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Building an institutional ecosystem for continuing education



UNIVERSITÀ TELEMATICA
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Executive Summary

Universities are exploring effective ways to organize lifelong learning and continuous education, with extension schools/institutes/centres for continuing education emerging as a method. These schools/institutes/centres focus on developing programs for continuing education, professional development and micro-credentials. A Peer Learning Activity meeting of the MCE project highlighted the role of extension schools, particularly the "Institut für wissenschaftliche Weiterbildung (FeUW)," at the FernUniversität in Hagen, and aimed to compare it with similar institutions.

The meeting and the following discussions revealed that while many partner institutions utilize extension schools, some prefer alternative structures, such as decentralized approaches across faculties or centralized frameworks merging extension schools with the university. The involvement of industry in shaping continuous education varies, with some institutions collaborating closely while others do not.

Extension schools can operate within universities or as separate entities, offering flexibility in operations and staffing. All universities indicated that their CE courses are cost-covering by students and do not get subsidized by the government.

Across the MCE partnership, institutions are already integrating quality assurance for micro-credentials in their internal QA processes and looking towards guidance from external QA associations.

Most MCE partner countries lack a legal framework for micro-credentials, but institutions are collaborating to create a shared understanding and quality assurance processes. Challenges include the need for monitoring of micro-credential programs and balancing flexibility with efficiency. Despite these challenges, educational institutions are expanding their offerings in lifelong learning and micro-credentials, driven by regional interactions and increasing collaboration with industry.

Through these activities, we slowly see ecosystems around micro-credentials emerging. This creates interesting opportunities for mutual support and collaboration and calls for further international projects like MCE, enabling the dialog between HEIs and creating impulses for building ecosystems around micro-credentials, which would foster and boost collaboration between universities, public authorities, labour market organisations, social partners and other stakeholders.

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1. Introduction

The topic of micro-credentials has been investigated significantly over the past years, often spurred on by policy and funding initiatives from the European Commission, which defines micro-credential as “the record of the learning outcomes that a learner has acquired following a small volume of learning (EC 2021b, p. 14).

Building on many projects and initiatives (see e.g. E-SLP 2020, Henderikx et al. 2021, MICROBOL 2022), 10 partners have come together in the Erasmus+ funded project “Modular Continuing Higher Education by Micro-credentials (MCE)” (running from 1st of April 2022 till 31st March 2025) - under the coordination of EADTU - working on topics such as the learners’ perspective, and institutional, national and transnational contexts of micro-credentials and modular education. The partners are Università Telematica Internazionale UNINETTUNO, UNED, Universidade Aberta, FernUniversität in Hagen, Hellenic Open University, Open Universiteit, Open University of Cyprus, Kaunas University of Technology, Open University of Catalonia (UOC), and KU Leuven.

Within the MCE project, the FernUniversität is leading a work package on institutional leadership and micro-credentials (WP3). The objective of WP3 is to support university leadership in the development and progressive implementation of transformative institutional policies, strategies, and institutional preconditions for forward-looking CEPD and micro-credential programs and qualifications in response to the demands and expectations of learners, the economy, and society. Specifically, the objectives include comparing institutional policies, strategies, and frameworks for CEPD and micro-credentials in light of new perspectives on the transformation of higher education, taking the learners’ perspective into account as well as analysing and mapping the current institutional qualifications for continuing education and professional development and micro-credentials within the partnership. These objectives have been reached through one survey and two published reports (see Weiß et al. 2023, Zeman et al. 2023). Further goals are to harmonize and align micro-credentials with EU policy and contribute to building an institutional ecosystem for continuing education.

In order to accomplish the last of these objectives and to facilitate the mutual exchange of learnings and challenges across institutions, a Peer Learning Activity meeting was held on September 5th, 2024, dedicated to the topic “Building an Institutional Ecosystem for CEPD and Micro-credentials”. This report summarizes the key points from the meeting and is structured as follows:

- In the first section, we give background to the high-level authority meeting on building an Institutional Ecosystem, and the choice of the topic and focus of the discussions at this event.
- In the second section, we look at the methodology used for the event.
- The third section dives into the presentation held by Prof. Dr. Uwe Elsholz on extension schools and the case of the “Institut für wissenschaftliche Weiterbildung” (FeUW) (Continuing Education Institute) in Hagen (DE), focusing particularly on the structure and organization of the “Institut”.

- The fourth section looks at issues of quality assurance processes around extension schools, with the presentation, and following discussion.

