherwise issued in paper format, **to electronic ones**, to ensure remote work processes. Documents are issued in electronic form upon request or to learners who have completed a programme online. The examples mentioned by the respondents include:

- Digital credential certification bearing an electronic signature by an authorized signatory.
- After completing a formal education programme online, a copy of the certification bearing an electronic signature is issued, whereas a certification for acquisition of non-formal education may have both an electronic copy and electronic original, depending on the target group and the type of courses.
- A scanned document that is sent per e-mail.
- Digital certificates for those participating in webinars.

The examples include also the sending of information for its registration in a database containing information on the competences acquired (Registry of Seafarers), as a result of which, in essence, it is no longer necessary to issue a separate certification.

The comment below reflects the opinion that the existing regulatory framework does not provide sufficient flexibility for the development of digital credentials:

"The legal framework should include all laws and regulations related to digital credentials, which would render these credentials valid. In the future, the institutions of higher education could issue digital diplomas. Another option would be the establishment of a verification body, which would allow

obtaining information on the certificate holder, by entering the certificate number in the system. Diplomas in paper format already belong to the past, especially if programmes are delivered online. The silliest thing is that the holder must travel a distance of 100 km and sign, in order to obtain a diploma. These pretexts will have no future. Learning is becoming global, but there are still several Cabinet Regulations which stipulate that the diploma holder must sign in person, thus acknowledging the receipt of the diploma."

Accordingly, the existing regulatory framework should be reviewed, especially regarding the development of Europass EDCI, in order to ensure the possibility of issuing digital credentials. Moreover, the HEIs should be informed about the possibilities of digitalizing the process of issuing certifications.

3.2. Awarding of credits

3.2.1. International experience

Credits are useful if the accumulation, assessment, and recognition of several learning units is required. The use of ECTS or other equivalent **academic credits for micro-credentials** is recommended by both the EC Consultation Group, other authors (Orr et al., 2020; Shapiro Futures et al., 2020a), and consortia of institutions of higher education (EMC, n.d.). ECTS are based on learning outcomes, and they provide the opportunity to measure the learning experience. The awarding of academic credits for micro-credentials would allow to improve their recognition and increase the number of learners enrolled in the programme. Regardless of where the credits are earned, credits derived from certified learning means a future discount on the time and money required for a learner to advance to a formal qualification (Oliver, 2021). A representative example of using the ECTS in the recognition of learning experience are the students participating in Erasmus+ mobility programme. The courses acquired at an institution of higher education abroad are recognized by the sending institution of higher education, taking into account the number of ECTS awarded (Orr et al., 2020).

The survey²⁸ for country representatives conducted as part of the MICROBOL project²⁹ suggests that most of the countries have micro-credentials expressed in ECTS, either in some cases or always. The range in number of ECTS credits varies from 1 to more than 100 for one education programme. Although ECTS are not always awarded, this is perfectly possible, using the same principles for credit award, accumulation, and transfer as is done for component parts of programmes, as explained in the LLL section of ECTS User's Guide³⁰ (Lantero et al., 2021). However, for those micro-credentials, which are not component parts of programmes, it should be considered to develop more detailed system guidelines for the approach to awarding of credits.

There are different recommendations for the desired **number of credits** to be awarded:

- 1. Within its consortium of institutions of higher education, the EMC recommends the amount of micro-credential courses: 4 6 ECTS / 100 150 hours of study time (EMC, n.d.).
- 2. Oliver (2021), on the other hand, recommends creating micro-credentials that singly or as a bundle equate to a typical semester length unit, which will make it easier for a range of educational providers to receive the micro-credential for credit.
- 3. Orr, Pupinis, and Kirdulytė (2020) recommend avoiding setting a fixed number of credits at EU level, allowing the countries to develop their own approach so as not to hinder educational innovation and flexibility in higher education. Also, it is difficult to provide clear grounds for a specific volume. Such approach with maximum flexibility is supported by the EC Consultation

²⁸ A total of 35 countries participated in the survey conducted from 15 October to 25 November 2020.

²⁹ For more information, visit: https://microcredentials.eu/about-2/microbol/.

³⁰ For more information, visit: https://ec.europa.eu/assets/eac/education/ects/users-guide/index_en.htm.
Group (Shapiro Futures, 2020a), currently allowing for a wide range of ECTS – from 1 ECTS credit to a volume with an upper limit of less than a full degree. At the same time, it is suggested that the typical volume should be 1 - 6 ECTS.

3.2.2. Experience of Latvia

In higher education in Latvia credits are used. One credit in Latvia is defined as the full-time study load in one week, and it equates to 40 academic hours. The duration of 1 academic hour is 45 minutes. A full-time study load consists of 40 credits in one academic year. Recalculating in European Credit Transfer System (ECTS) points, the amount of Latvian credits is multiplied by 1.5 (Academic Information Centre, 2017).

The number of credits earned must be indicated in the certificate issued to the attendees following the completion of a study course or module (Section 59^2 of the Law on Institutions of Higher Education).

In continuing vocational education and professional development programmes, credits are not indicated. However, their duration is expressed in hours.³¹

- Continuing vocational education programme: 480 1200 hours (or usually with a duration of several months).
- Professional development programme: at least 160 hours (with a duration of several weeks or months).

The duration of non-formal education programmes for adults is not specifically regulated.

In case of the certification of medical practitioners³², the learners are awarded continuing education points (CEPs) – quantitative measurement unit for the registration of professional and scientific activity and continuing education activities of a medical practitioner. 1 CEP equals to 1 academic hour with a duration of 45 minutes.

The outcomes of the survey conducted among HEIs regarding the awarding of credits in different continuing education courses/programmes are summarised in Table 2 below.

For the purposes of the study, the continuing education opportunities were divided into three groups, depending on the extent to which they are relevant to the definition of a micro-credential (see Chapter 1), including their relation to a larger qualification and degree programme:

- 1) Study courses and modules, which can be acquired by the attendees in continuing education.
- 2) Short courses closely related to a study programme in terms of the curriculum (includes the curriculum of a short study course or is relevant to a part of the study course).
- 3) Courses not related to a SP in terms of the curriculum.

Table 4. Awarding of credits in different types of continuing education courses/programmes

	Awarding of credits	Number of credits
Study courses and modules	Credit-bearing in accordance with Section 59 ² of the Law on Institutions of Higher Education.	For a study course: 1 – 10 credits. For a module: up to 24 credits.

³¹ In accordance with Annex 1 to the Regulation No. 1-6e/21/3 adopted by the Ministry of Education and Science on 1 March 2021. See: https://www.visc.gov.lv/lv/media/2188/download.

³² In accordance with the Cabinet Regulation No. 943 "Procedure for Certification of Medical Practitioners" of 18 December 2012.



Table 2 shows that academic credits are awarded for all study courses and modules, in accordance with the procedures provided for in the Law. In the context other continuing education courses/programmes, HEIs award credits only for a part of courses/programmes, slightly more frequently for courses/programmes, which, in the opinion of HEIs, are closely related to a SP in terms of the curriculum.

During the interviews, the respondents explained that, at times, credits are awarded for non-formal education programmes, if they are delivered to lecturers, thus facilitating their recognition. At the same time, the respondents acknowledged that **it would be useful to draw up an external regulatory framework or methodological material, which would serve as a guide for HEIs when awarding credits for continuing education courses/programmes.**

The interviewed HEI experts supported the awarding of credits for micro-credentials in Latvia. Furthermore, it would be important to ensure a sufficient number of credits for micro-credentials, as insignificant learning experiences, such as participation in seminars and conferences, should not qualify as micro-credentials.

3.3. Learning outcomes and their assessment

3.3.1. International experience

Description of learning outcomes is identified as critical information which the micro-credentials should include (Shapiro Futures, 2020a; Orr, 2020), to facilitate their transparency, credibility, recognition, and stackability. According to the EMC, on the other hand, the institutions of higher education of its consortium should award a certificate supplement outlining the learning outcomes (EMC, n.d.), similarly as the diploma supplement.

Another no less important issue is the **form of assessing the learning outcomes,** as the assessment of learners is an essential part of quality education. Oliver (2019) addresses issues arising in cases where micro-credentials lead to academic credits. The key questions pertain to assurances about assessment in accordance with academic standards and principles of academic integrity: Does assessment occur, and

if so, how and under what conditions, and how is the learner's identity and contribution reasonably verified? Micro-credentials that are affordably priced may not generate the same level of revenue as units within a degree program, so design decisions may have to be rethought (Oliver, 2019). The micro-credential programmes delivered by HEIs should therefore include **meaningful tasks**, **suited to the level and context of the particular educational experience, that allow students to demonstrate the learning outcomes.** Accordingly, the recording of student attendance as the sole means of assessment would not be acceptable in the context of micro-credentials, as it is not relevant to an outcome-based approach.

According to Oliver (2019), the assessment should include, where possible, the following:

- At least one robust individualised assessment task that involves authentic problem solving and demonstrates application of knowledge and problem-solving abilities in a work-related or industry scenario (submitting a concise artefact, possibly a video, audio, or text).
- Personal and personalised feedback allowing the students to use their skills in practice.

Oliver (ibid) also points out that it may be tempting, in an online environment, to automatically assess learners, using a quizzing tool. However, if it is the sole means of summative assessment, this could raise concerns about quality or academic integrity. On the other hand, quizzes can be excellent for enabling the learners to test their own knowledge and provide instant feedback.

3.2.2. Experience of Latvia

Description of learning outcomes in the certificate

A description of learning outcomes in the certificate supplement would undoubtedly raise awareness of the role of this certificate and the learning outcomes outlined therein. Following the employer survey, the Academic Information Centre concluded that half of employers pay attention to the knowledge, skills, and competences outlined in diplomas (Ramiņa, Rutkovska, Labunskis, 2020).

Although the description of learning outcomes in the certificate of completion of a continuing education course/programme is not mandatory, it is perfectly possible, as in many cases the learning outcomes are formulated when developing education programmes.

For instance, the certificate of completion of a study module or study course acquired at an institution of higher education or college must include the assessment of learning outcomes (Section 59^2 of the Law on Institutions of Higher Education), while a description of learning outcomes is optional. However, study courses and modules are complementary parts of a study programme, for which learning outcomes are planned and described, as well as the criteria for the assessment of learning outcomes. Under the Law on Institutions of Higher Education, *learning outcomes* are defined as "a set of knowledge, skills, and competences to be acquired upon completion of a study programme, study module or study course" (Section 1). The intended learning outcomes and their assessment criteria must be outlined in the course description (Section 56^1). The intended learning outcomes must be included also in the module description, which outlines courses included in the study module (Section 56^2).

Learning outcomes in certificates of completion of a continuing education programme or professional development programme are optional, while in vocational secondary education, there are modular vocational education programmes and modules³³ of lifelong learning competences, which include a detailed description of learning outcomes. These modular programmes may serve as a basis when developing continuing vocational education programmes and professional development programmes.

Learning outcomes are optional also in certificates of completion of a non-formal education programme, despite the fact that the education programme must include the curriculum for the acquisition of competences (including the intended learning outcomes, topics, and sub-topics) and scope of acquisition.³⁴

³³ See: https://www.visc.gov.lv/lv/modularas-programmas.

