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MICRO-credentials for life-long learning and employability:

Pedagogical and didactic aspects of teaching courses leading to micro-credentials

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Università Europea di Roma

Proof

Learning outcomes

Learner

Learning experience

A European approach to micro-credentials. for lifelong learning and employability
Output of the micro-credentials higher education consultation group
Final report proposal – December 2020
Officially adopted – June 2022

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 transparent standards

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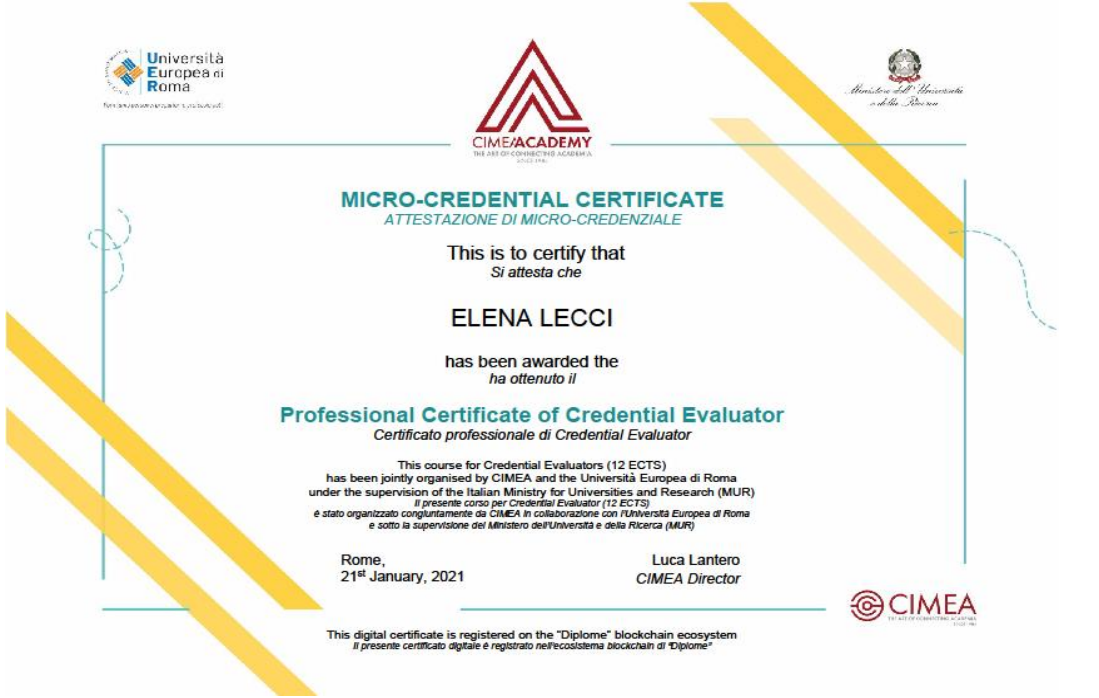
Proof

- **Certification**
  recognised by (or generate the 'trust' of) as many operators (countries, companies, training subjects) as possible
- **Assessment**
  evaluation methods must be transparent and shared by a broad community of operators



Università Europea di Roma

CIMEA ACADEMY

MICRO-CREDENTIAL CERTIFICATE
ATTESTAZIONE DI MICRO-CREDENZIALE

This is to certify that
Si attesta che

ELENA LECCI

has been awarded the
ha ottenuto il

Professional Certificate of Credential Evaluator
Certificato professionale di Credential Evaluator

This course for Credential Evaluators (12 ECTS)
has been jointly organised by CIMEA and the Università Europea di Roma
under the supervision of the Italian Ministry for Universities and Research (MUR)
Il presente corso per Credential Evaluator (12 ECTS)
è stato organizzato congiuntamente da CIMEA in collaborazione con l'Università Europea di Roma
e sotto la supervisione del Ministero dell'Università e della Ricerca (MUR)

Rome,
21st January, 2021

Luca Lantero
CIMEA Director

CIMEA

This digital certificate is registered on the "Diplome" blockchain ecosystem
Il presente certificato digitale è registrato nell'ecosistema blockchain di "Diplome"

MICROCASA

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Learning outcomes

what the micro-credential inherently has to offer.

must be described according to a terminology shared and recognised in as broad a context as possible

