TAM Montenegro, 27-28/05/2025

Flexibilization of learning and micro-credentials in higher education

Role of universities, policy makers, business sector

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Flexibilization of learning and micro-credentials in higher education

Think about a recent challenge

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Common challenges

Image credit: https://pixabay.com/es/illustrations/inteligencia-artificial-cerebro-3382507/

Did you know how to use genAI when ChatGPT came out?

Common challenges

Image credit: B. Hasenknopf

Did you know what to do when we were in Covid-19 lockdown?

Common challenges

https://commons.wikimedia.org/wiki/File:Tri_des_déchets_(cropped).jpg?uselang=fr

Do you really know how to separate your trash?

Always needed

https://www.thebluediamondgallery.com/handwriting/l/learning.html

- Access to learning offers
- Structure of learning pathways
- Certification of learning outcomes

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Flexibilization of learning and micro-credentials in higher education

Who is your presenter today?

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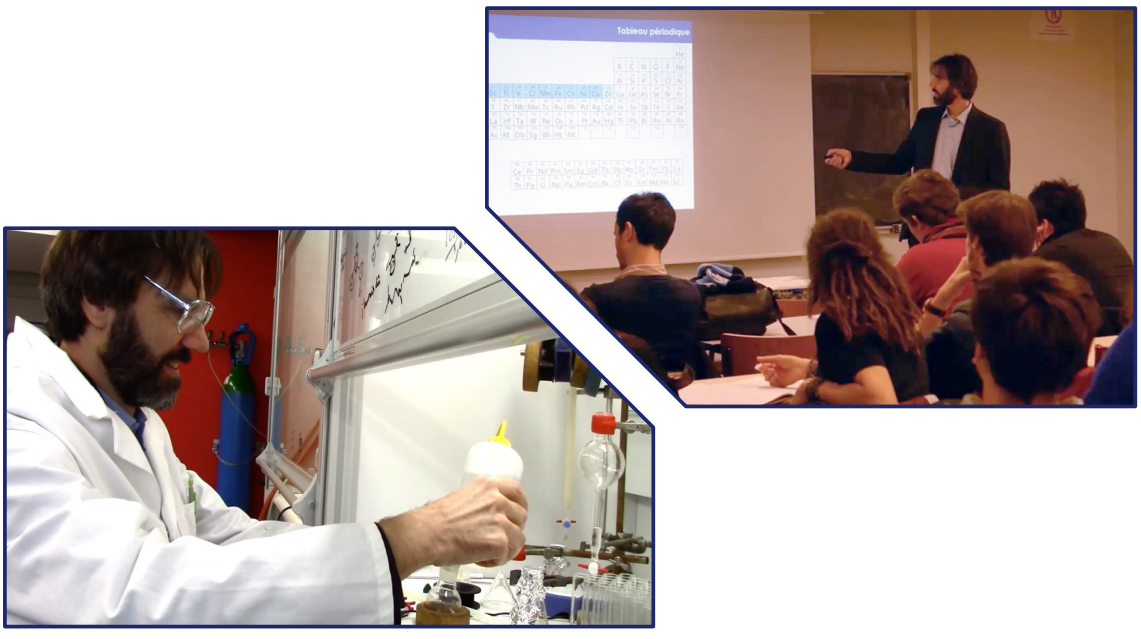
Chemistry Professor



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Erasmus+

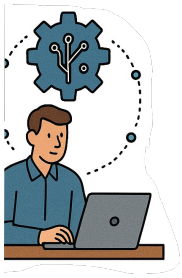
Senior Advisor for European Commitment – President's Office

Facilitator

1

What is Flexible learning and who is it for?