³⁴ In accordance with the Regulation No. 1-6e/21/3 adopted by the Ministry of Education and Science on 1 March 2021. See: https://www.visc.gov.lv/lv/media/2188/download.

The responses by HEIs regarding the attachment of the description of learning outcomes to the certificate of completion of a continuing education course/programme are summarized in Table 3.





Table 3 shows that, **in the context of study courses and modules**, the description of learning outcomes in the certificate or its supplement is provided by 21 HEIs (half of the surveyed institutions of higher education) (at least in certain cases), despite the fact that the description is optional. Also, it is **more frequent than in the context of other courses/programmes.** It is to be welcomed that 8 HEIs have provided a description of learning outcomes for at least some courses/programmes (not always).

Whether or not the course/programme is related to a SP, in this case, is not a factor that determines whether or not the learning outcomes are described.

The interviewed HEI experts believe that learning outcomes must be described in the context of microcredentials. The automation of the process should not be too burdensome to the HEIs, as the learning outcomes are already described during the programme development process.

Moreover, there are institutions of higher education (e.g., the University of Latvia), which develop all continuing education courses/programmes (including non-formal education programmes) on the same basis as study programmes, describing the intended learning outcomes in detail. Such approach, if necessary, allows easily attaching the described learning outcomes to the certificate supplement.

Assessment methods

As for the **assessment of learning outcomes**, Figure 11 shows that HEIs use the **attendance as the sole means of assessment**, but only in relatively few cases. Given that it is not an outcome-based approach, it would not be acceptable in the context of micro-credentials. The same applies in other cases, especially in the context of study courses and modules, where the attendees should be assessed the same way as the students, in accordance with the requirements for the study course. However, the interviews and the comment below suggest that the understanding of the role³⁵ and assessment of attendees may vary among the HEIs:

"If a person is awarded an attendance certificate, the attendance is one of the main prerequisites. However, if a person is awarded a certification or certificate, the newly acquired skills of the person are tested both practically and theoretically." (Comment provided in the survey conducted among HEIs)

The term "attendee" might be confusing due to its semantics, which entails a rather passive action, not active acquisition of learning outcomes, and which does not correspond to a student-centred approach.

Attendance as the sole means of assessing learning outcomes acquired through continuing education is not a common method used by HEIs, especially in the context of study courses and modules. Slightly more frequently – in the context of continuing education courses/programmes (16% of HEIs).

At many HEIs, the **attendance is considered additional means of assessment** (at 53% of HEIs in the context of courses and modules; 1/3 of HEIs – in the context of other courses/programmes). Also, many HEIs opt for **standardised tests, practical projects, and written term papers** as the means of assessment. 10 HEIs have integrated traineeship also in their courses and modules.

³⁵ In accordance with the Law on Institutions of Higher Education, an attendee is a person who has enrolled at the institution of higher education or college to "acquire", rather than simply to "attend" the study module and study course.



Figure 11. Means of assessment of learning outcomes

The respondents provided comments also on other means of assessment:

- Examination.
- Thesis.
- Combination of different methods (e.g., attendance, participation in discussions, results of individual and group work, tests, examinations).
- Interviews (in the context of language courses).
- Independent work tasks.

During the interview, one HEI expert pointed out that, in the context of micro-credentials, a means of assessment in accordance with certain standards is of great importance, in order to ensure the recognition of learning outcomes in accordance with academic standards and their comparability to the level of higher education, accordingly. Another expert, however, questioned the possibilities to guarantee that at educational institutions other than HEIs.

3.4. Recognition

3.4.1. International experience

Recognition in education

Although micro-credentials are often provided in the higher education sector, which, to a large extent, is quite standardized as a result of the Bologna Process, micro-credentials often fall outside of the scope of standardized framework, which, at turn, significantly hinders their recognition. Oliver (2019) puts it this way: The more precise the recognition for prior learning, the more satisfied the student, and the more likely they are to be retained to complete the degree program.

Orr et al. (2020, p. 69) distinguish between two types of micro-credentials, which are described in detail in Table 6:

- 1) Credit-bearing, when they earn admission to, or credits towards, formal qualifications.
- 2) Non-credit bearing, when they do not earn admission to, or credits towards, a formal qualification.

Table 6. Comparison of credit-bearing and non-credit bearing micro-credentials

Credit-bearing micro-credentials	Non-credit bearing micro-credentials
 Credit-bearing micro-credentials include assessment aligned to a formal qualification level. Achievement of the learning outcomes 	 Non-credit-bearing micro-credentials include assessment that may or may not be aligned with a formal qualification level. Achievement of the learning outcomes
• Achievement of the feating outcomes leads to an offer of admission to, or credits towards, at least one formal qualification, regardless of whether the offer is taken up by the learner.	• Achievement of the learning outcomes does not lead to an offer of admission or credit towards a formal qualification.
• Credit-bearing micro-credentials mirror and contribute to the academic standards required in the target qualification(s).	• Non-credit-bearing micro-credentials may or may not conform to the academic standards, including duration and effort, required for a formal qualification.
 The duration and effort required by the learner are in keeping with amount of credit earned in the target qualification(s). Credit-bearing micro-credentials are likely to be more strongly linked to an individual's employability. 	• Non-credit-bearing micro-credentials often reflect a wider societal or labour market focus on the development of important skills and knowledge. In some cases, they are geared towards a personal interest and might have little or no relevance to employability.

Source: Orr et al., 2020, p. 69

If both types of micro-credentials are offered, it gives learners the flexibility to choose according to their preferences and situation. If they have the possibility of combining their achieved micro-credentials into something larger, learners may also be motivated to pursue a full degree at a later date. Preferably, the relevant micro-credential should also work in a stand-alone format and as an important employment-focused learning experience. For example, MOOC platforms are constantly experimenting with different approaches, and in their search for a sustainable business model, the newly created micro-credentials are increasingly being embedded within full-degree programmes, serving as an entry point for a full degree (Orr et al., 2020).

A survey³⁶ conducted within the MICROBOL project³⁷ (Lantero et al., 2021) suggests the following:

- The majority of countries have implemented policies related to the recognition of microcredentials with the aim of both increasing learners' competitiveness on the labour market and recognising micro-credentials for academic purposes (slightly less frequently) and for further study (also in the form of recognition of prior learning).
- In almost half of the countries, learners can accumulate micro-credentials and have them recognised to build up to a degree programme. In some cases, stackability is not possible towards a full degree. The real challenge is with stand-alone micro-credentials rather than for micro-credentials that are already part of a full-degree programme.
- Nearly half of respondents do not recognise micro-credentials from providers other than HEIs. This is mainly due to the regulatory framework or to the absence of quality assurance mechanisms. In some cases, micro-credentials awarded by external providers are recognised only through using recognition of prior learning or under certain conditions.

³⁶ A total of 35 countries participated in the survey conducted from 15 October to 25 November 2020.

³⁷ For more information, visit: https://microcredentials.eu/about-2/microbol/.

The EC Consultation Group, on the other hand, provides the following recommendations for the recognition of micro-credentials (Shapiro Futures, et al., 2020a):

- At the early stage, the recognition of micro-credentials could serve as useful standard procedures used to recognise learning experience acquired abroad. Procedures for the recognition of learning outcomes achieved through previous learning can be used for the recognition of certificates issued by other education institutions/training centres.
- Transparency of credentials is essential for the recognition, which would be facilitated by the elements included in the definition of micro-credentials (see def. IV, Section 1.2).
- The recognition procedures should be adapted to micro-credentials, given that the existing procedures are too time-consuming and resource-intensive, and they will not meet the increasing demand. A more standardised approach, rather than evaluation on a case-by-case basis, is necessary, which would enable its scaling to micro-credentials.
- Current projects that could contribute to the recognition of micro-credentials: Europass EDCI, European Student Card Initiative³⁸, and EMREX³⁹.

In the light of the increasing educational offer online, additional risks must be taken in account. The e-Valuate project (NUFFIC, 2019) offers the following criteria for the assessment of e-learning:

- Quality of the study programme.
- Verification of the certificate.
- Level of the study programme.
- Learning outcomes.
- Workload.
- The way study results are tested.
- Identification of the participant.

Recognition in the labour market

The past experience shows that employers do not always completely understand the different types of education programmes and the importance of certifications. A US study (Gallagher, 2018) suggests that micro-credentials currently function, to a large extent, to apply the acquired knowledge in the labour market, complementing degree programmes, while employers are generally not aware of micro-credentials. Meanwhile, employers acknowledge the growing role of lifelong learning, including in online environment, which is growing in importance in technological sectors. Gallagher (2019) suggests that the employers' awareness of micro-credentials could be enhanced by describing learning outcomes – also in cases where automated analysis of applications is used during the initial personnel selection.

3.4.2. Experience of Latvia

The system for the recognition of learning outcomes achieved through prior learning and professional experience in higher education in Latvia has been operating since 2012. This process is not coordinated at a national level. The HEIs develop their own approach and practice, based on the regulatory framework and methodological recommendations drawn up by the MoES, and they determine the fee to be charged for the recognition. According to the general procedure, a committee set up by the HEI must evaluate the submitted documents within one month, recognise them, if they meet the requirements and intended learning outcomes of the study programme, and award the appropriate number of credits, which leads to enrolment in the particular study programme. A decision is made after analysing each case separately. Learning outcomes recognised this way do not qualify as the final examination, state examination, or exit examination – qualification examination or doctoral thesis (Academic Information Centre, 2018; 2018a).

Thus, the knowledge, skills, and competences acquired following the completion of a continuing education programme, professional development programme or a non-formal education programme and

³⁸ For more information, visit: https://ec.europa.eu/education/education-in-the-eu/european-student-card-initiative_en.

³⁹ Electronic data exchange solution to support student mobility. For more information, visit: https://emrex.eu/.

in other forms (e.g., through self-education) can be recognised, certifying the acquired parts of a study programme, which resembles partial recognition of a qualification not leading to a formal certification document.

In the context of study courses and modules, the Law on Institutions of Higher Education provides for that the attendee has the right to accumulate amount of study work confirmed by certificates and, if he or she has an adequate previous education, to request that the institution of higher education or college evaluates the compliance of the work amount with the study programmes or stages thereof, awarding the relevant credits for it (Section 59²).

In accordance with the draft guidelines for education and development for 2021 - 2027 (Ministry of Education and Science, 2020), certain improvements in the recognition process are envisaged – development of approaches to recognise competences acquired outside formal learning, providing the possibility to recognise parts of qualifications.

Within the survey, the HEIs were asked:

- (1) whether different types of continuing education courses/programmes delivered by the HEI lead to studies in one of the study programmes offered by the HEI; and
- (2) whether the HEI offers learners the possibility to enrol in a study programme after completing a course.

The respondents, i.e., continuing education providers at the HEIs, might not be experts in higher education, but their responses show the efficiency of the recognition policy and practice in ensuring continuing education at institutions of higher education and colleges and whether new students can be reached through continuing education.



Table 7. Recognition of continuing education courses/programmes leading to further studies and involvement of the graduates in studies



The responses provided by the HEIs suggest that, in opinion of the HEIs, the procedure for recognising courses/programmes **related to study programmes in terms of the curriculum are also less complicated** (see Table 7), which makes sense.

