Pilot studies on modularisation and micro-credentialing

Document details

Document version	1.0
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Dissemination level	***Public*** */ Sensitive / EU classified[1]*
Date	03/14/2025

Versioning and Contribution History

Revision	Date	Author	Organisation	Description
01	18/03/2025	Alessandra Antonaci	EADTU	Peer review and editing
02	25/03/2025	Carles Bruguera	UOC	Peer review
03	26/03/2025	Erato Ioanna Sarri	OUC	Peer review
04	26/03/2025	Tom Melai	OUNL	Peer review

[1] Public- fully open (automatically posted online on the Project Results platforms)
Sensitive- limited under the conditions of the Grant Agreement
EU classified (EUCI) under decision 2015/444 check Annex I DoA

Executive Summary

Based on the recommendations derived from the "Report on case studies on modularization and microcredentialing", the WP leaders have guided the partners to identify the best format to experiment microcredential formats with their pilots. As can be seen in the report Follow-up and analysis of national and EU policy developments on microcredentials (WP6), the reality of the different countries in the development of microcredentials has been very diverse, offering very varied support depending on the context. In this framework, the development of this new approach to continuous training has not been without difficulties for the different institutions involved in the project. Each HEI has identified at least 2 pilot studies and detailed them in the planning tool designed by the WP leaders called Pilots collection, saved and shared via our MS Team channel. In the end there have been 22 pilot microcredentials.

The 22 microcredentials reflect a great diversity of designs and contents of continuing education carried out in the participating universities. They have involved 1,607 students, 117 teachers, and 59 staff members demonstrating the advantage of Distance Education by its scalability and flexibility. The contents do not limit the possibilities of microcredentials that can offer all types of subjects and contexts. Although most microcredentials align to levels 6 and 7 according to EQF levels, they could also reach lower levels of competence offering continuity and progression in training.

Most microcredentials have up to 15 ECTS and last until 30 weeks. As the modular design is also the most frequent, they allow a flexible participation adapted to learners' needs and companies' demands. There is also an interesting scratch offer. Most of them are organized online or remote, using synchrony in a variety of ways, also providing opportunities for non-face-to-face modalities. Some of them offer stackability and integration into broader and sometimes cross-institutional frameworks.

Approximately a third of the microcredentials have academic collaborations and half have collaborations with stakeholders. These collaborations provide sometimes opportunities for external accreditation.

Within this general vision drawn by the microcredentials carried out, the possibilities of distance education universities to extend flexible continuous training offers that connect with the labour market and employers, as well as with the needs of workers and the demands of companies, are valued.

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Introduction

Work package 5

This work package aims at testing the design and development of modularization and microcredentialing, according to the agenda and context of each institution, involving all actors through case studies and pilots, responding to the demands and expectations of learners, the economy and society. To test educational changes, institutional stakeholders have conducted a "reality check" together through case studies (see "Report on case studies on modularization and microcredentialing") and pilots in which each of them takes their specific roles as designer, expert advisor, organizer, administrator, or leader. These exercises have had an impact on how all actors see their role in developing and organizing microcredentials and how this can be further scaled up in line with university, institutional, policies.

Specific objectives WP5:

1) Select and describe case studies related to the current modularization by microcredentials and microdegrees and how they respond or not to criteria reported in EU level and national policy documents.

2) Design and implement pilot studies to reinforce (sub)modularization in courses, microcredentials or degree programmes according to the agenda and context of each institution, taking into account the learner's perspective (WP2) and aligned with evolving national and EU policies and frameworks on micro references.

3) Seek collaboration within the partnership to build models for the joint design and delivery of microcredential programs.

4) Involve external stakeholders (professional organisations, public and private sector, companies) in the design and development of microcredential programs.

Task 5.2: Pilot studies on modularization and microcredentials

The Task 5.2 starts from modularise courses, microcredential, microdegree, and degree programs, meeting learner expectations ("Recommendations by the MCE high level expert group on microcredentials programmes and qualifications and the learner perspective"), taking into account recommendations from the case studies ("Report on case studies on modularization and microcredentialing") and aligned to institutional perspectives related to microcredential qualifications for Continuous Education and Professional Development ("Institutional development for CEPD and Microcredentials" and "Analysis and mapping of current CEPD qualifications into partnership"). It capitalizes on the project European Short Learning Programs models and guidelines for collaborative design. The types of pilots could include (re)design and develop a microcredential programme, testing a modular structure, possibly in collaboration with an external stakeholder (employer, region, city,…); (Re-)design an existing bachelor or master programme, testing a modular approach, to facilitate the participation of CEPD learners, possibly in collaboration with external stakeholders; (Re-)design and development of a networked or joint microcredential or microdegree, facilitating

collaboration and (staff or student) mobility. In all three types, partners have prepared proposals for pilots (e.g. collaborative microdegrees European studies, teacher training at school and tertiary level, MOOC-based microcredentials in humanities, science and technology, biomedical sciences; microdegrees on software development with Microsoft.