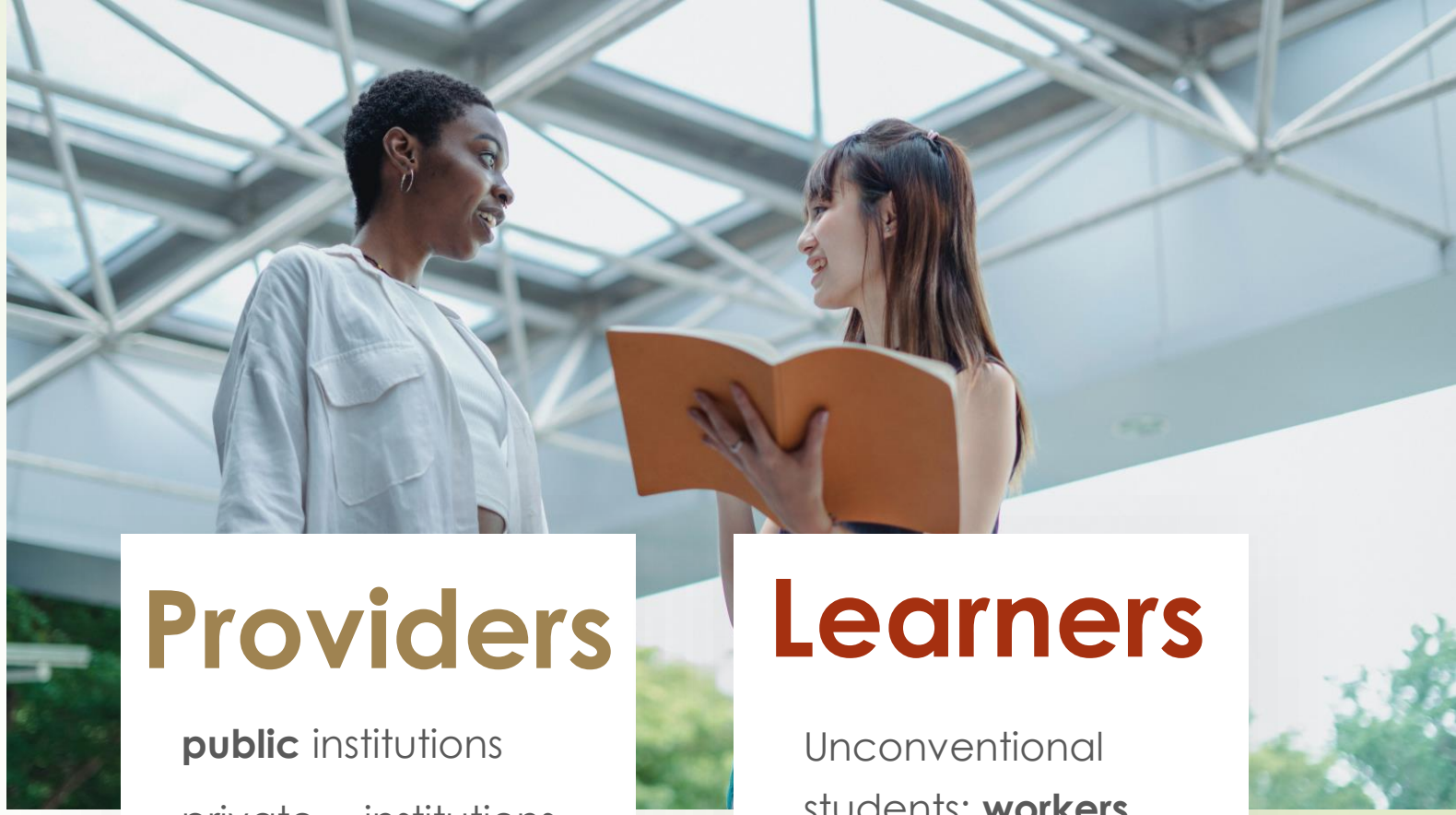
Short learning experience

01 **Content**

that is offered by the training provider

02 **Teaching methods**

linked to the learning outcome and specific skills to be acquired



Providers

public institutions

private institutions subject to public regulations

private institutions

Learners

Unconventional students: **workers**.