2. Background

The MCE project's studies indicate that the institutions building an offering around micro-credentials are faced with a host of questions related to their organisation. (See Bruguera et al. 2022, Bruguera et al. 2023, Antonaci et al. 2023, Weiß et al. 2023, Zeman et al. 2023, Caforio et al. 2023). These questions occur because of the uncertain, unclear and often undefined status of micro-credentials with respect to other traditional offerings, such as Bachelor's and Master's study programs. Some issues that have been raised include:

- Funding of micro-credentials: Do micro-credentials have to be funded by individual investment from the learner? Are there possibilities for subsidies from governments or employers?
- Topics of micro-credentials: Are micro-credentials in line with existing study programs or complementary to these programs? Are they a unique offering directed by the labour market or initiated by faculty?
- Quality Assurance processes: Are quality assurance processes for micro-credentials in line with the traditional offerings, or are there other/special quality assurance processes for micro-credentials?

One possibility to consolidate the micro-credential offering is through the foundation of extension schools/institutes initiated by the university. These schools – centralized at the university or faculty-dependent – provide micro-credentials towards a targeted audience and with their unique offering of Continuous Education. One good/best practice example for extension schools is the “Institut für wissenschaftliche Weiterbildung (FeUW)” (see webpage: <https://feuw.fernuni-hagen.de/>), founded 2019 at the FernUniversität in Hagen, which was presented during the Peer Learning Activity by Prof. Dr. Uwe Elsholz.

The Peer Learning Activity centred around this case had multiple goals:

- To understand the purpose of the “Institut für wissenschaftliche Weiterbildung (FeUW)” i.e. “institute” or “extension school” and its relationship with the host university
- To understand the structure and organisation of FeUW and its ways of organising and offering micro-credentials
- To identify how other educational institutions, possibly similar to the FernUniversität, organise their micro-credential offering via extension schools/Institutes for Continuing Education
- To understand how internal processes of Institutes for Continuing Education/extension schools are changing, adapting and becoming more flexible to support micro-credentials
- To understand the institutional ecosystems that are emerging

3. Peer Learning Activity Methodology

The Peer Learning Activity was attended by 22 participants, representing the 10 MCE partner institutions. The attendees were a mix of institutional policy makers (vice-rector, department lead) or project leads with mandates over the implementation of micro-credentials at their institutions.

The meeting commenced with Prof. Dr. Uwe Elsholz, who introduced the case of Continuing Education in Germany in general and the case of Institut für wissenschaftliche Weiterbildung (FeUW) at the FernUniversität in Hagen in particular. Following this presentation, the participants were invited to share and reflect on comparable initiatives at their institutions, which were recorded in a Padlet. In the second part of his presentation, Prof. Elsholz talked about the quality assurance processes at the FernUniversität in Hagen, followed by a discussion on analogous processes at the other institutions. The meeting concluded with a synthesis of key points and final remarks.

In sections 4 and 5, we give a short summary of the topics presented and spend more time on the outcomes of the reflection moments and discussions. We conclude with overall observations and avenues for further work.

4. Continuous Education and Extension schools

Universities have been seeking the most appropriate organization to structure their offerings for lifelong learning and continuous education. One of these methods are extension schools, i.e. separate organizational units that hold a mandate to develop programs for continuous professional development and lifelong learning. Several MCE partner institutions work with extension schools, but some prefer other ways. Below, we describe the situation in each MCE partner institution.

FernUni

In Germany there is a special legal framework which strongly differentiates between undergraduate programs and continuing education at universities. While undergraduate programs lead to a (first) university degree (Bachelor/Master), continuing education is defined as advanced courses based on previous degrees (e.g., certificates, advanced Master's). Admission requirements differ between the two: For undergraduate programs university entrance qualification ("Abitur") is mandatory, for continuing education previous university degree and often work experience are prerequisite. Crucial difference lies in funding: undergraduate programs are typically funded by state funds and students are confronted with small tuition fees, in case of continuing education cost-covering is mandatory and therefore students encounter much higher fees. Regarding quality assurance there are also differences: undergraduate programs are accredited, in case of continuing education there are flexible regulations. FernUni has established the Institute für wissenschaftliche Weiterbildung (Continuous Education Institute) in 2019 for several reasons. One of the reasons was the decline of continuing education programs at the university. In order to halt the decline, the Institute specialized in continuous education programs was founded, which enabled more flexibility and agility in the processes of the administration, which are very slow and inert in institutions such as universities. The Institut für wissenschaftliche Weiterbildung makes it possible to be more agile and innovative in designing and implementation of continuing education programs. The Institut für wissenschaftliche Weiterbildung is an innovation lab for continuing education programs and micro-credentials. Another reason is legal: The Institute makes it legally possible for professors to teach in undergraduate programs and in continuing education.

The Institut für wissenschaftliche Weiterbildung is 100% subsidiary of the FernUniversität in Hagen. It stands for professional academic education. It specializes in certificate and master's degree programs, and it also offers micro-credentials.