The deliverable 5.2 includes a description of the case studies, conclusions, and recommendations to partner institutions and to national and EU-level policymakers related to microcredential programmes and qualifications (EC Recommendation to the Council). Faculty staff, teaching and learning services, and continuous education and professional development services, Information Technology support related to the selected pilots of all 10 participating universities.

Global overview of the microcredentials

The pilots collection was described with the Name of the pilot, the Lead institution, details about Pilot leader, Name of the microcredential, Scientific Area, EQF Level, Credits, Duration (weeks), Design, Academic Collaboration, Stakeholder Collaboration, Online / Remote, Synchrony, Students, Professors, Management, External Stakeholder, External Accreditation, Stackability, and Planning (start- end months). Initial designs have been updated according to the final actual data. The analysis of the design of the microcredentials reflects the diversity of formats and contents, providing a rich and varied vision of the current offer of continuing training in the universities involved in the project.

Scientific Area

A significant number of microcredentials are in the area of Computer Science (18.18%), reaching 36.36% adding all the more technical and scientific ones. However, most microcredentials are in social sciences in general (59.09%). This diversity coincides with the general trends reflected in the European HEI offer (European Commission et al., 2025).

Scientific Area	Occurrence	%
Agriculture / Eng.	1	4.55
Business / Social	1	4.55
Computer Science	4	18.18
Economics	2	9.09
Education	2	9.09
Env. Sciences	1	4.55
Humanities	1	4.55
Law studies	1	4.55
Marketing	1	4.55
Math / Eng.	2	9.09
Multimedia and Telecommunications Studies	2	9.09
Psychology	1	4.55
Social sciences	2	9.09
Sociology	1	4.55

EQF Level

Most of the microcredentials correspond to levels 6 (54.55%) and 7 (36.36%) of the European Qualifications Framework. Knowing that it has 8 levels (Bouder et al., 2008), a lack of training is observed at the lower levels of the framework.

EQF Level	Occurrence	%
5	2	9.09
6	12	54.55
7	8	36.36

Credits

The microcredentials are defined in ECTS (Council of the European Union, 2022). 63.64% have up to 15 ECTS and 90.91% have up to 30 ECTS. Some of the pilot proposals would not be admitted under the current microcredentialing framework defined in specific countries, for instance, Spain is limiting them up to 15 ECTS, but Ireland does it up to 30 ECTS.

Credits	Occurrence	%
1-15	14	63.64
16-30	6	27.27
31-60	2	9.09

Duration (weeks)

Most microcredentials last until 30 weeks (63.63%), that is, in one semester. There are very few longer courses (18.08%), as well as an interesting offer of flexible proposals (18.08%). Certainly, the duration must be decided according to the training needs and availability of the learners (Knowles et al., 2020).

Duration (weeks)	Occurrence	%
1-15	6	27.27
16-30	8	36.36
31-52	4	18.18
flexible timing	2	9.09
self-paced	2	9.09

Design

Most microcredentials offer a modular design (63.64%) and a third part offers a scratch design (36.36%). Both proposals are applicable and interesting for microcredential design, although the Council Recommendation emphasizes the benefits of the first approach (Council of the European Union, op. cit.).

Design	Occurrence	%
Scratch	8	36.36
Modular	14	63.64

Collaboration

Approximately a third of the microcredentials have academic collaborations (31.82%) and half have collaborations with Stakeholders. This can be seen as an obvious area for improvement as that the nature of continuing training must be seen as linked to the demands and needs of the labour market and society in general, as well as interdisciplinary proposals (OECD, 2022).