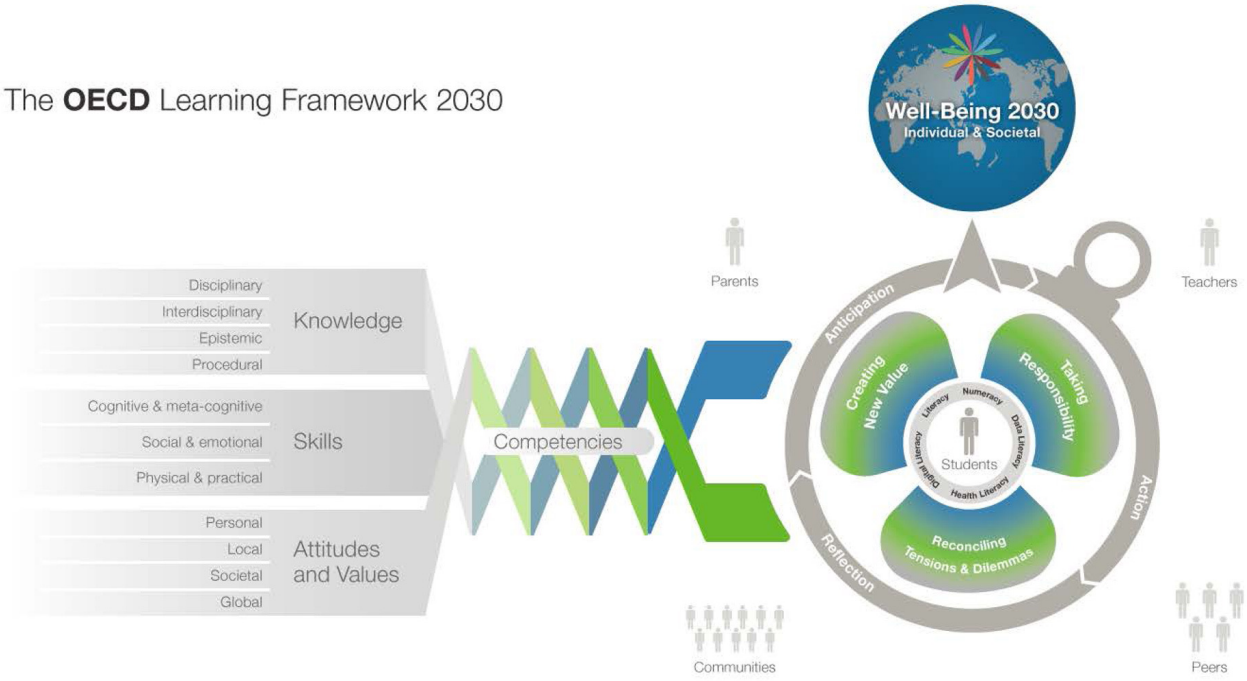
Setting the stage



ChatGPT

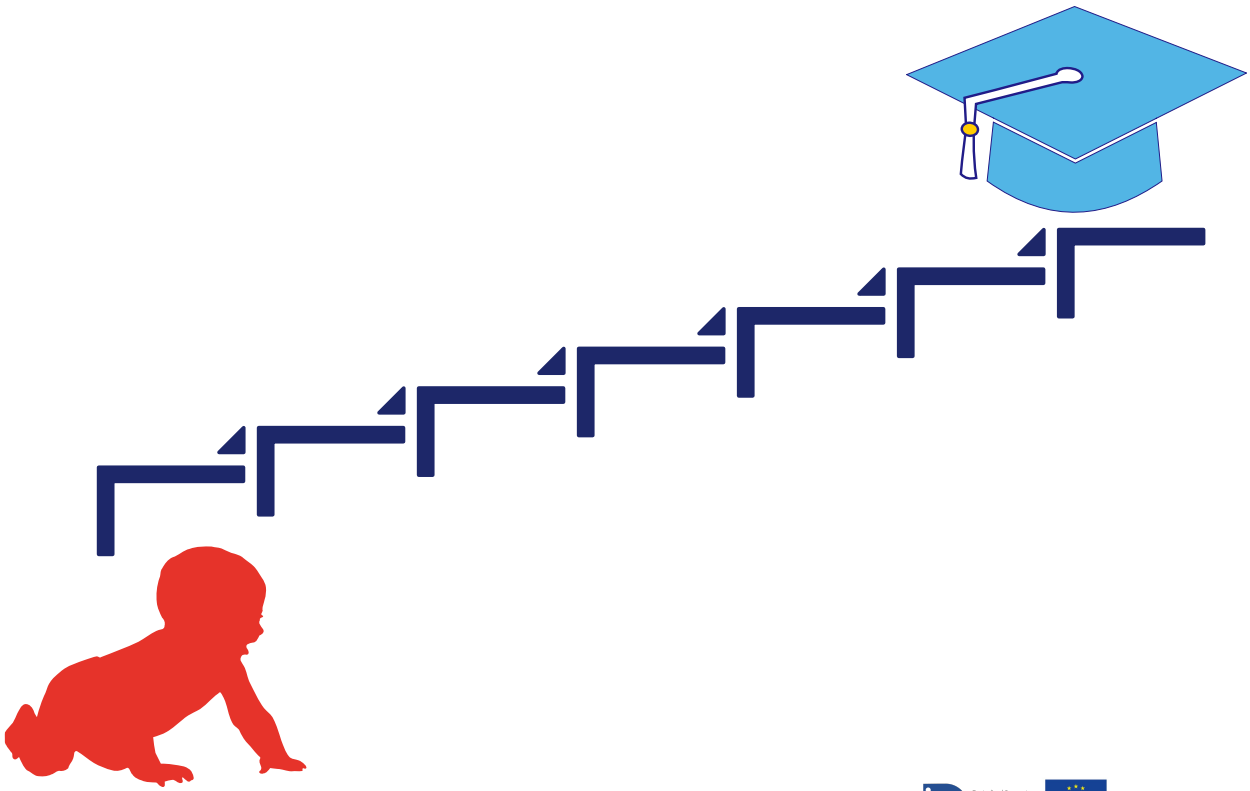
"*Technological advances, climate change, and shifting demographics are reshaping economies and societies. Millions of jobs are being transformed or made obsolete, and entirely new types of roles are emerging — often requiring skills that didn't exist a decade ago.*"

Competencies for Well-Being



The Future of Education and Skills: Education 2030, OECD (**2018**); http://www.oecd.org/education/2030/

Education pathways



Education pathways

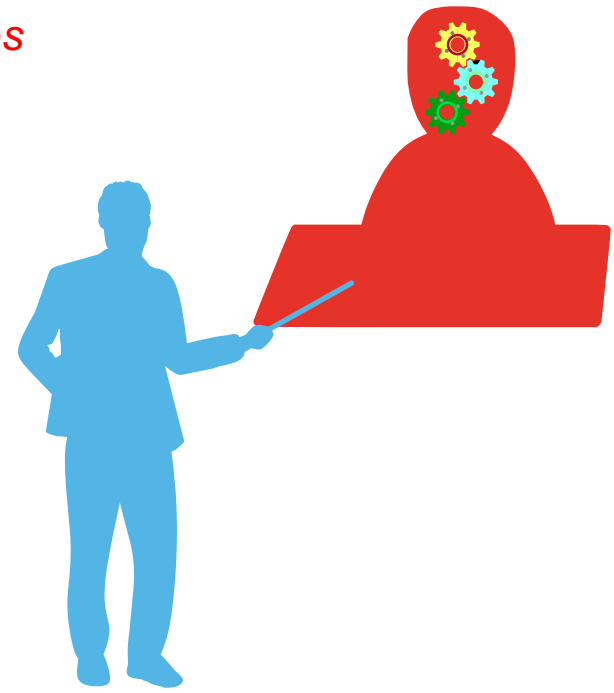
1 What is Flexible learning and who is it for?

Definition and scope

Student-centered Learning

Focus on what the *student does*

- Teacher defines desirable outcomes of learning and develops activities to achieve those outcomes.
- Students execute those activities under the guidance of the teacher.
- Different quality of L&T results from different **alignment** of learning outcomes and learning activities.



J. Biggs, C. Tang, *Teaching for Quality Learning at University*, McGraw Hill (**2011**)

Flexible learning includes

Multiple delivery formats	• Online • In-person • Blended
Time options	• Synchronous • Asynchronous • Self-paced
Modular approach	• Stackable learning units • Personalized curricula
LLL	• Recognition of Prior Learning • Informal experience

Flexible learning benefits mostly

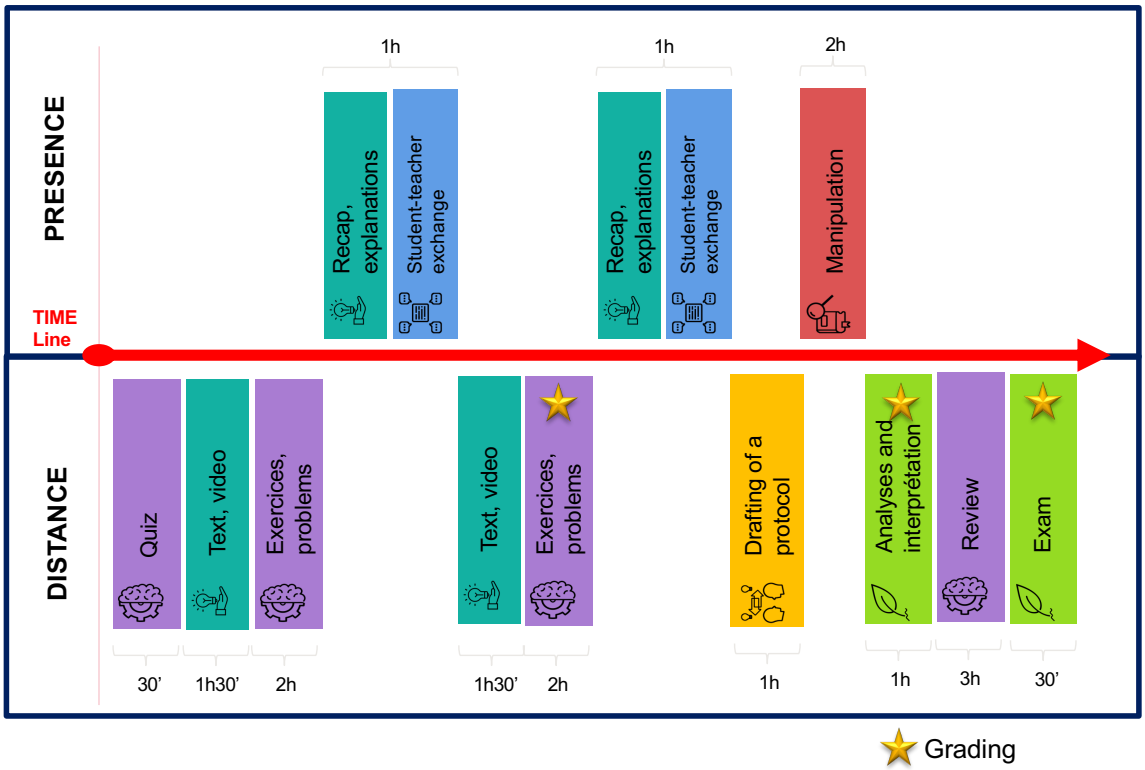
Working students	• who need to balance study with employment
Reskilling	• seeking quick, targeted skills in a new domain
Upskilling	• pursuing personal or professional growth
Non-traditional students	• returning to education later in life • without an academic background

2

The difference of flexible learning and blended learning

Blended learning scenario

Arbitrary example of a teaching unit



Blended vs. flexible learning

Definitions and goals

Blended learning

Definition: A classroom method that combines traditional face-to-face with distant learning.