The interviewed HEI expert pointed out that the system for the recognition of learning outcomes achieved through previous learning is not efficient enough and the authorities should work towards enhancing and launching these processes, providing methodological support to HEIs. Although there is a regulatory framework in place and the HEIs implement the recognition procedures, it is not done on a daily basis. The recognition process should constitute an integrated complementary part of the lifelong learning process.

As for active outreach of learners involved in continuing education, most **HEIs take active measures to achieve it regarding the attendees of study courses and modules**, which is also evidenced by the interview, during which it was explained that for universities, the number of students is of great importance to retain their status. The number of attendees, however, is not considered as a performance quality indicator. Therefore, there are active attempts, where possible, to "transform" the attendees into students. Worth mentioning is the fact that the status of an attendee is a very convenient and appropriate way of acquiring education especially for adults with work and family obligations, as it allows the person to determine the learning pace and the amount of financial resources to be invested. The interview also revealed that the learners often opt for the status of an attendee to earn a higher education degree in a flexible way. Given that the target groups in higher education change, the studies should be more flexible, and the strict limits between the status of a student and of an attendee should be reconsidered, especially in the performance quality criteria for institutions of higher education. Also, the HEIs should seek for more opportunities to plan studies in a flexible manner also for the students.

4. Quality assurance of micro-credentials

This chapter deals with the quality assurance of micro-credentials: summary of international experience and recommendations, as well as the evaluation of procedures for the assessment of the quality of higher education provided by HEIs in Latvia, which would be attributable to different types of continuing education courses/programmes.

4.1. International experience

The survey conducted among different countries as part of the MICROBOL project shows that the majority of countries monitor the quality of courses through both programme accreditation/evaluation and accreditation/evaluation of HEIs, while in a lower number of countries, it is monitored either through accreditation/evaluation of programmes or HEIs. The fact that micro-credentials are not explicitly mentioned in the national regulatory framework does not prevent most countries from considering them **implicitly covered by their existing quality assurance system for higher education.** At the same time, the majority of the countries have no national database of the micro-credentials offered, and information on micro-credentials and their quality assurance may be provided only by the educational institution itself (Lantero et al., 2021).

The ESG, which are applied to assess higher education institutions and quality assessment bodies within the European Higher Education Area, can be used also for the quality assurance of micro-credentials. The introductory part of ESG underlines the following: *"The ESG apply to all higher education offered in the EHEA regardless of the mode of study or place of delivery.* [...] The term "programme" [in the ESG] refers to higher education in its broadest sense, including that which is not part of a programme leading to a formal degree." Thus, the ESG apply to education programmes of any type and duration, which correspond to the level of higher education (starting from EQF Level 5). Furthermore, there is nothing that would prevent the ESG from being applied to education programmes delivered by HEIs, which correspond to a lower EQF level. This is supported also by the surveyed countries which agree that **the ESG are sufficiently comprehensive to be applied to micro-credentials.** The countries also consider that ad hoc external quality procedures (such as course/programme accreditation) are too burdensome to be applied to micro-credentials and **micro-credentials should be assessed as part of institutional evaluation** (Lantero et al., 2021).

Most quality assurance agencies noted that their **external quality assurance activities did not cover micro-credentials**, although a significant number of them have plans in that regard. 23% of the surveyed agencies noted that micro-credential offers are covered by their external quality assurance activities (e.g., the procedure for the assessment of the internal quality system also addresses the micro-credential offer), while only 15% have specific external quality assessment procedures for micro-credentials (EQAR, 2021).

The European policy debate is still ongoing as to whether the ESG should also be used as a basis for micro-credentials by other providers, e.g., training centres and associations. There are different opinions as to whether such education should be considered higher education. 15 surveyed agencies noted that they already have procedures for the assessment of certificates offered by non-HEI providers. However, these procedures are not always in line with the ESG (EQAR, 2021).

As for the quality assurance of **online** learning, there are no specific standards developed for this purpose at the European level. However, there are different recommendations, e.g., recommendations by the European Association for Quality Assurance (ENQA)⁴⁰ or the European Association of Distance Teaching Universities (EADTU)⁴¹. Moreover, the ESG are sufficiently general so as to be successfully applicable also to online learning.

⁴⁰ See: https://www.enqa.eu/publications/.

⁴¹ See: https://e-xcellencelabel.eadtu.eu/images/E-xcellence_manual_2016_third_edition.pdf.

The EC Consultation Group has drawn the following conclusions on the quality assurance of microcredentials (Shapiro Futures et al., 2020a):

- HEIs that are externally quality assured in line with the ESG should be regarded as trusted providers of micro-credentials. The Database for Quality Assurance Results (DEQAR)⁴² includes information on such HEIs.
- When delivered by higher education institutions, the same quality principles should be applied to micro-credentials as to higher education degrees.
- Further guidelines might be needed on how the ESG could be operationalised in the context of micro-credentials.

4.2. Experience of Latvia

Currently, the quality assurance system for higher education in Latvia consists of three procedures:

- 1) Licensing of all new study programmes.
- 2) Accreditation of study directions (which includes the assessment of the study direction and the relevant study programme).
- 3) Accreditation of the HEI.

Only the accreditation of study directions, which takes place every 2 or 6 years, depending on the shortcomings identified, is cyclical.⁴³

According to Kažoka, Silka, and Rauhvargers (2018), the accreditation of study directions (previously – the accreditation of study programmes) became the main quality assurance procedure in Latvia, as by 2010 all the existing HEIs had been accredited for an indefinite term. Thus, accreditation of HEIs is currently performed only for the newly established institutions or in extraordinary cases. This has led to a situation that there is a lack of a regular external quality assurance mechanism in Latvia that would look deeper into a strategic management, the internal quality assurance system, and the development plans at an institutional level (Kažoka et al., 2018). In order to address this issue, the Ministry of Education and Science (MoES) plans to implement cyclical institutional accreditation as of 2024 (Ministry of Education and Science, 2020).

The analysis of the wording regarding the institution of higher education and college, as well as the accreditation of study directions, provided for in the Law on Institutions of Higher Education and the legal provisions adopted by the Cabinet of Ministers, suggests that the regulatory framework for quality assurance of higher education has been developed, primarily focusing on study programmes and students, without considering continuing education provided by HEIs. The quality assurance of professional development programmes, continuing vocational education programmes, and non-formal education programmes are governed by other laws and regulations, which makes sense, given that these types of programmes have not been comparable to higher education level so far (starting from LQF Level 5).

The external quality assurance of continuing vocational education programmes, professional development programmes, and non-formal education programmes delivered by HEIs is carried out as follows:

- Pursuant to the Cabinet Regulation No. 618⁴⁴ of 6 October 2020, the accreditation of the relevant study direction provides assurance that also the relevant continuing vocational education programmes and professional development programmes can be accredited.
- In case of vocational continuing education programmes, the SEQS examines the application for accreditation of a study programme submitted by an accredited HEI, "if the educational institution delivers an accredited [...] continuing vocational education programme belonging to

⁴² See: https://www.eqar.eu/qa-results/search/by-institution/.

⁴³ Cabinet Regulation No. 793 "Regulations Regarding Opening and Accreditation of Study Directions" of 11 December 2018.

⁴⁴ Cabinet Regulation No. 618 "Procedures for Accreditation of Educational Institutions, Examination Centres, Other Institutions Specified in the Education Law, and Education Programmes, and Assessing the Professional Activity of the Heads of Educational Institutions" of 6 October 2020. See: https://likumi.lv/ta/id/317820-izglitibas-iestazu-eksaminacijas-centru-citu-izglitibas-likuma-noteiktu-instituciju-unizglitibas-programmu-akreditacijas.

the same education programme, which corresponds to the same or higher vocational qualification level, or a vocational higher education programme relevant to an accredited study direction, both corresponding to the Classification of the Latvian Education (Sub-Paragraph 44.5), or facilitated accreditation of continuing vocational education programmes may be carried out."

- In case of a professional development programme relevant to an accredited study direction, the HEI is not required to submit an application to the SEQS, as the information on the accreditation of the study direction relevant to the professional development programme is attached to the application for licensing of an education programme. In addition to the title of the relevant professional development programme listed in the SEQS information system, also the term of accreditation of the education programme must be indicated (Sub-Paragraph 44.9).
- The implementation of non-formal education programmes, on the other hand, does not even require the accreditation of study directions, as HEIs as registered educational institutions are entitled to deliver them without a license (Section 46 of the Education Law).

In the context of micro-credentials, as well as by widening the access to continuing vocational education at the higher education level, there will be a wider range of continuing education offers provided by HEIs at the higher education level. Therefore, it should be considered whether the external quality assessment of these education programmes should be part of quality assurance of higher education.

Questions and considerations when planning the quality assurance framework for micro-credentials.

1. To what extent the external and internal quality assurance system in higher education concerns continuing education provided by HEIs?

The task of institutions of higher education, which consists in implementing their internal quality assurance systems within the scope of which a policy and procedures for assuring the quality of higher education are established (Section 5, Paragraph 2^1), can be interpreted in its broadest sense, applying it also to micro-credentials at the higher education level.

Also, the laws and regulations clearly stipulate that the accreditation of institutions of higher education and colleges and the assessment of study directions must be carried out in accordance with the ESG⁴⁵, which may be interpreted with regards to both the standards referred to in the ESG and the scope defined therein. In accordance with the ESG, this document is applicable to all types of higher education and short programmes that do not lead to a degree.

All this suggests that the external quality assurance system in higher education, which plays an important role also in the internal quality system of HEIs, does not exclude continuing education offered by HEIs in Latvia, despite the fact that there is no detailed clarification thereof.

2. To what extent the accreditation of study directions concerns study courses and modules to be acquired by attendees?

Given that attendees usually acquire a certain study course or module together with the students, the attendees should have access to the same quality education as the students.

3. To what extent the accreditation of study directions concerns also other continuing education courses/programmes delivered by HEIs?

Currently, the assessment of study directions partly replaces the missing institutional accreditation. The accreditation of study directions includes not only the assessment of individual study programmes, but also the study direction as a whole, including its management, the efficiency of the internal quality assurance system and implementation of recommendations provided within the framework of the system, as well as its resources and provision⁴⁶. These factors undoubtedly affect the capacity of HEIs to deliver not only quality study programmes, but also to offer courses and modules of study programmes to attendees, as well as to implement other continuing education

⁴⁵ Paragraph 2 of the Cabinet Regulation No. 794 "Regulations on the Accreditation of Institutions of Higher Education and Colleges" of 11 December 2018; Paragraph 13 of the Cabinet Regulation No. 793 "Regulations Regarding Opening and Accreditation of Study Directions" of 11 December 2018.

⁴⁶ A detailed assessment methodology is outlined in the Guidelines for Drawing Up a Joint Report by the Experts Group on the Assessment of a Study Direction (2019). See: https://www.aika.lv/wp-content/uploads/2019/05/Studiju-virziena-novertesanas-ekspertu-grupaskopiga-atzinuma-izstrades-vadlinijas_2019.pdf.

courses and programmes. Thus, the assessment of the study direction may also include the assessment of the capacity of the HEI to provide continuing education and micro-credentials.