Collaboration	Occurrence	%
Academic	7	31.82
Stakeholder	11	50.00

Organisation

Most of the microcredentials are organized online or remote (86.36%). Synchrony (real-time activities) is used in a wide variety of ways: 40.91% offer 40% or more of the microcredential synchronously. It is normal for distance universities to offer mostly training in this modality, although they can be adapted to the demands and needs of specific groups and environments. Likewise, synchrony offers the advantage of immediate and live contact with the trainees, but it is less adapted to the needs of flexibility that is usually compensated by offering recordings of the sessions developed live (European Association of Distance Teaching Universities & Ubachs, 2022).

Organisation	Occurrence	%
Online / Remote	19	86.36
Synchrony (10%)	9	40.91
Synchrony (11%-20%)	4	18.18
Synchrony (40%-90%)	9	40.91

Participation

The microcredentials carried out have involved 1,607 students, 117 teachers, and 59 staff members. This means averages of 73.05 students, 5.32 teachers, and 2.68 staff members. In addition to knowledge, universities offer a teaching staff that is usually complemented by external specialists and have profitable and squeezed organizational infrastructures that guarantee the solidity of the non-formal training offer as well. Moreover, distance modalities respond better to unexpected demands due to their scalability compared to face-to-face modalities (European Association of Distance Teaching Universities & Ubachs, op. cit.).

Participation	Occurrence	Mean
Students	1607	73.05
Professors	117	5.32
Management	59	2.68

Other relevant elements

Other relevant elements are the involvement of external stakeholders (31.82%), offering external accreditation (50.00%), and stackability (77.27%). This can be seen as an obvious area for improvement as that the nature of continuing training must be seen as linked to the demands and needs of the labour market and society in general, as well as interdisciplinary

proposals (OECD, op. cit.). Stackability is closely linked to modularity and is a way for structuring flexible and dynamic training frameworks that can quickly adapt to the evolving needs and demands of the labour market (Council of the European Union, op. cit.).

Other relevant elements	Occurrence	%
External Stakeholder	7	31.82
External Accreditation	11	50.00
Stackability	17	77.27

Description of the pilots

FernUniversität in Hagen (1st microcredential)
Program name: CAS Environmental Sciences

- Scientific Area: Env. Sciences
- EQF Level: 5
- Credits: 30
- Duration (weeks): self-paced
- Design: Modular
- Academic Collaboration: Yes
- Stakeholder Collaboration: Yes
- Online / Remote: 10%
- Synchrony: 10%
- Students: tbd
- Professors: tbd
- Management: Yes
- External Stakeholder: tbd
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): Permanent availability. No specific start or end dates.

FernUniversität in Hagen (2nd microcredential)
Program name: Kinderschutz

- Scientific Area: Sociology
- EQF Level: 7
- Credits: 5 - 20
- Duration (weeks): flexible timing
- Design: Scratch
- Academic Collaboration: No
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 10%
- Students: 15

- Professors: 10
- Management: 3
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): Permanent availability. No specific start or end dates.

FernUniversität in Hagen (3rd microcredential)
Program name: Psychology

- Scientific Area: Psychology
- EQF Level: 6
- Credits: 60
- Duration (weeks): 52
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%?
- Synchrony: 10%
- Students: 900
- Professors: flexible
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to aug-24

Hellenic Open University (1st microcredential)
Program name: Teaching applications in Special Education

- Scientific Area: Education
- EQF Level: 7
- Credits: 16.8
- Duration (weeks): 28
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 10%
- Students: 40
- Professors: 3
- Management: tbd
- External Stakeholder: No

- External Accreditation: No
- Stackable: tbd
- Duration (calendar): oct-23 to may-24

Hellenic Open University (2nd microcredential)

Program name: Precision agriculture applications

- Scientific Area: Agriculture / Eng.
- EQF Level: 7
- Credits: 10
- Duration (weeks): 16
- Design: Scratch
- Academic Collaboration: Yes
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 10%
- Students: 20
- Professors: 5
- Management: 3
- External Stakeholder: No
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): oct-23 to feb-24

Katholieke Universiteit Leuven (1st microcredential)

Program name: Chip design – Verification and Design Flow of Digital and Mixed-signal Chips

- Scientific Area: Computer Science
- EQF Level: tbd
- Credits: 3
- Duration (weeks): 8
- Design: Scratch
- Academic Collaboration: No
- Stakeholder Collaboration: Yes
- Online / Remote: 0%
- Synchrony: 90%
- Students: 26
- Professors: 3
- Management: 2
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): may-24 to jun-24