Main Goals:

- Promote active learning through a mix of synchronous (live) and asynchronous activities.
- Make education more efficient by utilizing classroom time for hands-on activities and discussions, while basic instruction can happen online (flipped classroom model).

Flexible learning

Definition: A learning pathway that emphasizes student choice in how, when, and where learning occurs.

Main Goals:

- Increase accessibility and inclusivity for diverse learners, including those with work, family, or other commitments.
- Adapt to varied learning styles and needs by offering flexibility in pace, content delivery, and assessment methods.
- Promote self-directed learning and responsibility, encouraging students to manage their own educational journeys.

Blended vs. flexible learning

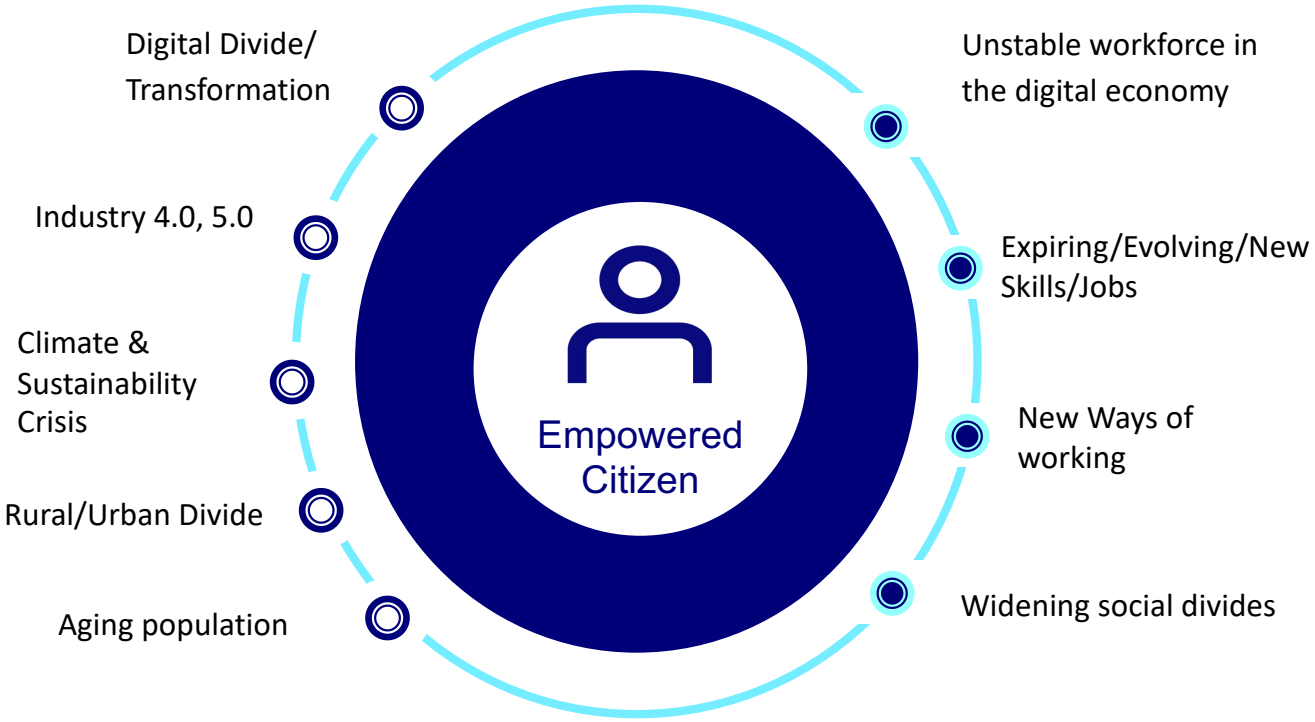
Key differences at a glance

Aspect	Blended Learning	Flexible Learning
Focus	Mix of in-person and distant	Learner choice and adaptability
Structure	Teacher-driven with a set structure	Student-driven with adaptable structure
Learning pace	Often fixed or semi-flexible	Highly flexible and individualized
Environment	Usually combines physical and digital spaces	Can be fully online, hybrid, or other varied formats
Goal Emphasis	Improve instruction through blended techniques	Expand access and personalize the learning experience