4. To what extent the external quality assurance procedures practically cover continuing education provided by HEIs?

In order for the experts in quality assurance to be able to analyse also continuing education provided by HEIs (at the higher education level or at all levels), it must be covered by the relevant methodology and regulatory framework. If micro-credentials were linked to specific study directions implemented by HEIs, they could practically be already clearly covered by the scope of external quality assurance in higher education, complementing the definition of the accreditation of study directions provided for in the Law on Institutions of Higher Education, accordingly (Section 1), which is currently applicable only to study programmes ("an inspection with the purpose of determining the [...] of an institution of higher education or college and the ability to implement a study programme corresponding to a specific study direction [...]", and complementing the guidelines developed by the Quality Agency for Higher Education (QAHE).

In the future, the role of HEIs in ensuring continuing education shall be taken into account when developing a quality assurance system and shifting to institutional accreditation.

Study outcomes

In the framework of the survey, the HEIs were asked about the way of assuring quality of learning within continuing education, asking them to select the statements they believed to be true. The responses of the respondents, i.e., continuing education providers at HEIs, reflect their understanding of and experience in application of quality assurance procedures of HEIs in continuing education. The responses are summarised in Figure 12.



Figure 12. Quality assurance of continuing education courses/programmes

As for the application of the **accreditation of study directions** to continuing education, 17 HEIs (less than half -40%) believed that the **accreditation of study directions completely covers (13) or partially covers (4) study courses and modules.** Only 6 HEIs (14%) considered the accreditation of study directions to be at least partially applicable to other types of courses/programmes.

The internal quality assurance system is applicable to continuing education more than the accreditation of study directions, especially in the context of study courses and modules (at least partially

-51% of HEIs). One third of HEIs considered the internal quality assurance system to be at least partially applicable to courses/programmes not related to a SP. Meanwhile, no respondent had indicated that the internal quality assurance system is not applicable to continuing education.

At the same time, many respondents noted that they **carry other – additional – activities for the quality assurance of continuing education** (15 HEIs or 35% in the context of study courses and modules; 18 HEIs or 42% in the context of courses/programmes not related to a SP). Moreover, **the HEIs do not tend to rely only on the lecturer and/or the demand in continuing education** (only 1 HEI responded in the affirmative), which suggests that the HEIs tend to assume institutional responsibility for continuing education.

Asked to provide comments, the HEIs mentioned the following quality improvement measures:

- Written feedback, including assessment questionnaires, upon concluding a course.
- Weightings applicable to salary thus incentivising the teaching staff to perform high-quality work.
- Additional external assessments, e.g., carried out by the Ministry of Health or the Maritime Administration of Latvia.

During the interviews, the representatives of institutions of higher education pointed out the role of internal coordination procedures and approaches ("internal quality grid") in quality assurance, especially the efforts to involve the best teaching staff. The interviewed representatives of institutions of higher education emphasised that their institutions are very interested in offering quality courses/programmes to maintain their prestige (all certificates bear the coat of arms of the institution of higher education). They explained that, in their opinion, the national procedures for licensing and accreditation of formal and non-formal education programmes are acceptable and sufficiently efficient. However, the most time-consuming and complicated stage is the development of new programmes, including their coordination internally, as well as with the representatives of employers and the founder, which in the context of institutions of higher education is the relevant ministry. This process often also includes coordination with all non-governmental organisations interested. Thus, the development of new continuing education programmes is more time-consuming for State-owned institutions of higher education than it is for the private ones. Several persons are in charge of delivering a course/programme in accordance with the internally established procedure: the person in charge of study organisation, the person in charge with the curriculum, the vice-rector, and the rector. At the same time, the representatives acknowledged that, despite the complex coordination process, it ensures the offered programme quality.

As for the external regulatory framework for initial coordination and quality assurance of microcredentials, the interviewed HEI experts believed that stand-alone licensing and accreditation procedures for micro-credentials would not be commensurate with the existing situation. One expert indicated the following:

"We are not able to manage the assessment of non-formal education. I cannot imagine a national mechanism that would ensure that."

The experts recommended HEIs to develop their internal system, assuming full responsibility for the delivery of micro-credentials.

One expert in vocational education believed that, for the time being, the accreditation of study directions does not fully guarantee that the professional study programmes will meet the profession standards and vocational qualification requirements. This issue should be addressed also in the context of micro-credentials.

Thus, instead of developing new stand-alone procedures for licensing and accreditation of microcredential programmes, the existing regulatory framework should be reviewed, in order to ensure that the HEIs assume responsibility for quality assurance of micro-credentials and that, in the context of vocational education, their compliance with requirements for a part of vocational qualification would gain more focus.

5. Aligning micro-credentials with the qualifications framework

International trends

The EC Consultation Group acknowledges that the inclusion of micro-credentials in NQFs is at an early stage. On one hand, some form of referencing of micro-credentials within the overall education and training provision would be useful. On the other hand, the international trends show that different approaches and processes have occurred (Shapiro Futures et al., 2020a). The report on the survey conducted among countries within the MICROBOL project suggests that **the majority of countries do not have micro-credentials referenced to the NQF.** However, there is consensus on the fact that if micro-credentials are referenced to the NQF, this would support transparency and recognition (ibid).

The fact that the micro-credentials are not yet referenced to the NQF is explained by the fact that it is a new topic that still needs to be discussed at a national level. Qualifications that are foreseen in the NQF generally have substantive sizes. Micro-credentials, when they are very small, would nevertheless gain relevance for personal and professional development. However, their referencing to the NQF should be optional. The report includes examples of different ways of referencing the micro-credentials to the NQF (Lantero et al., 2021):

- Referencing to any EQF level, except for the EQL Level 1 or 8, or only to a higher education level (5 to 8).
- Only those micro-credentials delivered by HEIs.
- Only those micro-credentials which form part of a study programme.
- Study courses or modules are referenced to the NQF level to which the study programme corresponds.
- Some non-formal education, vocational education, and adult education qualifications to contribute to their transparency at a national and European level and their recognition, respectively.

According to Oliver (2019), credit-bearing micro-credentials should be aligned to a NQF level. This is done by designing the main task for the assessment of the achieved learning outcomes to mirror the level of complexity and autonomy required in a typical unit in the formal qualification. However, qualification levels can be slightly confusing, except the terms Bachelor, Master, and Doctor, which seem to be universally understood. For simplicity, clarity and global understanding, these education levels should be used.

The EC Consultation Group (Shapiro Futures, 2020a) suggests differentiating two types of micro-credentials:

- 1) Micro-credentials issued by formal education institutions and can be aligned with the EQF (through NQFs) and ECTS (or other credit systems).
- 2) Micro-credentials issued by non-formal education providers. Further discussion is needed to identify standards for these micro-credentials.

Latvia

During the 10 years since the establishment of the LQF and its alignment to the EQF, the LQF has played an important role in the education and labour market in Latvia, increasing the importance of learning outcomes within the education system and supporting a curriculum more understandable and transparent for education stakeholders, employers, international partners, and the public in general (Ramiņa, Rutkovska, Labunskis, 2020). Currently, the level of qualification is indicated in the

supplement⁴⁷ to the diploma on higher education and all State-recognised documents⁴⁸ evidencing the acquisition of vocational education and a vocational qualification.

After conducting a survey on the role of the LQF (Ramiņa, Rutkovska, Labunskis, 2020), the Academic Information Centre came to the conclusion that although the level of awareness of the LQF in the public in general and among the employers is low, it is mostly associated with the recognition of diplomas and qualifications acquired abroad. According to those HEI representatives and employers who were aware about the LQF, the impact of the LQF is mostly evident the development of education programmes. During the interviews, the respondents also pointed out the significant role of the LQF in designing and developing outcome-based education. Thus, it can be concluded that also the referencing of microcredentials to the LQF would contribute to their recognition in both education and labour market.

The interviewed HEI experts expressed doubts as to whether the referencing of micro-credentials to the LQF brings any added value.

The interviewed experts in vocational education pointed out that the LQF level is already indicated in the sample modular vocational secondary education programmes, which should be indicated also for the acquisition of a component of the respective vocational qualification. They also mentioned their possible plans to complement the profession standards or vocational qualification requirements with the possible components of a vocational qualification. However, they should be coordinated with the relevant sector and serve for outreach purposes rather than be approved by the PINTSA and the Cabinet of Ministers, which would be disproportionately burdensome.

Similarly, if micro-credentials in Latvia were introduced as components of qualifications, this would facilitate their referencing to the LQF in accordance with the respective level of qualification.

⁴⁷ Cabinet Regulation No. 202 "Procedures by which State-recognized Documents Certifying the Acquisition of Higher Education Are Issued" of 16 April 2013. See: https://likumi.lv/doc.php?id=256157.

⁴⁸ Cabinet Regulation No. 451 "Procedures by which State-recognised Documents Certifying Vocational Education and Vocational Qualification and Documents Certifying Acquisition of a Part of an Accredited Vocational Education Programme Are Issued" of 21 June 2005. See: https://likumi.lv/doc.php?id=111580.

6. Conclusions, recommendations, and questions for further discussion

This chapter sets out the conclusions after properly addressing the questions of the study formulated in the task of the study. Recommendations provided in this report are summarised and the related questions for further discussion are formulated below.

6.1. Conclusions

6.1.1. What are micro-credentials? European context: Definition and description. Concept of micro-credentials in Latvian context

The concept of micro-credential first appeared in about 2013, often in connection with digital badges, and it has subsequently become synonymous with certificates earned through the massive open online courses (MOOCs). It is clear that the development of micro-credentials and digitalisation of continuing education offered by institutions of higher education are intrinsically linked, especially in the context of the development of micro-credentials available online which has been more active due to the Covid-19 pandemic.

Micro-credentials have proven to be beneficial in terms of the development of a lifelong learning scheme, the access to continuing education, and the upskilling of workforce. The institutions of higher education recognise that micro-credentials can also contribute to innovations in higher education, including the improvement of the curriculum, pedagogical innovations, application of new learning technologies, upskilling of the teaching staff of institutions of higher education, identification of new target groups, and the development of internal processes at institutions of higher education.

The term "micro-credentials" is now generally used to describe all manner of shorter form learning experiences, using a variety of names and brands of all types, modes, and sizes. Most European countries associate micro-credentials with study modules, study courses forming part of a degree programme (also those delivered online and offered additionally to the study programmes), as well as complementary courses developed for a specific purpose, and certificates.

While there is currently no common understanding of micro-credentials and it differs from country to country, some common characteristics can be identified: the length of learning activities – typically larger than a single course, but less than a full degree programme, labour market relevance, as well as a key role in ensuring lifelong learning, providing short and flexible learning pathways.

The development of micro-credentials has become a significant EU priority in education. In order to promote trust in micro-credentials, their wider use, and recognition, the EU intends to develop and offer a common approach to micro-credentials, including a common definition. Thus, micro-credentials could become a single EU certificate standard for short programmes offered by institutions of higher education. In order to adopt this framework and to support the recognition of short programmes offered by Latvian HEIs at an international level, **also Latvia should implement micro-credentials in line with the standards defined by the EU**.

Currently, the extended definition of micro-credentials offered by the EC Consultation Group is as follows:

"A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against certain standards. The proof shall be contained in a certified document that lists the following elements: name of the holder; achieved learning outcomes; assessment method; awarding body; qualifications framework level, where applicable; and credits gained. Micro-credentials are owned by the learner, are shareable, credit-bearing/portable and may be combined into larger credentials. Their quality is assured in line with harmonized quality standards."