Katholieke Universiteit Leuven (2nd microcredential)

Program name: Mathematical Techniques for Problem Solving in Engineering & Science

- Scientific Area: Math / Eng.
- EQF Level: 7
- Credits: 4
- Duration (weeks): self-paced
- Design: Modular
- Academic Collaboration: Yes
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 10%
- Students: 50
- Professors: 2
- Management: 5
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to mar-24

Open University of Cyprus (1st microcredential)

Program name: Strategy and Leadership

- Scientific Area: Business / Social
- EQF Level: 7
- Credits: 10
- Duration (weeks): 15
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: tbd
- Students: tbd
- Professors: 1
- Management: 5
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to feb-24

Open University of Cyprus (2nd microcredential)

Program name: Introduction to Law and Legal Method

- Scientific Area: Law studies

- EQF Level: 6
- Credits: 10
- Duration (weeks): 15
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: tbd
- Students: tbd
- Professors: 1
- Management: 5
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to feb-24

Open Universiteit Nederland (1st microcredential)
Program name: Certified Professional Program Data Science

- Scientific Area: Computer Science
- EQF Level: 6
- Credits: 10
- Duration (weeks): 31
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 20%
- Students: 20
- Professors: 9
- Management: 3
- External Stakeholder: tbd
- External Accreditation: No
- Stackable: No
- Duration (calendar): sep-23 to may-24

Open Universiteit Nederland (2nd microcredential)
Program name: Stigma. gezondheid en cultuur

- Scientific Area: Humanities
- EQF Level: 6
- Credits: 15
- Duration (weeks): 30

- Design: Scratch
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 20%
- Students: 30
- Professors: 6
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to abr-24

Universidade Aberta de Portugal (1st microcredential)
Program name: Digital Strategy and Performance Marketing

- Scientific Area: Marketing
- EQF Level: 6
- Credits: 1
- Duration (weeks): 4
- Design: Scratch
- Academic Collaboration: Yes
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 10%
- Students: 100
- Professors: 4
- Management: 3
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): oct-24 to nov-24

Universidade Aberta de Portugal (2nd microcredential)
Program name: Digital Tools - Level 1

- Scientific Area: Computer Science
- EQF Level: 6
- Credits: 1
- Duration (weeks): 4
- Design: Scratch
- Academic Collaboration: No
- Stakeholder Collaboration: Yes

- Online / Remote: 100%
- Synchrony: 20%
- Students: 50
- Professors: 4
- Management: 3
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): sep-24 to oct-24

Universidad Nacional de Educación a Distancia (1st microcredential)
Program name: Reading motivation 2.0

- Scientific Area: Education
- EQF Level: 6
- Credits: 25
- Duration (weeks): 25
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 0%
- Students: 12
- Professors: 3
- Management: 2
- External Stakeholder: No
- External Accreditation: No
- Stackable: No
- Duration (calendar): jan-24 to jun-24

Universidad Nacional de Educación a Distancia (2nd microcredential)
Program name: Theoretical and Practical Application of FEM and CAE Simulation

- Scientific Area: Math / Eng.
- EQF Level: 6
- Credits: 60
- Duration (weeks): 36
- Design: Modular
- Academic Collaboration: Yes
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: tbd
- Students: tbd

- Professors: 24
- Management: 4
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: No
- Duration (calendar): mar-24 to dec-24

Università Telematica Internazionale (1st microcredential)

Program name: GIF - Green Innovation in the Fashion Industry management

- Scientific Area: Economics
- EQF Level: 5
- Credits: 2
- Duration (weeks): 6 - 10
- Design: Scratch
- Academic Collaboration: Yes
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 0%
- Students: 75
- Professors: 8
- Management: 7
- External Stakeholder: Yes
- External Accreditation: No
- Stackable: Yes
- Duration (calendar): oct-23 to feb-24

Università Telematica Internazionale (2nd microcredential)

Program name: ReGeneration Enel

- Scientific Area: Computer Science
- EQF Level: 6
- Credits: 6 - 12
- Duration (weeks): 8 - 12
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 15%
- Students: 200
- Professors: 20
- Management: 5
- External Stakeholder: Yes

- External Accreditation: No
- Stackable: Yes
- Duration (calendar): oct-23 to feb-24

Universitat Oberta de Catalunya (1st microcredential)
Program name: Initiation to Web Design