UOC

At the Universitat Oberta de Catalunya (UOC), continuing education has been fully integrated into the university's structure. Initially, it was managed by a separate institution, but in line with a broader vision to centralize lifelong learning as a core mandate, both entities have been merged into one cohesive framework. As a result, UOC's continuous education is now a core part of its academic offerings, without relying on external institutions for the delivery of such programs.

Industries play a vital role in shaping UOC's micro-credential offerings, primarily through partnerships and alliances. Their involvement takes three key forms: collaborating in the design or teaching of the micro-credentials, certifying the micro-credentials to ensure they meet industry standards, and providing crucial labor market data to align the content with current and future market needs. The UOC's labour market research and analysis unit was created in 2022 in response to a challenge that all universities are facing. Developing and providing a range of courses that are relevant for their students and for the professionals that make up the labour market (see <https://www.uoc.edu/portal/en/metodologia-online-qualitat/estrategia/analisi-mercat-treball/index.html>).

To enhance the relevance of these micro-credentials, the UOC is exploring continuous engagement with companies and professionals. This dialogue is supported by both quantitative and qualitative data, which allows the university to evaluate and compare the skills offered in its programs with the needs and trends in the labor market. Furthermore, this collaboration would foster the creation of new micro-credential offerings and learning pathways, ensuring that UOC's programs remain adaptable and forward-looking in a fast-evolving professional landscape. In the 2024/2025 academic year UOC will be offering 65 micro-credentials for the development of key competences aimed at improving employability, training or updating in future professional profiles (reskilling and upskilling) and acquiring skills to address current and future challenges in our society,

OUNL

At the Open Universiteit (OUNL), the institution also has a department dedicated to lifelong learning, which primarily functions as a broker between the university's formal education offerings and industry. Unlike departments that actively develop educational content, this team focuses on facilitating connections between academic faculties and businesses. This intermediary role is essential because OUNL's educational focus is deeply rooted in lifelong learning, ensuring that its programs meet evolving market needs.

The department includes account managers who engage with industries, either by reaching out to them or responding to requests from businesses. However, there is a growing belief within the institution that industries should have a more integrated role in the educational process. This would foster a stronger link between education and industry, allowing for a deeper connection between what is taught and the skills required in the workforce. Such an approach would increase the value of education for both learners (by equipping them with relevant, in-demand skills) and for employers (by providing a talent pool better aligned with their needs).

UNED

At UNED, continuous education is structured around two key pillars: the University Institute of Distance Education, which focuses on internal training and research in the field of distance education, and the Continuous Education Program, which offers a variety of courses tailored to the needs of institutions, companies, and social demands. Companies and institutions play a crucial role in this ecosystem through formal agreements that enable collaboration. These partnerships often extend to external professionals and subject matter experts, who may

participate in courses as instructors, enriching the learning experience with real-world expertise.

While companies are involved, it is typically institutions and associations that show greater interest in forming these agreements. The primary participants in UNED's continuous education programs are individuals who seek to enhance their professional qualifications, either to secure employment or to improve their job prospects. This dynamic ensures that UNED's continuous education offerings are aligned with both societal needs and the professional aspirations of learners, providing practical skills and knowledge relevant to today's workforce.

KTU

At Kaunas University of Technology (KTU), the newly established Centre for Lifelong Learning is focused on coordinating educational offerings from various faculties and securing funding opportunities through partnerships with businesses and government programs. This center plays a critical role in streamlining the university's continuing education initiatives, ensuring that they meet both academic standards and industry demands. Further details about its activities can be found on the dedicated webpage: up4skill-en.ktu.edu.

KTU has a long-standing tradition of collaborating with industry partners, and many of its continuing education programs are designed to address the specific needs of the industry. This close cooperation ensures that the training provided is directly relevant to current labor market demands. Moreover, with the introduction of the national platform kursuok.lt, KTU has emerged as a leading provider of continuing education, offering training programs that are frequently attended by individuals whose workplaces require them to enhance or update their skills. This dual focus on industry collaboration and national-level coordination strengthens KTU's role in supporting lifelong learning and workforce development.

HOU

At the Hellenic Open University (HOU), the Lifelong Learning Center (KEDIVIM) plays a pivotal role in offering all lifelong learning and continuous education programs. These short programs are either online or blended, providing up to 20 ECTS credits, and are designed to cater to diverse learning needs in a flexible and accessible manner. HOU, as an open university, also offers formal undergraduate and graduate degree programs through its four faculties, with undergraduate programs ranging from 90-120 ECTS and graduate programs requiring 240 ECTS.