Conventional students: **university or high school students**

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DUBLIN DESCRIPTORS

Learning outcome linked to:	Related verbs:	Teaching strategies typically used to support the achievement of this learning outcome type
Knowledge acquisition and retention	Recognise, Recall, State, Outline, Identify, Describe, Match, Order, Name, Label, Reproduce.	• Lecture / Didactic teaching • Didactic tutorial / Seminar • Self-directed learning • Classroom assessment techniques (e.g. minute papers, polling, 3-2-1 structured engagement, Think-Pair-Share)
Understanding and comprehension	Interpret, Exemplify, Clarify, Classify, Paraphrase, Summarise, Infer, Compare, Explain, Represent, Translate, Illustrate, Categorise.	• Lecture / Interactive teaching • Interactive tutorial / Seminar • Scaffolded discussion • Role play • Simulation • Group work • Self and peer assessment • Peer teaching • Self-directed learning • Independent research • Conducting fieldwork • Experimental lab work (Individual/in pairs or groups) • Artefact creation (e.g. essay/multimedia artefact • Classroom assessment techniques (e.g. minute papers, polling, 3-2-1 structured engagement, Think-Pair-Share)
Application of knowledge in a given situation.	Apply, Implement, Demonstrate, Illustrate, Interpret, Execute.	• Role play • Simulation • Group work • Peer teaching • Research enquiry • Conducting fieldwork • Experimental lab work (Individual/in pairs or groups)
Analysis, classification, structural understanding, hypothesis testing, and evidencing.	Analyse, Differentiate, Organise, Attribute, Appraise, Critique, Compare.	• Lecture / Interactive teaching • Interactive tutorial / Seminar • Scaffolded discussion • Role play • Simulation • Group work • Self and peer assessment • Peer teaching • Self-directed learning • Independent research • Conducting fieldwork • Experimental lab work (Individual/in pairs or groups) • Artefact creation (e.g. essay/multimedia artefact)
Evaluating, evidencing and defending judgment or analysis.	Evaluate, Critique, Appraise, Argue, Justify, Explain, Predict, Support, Defend.	• Interactive tutorial / Seminar • Panel discussion • Role play • Simulation • Group work • Self and peer assessment • Peer teaching • Scoping or comparative analysis • Conducting fieldwork • Experimental lab work (Individual/in pairs or groups) • Artefact creation (e.g. essay/multimedia artefact
Creating, integrating, or synthesising ideas, concepts or practices coherently.	Create, Generate, Plan, Produce, Design, Modify, Develop, Invent, Write.	• Role play • Simulation • Group work • Peer teaching • Conducting fieldwork • Experimental lab work (Individual/in pairs or groups) • Artefact creation (e.g. essay/multimedia artefact

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Developing your Micro-credential Descriptor:

- **Think about practical and pragmatic aspects of the course.**
  - What are you trying to achieve with this course?
  - What is the 'need' for the course (e.g. in industry/society)?
  - Who is likely to take this course, and how is this course appropriate to their needs?
  - How would you explain the course and encourage someone to register for it?
  - What are its key features?
  - What should a micro-credential 'graduate' be able to do/know/understand after its completion?

- **Think about your micro-credential from the learner's perspective.**
  - Why should someone do the course and what are they expected to be able to do/know/understand by the end of the micro-credential?
  - How does the course acknowledge the specific needs of those learners in terms of teaching, learning, and assessment practices?
  - What are the expectations of the typical micro-credential participant (fee-paying, established career professional etc.) and how might these be different in teaching/learning/assessment by comparison to a 'traditional' student?
  - What sort of delivery context is appropriate for your micro-credential and why (e.g. physically on site, blended, fully online)?

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Defining your Learning outcomes:

Constructive Alignment

Cognitive domain

recognition of knowledge and the development of intellectual skills/abilities.

Affective domain

incorporates emotion, feeling and character

Psychomotor domain

concerns physical movement and coordination

Learning outcomes in higher education are most commonly related to the **cognitive domain**. Learning outcomes designed for micro-credentials that are industry/work-relevant (e.g. connecting to or developing softer skills such as reflexivity, creativity, leadership, negotiation, confidence) are likely to draw on more than one domain.

Questions to consider:

- Are my learning outcomes, 'outcomes', as opposed to a list of syllabus aims or objectives?
- Can their achievement be demonstrated through assessment?
- Is the balance of learning outcomes across domains appropriate for the micro-credential?
- Are they limited in number? Less is more!
- Are all of these learning outcomes necessary? If not don't have them as a learning outcome.
- Do they use appropriate verbs? Are they clear and concise?

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Teaching & Learning Methods

Keeping your learning outcomes in mind will help you plan effectively and support you to take a holistic approach to micro-credential design.