3

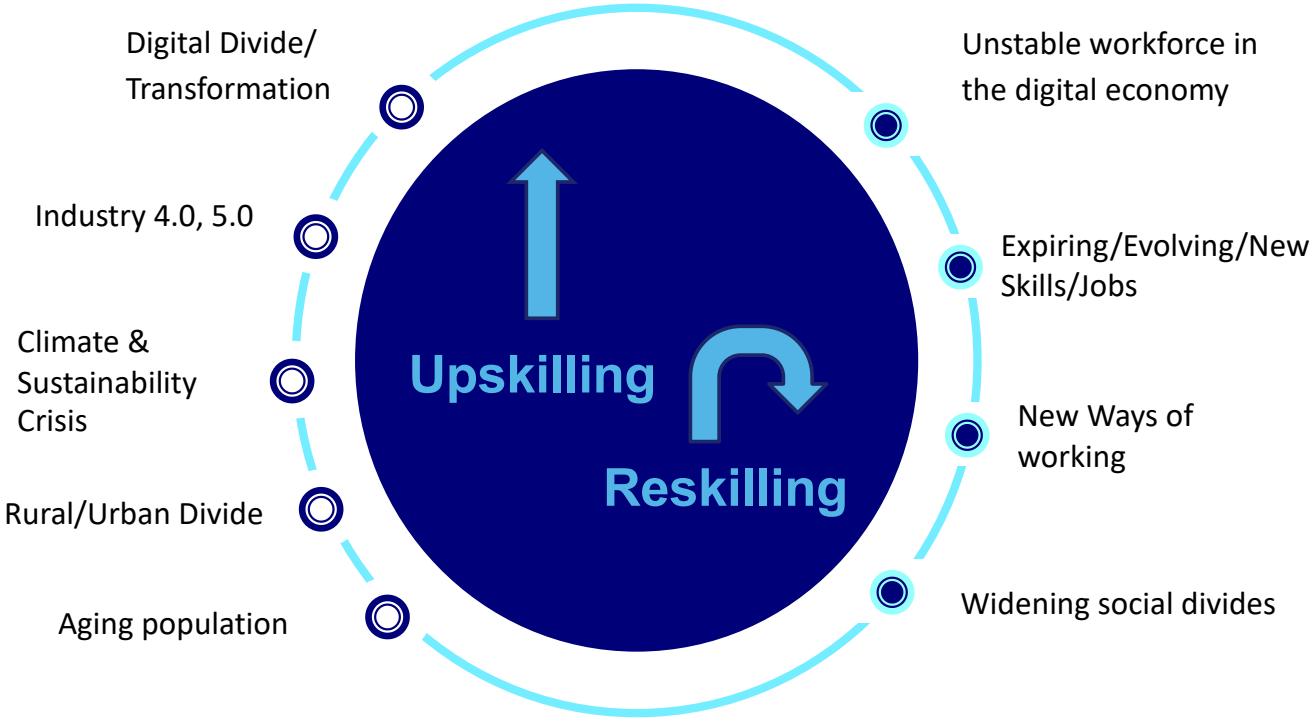
Problem context worldwide

Problem context worldwide



Slide credit: Mitchell Peters

Problem context worldwide



Problem context worldwide

Digital Divide/ Transformation

Industry

Climate & Sustainability Crisis

Rural/Urban Divide

Aging population

Unstable workforce in the digital economy

Expiring/Evolving/New Skills/Jobs

New Ways of working

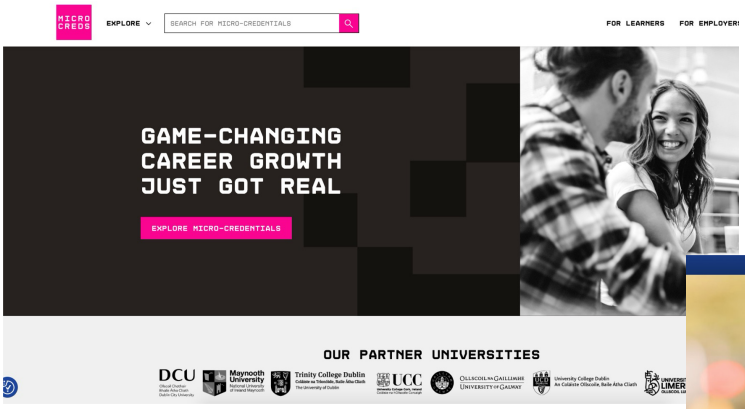
Widening social divides

"To encourage lifelong learning, Member States have endorsed the EU 2030 social targets that at least 60% of adults should participate in training every year..."

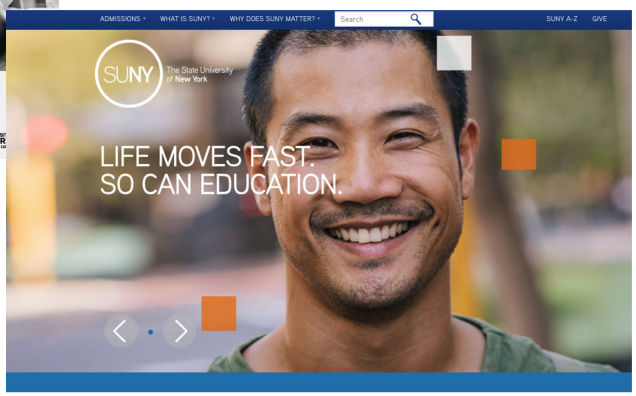
European Commission
2023 European Year of Skills

Slide credit: Mitchell Peters

Some frontrunners



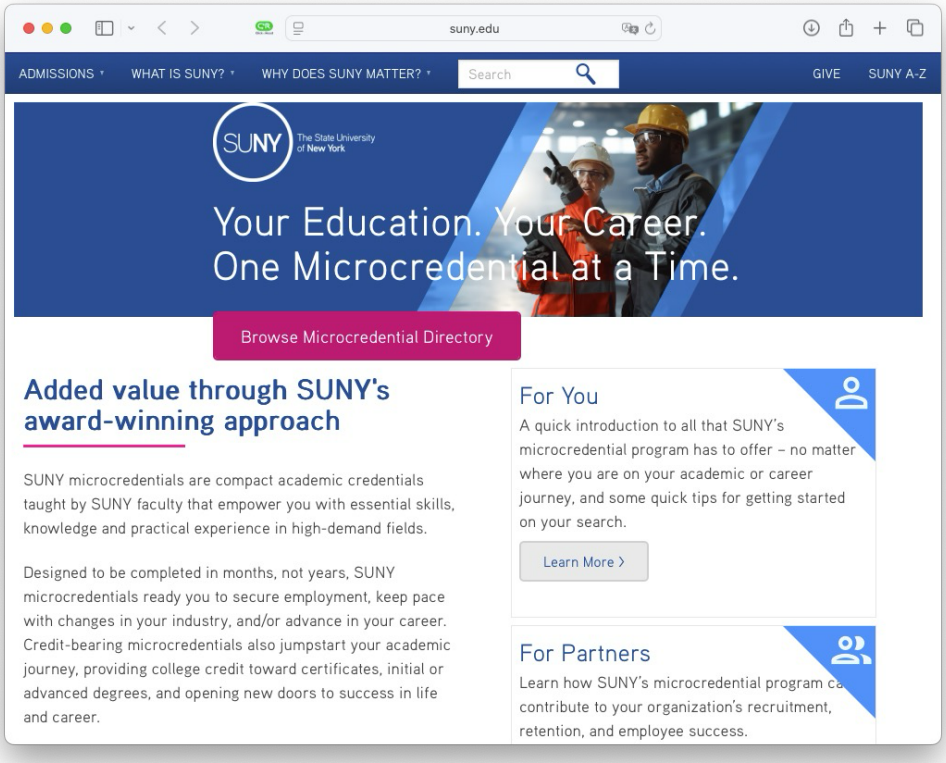
https://microcreds.ie/



https://www.suny.edu/microcredentials/

Gain New Skills, Knowledge, and Experience with Microcredentials at SUNY

SUNY Micro-credential program



Some features of SUNY micro-credential program

- Chronology: from 21 MC in 2018 to 521 MC in 2022 across 36 / 64 SUNY campuses (task force was formed in 2015)
- 43% fully online, 24% hybrid, 33% on site; many workers want to come to campus! (not always internet at home, kids around, meet new people ...)
- 67% MC are stackable to degrees such as bachelors, masters, PhD, DDS, PharmD, OD and MD
- A growing number of micro-credentials are in emerging areas and state priorities: renewable energy, green building, cannabis science;
- Every micro-credential gives access to the SUNY-id = full access to university services (very important to provide access to learning resources; creates feeling of belonging to SUNY)

Communication by Cynthia Proctor, Barcelona 2023

European Universities initiative

Transnational alliances of HEI paving the way towards the universities of the future.

- A flagship initiative of the European strategy for universities.
- Sets the ambition to expand to 60 European Universities alliances involving more than 500 higher education institutions by mid-2024.

https://education.ec.europa.eu/education-levels/higher-education/european-universities-initiative

Skills development in the EU

The EU Vision:

upskilling and reskilling for lifelong learners will become the norm

 https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-year-skills-2023_en

Union of skills

EUROPEAN
COMMISSION

Brussels, 5.3.2025
COM(2025) 90 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

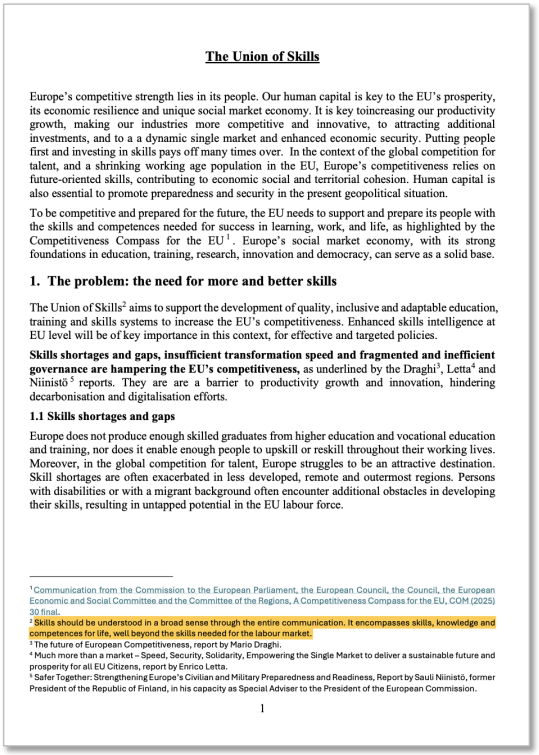
The Union of Skills

https://www.cedefop.europa.eu/files/communication_-_union_of_skills.pdf

EU priorities 2025: Union of skills

https://epale.ec.europa.eu/en/blog/union-skills-equip-people-competitive-europe

"Skills" in a broad sense



The Union of Skills

Europe's competitive strength lies in its people. Our human capital is key to the EU's prosperity, its economic resilience and unique social market economy. It is key toincreasing our productivity growth, making our industries more competitive and innovative, to attracting additional investments, and to a a dynamic single market and enhanced economic security. Putting people first and investing in skills pays off many times over. In the context of the global competition for talent, and a shrinking working age population in the EU, Europe's competitiveness relies on future-oriented skills, contributing to economic social and territorial cohesion. Human capital is also essential to promote preparedness and security in the present geopolitical situation.