The KEDIVIM is managed by a dedicated Managing Board that includes representatives from all four faculties and is presided over by a Vice-rector. Additionally, a faculty member serves as the Director of Studies, overseeing academic aspects. This Board is responsible for reviewing and approving proposals for new short programs. What makes this system inclusive is that anyone, not just HOU staff, can submit a proposal for a new program, provided they meet the qualifications. The individual proposing the program must act as its coordinator, and those eligible to teach must be registered in the Registry of Adult and Lifelong Learning

Educators. Proposals for these programs can come from HOU staff, staff of other universities, or any PhD holder, including researchers and professionals.

While industries are typically not directly involved in the creation or teaching of these programs, they can sometimes participate as partners. Coordinators may also seek industry support for specific programs, ensuring that the content remains aligned with the evolving needs of the workforce. Once a program is completed, it undergoes evaluation by the university's Internal Evaluation Unit, ensuring a consistent standard of quality. For more information, the KEDIVIM website can be accessed here: (<https://kedivim.eap.gr/>).

OUC

The Open University of Cyprus (OUC) has a Centre for Vocational and Lifelong Learning. Information: <https://www.ouc.ac.cy/index.php/en/studies/studies-lifelong/kedma-gr>

The Centre's mission is to build a bridge of communication with society at large and fulfill rapidly changing educational needs, by offering programs in vocational education. The subjects of those programs are relevant to the focus areas of the University's three Faculties, and they are taught by acclaimed academic faculty. The Centre provides multi-operational educational programs and may also offer tailor-made programs to address the educational needs of specific organizations. Programs can be funded by the Human Resources Development Authority of Cyprus (HRDA), as the Centre has been accredited as a Vocational Training Centre by the above-mentioned Authority. The Center offers professional development courses / programs of short duration so far online. The Programs offered by the Center are approved by an internal OUC Committee. Topics / courses can be proposed by faculty or adjunct faculty members of the Open University of Cyprus for the time being, not by external stakeholders.

Moreover, in the context of Lifelong Learning, OUC offers all Modules/Courses of its Undergraduate (Bachelor) and Postgraduate (Master) Programs of Study as Stand-alone courses, and people interested to enroll in only 1 or more courses can do so, without the need to enroll/commit to the overall Program. Once a course is successfully completed, participants are awarded a Certificate of Completion and the relevant ECTS, which they can in the future apply to have them recognised if they wish to enroll to the overall Program of Study. The Open University of Cyprus is currently drafting a new policy for Microcredentials and MOOCs to streamline its operations.

UNINETTUNO

At UNINETTUNO, continuous education is managed through a separate entity that operates in collaboration with the university. This structure allows for a focused and streamlined approach to delivering short programs, particularly in the area of micro-credentials (MCs). One of the key successes in this domain has been the development of a series of short learning programs in partnership with a major Italian enterprise. This collaboration is governed by a partnership agreement that is regularly updated on an annual basis, ensuring that the programs remain relevant to the evolving needs of the enterprise and the industry at large. Each year, new programs and subjects are introduced, reflecting both technological

advancements and market trends, further reinforcing UNINETTUNO's commitment to providing flexible, industry-aligned educational offerings. This approach not only strengthens ties between academia and industry but also ensures that learners are equipped with up-to-date skills and knowledge that meet the demands of the labor market.

UAb

At the Universidade Aberta (UAb) in Portugal, lifelong learning (LLL) is an integral part of the university's educational offerings, managed through a dedicated Unit responsible solely for non-degree studies, including short learning courses and micro-credentials (MCs). Unlike many other universities in Portugal, which may not have a unit specifically focused on LLL, UAb has been pioneering the implementation of micro-credentials for several years, making it a key player in this domain.

In UAb's MC programs, various institutions play an active role in shaping the curriculum. Although industrial collaboration is still limited, institutions from sectors such as law enforcement and tourism have been instrumental in helping to design courses that meet their specific needs. These institutions contribute not only to course design but also assist in preparing learning materials and, in some cases, even participate in teaching. This collaboration ensures that the micro-credentials offered are highly relevant, addressing practical needs within these sectors and aligning UAb's programs with the professional requirements of its institutional partners.

KU Leuven

At KU Leuven, the central support unit plays a crucial role in overseeing processes related to lifelong learning (LLL), ensuring that these offerings are an integral part of the university's academic framework. The comprehensive range of lifelong learning opportunities available at KU Leuven is accessible through the KU Leuven Continue platform: <https://www.kuleuven.be/english/continue>. This platform reflects KU Leuven's commitment to making continuous education (CE) a vital component of its educational portfolio.

The organization and delivery of continuous education at KU Leuven is decentralized across the various faculties, departments, and institutions within the university. Each faculty and department maintains direct relationships with industry and professional organizations, facilitating collaborations that ensure the courses offered are aligned with market demands. Continuous education programs are frequently developed in partnership with companies or other organizations, allowing for a dynamic exchange of expertise.