- Scientific Area: Multimedia and Telecommunications Studies
- EQF Level: 7
- Credits: 24
- Duration (weeks): 40
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 0%
- Students: 5
- Professors: 3
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-24 to feb-25

Universitat Oberta de Catalunya (2nd microcredential)
Program name: Online Introductory University Course in Computer Science

- Scientific Area: Multimedia and Telecommunications Studies
- EQF Level: 6
- Credits: 12
- Duration (weeks): flexible timing
- Design: Scratch
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 10%
- Students: tbd
- Professors: 3
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-24 to feb-25

Universitat Oberta de Catalunya (3rd microcredential)

Program name: Online Introductory University Course in Economics

- Scientific Area: Economics
- EQF Level: 6
- Credits: 18
- Duration (weeks): 4 - 24
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 100%
- Synchrony: 10%
- Students: 15
- Professors: 3
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-24 to feb-25

Kaunas University of Technology (1st microcredential)

Program name: Civil Society and Volunteerism

- Scientific Area: Social sciences
- EQF Level: 6
- Credits: 6
- Duration (weeks): 18
- Design: Modular
- Academic Collaboration: Yes
- Stakeholder Collaboration: Yes
- Online / Remote: 100%
- Synchrony: 40%
- Students: 20
- Professors: 2
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: Yes
- Duration (calendar): sep-23 to feb-24

Kaunas University of Technology (2nd microcredential)

Program name: Public Governance and Civil Society

- Scientific Area: Social sciences

- EQF Level: 7
- Credits: 6
- Duration (weeks): 16
- Design: Modular
- Academic Collaboration: No
- Stakeholder Collaboration: No
- Online / Remote: 75%
- Synchrony: 40%
- Students: 30
- Professors: 2
- Management: 1
- External Stakeholder: No
- External Accreditation: Yes
- Stackable: No
- Duration (calendar): sep-23 to feb-24

Schedule

This is the timeline for the development of micro-credentials. Due to their design, some have remained on offer throughout the period while others have been developed on specific dates as can be seen in the table. This reflects the great diversity of timelines applied according to the institutions.

Pilot leader	Program name	sep-23	oct-23	nov-23	dic-23	ene-24	feb-24	mar-24	abr-24	may-	jun-24	jul-24	ago-24	sep-24	oct-24	nov-24	dic-24	ene-25	feb-25
FernUni Hagen	CAS Environmental Sciences	X	X	X	X	X	X	X	X										
FernUni Hagen	Kinderschutz	X	X	X	X	X	X	X	X										
FernUni Hagen	Psychology	X	X	X	X	X	X	X	X										
HOU	Teaching applications in Special Education		X	X	X	X	X	X	X										
HOU	Precision agriculture applications		X	X	X	X	X	X	X										
KU Leuven	Chip design – Verification and Design Flow of Digital and Mixed-signal Chips									X	X								
KU Leuven	Mathematical Techniques for Problem Solving in Engineering & Science	X	X	X	X	X	X	X	X										
OUC	Strategy and Leadership	X	X	X	X	X	X	X	X										
OUC	Introduction to Law and Legal Method	X	X	X	X	X	X	X	X										
OUNL	Certified Professional Program Data Science	X	X	X	X	X	X	X	X										
OUNL	Stigma, gezondheid en cultuur	X	X	X	X	X	X	X	X										
UAb	Digital Strategy and Performance Marketing															X	X		
UAb	Digital Tools - Level 1														X	X			
UNED	Reading motivation 2.0					X	X	X	X	X	X								
UNED	Theoretical and Practical Application of FEM and CAE Simulation									X	X								
Uninettuno	GIF - Green Innovation in the Fashion Industry management		X	X	X														

Pilot leader	Program name	sep-23	oct-23	nov-23	dic-23	ene-24	feb-24	mar-24	abr-24	may-	jun-24	jul-24	ago-24	sep-24	oct-24	nov-24	dic-24	ene-25	feb-25
Uninett uno	ReGeneration Enel		X	X	X	X	X												
UOC	Initiation to Web Design													X	X	X	X	X	X
UOC	Online Introductory University Course in Computer Science													X	X	X	X	X	X
UOC	Online Introductory University Course in Economics													X	X	X	X	X	X
KTU	Civil Society and Volunteerism	X	X	X	X	X	X												
KTU	Public Governance and Civil Society	X	X	X	X	X	X												