To be competitive and prepared for the future, the EU needs to support and prepare its people with the skills and competences needed for success in learning, work, and life, as highlighted by the Competitiveness Compass for the EU[1]. Europe's social market economy, with its strong foundations in education, training, research, innovation and democracy, can serve as a solid base.

1. The problem: the need for more and better skills

The Union of Skills[2] aims to support the development of quality, inclusive and adaptable education, training and skills systems to increase the EU's competitiveness. Enhanced skills intelligence at EU level will be of key importance in this context, for effective and targeted policies.

Skills shortages and gaps, insufficient transformation speed and fragmented and inefficient governance are hampering the EU's competitiveness, as underlined by the Draghi[3], Letta[4] and Niinistö[5] reports. They are are a barrier to productivity growth and innovation, hindering decarbonisation and digitalisation efforts.

1.1 Skills shortages and gaps

Europe does not produce enough skilled graduates from higher education and vocational education and training, nor does it enable enough people to upskill or reskill throughout their working lives. Moreover, in the global competition for talent, Europe struggles to be an attractive destination. Skill shortages are often exacerbated in less developed, remote and outermost regions. Persons with disabilities or with a migrant background often encounter additional obstacles in developing their skills, resulting in untapped potential in the EU labour force.

[1] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, A Competitiveness Compass for the EU, COM (2025) 30 final.
[2] Skills should be understood in a broad sense through the entire communication. It encompasses skills, knowledge and competences for life, well beyond the skills needed for the labour market.
[3] The future of European Competitiveness, report by Mario Draghi.
[4] Much more than a market – Speed, Security, Solidarity, Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens, report by Enrico Letta.
[5] Safer Together: Strengthening Europe's Civilian and Military Preparedness and Readiness, Report by Sauli Niinistö, former President of the Republic of Finland, in his capacity as Special Adviser to the President of the European Commission.

1

"*Skills should be understood in a broad sense through the entire communication. It encompasses skills, knowledge and competences* ***for life, well beyond the skills needed for the labour market.***"

https://www.cedefop.europa.eu/files/communication_-_union_of_skills.pdf

EU priorities 2025: Union of skills

https://epale.ec.europa.eu/en/blog/union-skills-equip-people-competitive-europe

A key deliverable for upskill & reskill

Expand the use of micro-credentials as flexible learning solutions, in line with the **European approach**, to ensure that they are trusted, understandable, issued digitally and comparable across sectors and countries.

This will require actively engaging **all types of micro-credential providers**, notably private training providers, on top of education and training institutions.

Where relevant, micro-credentials should be **linked to national and European Qualification Frameworks**. Guidance on quality assurance instruments will enhance trust and take-up of micro-credentials in recruitment processes.

The aim is also to increase the number of **joint micro-credentials** issued by Centres of Vocational Excellence, European Universities alliances and EU Skills Academies, and to **increase their business use** in recruitment and career promotion, focusing in particular on strategic sectors.

https://www.cedefop.europa.eu/files/communication_-_union_of_skills.pdf

How short courses can address labor market and societal needs

Often cited economic arguments ...

- Quick skill development
  - Fast-changing industries
  - Market trends
  - Career changes
- Increased accessibility
  - Flexible learning pathways
  - Empowering marginalized groups
- Supporting community and economic development
  - Alignment with local needs

How short courses can address labor market and societal needs

... but also for the informed and cultivated citizen, and society

- Quick skill development
  - Identify fake news in the information universe
  - Distinguish facts from opinions
- Increased accessibility
  - Integrate migrant populations
- Supporting community and economic development
  - Foster a democratic culture

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Implementation of flexible learning and micro-credentials

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4

Flexibility dimensions and their management

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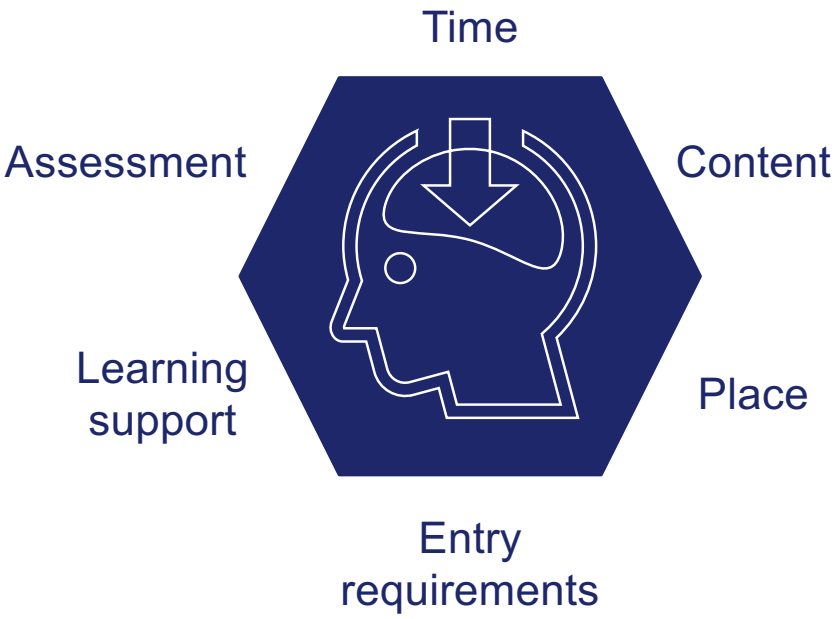
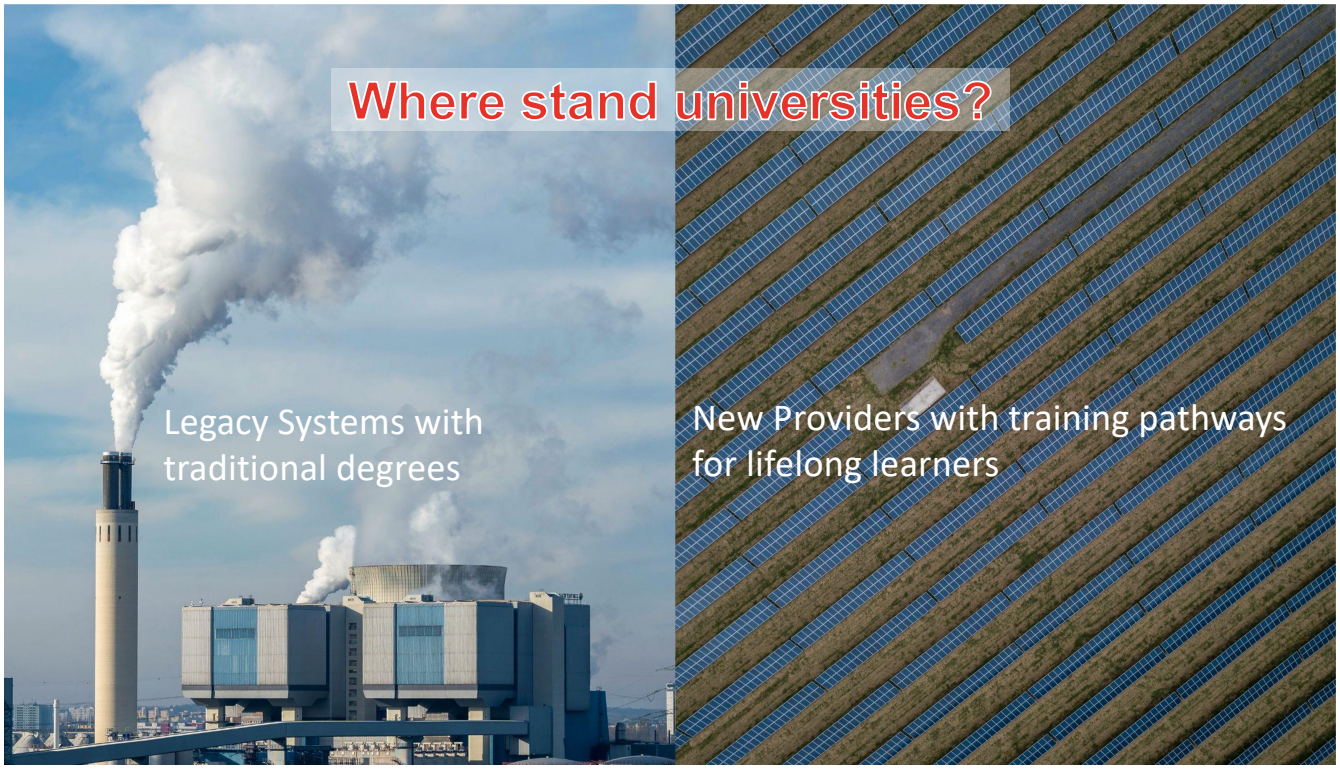
Flexibility dimensions of teaching and learning