In order to emphasize the key characteristic of micro-credentials, i.e., labour market relevance, the author suggests clarifying the definition as follows (option A):

A. "A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience <u>useful in the labour market</u>. These learning outcomes have been assessed against certain standards. A micro-credential is credit-bearing and may be combined into a larger credential. [...]"

In the context of the education system in Latvia, this definition is applicable to all levels of education (both continuing vocational education and higher education) and to any type of higher education programme (when developing micro-credentials on the basis of both academic study programmes and professional study programmes).

In Latvia, the use of learning outcomes on the labour market is most directly ensured by vocational education where labour market demand is ensured through a system of profession standards and vocational qualification requirements, in the development of which the representatives of employers are actively involved. Accordingly, the micro-credentials in the context of vocational education in Latvia could be defined more narrowly (option B)

B. "A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience useful in the labour market. These learning outcomes have been assessed against a <u>part of the profession standard or vocational qualification requirements</u>. A micro-credential is credit-bearing and may be combined into a larger vocational qualification."

There might be some issues with the **translation of the term "micro-credentials" into Latvian**, given that both the term "*mikrokvalifikācijas*" and "*mikroapliecinājumi*" are used in public communication so far. In English, the term "micro-credential" refers to both learning activities leading to a credential and credentials evidencing the learning activities and learning outcomes achieved during these learning activities. Also, in Latvian, the term "qualifications" has a wider meaning. Therefore, the author supports the **suggestion by the State Language Centre to translate this term in Latvian as** "*mikrokvalifikācijas*".

6.1.2. Which qualifications delivered in Latvia qualify as micro-credentials? Do the relevant laws and regulations (if any) currently regulate the mode of delivering micro-credentials?

In Latvia, **in the context of continuing education, the institutions of higher education and colleges typically offer stand-alone parts of study programmes (study courses or modules),** as well as other types of education programmes, which currently do not qualify as higher education programmes: **formal education programmes (continuing vocational education programmes, professional development programmes)** and **non-formal education programmes.** As for the regulated professions (e.g., in the field of pedagogy and healthcare), in some cases they may require mandatory professional development, certification, or recertification for the professional to be able to practice the respective profession.

The comparison of examples provided during the survey suggests that the short programmes offered by the Riga Graduate School of Law, which have been developed and offered as part of a development collaboration project, are the ones that resemble most the micro-credentials offered on international MOOC platforms. They consist of several study courses adapted to the needs of the short programme and its target audience, e.g., in a shortened form, where necessary, focusing on the necessary topics in the curriculum and complementing the programmes with study visits. Following the completion of these programmes, the learner is issued a certificate, which can be used later to earn a master's degree.

The compliance of continuing education courses/programmes typically offered by HEIs with the requirements outlined in the definition of micro-credentials provided by the EC Consultation Group is described in Table 8. This summary has been made, taking into account the current regulatory framework and analysing how easily the necessary changes could be made (including the responses provided by the HEIs in the survey and during the interviews). For instance, the description of the learning outcomes achieved can be easily attached to the certificate for the completion of an education programme, as it has been already drawn up while developing the study programme.

Having analysed the compliance of the most popular continuing education courses/programmes with the requirements for micro-credentials (see Table 8), the following can be concluded:

- A certificate of completion of a study course, module or set of modules qualifies as a microcredential in cases where the learning experience is oriented towards the labour market relevance (rather in the context of professional study programmes and possibly also academic study programmes).
- A certificate of a vocational qualification issued following the completion of a continuing vocational education programme may qualify as a micro-credential only in cases where it is established that the micro-credential is smaller than a higher education degree (and the study programme, respectively). If micro-credentials referred only to vocational education, only certificates for the acquisition of a component of qualification (following the completion of modules, sets of modules, or professional development programmes) would qualify as micro-credentials.
- A certificate issued following the completion of a **professional development programme** qualifies well as a micro-credential, including in case of the popular professional competence improvement programmes for educators.
- In certain cases, in terms of the curriculum, non-formal education programmes may be explicitly oriented towards labour market needs (e.g., non-formal education programmes for business managers offered by the School of Economics in Riga). However, this is not always the case. Furthermore, the non-formal education programmes currently lack substantial elements (especially regarding the requirements for quality assurance). If non-formal education qualified as micro-credentials, this would trigger the need for a stricter regulatory framework, which is not compatible with their non-formal character. Therefore, the idea of non-formal education programmes is not compatible with an overly burdensome regulatory framework, which is why they should better not qualify as micro-credentials.

Table 8. Summary of the relevance of different types of courses/programmes delivered by HEIs in continuing education to significant components of microcredentials

		Study course or module, or a set of modules	Continuing vocational education programme	Professional development programme	Competence improvement programmes for educators	Non-formal education programme
Short learning experience: a) Shorter than acquisition of a qualification in higher education		Yes	Yes	Yes	Yes	Yes
Short learning experience: a) Shorter than acquisition of a vocational qualification		Yes, if the set of modules to be acquired does not lead to a vocational qualification.	Less than a SP, but equal to a vocational qualification.	Yes	Yes	Yes
Labour market relevance		Not always	Yes	Yes	Yes	No (possible in specific cases)
Issue of a certified document		Certification issued by the HEI	State-recognized certification	State-recognized certification	State-recognized certificate	Certification issued by the HEI
the	Achieved learning outcomes	No, but perfectly possible.	No, but perfectly possible.	No, but perfectly possible	No, but possible.	No, but possible.
cluded in ment	Assessment method	No, but perfectly possible.	Yes	Yes (tests in the transcript of records)	No, but possible.	No, but possible.
aents inc docu	Credits earned	Yes	No, but possible.	No, but possible.	No, but possible.	No, but possible.
Elen	LQF level	No, but perfectly possible.	Yes (currently up to LQF Level 4)	Possible.		No
Credit-bearing, transferrable, possibility to combine into a larger credential		Yes	Possible	Possible	Possible	Possible
Quality assurance in line with harmonised standards		Yes	Yes (in case of a relevant accredited study direction)	Yes (in case of a relevant accredited study direction)		No

Fully compliant
Almost compliant (or easy to ensure compliance)
Partially compliant (or easy to ensure compliance)
Non-compliant (except for specific cases)
Non-compliant

The Parliament (*Saeima*) is currently discussing **amendments to the Vocational Education Law**, through which, if adopted, **micro-credentials and the relevant principles would be enshrined in vocational education at all levels**, without even mentioning the term "micro-credentials" (including a flexible modular approach to education programmes, the possibility to acquire a component of a qualification, improved recognition of units of learning outcomes, etc.). It may be assumed that a certificate evidencing the acquisition of a module and a certificate evidencing the acquisition of a component of a vocational qualification (to be awarded following the completion of several modules or a professional development programme) qualify as micro-credentials.

The amendments to the Vocational Education Law provide for a wider access to vocational education at the level of higher education, establishing that continuing vocational education programmes may lead to a vocational qualification in higher education up to LQF Level 7. It is intended to define professional development as type of vocational education that allows the learner to acquire or complement a component of a vocational qualification covered by the SQF.

The adoption of these amendments to the Vocational Education Law would allow the learners to acquire additional vocational qualifications they require, i.e., knowledge, skills, and competences, that would be assessed, credit-bearing, and certified in an official document, by acquiring the missing component and without duplicating the long vocational education programmes. It is especially important in the context of both the lifelong learning and a small labour market, where the required competences are often covered by different vocational qualifications. **Therefore, the adoption of these amendments would be highly recommendable.**

Continuing education offered by HEIs

Summary of the survey conducted among HEIs

The current situation regarding the continuing education opportunities in higher education is characterised by the outcomes of the survey conducted among HEIs:

- A total of 43 HEIs or 83% of all HEIs in Latvia participated in the survey. 24 of them were institutions of higher education and 19 colleges; 29 were State-owned HEIs, 13 HEIs founded by legal entities, and 1 branch of an institution of higher education abroad).
- Almost all HEIs provide continuing education opportunities. Only 1 institution of higher education and 4 colleges indicated that they do not offer continuing education.
- The majority of institutions of higher education and colleges offer non-formal education programmes (29 HEIs or 67%), study courses (25 HEIs), and professional development programmes (20 HEIs). Continuing vocational education programmes and modules are offered in relatively few cases (only one in every five HEIs).
- The labour market demand plays a significant role 56% of HEIs develop and deliver special programmes upon external request, while 37% of HEIs deliver education programmes that lead to certification of specific professions. Only 3 HEIs (7%) offer international certificates, and the same number of HEIs have commenced delivering MOOCs.
- The HEIs offer both short courses/programmes closely related to the study programmes delivered in terms of the curriculum (19 HEIs) and courses/programmes not related to study programmes (15 HEIs).
- According to the HEIs, the target groups of continuing education are mostly specific professionals, any adult learner, as well as graduates.
- Over the two years, the most popular mode of delivering continuing education courses/programmes has been the blended mode, combining both on-site and online learning.
- 40% of HEIs offer some continuing education courses/programmes free of charge, while 42% of HEIs provide tuition fee discounts in specific cases.
- The vast majority of HEIs intend to widen the continuing education offer in the next two years: 79% of the surveyed institutions of higher education and 74% of the surveyed colleges. Furthermore, a significant number of HEIs intend to widen their educational offer online: ¹/₂ of HEIs intend to increase the number of both blended and online courses/programmes only, while 40% of HEIs intend to increase the number of blended courses/programmes only.

- As for the main challenges and difficulties faced by HEIs when offering continuing education, the majority of the HEIs have mentioned the workload and lack of internal human resources, as well as insufficient financial support for adult education and a low demand. Only 7 HEIs (16%) had difficulties with too complex administrative requirements.
- The most frequently mentioned factors contributing to continuing education included:
 - Availability of human resources (additional staff for both the organization and delivery of study programmes).
 - Availability of financial resources (national support programmes, increase in the demand).
 - Demand (on the part of both the customers and learners).
 - Training (training seminars, training for continuing education providers on the development, licensing, and accreditation of programmes, consultations and recommendations on the necessary documentation and certificates, including the digital ones).
 - Time (new programmes approved in a timely manner and more timely information on the demand for EU-funded projects).

Summary of the interviews of HEI experts

During the interviews, the HEI experts explained that it is easier to outreach the attendees, as they are involved in the existing study programmes, and they learn together with the students. The offer of other types of education highly depends on the capacity of human resources – both the organisational workforce and the teaching staff. In order to contribute to the development of continuing education, the HEIs suggested:

- Including quality criteria in public procurements and avoiding from determining the lowest price principle as the main one.
- Collecting information on continuing education opportunities provided by all HEIs on a shared user-friendly platform and organising a common outreach campaign.

Conclusions

The outcomes of the survey and interviews conducted among HEIs suggest the following:

- 1. Almost all HEIs provide continuing education opportunities, and the educational offer is expected to increase in the following years. The digitalisation of continuing education opportunities is taking place and is intended, offering online and blended continuing education courses/programmes, possibly due to the Covid-19 pandemic. Thus, HEIs have a good potential to offer micro-credentials.
- 2. Continuing education courses/programmes that are oriented towards labour market relevance (e.g., programmes upon external request or professional development programmes for specific professions) are playing a significant role in the continuing education offer provided by HEIs.
- 3. Improvement of the internal capacity of institutions of higher education and development of/contribution to the external demand, including both financial and outreach incentives, is of great importance, in order to support the offer of continuing education (including micro-credentials) provided by HEIs.