Conclusions and Recommendations to Partner Institutions and to National and EU-Level Policymakers

The 22 microcredentials piloted under this deliverable have engaged 1,607 students, 117 teachers, and 59 staff members across ten higher education institutions, offering a rich and diverse picture of how modularisation and microcredentialing are being operationalised in real-world institutional contexts. These pilots demonstrate the strong potential of distance and blended learning models to offer scalable, inclusive, and flexible educational formats tailored to varied learner lifestyles—a conclusion also supported by institutional insights presented in Van Melkebeke, L.., Op de Beeck, I., & Antonaci, A. (2025), which emphasises the capacity of distance education to meet the evolving needs of learners and institutions alike.

A significant proportion of these microcredentials are offered in social sciences, although there is also meaningful representation from technical and scientific fields. This diversity underscores the flexibility of the microcredential format, as highlighted in Casa Nova, D., Bastos, G., & Antonaci, A. (2025), which advocates for microcredentials as enablers of innovation in both traditional and emerging subject areas. Yet, the underrepresentation of EQF levels below 6 suggests a gap in provision for lower-level qualifications. To address this, we recommend targeted efforts to develop microcredentials that cater to initial skill-building and entry-level upskilling, thereby supporting a wider continuum of lifelong learning and progression.

While most microcredentials fall within the 15 ECTS range and last up to 30 weeks, the pilots reveal that more flexible and stackable designs could improve learner access and institutional agility. As outlined in both Corbelli, G., Pallante, A., Feliz-Murias, T. & Antonaci, A. (2025) and Van Melkebeke, L.., et Al., (2025)., stackability and modularity are key enablers for personalised learning pathways and professional relevance. Learners and external stakeholders—according to D5.3—value the ability to combine or progress through learning units, but still express concerns over the visibility of outcomes (observability). Therefore, flexibility must be paired with clearer recognition mechanisms and learner support strategies to ensure engagement and perceived value.

Most pilots employed a modular structure, though scratch designs also proved effective. Both formats should be considered valid and adaptable tools, depending on learner and labour market demands. Similarly, while online and remote delivery dominate the landscape—leveraging the strengths of distance institutions—blended and synchronous options offer opportunities for more immediate engagement. Recording and reusability of content can further enhance accessibility, especially for non-traditional learners.

The pilots also reveal promising, yet underutilised, collaboration patterns: only a third of microcredentials involve academic collaboration, and half engage with external stakeholders. However, as reaffirmed in Casa Nova, D. et Al., (2025), stakeholder involvement is critical for aligning content with professional standards and for fostering cross-sectoral trust and recognition. Moreover, Van Melkebeke, L., et Al., (2025) stresses that effective communication and institutional coordination are necessary to fully harness the value of such collaborations. We therefore recommend actively promoting co-design with employers, professional bodies, and other universities, especially in cross-institutional or cross-border contexts.

Other strategic recommendations drawn from both the pilots and broader MCE project findings include:

- **Aligning microcredential design with EU-level principles**, particularly in relation to quality assurance, recognition, and portability, as outlined in Casa Nova, D. et Al., (2025).

- **Enhancing collaboration with employers and professional bodies**, a key factor in stakeholder acceptance and long-term sustainability, as shown in Corbelli, G. et Al., (2025).

- **Expanding modular and stackable structures**, offering learners flexible, cumulative learning pathways while ensuring curricular coherence.

- **Strengthening internal and external quality assurance mechanisms**, integrating ESG standards and Bologna instruments to ensure consistency and trust.

- **Fostering institutional consistency** in credit attribution, EQF level assignment, and workload transparency, which will support mutual recognition and learner mobility.

- **Developing infrastructure for cross-border recognition**, including the use of Europass and other interoperable digital credential repositories to support learner visibility and credential portability.

In summary, the pilots serve not only as experiments in educational innovation but also as valuable case studies that inform institutional, national, and EU-level policy development. Their success and scalability depend on coherent, learner-centred strategies that bridge design, recognition, and quality assurance—an integrated approach that is echoed across (Corbelli, G. et Al., (2025); Van Melkebeke, L., et Al., (2025); Casa Nova, D., et Al. (2025)).

Microcredentials must therefore be embedded within institutional and systemic frameworks—not as peripheral options, but as core elements of a lifelong learning ecosystem that is responsive, inclusive, and future-proof.

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