KU Leuven maintains strong connections with industries and is consistently open to new partnerships. This enables the university to offer programs that are responsive to the needs of the workforce and evolving market trends, ensuring that learners receive the most relevant and up-to-date education possible.

4. Organisation and Structure of Extension schools

Representatives of all institutions were requested to share comparable institutions or organizations at their universities, to discuss how they are organized to offer micro-credentials. Specifically, they were requested to consider the following guiding questions:

- Do you have structures similar to “Institut für wissenschaftliche Weiterbildung” at FernUniversität in Hagen in your countries? What do they look like? Who is involved in their organization?
- How is industry involved in these structures in your country? How should they be involved? How could they be involved?

All participants were requested to note down their reflection in a shared Padlet and a plenary discussion followed considering the notes. A thematic analysis of the Padlet notes was conducted and complemented with further specifications from the recording of the discussion.

The discussion highlighted the following differences in the organization of continuous education and lifelong learning.

Legal entity of the extension school. The extension school can operate from within the university or exist as a separate legal entity. Considerations to choose for a separate organization are increased flexibility in operation, ability to recruit dedicated staff and flexibility to choose topics closer to the needs of industry. Considerations for an organization within the university are, among others, the ability to a more consolidated offering stretching from Bachelors’ and Masters’ study programs to Continuous Education and common branding and marketing.

Role of faculty in Continuous Education. Involvement of faculty in CE is a prerequisite for most universities in the MCE project. Operationally, this means the faculty is the instigator of a course, and often part of the quality assurance process. Continuous Education can work with regular teaching staff, or with dedicated staff who develop courses, micro-credentials and other forms of education. Additionally, guest lecturers can be attracted to develop and give certain parts of the courses, providing new perspectives for students.

Cooperation with industry. Continuous Education primarily targets students who are working and want to develop their skills and knowledge in line with industry needs. This requires close collaboration with industry. However, the examples in the MCE project show that this is not straightforward. Although nearly all universities have ongoing collaborations and partnerships with industry partners (corporations, industry sector organizations, associations, etc.), this does not always translate into co-design or co-development of study programs.

Cost-covering/funding courses. All universities indicated that their CE courses needed to be cost covering and do not get subsidized by the government.

Status of student enrolled for CE. Part of the discussion related to the status of the students enrolled in CE courses. In some universities, students of CE have the same access to resources (e.g. library services, internet services) as students in other larger programs, which has financial consequences for the university. Many universities are looking into a unique student category for CE students.

Various roles of industry. The discussion highlighted the various roles industry can take in a micro-credential ecosystem. They can be the provider or co-creator of micro-credential courses, but also be the consumer as employers who finance the upskilling of their employees. Both situations require different interaction processes with the university.

Target group of the CE. Finally, it was also discussed who the target groups are of extension schools and similar departments. As the employers can be funders, they form a central target group, who are not always on board. However, motivation for continuous education is often higher with the individual learner.

6. Quality Assurance for micro-credentials at Extension schools

In a second reflection exercise, the representatives of all institutions were asked to consider the quality assurance processes for micro-credentials. Specifically, they were asked to reflect on these guiding questions:

- What are the provisions for recognition of micro-credentials in your country? If none, what should there be?
- What are the challenges you see for internal QA processes around micro-credentials in your institution? What are the challenges you see for external QA processes around micro-credentials in your country?
- Which organizational activities support the development of short programs? What is the role of faculty here?

All participants were requested to note down their reflection in a shared Padlet and a plenary discussion followed on the basis of this Padlet.

A thematic analysis of the Padlet notes was conducted and complemented with further specifications from the recording of the discussion. Below, the main themes will be presented for each question.

6.1. Provisions for recognition of micro-credentials

In **Germany**, the situation regarding micro-credentials is still in need of clarification. There are currently no clear state regulations concerning the use of the term "micro-credential." It is important for the state to establish regulations to ensure consistency and recognition of micro-credentials across institutions, helping to standardize their value and the skills they represent. However, there are some independent associations that have developed

recommended guidelines and frameworks for micro-credentials. The Institute at FernUni uses such a recommendation from the German Association for University Continuing Education and Distance Education e.v. (DGWF) to structure their micro-credential offering (see DGWF 2023). According to DHWFs Recommendation the regulations of the respective state university laws are binding for continuing education programs and certificate/part-time programs in the sense of modular studies. In the case of such programs with less scope than a complete degree program, some federal states provide freedom of choice for awarding credit points (CP) according to the European Credit Transfer System (ECTS). One credit point must equal a workload of at least 25 and no more than 30 hours. Certificates can be combined in larger degrees and credited to degree programs (accumulation), provided there is a relation in terms of content and a logical combination of the acquired competencies. There is a wide variety of designations resulting from market requirements and specific market experiences of the higher education institutions. The higher education institution offering the program selects the designation according to its respective marketing strategy and target group, among other things. According to German Association for University Continuing and Distance Education Recommendation certificates for which students acquire up to 9 ECTS credits can be referred to as micro-credentials.