6.1.3. Micro-credentials in Latvian education system: Recognition and quality assurance

Recognition (certificate, awarding of credits, description of learning outcomes and their assessment, the recognition process)

It results from the proposal for the definition of a micro-credential, as provided by the EC Consultation Group, that the proof evidencing the acquisition of learning outcomes shall be contained in a **certified document that lists the following elements: name of the holder; achieved learning outcomes; assessment method; awarding body; qualifications framework level, where applicable; credits gained**. This information could be included also in the certificate supplement, similarly as in the diploma supplement. Micro-credentials developed in close collaboration with employers, as well as an industry endorsement would help winning learners' confidence in the fact that micro-credentials have been developed to provide employment opportunities in the relevant field.

In view of the technological development and the growing prevalence of adult education worldwide, there is ongoing development and improvement regarding the **digital transcripts, identity verification, and digital credentials.** Since these solutions are improving and becoming more cost effective, the education providers should consider trialling or adopting these as they mature, especially in case of the Europass Digital Credentials Infrastructure (EDCI).

The awarding of **academic credits** for micro-credentials would allow to improve their recognition and increase the number of learners enrolled in the programme. Most of the European countries have micro-credentials expressed in ECTS. However, their range varies significantly. According to the ECTS User's Guide, the awarding of credits for micro-credentials relevant to a part of a study programme is perfectly possible.

In Latvia, academic credits are awarded following the completion of study courses and modules, in accordance with the Law on Institutions of Higher Education.

Description of learning outcomes is identified as critical information which the micro-credentials should include to facilitate their transparency, trust, recognition, and stackability.

Although the description of learning outcomes in the certificate of completion of a study course/module or other continuing education courses/programmes is not mandatory, **it is perfectly possible, as in many cases the learning outcomes are formulated** when developing the description of the education programme.

Another no less important issue is the **form of assessing the learning outcomes,** as the assessment of learners is an essential part of quality education. The micro-credentials should therefore include meaningful tasks, suited to the level and context of the particular educational experience, that allow students to demonstrate the learning outcomes. Accordingly, the recording of student attendance as the sole means of assessment would not be acceptable in the context of micro-credentials.

Certi	ficate, awarding of credits, description of learning outcomes, and their assessment
	Summary of the survey conducted among HEIs
 In ec M ar el 	Latvia, documents issued by HEIs following the completion of different continuing ducation courses/programmes are usually called either <i>"certificate"</i> or <i>"certification"</i> . Iany HEIs in Latvia also provide digital credentials (usually upon request). However, they be usually standard certificates converted to an electronic document and/or bearing an ectronic signature, in order to ensure remote work processes.
– Ti st H	he HEIs award credits only for some continuing education courses/programmes (other than udy courses or modules) and slightly more frequently for courses/programmes which the EIs consider to be closely related to study programmes (with credits ranging from 1 to 8).
– In ce fa	the context of study courses and modules, the description of learning outcomes in the ertificate or its supplement is provided by $\frac{1}{2}$ of HEIs (at least in certain cases), despite the ct that the description is optional. Also, it is more frequent than in the context of other purses/programmes.
- A ec ar cc m in	ttendance as the sole means of assessing learning outcomes acquired through continuing lucation is not a common method used by HEIs, especially in the context of study courses and modules. Slightly more frequently – in the context of continuing education purses/programmes (16% of HEIs). At many HEIs, the attendance is considered additional eans of assessment (at 53% of HEIs in the context of courses and modules; 1/3 of HEIs – the context of other courses/programmes). Also, many HEIs opt for standardised tests, ractical projects, and written term papers as the means of assessment. 10 HEIs have

Summary of the interviews of HEI experts

integrated traineeship also in their courses and modules.

- In order to support the awarding of credits, it would be useful to draw up an external regulatory framework or methodological material, which would serve as a guide for HEIs.

Conclusions

- 1. In Latvia, the HEIs have not yet commenced issuing digital credentials for the completion of continuing education courses/programmes, but they should be encouraged to do so. Possibilities to use the envisaged Europass EDCI improvements should be identified.
- 2. As for the awarding of credits and provision of the description of learning outcomes in the certificate of completion of continuing education courses/programmes, the HEIs in Latvia actually go beyond the scope of the legislation. An external regulatory framework or methodological materials clarifying this process would encourage the HEIs to be more active in this respect. It would not be burdensome for the HEIs to attach the description of learning outcomes to the certificate, as, in many cases, the HEIs describe them during the development of education programmes anyway.

The majority of European countries have implemented policies related to the **recognition** of microcredentials with the aim of both increasing learners' competitiveness on the labour market and recognising micro-credentials for academic purposes (slightly less frequently) and for further study (also in the form of recognition of prior learning). According to the EC Consultation Group, at the early stage, the recognition of micro-credentials could serve as useful standard procedures used to recognise learning experience acquired abroad. Procedures for the recognition of learning outcomes achieved through previous learning can be used for the recognition of certificates issued by other education institutions/training centres. Also, the recognition procedures should be adapted to micro-credentials, given that the existing procedures are too time-consuming and resource-intensive, and they will not meet the increasing demand.

The system for the recognition of learning outcomes achieved through prior learning and professional experience in higher education in Latvia has been operating since 2012. However, this process is not coordinated at a national level. The HEIs develop their own approach and practice, based on the regulatory framework and methodological recommendations drawn up by the MoES. The knowledge, skills, and competences acquired following the completion of a continuing education programme, professional development programme or a non-formal education programme and in other forms (e.g., through self-education) can be recognised, certifying the acquired parts of a study programme, which resembles partial recognition of a qualification.

The learning outcomes achieved following the completion of study courses and modules are creditbearing and stackable in accordance with the Law on Institutions of Higher Education.

Recognition process				
Summary of the survey conducted among HEIs				
 Continuing education courses/programmes related to study programmes in terms of the curriculum are also easier to recognise. As for active outreach of learners involved in continuing education, most HEIs take active measures to achieve it regarding the attendees of study courses and module. There are cases where the role of an attendee is limited to sole attendance of the study course, taking into account only the attendance, which indicates to misconception of the role of an attendee due to the semantics of the term "attendee". 				
Summary of the interviews of HEI experts				
The interviewed HEI experts suggested the following:				
- In order to facilitate the recognition of qualification components and learning outcomes achieved through prior learning, this process should be standardised, and it requires more				

coordination at a national level.

Given that the status of an attendee is often used to provide flexible learning pathways (which is relevant to adults with family and work obligations), the strict limits between the status of a student and of an attendee should be reconsidered, including in the performance quality criteria for institutions of higher education. Also, the HEIs should seek for more opportunities to plan studies in a flexible manner also for the students.

Conclusions

- 1. Micro-credentials as the "pathway to a higher education degree" usually work for the attendees of study courses and modules. The standardisation of the regulatory framework for the recognition of learning outcomes achieved through prior learning and more active coordination of this process at a national level would contribute to active recognition.
- 2. The strict limits between the status of a student and of an attendee should be reconsidered, seeking to provide flexible learning pathways for students and external incentives for HEIs regarding the outreach of attendees. Also, it should be evaluated whether the term "attendee" complies with the current pedagogical guidelines, given its passive semantics.

Quality assurance

As for the **quality assurance of micro-credentials,** the fact that micro-credentials are not explicitly mentioned in the national regulatory framework does not prevent most European countries from considering them implicitly covered by their existing quality assurance system for higher education. The ESG, which are applied to assess higher education institutions and quality assessment bodies within the European Higher Education Area, can be used also for the quality assurance of micro-credentials. The European countries also consider that ad hoc external quality procedures are too burdensome to be applied to micro-credentials and micro-credentials should be assessed as part of institutional evaluation. At the same time, most quality assurance agencies note that their external quality assurance activities do not cover micro-credentials, although a significant number of them have plans in that regard. 23% of the surveyed agencies note that micro-credential offers are covered by their external quality assurance activities (e.g., the procedure for the assessment of the internal quality system also addresses the micro-credential offer), while only 15% have specific external quality assessment procedures for micro-credentials.

In Latvia, the regulatory framework for the external quality assurance systems in higher education does not describe and clarify the quality assurance of continuing education in detail. At the same time, the internal quality assurance systems of HEIs play a significant role in the quality assurance of higher education, which undoubtedly affect the capacity and ability of HEIs to offer also continuing education. Also, the accreditation of the relevant study direction provides assurance that also the relevant vocational continuing education programmes and professional development programmes can be accredited in accordance with the facilitated procedure. Small changes to the regulatory framework and guidelines would facilitate the inclusion of continuing education, including the micro-credentials (relevant to the study directions) in the external quality assurance system. The role of HEIs in ensuring continuing education should be considered when developing quality assurance systems and shifting to institutional accreditation in the future.

Quality assurance

Summary of the survey conducted among HEIs

- Only 40% of HEIs (as continuing education providers) consider that the accreditation of study directions covers study courses and modules completely or partially.
- Only 14% of HEIs apply the accreditation of study directions (at least partially) to other types of courses/programmes.
- The internal quality assurance system is applied to continuing education more frequently than the accreditation of study directions, especially in the context of study courses and modules (at least partially by 51% of HEIs).
- At the same time, many respondents noted that they carry out other additional activities for the quality assurance of continuing education. Moreover, the HEIs do not tend to rely only

on the lecturer and/or the demand in continuing education, which suggests that the HEIs tend to assume institutional responsibility for continuing education.

Summary of the interviews of HEI experts

The interviews of HEI experts suggest that the current procedures for licensing and accreditation of continuing education programmes are acceptable and sufficiently efficient. However, the most time-consuming and complicated stage for State-owned institutions of higher education, when developing new programmes, is the internal coordination process, which, at the same time, ensures that the quality of programmes comply with the standards for institutions of higher education.

Conclusions

The outcomes of the survey and interviews conducted among the HEIs suggest the following:

- 1. The quality assurance of continuing education courses/programmes is more frequently part of the internal quality assurance system of the institution of higher education than the accreditation of study directions.
- 2. Many HEIs carry out additional activities focused specifically on the quality assurance of continuing education courses/programmes, which indicates that the HEIs tend to assume institutional responsibility for continuing education.
- 3. Instead of developing new stand-alone procedures for licensing and accreditation of microcredential programmes, the existing regulatory framework should be reviewed, in order to ensure that the HEIs assume responsibility for quality assurance of micro-credentials and that, in the context of vocational education, their compliance with requirements for a vocational qualification component would gain more focus.

6.1.4. Potential approach of Latvia for the introduction of micro-credentials in the LQF

The EC Consultation Group acknowledges that the inclusion of micro-credentials in the National Qualifications Frameworks (NQFs) is at an early stage. The majority of countries do not have micro-credentials referred to the NQF in cases where there are larger qualifications. However, there is consensus on the fact that if micro-credentials are referred to the NQF, this would support transparency and recognition. The fact that the micro-credentials are not yet referenced to the NQF is explained by the fact that it is a new topic that still needs to be discussed at a national level.

If micro-credentials in Latvia were introduced as components of educational qualifications (or only vocational qualifications), they could be easily referenced to the LQF in accordance with the qualification level of the relevant education. The indication of the LQF level in the certificate of completion of an educational programme would contribute to its recognition. In the context of vocational education, collection of and access to information on micro-credentials (as vocational qualification components) would be useful. However, this should be done for information purposes, without providing for a stand-alone time-consuming and representative coordination procedure like it is the case of vocational qualifications covered by SQFs and requirements for vocational qualifications. Otherwise, an inadequate administrative burden would be triggered.