Flexibility dimensions of teaching and learning

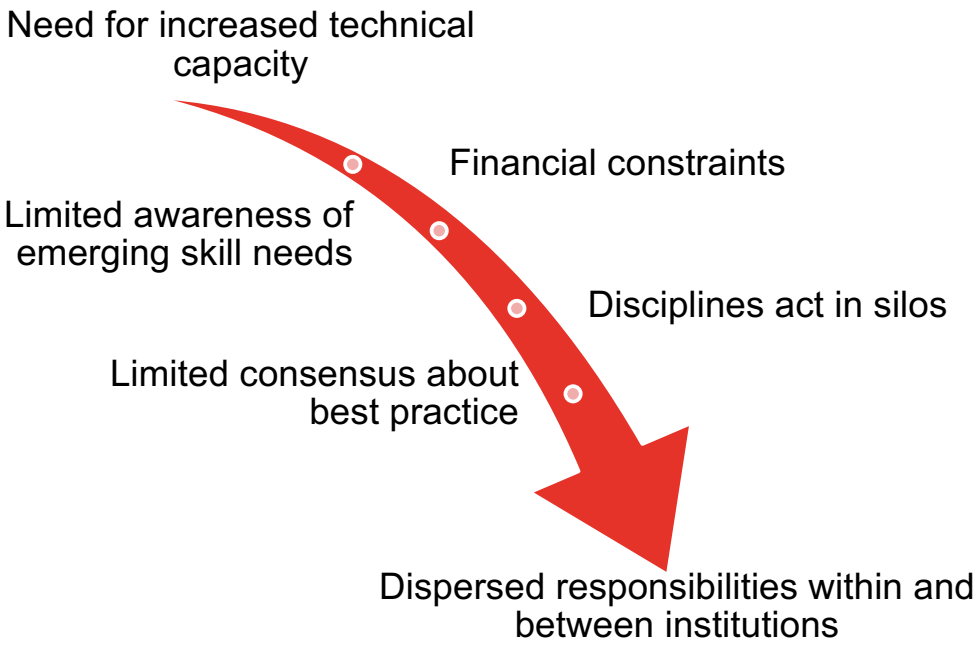
- **Time** – self-paced learning, synchronous/asynchronous teaching
- **Content** – modular, customizable curricula
- **Place** – online, hybrid, classroom
- **Entry requirements** – open access, recognition of prior learning (RPL)
- **Learning support** – tutoring, peer collaboration, tech assistance
- **Assessment** – continuous, formative, summative options

A change in the educational landscape

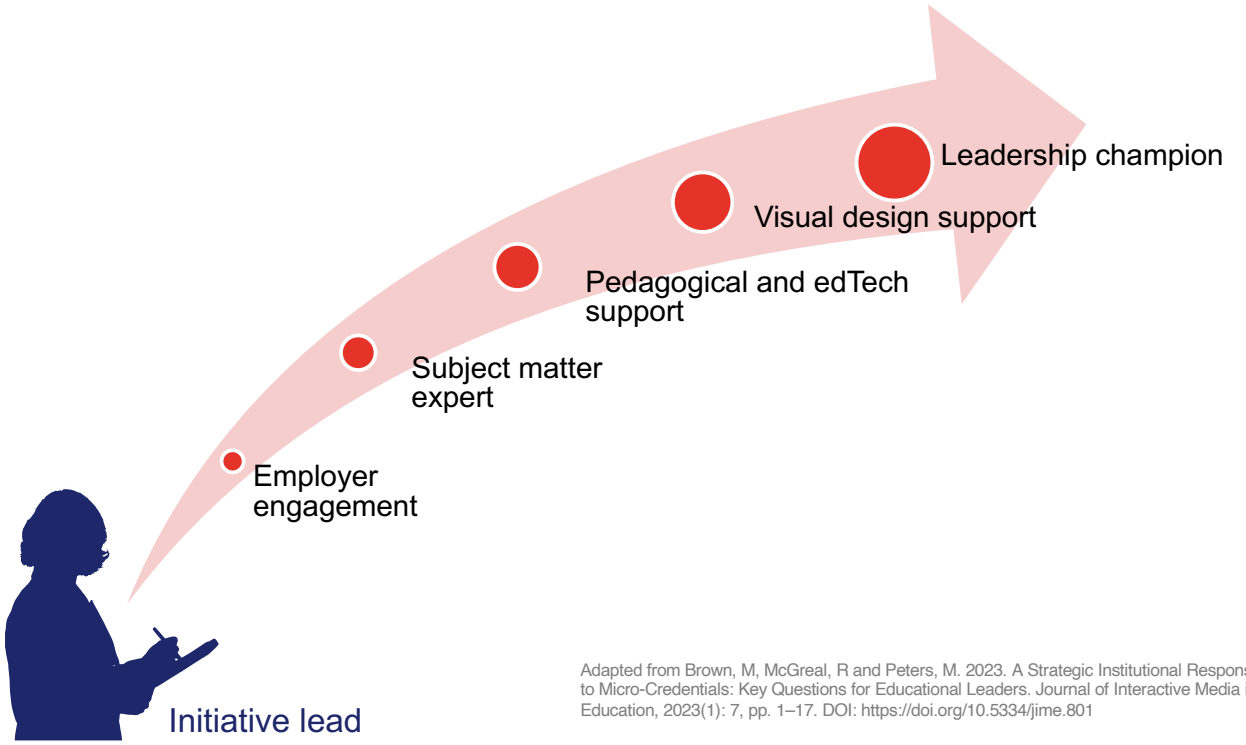


Slide adapted from Mitchell Peters

Common barriers in universities



An effective micro-credentials design team



Adapted from Brown, M, McGreal, R and Peters, M. 2023. A Strategic Institutional Response to Micro-Credentials: Key Questions for Educational Leaders. Journal of Interactive Media in Education, 2023(1): 7, pp. 1–17. DOI: https://doi.org/10.5334/jime.801

5

Micro-credentials and flexible learning in Higher Education

A change in the educational landscape

Are traditional degrees the fossil fuels of Higher Education?