In **Greece**, as in **Cyprus**, there are no specific provisions for micro-credentials, and by law, only the Hellenic Open University (HOU) can award lifelong learning certificates. However, there is a growing recognition that a national framework should be established in alignment with the European framework to ensure that micro-credentials are recognized across Europe. The Hellenic Confederation of Professionals, Craftsmen, and Merchants (GSEVEE), representing SMEs, is also working towards establishing micro-credentials. Key factors to consider in this process include the quality of training and assessment, the number of ECTS awarded, the institution offering the micro-credentials, and the recognition by the industrial sector.

In **Flanders**, there are currently no regulations from the Flemish government on micro-credentials, though efforts are underway to develop them. The Flemish government is working towards creating a framework that will likely address the growing demand for standardized micro-credentials and their recognition across institutions.

In the **Netherlands**, micro-credentials are seen as powerful tools, especially when their quality is assured according to a clear agreement. The value and content of a micro-credential are transparent, allowing learners to build upon them further in their educational or professional journey. Recognition by employers is not seen as an issue, as OUNL's courses, which are very similar to micro-credentials, already receive broad recognition. The focus is on continuing education, and the quality assurance system should result in a valid set of descriptions that include the level, orientation, size, content, and awarding institution.

In **Portugal**, micro-credentials are still relatively unknown, both among the general public and within the academic staff at universities. There is no national law governing micro-credentials, and higher education institutions are currently responsible for their accreditation and certification. As awareness grows, it will be important to establish a more standardized approach to micro-credentials at the national level.

In **Catalonia**, micro-credentials at UOC are awarded to students who complete short courses, ranging from 1 to 6 ECTS. These courses can either be part of a larger degree or master's program or independent offerings. The credits earned through these courses can be recognized in longer programs if they are approved by the faculty, allowing for flexibility in academic pathways.

In **Lithuania**, the development of micro-credentials is still in its early stages, and formal recognition processes are not yet fully standardized. Lithuanian higher education institutions are beginning to offer micro-credential programs in alignment with EU recommendations. For successful recognition, Lithuania will need to establish legal frameworks that integrate micro-credentials with traditional qualifications and align them with labor market demands.

In **Spain**, the Ministry of Education is actively promoting the implementation of micro-credentials. At UNED, there are specific rules in place to organize these credentials, and the number of ECTS awarded is flexible. This proactive approach reflects the increasing importance of micro-credentials in the Spanish education system, particularly in enhancing lifelong learning opportunities.

Overall, apart from Spain, none of the MCE partner countries has a legal framework in place. However, to facilitate the advancement in micro-credential offerings, institutions are teaming up with other organizations and associations, to build frameworks bottom-up. This creates a much-needed shared vocabulary around the term “micro-credential” and the processes around micro-credentials.

6.2. Challenges for internal QA processes and external QA processes around micro-credentials

Across the MCE partnership, institutions are already integrating quality assurance for micro-credentials in their internal QA processes and looking towards guidance from external QA associations.

QA of the course portfolio of the Institut für wissenschaftliche Weiterbildung in Hagen (**Germany**) may be summarized as follows: Based on the Higher Education Act (NRW) and the recommendations of the DGWF (Deutsche Gesellschaft für wissenschaftliche Weiterbildung und Fernlehre) all of the ECTS awarding courses in continuing education have defined admission requirements, mandatory assessments / exams, a module manual, exam regulations, and an individual evaluation plan. All programs are backed by university professors (as scientific leaders) and faculties have to approve new programs. Micro-credentials are modularized up to a workload of 5 ECTS credits to be compatible with study programs offered by the FernUniversität. Most programs are structured in Basic Modules to give a profound knowledge base. Elective Modules can be individually chosen and stacked to different stages of certification.

In **Portugal** at UAb, the quality control process for micro-credentials (MCs) is entirely internal, following the same procedures applied to other university courses. Proposals for MCs are

analyzed and approved by the scientific departments and the University's Scientific Council. After course completion, trainees provide feedback as part of the final evaluation process. Currently, the national external quality assurance (QA) agency in Portugal only oversees degree programs, and there are no plans to extend its remit to micro-credentials.