Select teaching and learning methodologies which align with your intended learning outcomes. It may seem counter-intuitive but this means:

1. deciding on learning outcomes
2. deciding how to assess the demonstrated achievement of those learning outcomes
3. planning your teaching and learning strategies
4. mapping the content to be covered.

Questions to consider:

How do you envisage the architecture of the micro-credential? E.g. long and thin / short and fat?

Which teaching strategies will guide and facilitate learners towards the achievement of learning outcomes?

Will you implement these strategies in-person/on-campus, or in a blended or fully online context?

If using a blended approach, how do you envisage the balance and blend between face-to-face and online teaching and learning activities?

What is required to facilitate these teaching and learning activities in online or blended contexts? E.g. blended/online teaching strategies supported by appropriate tools such as virtual break out rooms, online discussion boards.

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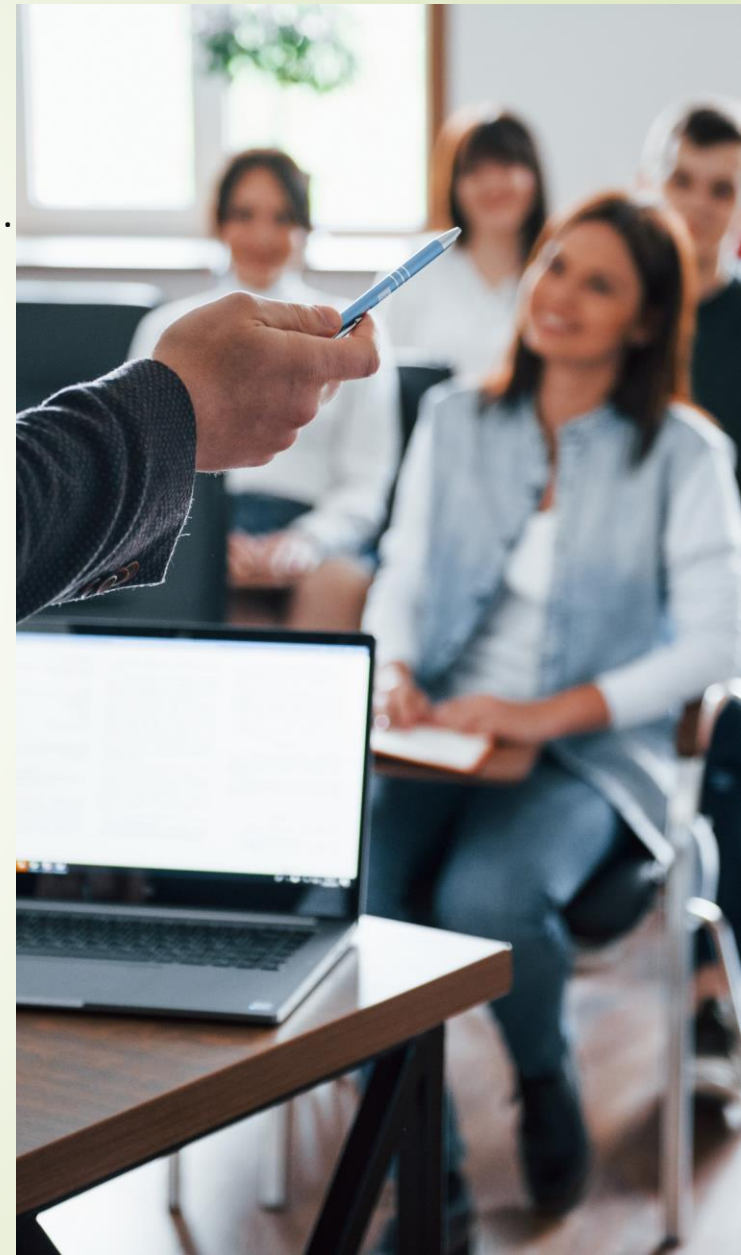
Assessment for a micro-credential

Key themes to identify an appropriate assessment strategy:

- **alignment** of the assessment to learning outcomes.
- **nature** of assessment (e.g. traditional/outward-facing; abstract/applied; qualitative/quantitative).
- **modality** of assessment across the microcredential (e.g. formative/summative).
- weighting of the assessment components.
- **size** of assessment (measured in terms of workload and ECTS hours).