Are Micro-credentials the electric cars of Higher Education?

Slide adapted from Mitchell Peters

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5 Micro-credentials and flexible learning in Higher Education

Definition and purpose of micro-credentials
Link to the European Qualification Framework and ECTS

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Micro-credentials: selected definitions

Cited from OECD Policy Perspectives N° 39, 2021

Source	Definition
BloomBoard	Micro-credentials are **a form of micro-certification** earned by proving competence **in one specific skill at a time**, via a portfolio of evidence, created through classroom practice
European University Association	A micro-credential is **a small volume of learning** certified by a credential
International Council for Open and Distance Education	A credential issued for a relatively small learning project that consists of **several modules in a given subject**
MicroHE	A micro-credential is **a sub-unit of a credential** or credentials that could accumulate into a larger credential or be part of a portfolio. Examples are Verified Certificates, Digital Badges, MicroMasters, and Nanodegrees
New Zealand Qualifications Authority	A micro-credential **certifies achievement** of a coherent set of skills and knowledge; and is specified by a statement of purpose, **learning outcomes**, and strong evidence of need by industry, employers, iwi and/or the community. They are smaller than a qualification and focus on skill development opportunities not currently catered for in the regulated tertiary education system.
Quacquarelli Symonds	A micro–credential is a **sector-endorsed short course** that provides the recipient with specialist skills.
State University of New York	Micro-credentials **verify, validate, and attest** that specific skills and/or competencies have been achieved. They differ from traditional degrees and certificates in that they are generally offered in shorter or more flexible timespans and tend to be more narrowly focused.

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EU Recommendation, 2022

A European approach to micro-credentials

What are micro-credentials?

Micro-credential' means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes will have been assessed against transparent and clearly defined criteria.

Learning experiences leading to microcredentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs.

Microcredentials are owned by the learner, can be shared and are portable.

They may be stand-alone or combined into larger credentials.

They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity

https://education.ec.europa.eu/education-levels/higher-education/micro-credentials

What are micro-credentials?

Learning Opportunity

- small volume of learning
- assessed against transparent clearly defined criteria
- specific knowledge, skills and competences
- stand-alone or combined into larger credentials
- quality assurance following agreed standards

Credential

- record of the learning outcomes
- owned by the learner
- can be shared
- are portable

Slide adapted from Mitchell Peters

An attempt to link MCs to the European Qualification Framework and European Credit Transfer System

- **Workload** of 100 to 150 hours (4–6 ECTS).
- Level 6 (**bachelor**) to 7 (**master**) of the EQF/NQF, with options for level 5.
- **Assessment** enabling the award of academic credit, either following successful completion of the course or recognition of prior learning.
- Reliable method of **ID verification** at the point of assessment.
- **Transcript** setting out the learning outcomes for a course, hours of study required, EQF level, and number of credit points earned.

Ferguson, R. and Whitelock, D. 2024. Microcredentials for Excellence: A Practical Guide. London: Ubiquity Press. DOI: https://doi.org/10.5334/bcz. License: CC BY-NC 4.0

6

Short courses, pedagogy and learning paths

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Micro-credentials

A new type of qualification

Some approaches to teaching and learning are more appropriate

Learners and educators need to acquire and develop new skills

A dinner for one https://www.youtube.com/watch?v=boisQwkK7rs

Ferguson, R. and Whitelock, D. 2024. Microcredentials for Excellence: A Practical Guide. London: Ubiquity Press. DOI: https://doi.org/10.5334/bcz.

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6 Short courses, pedagogy and learning paths

Pedagogy (andragogy) of micro-credentials

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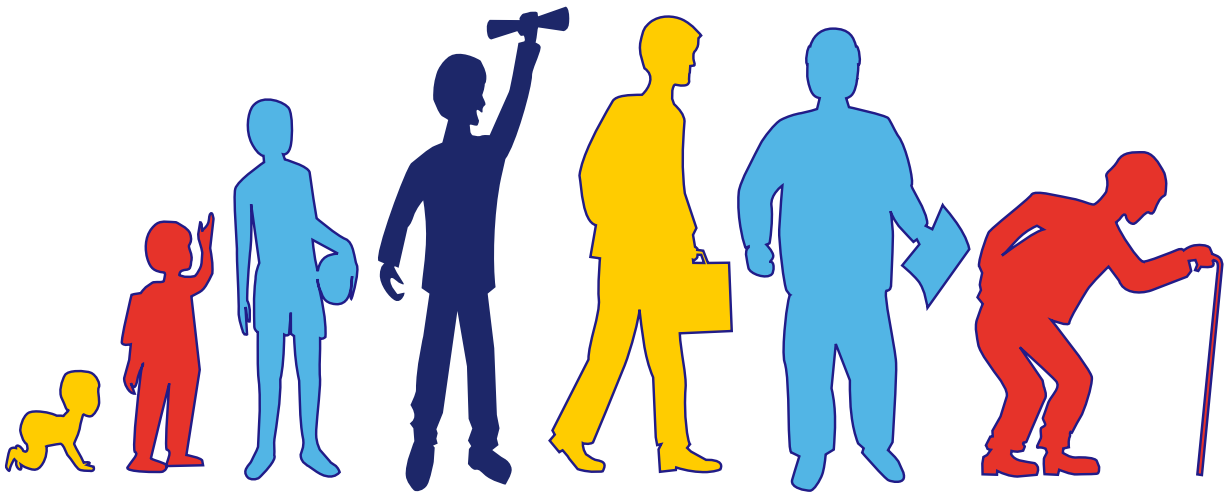
Micro-credential learners



(Fictional) MC learners

Working Adult: Ana, 38, Logistics Manager

- Ana needed digital project management skills to advance in her job. A university nearby offered a 6-week micro-credential in Agile Methodologies. It fit her work schedule, was affordable, and earned her a promotion.

Lifelong Learner: Peter, 63, Retired Engineer

- Peter wanted to contribute to his community's shift to solar energy. He took an online micro-credential in "Renewable Energy Fundamentals" through a local university. Now he volunteers to advise homeowners on energy upgrades.

Non-Traditional Student: Amina, 19, Refugee from Syria

- With no formal documents but strong motivation, Amina enrolled in an English-language micro-credential through an European MOOC Consortium. It helped her gain recognition, boost her confidence, and eventually enroll in a full diploma program.