In **Flanders**, at KU Leuven, the quality assurance for micro-credentials is also currently managed internally. The process includes an application form and a mandatory survey of participants, but there are no external quality control mechanisms in place yet. As MCs gain more traction, it is possible that external QA frameworks will be developed, but for now, internal processes ensure quality.

In **Greece**, the Hellenic Open University (HOU) has already established a comprehensive procedure for proposing, selecting, promoting, implementing, and evaluating micro-credential courses. The institution applies similar procedures to those used for its formal education courses, ensuring consistency in quality. At the national level, there are no specific QA provisions for micro-credentials, but HOU believes that institutions should retain the flexibility to implement their own QA processes. It follows a principle that while the state could set a framework and supervise its application, the market should play a significant role in determining what constitutes a high-quality micro-credential. In this regard, vocational education and training (VET) providers, who have extensive experience in market-driven education, could serve as valuable resources.

In the **Netherlands**, the issue of quality assurance for micro-credentials is more complex. Current regulations require that all micro-credentials be assessed by a national institute to determine their level - a process that is often costly and time-consuming. Institutions are not allowed to define the level themselves. This has raised concerns about the balance between administrative costs and the benefits of offering micro-credentials. Although a governmental framework for micro-credentials is in development, it is expected to take at least another year before it is fully implemented.

At UNED in **Spain**, there is an internal regulation specifically for managing micro-credentials. The university's continuous training service is responsible for supporting and managing these courses without rigid deadlines. UNED also emphasizes the importance of aligning micro-credentials with the European Competence Framework to promote equivalence and recognition of training content across Europe.

In **Catalonia**, at UOC, the Quality Department is developing a specific quality process for continuing education programs, including micro-credentials. UOC has already implemented internal regulations for micro-credentials, ensuring that quality standards are met. The university is actively working to align its offerings with internal QA processes that mirror those applied to its formal degree programs.

At Kaunas University of Technology (KTU) in **Lithuania**, the main challenges at the institutional level include the lack of established standards for micro-credentials, difficulties integrating them with existing curricula, and challenges around assessment and recognition. Externally, KTU faces regulatory gaps, unclear accreditation procedures, and issues with employer and

stakeholder recognition of micro-credentials. Additionally, monitoring and review processes for these new credentials are still evolving, making it more difficult to ensure consistent quality.

The Open University of **Cyprus** (OUC) has a lot of Adjunct Faculty members (Tutors). A potential challenge for micro-credentials is that if offered by adjunct faculty as opposed to permanent faculty, they will require closer monitoring than usual.

Some specific challenges on QA were also identified in the discussion and on the Padlet. As the trainer pool for micro-credentials is growing, one challenge might be the need for more rigorous monitoring compared to courses taught by permanent faculty. Additionally, the need for balancing flexibility with efficiency in process was also mentioned as a key challenge. Overall, while internal QA processes for micro-credentials are in place across many institutions, external regulatory frameworks are either lacking or still in development.

6.3. Organizational activities support the development of short programs

The MCE partner institutions are also considering how their organizational activities and processes need to be adapted to deal with a new more agile and flexible form of educational program, such as a micro-credential. In the discussion, following the presentation showing how **FernUniversität** adjusted organizational activities through the foundation of Institute for Continuing Education, we looked at how other institutions are adapting, how their programs are being created and designed and who is involved in these processes.

At **UOC** in Catalonia, the Labor Market Analysis Unit, created in 2022, plays a crucial role in supporting the development of educational programs. One of its key activities is the production of interactive labor market reports for the university's various faculties. These reports link each of UOC's programs with the competencies that the labor market demands from graduates. This data-driven approach not only helps to refine existing programs but also provides valuable insights for creating new training opportunities, such as micro-credentials (MCs), tailored to market needs.

At **UNED** in Spain, a vice-rector oversees all continuing education activities, supporting the development and organization of courses. The faculty does not play a direct role in the process. UNED uses the same platform for its continuing education courses as it does for its other educational offerings, streamlining the process and ensuring consistency across different types of programs.

At **Kaunas University of Technology (KTU)** in Lithuania, the university operates a separate platform dedicated to MOOCs and short learning programs. To ensure quality and effectiveness, KTU provides its teaching staff with extensive training and support in curriculum design, technical tools, and video production. The university's Lifelong Learning Centre also plays a vital role in marketing the courses and recruiting learners, ensuring that the programs reach the right audience.

In Cyprus, at the **Open University of Cyprus (OUC)**, all micro-credentials are managed by the Center for Lifelong Learning. This umbrella entity either proposes new micro-credentials or reviews proposals submitted by faculty members or potential adjunct tutors. The center also monitors the implementation of these programs, ensuring they meet the university's standards and the needs of learners.