You may find it beneficial to review the following **prompts**:

- ❑ How does assessment enable learners to demonstrate their achievement of learning outcomes?
- ❑ **How much** assessment is too much or too little (e.g. the integrity of the award vs the workload for student/assessor?)
- ❑ **When and where** does assessment take place across the structured programme of your micro-credential (e.g. are weekly assignments a feature of your curriculum design? Do these feed into a final summative assessment?)
- ❑ How and where does **feedback feature** in the micro-credential assessment strategy?
- ❑ Are traditional assessments (e.g. essays/exams) appropriate for the learner profile enrolled on the programme or might applied assessments be more **appropriate**?
- ❑ Is there any **choice** in assessment activity (e.g. pre-recorded or live presentation, essay or presentation, portfolio, visual or digital artefact)?



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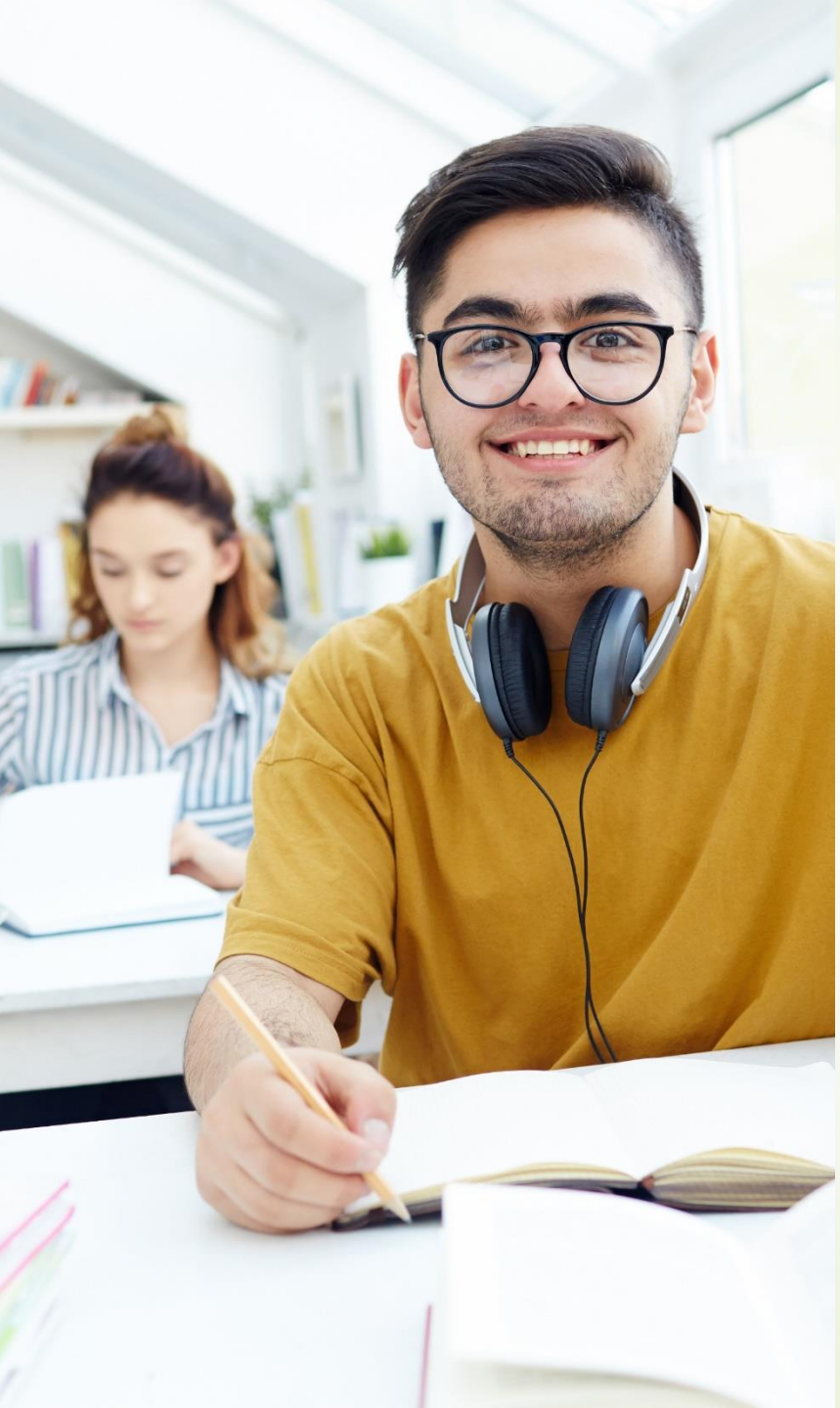

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Thank You

For Your Listening