6.2. Recommendations

Summary of recommendations provided in the Study Report:

- 1. To introduce micro-credentials in higher education in Latvia in line with the defined EU standards to facilitate the access to adult education and innovations in higher education.
- 2. To adopt amendments to the Vocational Education Law to establish the principles related to micro-credentials in vocational education, including modular principles for the implementation of educational programmes, vocational qualification components, and more efficient recognition thereof. To contribute to practical implementation of the relevant reforms in vocational education, especially in higher education.

- 3. Not to limit the possibility of using micro-credentials only to vocational education, given that there is also a potential to develop practical, labour market relevant micro-credentials on the basis of academic study programmes.
- 4. To collect information on continuing education opportunities offered by all HEIs on a shared user-friendly platform (preferably on an already existing one), and to implement a common outreach campaign.
- 5. To support the institutions of higher education in improving their internal capacity to develop and provide continuing education offers, which would involve organisation of the exchange of good practice, personnel training (e.g., on drawing up a regulatory framework and continuing education programmes, possibilities to use digital tools to facilitate the access to continuing education, and efficient use of human resources).
- 6. To encourage the HEIs to attract more attendees and learners in vocational education, including by taking into account the information on these learners included in the performance indicators of the HEIs. To make the learning pathways of students more flexible, given that the status of an attendee is more efficient than the status of a student in this respect.
- 7. To promote the increase of external demand for continuing education offered by HEIs, using education policy and support instruments, including financial and information tools.
- 8. To provide for quality criteria in public procurements on continuing education provided by HEIs and to avoid establishing the lowest price principle as the main one.
- 9. To ensure the possibility to issue digital credentials for completion of a continuing education course/programme, reviewing the regulatory framework and informing the HEIs thereof, if necessary. To consider the possibility to use the envisaged Europass EDCI improvements.
- 10. To develop an external regulatory framework or methodological material as to how to award credits and include a description of learning outcomes in the certificate (or its supplement).
- 11. To standardise the regulatory framework for the recognition of learning outcomes achieved through previous learning and to coordinate this process more actively at a national level.
- 12. To review the existing regulatory framework for external quality assurance of higher education so that it ensures that the HEIs assume responsibility for the quality assurance of micro-credentials as part of their internal quality assurance systems (and it could be verified through external assessment procedures). When assessing professional study programmes and the relevant micro-credentials, the quality assurance should be more focused on their compliance with profession standards (of requirements for vocational qualifications) and requirements for the relevant vocational qualification component. New stand-alone procedures for licensing and accreditation of micro-credential programmes would not be desirable, as they would be too burdensome for both the HEIs and quality assurance bodies.
- 13. To reference the micro-credentials to the LQF in accordance with the LQF level of the relevant largest educational qualification, while ensuring the learning outcomes of the respective level of education and appropriate methods for the assessment of learning outcomes.
- 14. To evaluate whether the term "attendee" complies with the current pedagogical guidelines, given its passive semantics.

6.3. Questions for further discussion and challenges

The further discussions on the development of micro-credentials in Latvia should be focused on addressing the questions below. In many cases, they also entail significant challenges.

Conceptual questions requiring agreement between the stakeholders

- 1. What is the base qualification that should be larger than micro-credentials: an educational qualification or, narrowing down the interpretation of micro-credentials, a vocational qualification (referring micro-credentials only to the vocational education system)?
- 2. In the context of vocational education, the awarding of a vocational qualification (or its components in the future) means that the education acquired is in line with the labour market requirements, which have been described in profession standards and requirements for vocational qualifications in collaboration with the representatives of employers and sectoral ministries. If the micro-credentials in Latvia were to be introduced in a broader sense (not

limited only to vocational education), should there be any conditions regarding their market relevance and involvement of employers, and if so, what would they be? How to earn employers' trust in micro-credentials offered outside the vocational education system?

- 3. Is it necessary define micro-credentials in the legislation separately as a special educational qualification or its status? Would it be sufficient to qualify the existing educational qualifications as micro-credentials, based on their compliance with the definition of micro-credentials (by complementing it with the missing elements, where necessary)?
- 4. How to practically implement the reform of vocational education in higher education, in accordance with the intended amendments to the Vocational Education Law? How to facilitate flexible learning pathways in higher education?
- 5. How to ensure quality assurance for those micro-credentials that are not relevant to the study directions implemented by the HEIs?
- 6. How to reference the micro-credentials not relevant to a larger educational qualification component to the LQF?

Questions related to the development of micro-credentials

- 7. How to implement micro-credentials and improve the regulatory framework, in order to ensure the transparency, credibility, and quality of micro-credentials and to facilitate their development and availability?
- 8. What incentives and support measures would be necessary to increase the commitment of HEIs to develop micro-credentials and actively offer them? How to ensure the capacity of HEIs to do so?
- 9. What would be the most efficient way of using the possibilities offered by digitalisation?
- 10. How to increase the demand? Is it possible to implement financial support programmes, and if so, what would they be? What would be the most efficient way of informing the HEIs about the continuing education offer, including the micro-credentials? How to encourage the employers to collaborate with HEIs to develop new, innovative, and labour market relevant short education programmes?
- 11. How to develop a framework and approach to micro-credentials so as to facilitate innovations in higher education, its digitalisation, quality, and availability?

The interviewed HEI experts suggested taking into account the following during the implementation of micro-credentials:

"Do not address the issue formally. Improve the existing system instead of inventing a new bicycle."

"Give the institutions of higher education the opportunity to be distinguished from any other provider of adult education."

"Collaborate with all stakeholders and hear out the suggestions of HEIs. If micro-credentials are to be applied also to other education providers, they should also be involved. The new system should be developed with joint efforts, as you cannot make someone do something that they do not want or are unable to do. They should work towards a common idea and pursue a common goal."

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Annexes

Annex 1

Questionnaire for institutions of higher education

Survey on continuing education at institutions of higher education

Responses are to be provided by those in charge of continuing education/continuing education providers at institutions of higher education.

Dear sirs!

The Academic Information Centre (AIC) is conducting a survey on continuing education opportunities provided by the institutions of higher education (HEIs) in Latvia.

This survey aims at identifying the situation in Latvia and participating in the EC public consultation on the development of micro-credentials (recognized proof of short, assessed learning experience), providing a data-based opinion and suggestions. The public consultation takes place, in order to draw up recommendations for the development and support of micro-credentials.

The survey outcomes will be disclosed in an aggregated form, and they will be provided to the Ministry of Education and Science (MoES), which intends to improve the regulatory framework for establishing micro-credentials in the education system in Latvia. The survey outcomes will be available and presented also to the HEIs and other stakeholders.

The survey covers short courses/programmes, e.g., study courses and modules offered in continuing education, as well as courses for secondary school pupils and adult learners. The survey does not cover higher education study programmes (1st level professional higher education programmes, bachelor's study programmes, etc.), even if the HEIs offer to acquire them in continuing education. If the HEI does not offer continuing education, please specify that in the questionnaire.

We kindly ask you to complete this questionnaire by 6 May 2021. It will take 10 to 40 minutes (depending on your possibilities to provide comments in detail). The data provided by the HEIs will not be disclosed to third parties.

For further questions, please contact Dr. sc. admin. Anita Līce (*contact information*), the contact person and person in charge of this survey.

Sincerely, Anita Līce

Type of HEI:

Institution of higher education (including a branch of a foreign institution of higher education)

College (including an agency of an institution of higher education implementing 1st level professional higher education programmes)

Ownership:

- State-owned
- Private (founded by legal entities)
- Branch of a foreign institution of higher education

1. Continuing education opportunities provided by the HEI

1.1. Does the HEI **provide** continuing education opportunities – short courses/programmes other than higher education study programmes?

Mandatory question.

Options (one option can be selected):

- Yes
- No (please, proceed to Section 5)

All further questions are optional:

1.2. What continuing education opportunities does the HEI offer? (Please select all categories relevant to one of the courses/programmes offered. Several categories may be relevant to one course/programme.)

Options (several options may be selected):

- Courses of study programmes.
- Modules or sets of modules.
- Short courses/programmes, which are closely related to a study programme in terms of the curriculum, but are shorter than a study course (e.g., includes a shortened curriculum of a study course or is relevant to a part of a study course).
- Courses/programmes not closely related to the study programmes delivered by the HEI in terms of the curriculum.
- Non-formal education courses (short courses oriented towards the interests and the demand).
- Professional development programmes (with a duration of 160 320 study hours, which lead to a certificate of professional development).
- Continuing vocational education programmes (leading to a vocational qualification at the level of secondary education or higher education).
- Massive open online courses (MOOCs).
- Custom-made education (e.g., learning based on the demand of public authorities or businesses).
- Training for the certification of specific professions, required to carry out the professional activity on the labour market.
- Training for the acquisition of an international certificate.
- Other:

1.4. How has the HEI delivered continuing education programmes over the past 2 years? Please, indicate all modes of delivering continuing education.

Options (several options may be selected):

- On-site only (learning materials can be provided electronically).
- Blended: partially on-site, partially online.
- Online only.
- **1.5.** Has the HEI intended to **broaden** the offer of continuing education **online** in the next year?

Options (one option may be selected):

- Yes, we will implement more blended learning (combining on-site and online learning).
- Yes, we will implement more learning only online.
- Yes, we will implement more both blended and online learning.
- No.
- I do not know.

Comments (if any):

1.6. What are the **target groups** of the continuing education courses/programmes offered by the HEI? *Options (several options may be selected):*

- Any adult.
- Own HEI graduates.
- Secondary school pupils.
- Specific professions (e.g., educators, medical practitioners, etc.).
- Unemployed persons, job seekers.
- Employers.
- Other:
- **1.7.** Does the HEI offer any continuing education courses/programmes free of charge? If so, please provide examples.
- **1.8.** Does the HEI provide study tuition discounts to any target groups? If so, please, provide an explanation/example.

2. Study courses and modules available to attendees in continuing education

If the HEI does not offer them, please proceed to Section 3.

- **2.1.** How many credits are awarded for one study courses or module? (Please indicate approximately from to.)
- **2.2.** Which **means of assessment** are used to issue a certificate of completion of a study course or module? (Please select all means used.)

Options (several options may be selected):

- Attendance (as the sole means of assessment).
- Attendance (as additional means of assessment).
- Standardised test.
- Practical project.
- Written term paper.
- Traineeship.
- Other:

2.3. Does the **certificate of completion of a study course/module** or its supplement include a description of learning outcomes?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

2.4. Does the HEI issue a digital credential for completion of a study course/module?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

2.5. Does the HEI offer the attendees to enrol a study programme for further studies after completing a study course/module?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.
- **2.6.** Describe the quality assurance of study courses/modules offered in continuing education. Please select all options that, in your opinion, are relevant (responses to this question will be disclosed only to the person in charge of the survey and analysed in aggregated form).