At **Universidade Aberta (UAb)** in Portugal, short courses can be proposed by university professors, departments, trainers, or external institutions with established protocols with the university. UAb's Lifelong Learning Unit is responsible for managing all non-formal courses, ensuring that these offerings are aligned with the university's broader educational goals and responsive to external demands.

At **KU Leuven** in Flanders, the faculties or individual faculty members take the lead in developing continuing education (CE) programs and short courses. They have the flexibility to organize these programs independently or seek support from the CE central support unit or their faculty's own support services. However, for micro-credentials and other CE programs

that result in a certificate, certain central processes must be followed to ensure compliance with university-wide standards.

At the **Hellenic Open University (HOU)** in Greece, all short courses are managed by the Lifelong Learning Centre (KEDIVIM). This centralized approach allows for a streamlined process in proposing, developing, and offering short learning programs.

At **OUNL** in the Netherlands, the university is considering shifting its policies to align with the CMF definitions of micro-credentials. This would mean that most courses would carry 5 ECTS, enabling stackability and standardizing the value of each micro-credential. Rather than developing a separate department for micro-credentials, OUNL intends to integrate this approach across the entire university, allowing micro-credentials to be embedded within all its programs. While this approach is ambitious, it also presents certain challenges, including the need for standardized processes and broad institutional support.

The discussion showed that choices for topics of micro-credentials **mostly** come **from the educational institutions** themselves, as collaboration with industry about programs is still in the process of being defined. There are some examples of continuous interaction with industry and the labour market, such as the initiatives at the UOC.

6. Conclusions and Future Work

Universities have been seeking the most appropriate organization to structure their offerings for lifelong learning and continuous education. One of these methods are extension schools, i.e. separate organizational units that hold a mandate to develop programs for continuous professional development and lifelong learning.

Most MCE partner institutions work with extension schools, but some prefer other ways. Some use extension schools/institutes/separate departments as innovation labs for Continuing Education programs and micro-credentials, others as a broker between the university's formal education offerings and industry. Continuing Education at some HEIs in the partnership is decentralized across the various faculties, departments, and institutions within the university. Others, in line with a broader vision to centralize lifelong learning prefer to merge entities such as extension school and university into one cohesive framework. Involvement of industries in shaping continuous education and micro-credentials varies strongly: While at some institutions industries play a vital role in shaping micro-credential offerings, at others they are not directly involved in the creation or teaching of these programs.

The extension school can operate from within the university or exist as a separate legal entity. Considerations to choose for a separate organization are increased flexibility in operation, ability to recruit dedicated staff and flexibility to choose topics closer to the needs of industry.

All universities indicated that their CE courses needed to be cost-covering and do not get subsidized by the government.

In some universities, students of CE have the same access to resources (e.g. library services, internet services) as students in other larger programs, which has financial consequences for the university. Many universities are looking into a unique student category for CE students.

Overall, apart from Spain, none of the MCE partner countries have a legal framework for micro-credentials in place. However, to facilitate the advancement in micro-credential offerings, institutions are teaming up with other organizations and associations, to build frameworks bottom-up. This creates a much-needed shared vocabulary around the term “micro-credential” and the processes around micro-credentials.

Across the MCE partnership, institutions are already integrating quality assurance for micro-credentials in their internal QA processes and looking towards guidance from external QA associations.

Some specific challenges on QA were also identified: As the trainer pool for micro-credentials is growing, one challenge might be the need for more rigorous monitoring compared to courses taught by permanent faculty. Additionally, the need for balancing flexibility with efficiency in process was also mentioned as a key challenge. Overall, while internal QA processes for micro-credentials are in place across many institutions, external regulatory frameworks are either lacking or still in development.

The discussions show that educational institutions are moving ahead with expanding their offerings towards more lifelong learning through micro-credentials, despite the lack of clarity from governments on legal frameworks around them. Micro-credentials hold much interest for industry players and sectorial associations as well, who look at upskilling and reskilling their workforce – and it is clear these actors are also moving ahead in defining the term “micro-credential” with relevant frameworks and structures.

Educational institutions are restructuring their existing organizational processes around study program creation, course design and quality assurance, to balance between more flexibility but also administrative efficiency.

It is also clear that the topics, content and focus of the micro-credentials primarily are chosen and decided by the educational institutions themselves, although they do indicate increasing continuous interactions with industry and the labour market.

Through these activities, we slowly see ecosystems around micro-credentials emerging, focusing mainly on regional interactions and driven by universities and educational institutions. This creates interesting opportunities for mutual support and collaboration and calls for further international projects like MCE, enabling the dialog between HEIs and creating impulses for building ecosystems around micro-credentials, which would foster and boost collaboration between universities, public authorities, labour market organisations, social partners and other stakeholders.

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