Options (several options may be selected):

- The accreditation of study directions FULLY COVERS this type of learning.
- The accreditation of study directions PARTLY COVERS this type of learning.
- The accreditation of study directions IS NOT APPLICABLE to this type of learning.
- The internal assurance system of the HEI IS APPLICABLE to this type of learning THE SAME WAY AS to any other STUDY PROGRAMME.
- The internal quality assurance system of the HEI is PARTIALLY APPLICABLE to this type of learning.
- The internal quality assurance system of the HEI IS NOT APPLICABLE to this type of learning.
- The HEI carries out other/additional activities (not applied in the study programmes) for the quality assurance of this type of learning.
- There are courses regarding which the HEI relies only on the lecturer and/or the demand. Other quality monitoring and assessment measures are not implemented.

Comments (if any):

3. Short courses that are related to a study programme in terms of the curriculum, but are shorter than a study course (e.g., include a shortened curriculum of a study course or is relevant to a part of a study course)

If the HEI does not offer such courses, please proceed to Section 4.

3.1. Does the HEI award credits for such courses?

Options (one option may be selected):

- Yes, for all.
- Yes, but not for all.
- No.
- I do not know.

3.2. How many credits are awarded for one course? (Please indicate approximately from – to.)

3.3. Which **means of assessment** are used to issue a certificate of completion of such study courses? (Please select all means used for such courses/programmes.)

Options (several options may be selected):

- Attendance (as the sole means of assessment).
- Attendance (as additional means of assessment).
- Standardised test.
- Written term paper.
- Practical project.
- Traineeship.
- Other:

3.4. What certificate (document) is issued by the HEI for completion of such courses?

3.5. Does the HEI issue also a digital credential for completion of such courses?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

3.6. Does the **certificate of completion of such courses** or its supplement include a description of learning outcomes?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

3.7. Do such courses **lead to further studies** at a study programme delivered by the HEI?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.
- **3.8.** Does the HEI offer the learners to enrol a study programme delivered by the HEI to continue the studies after completing such courses?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.
- **3.9.** Describe the quality assurance of such courses. Please select all options that, in your opinion, are relevant (responses to this question will be disclosed only to the person in charge of the survey and analysed in aggregated form).

Options (several options may be selected):

- The accreditation of study directions FULLY COVERS this type of learning.
- The accreditation of study directions PARTLY COVERS this type of learning.
- The accreditation of study directions IS NOT APPLICABLE to this type of learning.
- The internal assurance system of the HEI IS APPLICABLE to this type of learning THE SAME WAY AS to any other STUDY PROGRAMME.
- The internal quality assurance system of the HEI is PARTIALLY APPLICABLE to this type of learning.
- The internal quality assurance system of the HEI IS NOT APPLICABLE to this type of learning.
- The HEI carries out other/additional activities (not applied in the study programmes) for the quality assurance of this type of learning.
- The HEI offers this type of learning, regarding which the HEI relies only on the lecturer's ability to ensure quality assurance and/or the demand. Other quality monitoring and assessment measures are not implemented.

Comments (if any):

4. Continuing education opportunities not related to study programmes (e.g., self-developed courses, professional development programmes)

If the HEI does not provide such opportunities, please proceed to Section 5.

4.1. Does the HEI award **credits** for such courses/programmes?

Options (one option may be selected):

- Yes, for all.
- Yes, but not for all.
- No.
- I do not know.
- **4.2.** How many credits are awarded for one such course/programme? (Please indicate approximately from to.)
- **4.3.** Which **means of assessment** are used to issue a certificate of completion of such study courses/programmes? (Please select all means used.)

Options (several options may be selected):

- Attendance (as the sole means of assessment).
- Attendance (as additional means of assessment).
- Standardised test.
- Written term paper.
- Practical project.
- Traineeship.
- Other:

4.4. What certificate (document) is issued by the HEI for completion of such courses/programmes?

4.5. Does the HEI issue also a digital credential for completion of such courses/programmes?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

4.6. Does the **certificate of completion of such courses/programmes** or its supplement include a description of learning outcomes?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.

Comments (if any):

4.7. Do such courses/programmes **lead to further studies** at a study programme delivered by the HEI?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.
- **4.8.** Does the HEI offer the learners to enrol a study programme delivered by the HEI to continue the studies after completing this course/programme?

Options (one option may be selected):

- Yes.
- Yes, but not always.
- No.
- I do not know.
- **4.9.** Describe the quality assurance of such courses/programmes. Please select all options that, in your opinion, are relevant (responses to this question will be disclosed only to the person in charge of the survey and analysed in aggregated form).

Options (several options may be selected):

- The accreditation of study directions FULLY COVERS this type of learning.
- The accreditation of study directions PARTLY COVERS this type of learning.
- The accreditation of study directions IS NOT APPLICABLE to this type of learning.
- The internal assurance system of the HEI IS APPLICABLE to this type of learning THE SAME WAY AS to any full degree STUDY PROGRAMME.
- The internal quality assurance system of the HEI is PARTIALLY APPLICABLE to this type of learning.
- The internal quality assurance system of the HEI IS NOT APPLICABLE to this type of learning.
- The HEI carries out other/additional activities (not applied in the study programmes) for the quality assurance of this type of learning.
- The HEI offers this type of learning, regarding which the HEI relies only on the lecturer's ability to ensure quality assurance and/or the demand. Other quality monitoring and assessment measures are not implemented.

Comments (if any):

5. Other general questions

5.1. What are the main difficulties/challenges the HEI faced when providing continuing education opportunities? If you do not offer continuing education, please indicate the reason for that (responses to this question will be disclosed only to the person in charge of the survey and analysed in aggregated form).

Options (several options may be selected):

- Low demand or lack interest on the part of the customers.
- Lack of financial support from the State for adult education.
- Too complex administrative requirements at the national level.
- Too complex administrative requirements at the HEI level.
- Strategic objectives of the HEI.
- Insufficient support of the managerial staff of the HEI.
- Lack and workload of human resources.

- Other:
- **5.2.** Has the HEI intended to broaden the offer of continuing education over the next 2 years? *Options (one option may be selected):*
 - Yes.
 - Yes, under certain conditions (please, specify in the comment section).
 - No.
 - I do not know.

Comments (if any):

5.3. What measures should be taken for the HEI to be able to provide more continuing education opportunities?

Other comments on the survey topic or questionnaire (if any):

Your contact information (in case of further questions):

Annex 2

Guidelines for interviews with the experts of institutions of higher education

- **1.** Development of the continuing education offer, internal regulatory framework, and the assessment of the situation in Latvia.
- Orientation towards the labour market (LM). Does the HEI offer/advertise specific SCs, modules (e.g., those more demanded or more oriented towards the LM requirements)? If so, describe the process of taking the decision of which SCs/modules are to be offered actively in continuing education.
- Demand. What are the most popular forms of learning offered by institutions of higher education amongst the adult learners? Why? What outreach activities could the HEI carry out?
- Development of the offer of other courses. Describe the process of initiating other types of courses offered by the HEI. How are they regulated, coordinated, and registered internally at the HEI?
- What is the general situation in Latvia: Are the HEIs already sufficiently open to other target groups and short learning experiences? Should this be even specially promoted?
- How to strengthen the role of HEIs in continuing education? What are the main obstacles or tools facilitating it?

2. Opinion on micro-credentials

- Which continuing education courses/programmes offered by HEIs meets the definition of micro-credentials more accurately?
- Which micro-credentials are easier to recognise? Describe your actual experience with the involvement of attendees in study programmes at the HEI. Does the institution of higher education consider it a real opportunity in the student outreach? (Why yes/no?)
- Could the status of an attendee in Latvia be a real way of attracting more students?
- Would the enshrining of the new term "micro-credentials" in the regulatory framework be useful? Could this encourage the HEIs to participate in adult education more actively?

3. Suggestions for the implementation of micro-credentials in Latvia

- Learning outcomes and credits. Given that learning outcomes are described and credits are awarded also for SCs and modules, would it be useful also for other programmes? Would this contribute to the recognition of these programmes?
- Referencing to the LQF. Currently, only for study programmes. What is your opinion on referencing also shorter units of learning to the EQF? Would it be wort it? Would it bring any benefits?
- Quality assurance. What approach to the quality assurance of micro-credentials should be used?
- Recognition. Is the system for the recognition of learning outcomes achieved through prior learning currently efficient? Would it be necessary in Latvia to provide for the possibility that the recognition of a set of micro-credentials lead to a diploma?
- Approval of new programmes. Study programmes are approved by the Senate of the institution of higher education or the Council of the college (following an independent examination of the programme). What would be the procedure in case of micro-credentials?
- Your recommendations and suggestions to the MoES on the implementation of microcredentials in Latvia.

Annex 3

Examples of continuing education opportunities mentioned in the survey and during the interview with HEIs (selection)

	Descibility to a series study as summer and usedular involvements die study measurements
Non-formal education	Courses for the drivers and operators of the turntable ladder of the State Fire and Rescue Service (VUGD): English, German, official languages, as well as acquisition of computer skills for unemployed persons and jobseekers in collaboration with the State Employment Agency; programmes involving languages (English, Chinese, etc.), digital skills, communication skills, and personal development (sewing, meditation) for individuals; Latvian for remigrants and returnees; courses as part of culture projects; training on specific and current topics related to entrepreneurship and management for business managers.
Professional development	Management science in the field of firefighting (for those in charge of fire safety), accounting for beginners, digital marketing, computer skills for beginners, work with the museum stock, directing, and acting.
Continuing vocational education	Firefighter – rescuer of the Fire and Rescue Service, controller (internal affairs), border guard, activities of the outpatient medical assistant, use of the artificial circulation method in nursing practice, telemechanics and logistics leading to the qualification "Logistics Operator", energy and electrical engineering leading to the qualification "Electrical Engineering Technician'.
Programmes upon request by employers	Food technologies in fishing industry, foreign languages, a cynology programme, emotional intelligence – basis of employment and personal relationships, provision of first aid, training of electrical engineering technicians.
Certificates that can be used to acquire a master's degree	Advanced programme in European law and economics; intensive programme in European law and economics; intensive online programme in European law and economics. ⁴⁹
MOOCs	MOOC platform ⁵⁰ offering a supporting course in elementary mathematics. The course topics cover the knowledge required to successfully complete the mathematics programme of the 1 st study year at the RTU. They are open for both students from institutions of higher education and secondary school pupils who want to prepare themselves for an exam or test their knowledge regarding the mathematics programme implemented by an institution of higher education.
Continuing education opportunities in the maritime sector	Conventional maritime training courses, e.g., basic course in maritime safety, maritime security course for seafarers with security functions, GMDSS operator, engine room resource management, etc. Non-conventional training courses, e.g., Framo cargo pump system, pilot qualification improvement courses, etc. Individually designed courses, e.g., a continuing education programme for sailing instructors. Courses for the maintenance of qualification for boat masters and engineer officers. Professional development programmes with a modular system for engineer officers and boat masters, etc.
Recertification	Improvement of theoretical and practical competences required to resume the professional activity by medical assistants, nurses, and assistants in nursing.
Seminars	For pastoral workers (dialogue between theology and psychology, mental health and theology, sexuality and spirituality).
Interest-related education	Interest-related programmes for young children in form of a summer school – English, expressions of creativity, space school in collaboration with the Ventspils Board of Education.

 ⁴⁹ For more information, visit: https://www.rgsl.edu.lv/lv/programmas.
⁵⁰ For more information, visit: https://www.rtu.lv/lv/studijas/rtu-atverta-tiessaistes-platforma---mooc.