Pedagogy – Andragogy

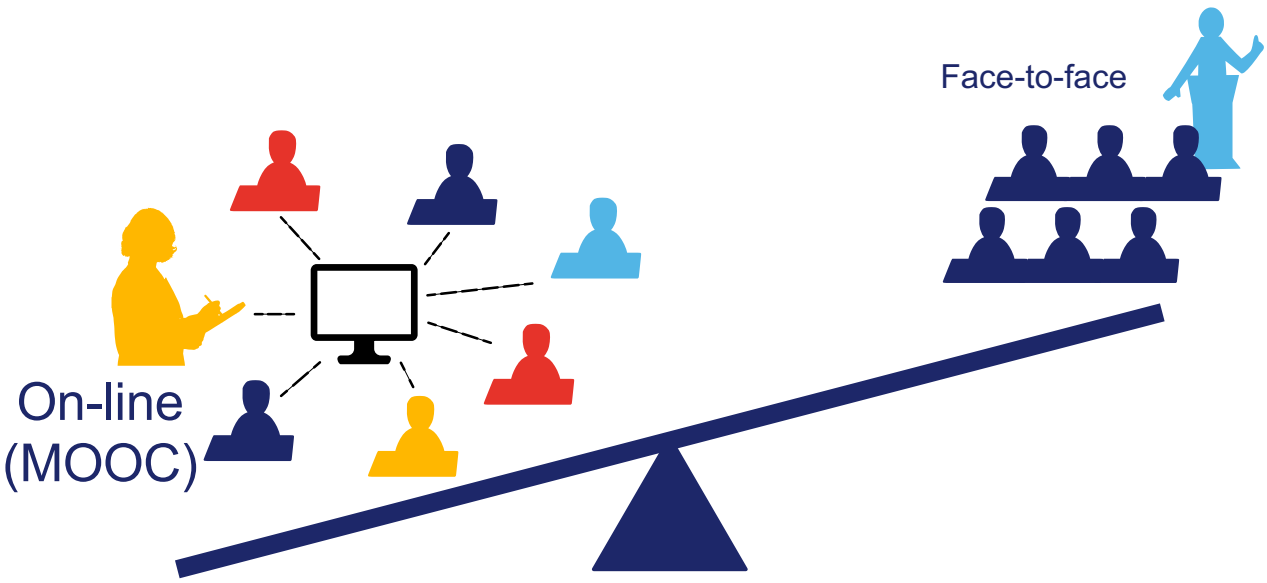
Compared to teenagers, adult learners

- consider the cost/benefit ratio before making a commitment
- liberate themselves from external authority
- have greater experience
- take fewer risks
- seek professional skills
- are more receptive to internal motivation

Adolescent — Student — Adult

D. Berthiaume, N. Rege Colet, *La pédagogie de l'enseignement supérieur: repères théoriques et applications pratiques*, Editions Peter Lang (Berne) **2013**.

Micro-credential teaching modes

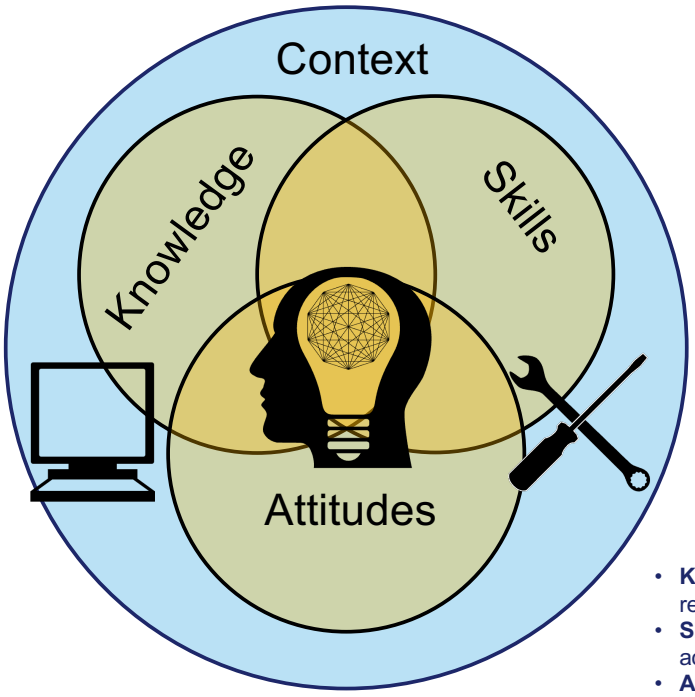


Challenges for teaching micro-credentials

Any successful micro-credential pedagogy will need to take into account that:

- cohorts are likely to be large; educator-learner ratios may be low
- learners are likely to have work and care commitments that take precedence over study; many learners will have disabilities that influence how and when they study; study is likely to be asynchronous
- focus is on career, workplace and professional skills; learners may have substantial relevant work experience
- learners may be new to online learning; learners require opportunities to interact with others
- learners require skills in self-regulation
- learners will be based in many countries
- learners may want to stack micro-credentials to form larger qualifications

Competency-based education



- **Knowledge**: cognitive abilities used to retain and process information
- **Skills**: physical abilities used to perform activities or tasks
- **Attitudes**: feelings and values about someone or something

Professional competence

Complete Tasks
- How to do the task
- Knowledge and skills required
- Quality of work is within expectations

Work Environment
- Physical environment and working conditions
- Adhering to policies and procedures
- Company culture - applying attitudes and values

Manage Tasks
- Combining tasks to complete larger work activities
- Multi-tasking
- Sequencing
- Time management

Job Role
- Working effectively with others
- Meeting personal and team expectations and responsibilities

Handle Contingencies
- Unexpected circumstances
- Changes in scope
- What to do when things go wrong

Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Prepare a meal

Activities

- find a recipe
- gather the ingredients
- prepare the dish
- set the table
- serve the food
- clear the table
- clean up the kitchen

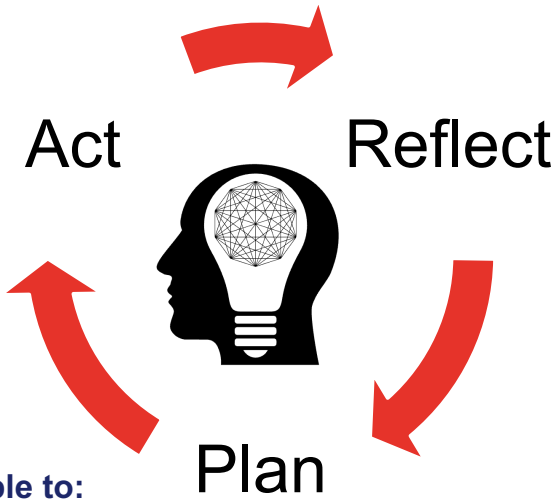
Competences

- using recipes to prepare food
- handling kitchen tools and equipment
- applying various cooking and baking methods
- adhering to safe work practices
- following safe food handling procedures

Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Active learning

Self-regulated learning



Learning how to learn involves being able to:

- decide what you need to help you learn
- manage your time
- set goals
- find valuable resources – including other people – to learn with
- choose learning strategies
- reflect on progress
- develop creative skills
- evaluate learning outcomes.

Learning design

https://abc-ld.org

Six types of learning

Learning type: **Acquisition**

Learning type: **Collaboration**

Learning type: **Discussion**

Learning type: **Investigation**

Learning type: **Practice**

Learning type: **Production**

From *Teaching as a Design Science*, Diana Laurillard (2012), Routledge, New York
https://www.youtube.com/watch?time_continue=59&v=wnERkQBqSGM

Activity based course design

Learning type: Acquisition

Conventional method	Digital technology
reading books, papers	reading multimedia, websites, digital documents and resources
listening to teacher presentations face-to-face, lectures	listening to podcasts, webcasts
watching demonstrations, master classes	watching animations, videos

Learning type: Collaboration

Conventional method	Digital technology
small group project	small group projects using online forums, wikis, chat rooms, etc. for discussing others' outputs
discussing others' outputs	building a joint digital output
building joint output	

Learning type: Discussion

Conventional method	Digital technology
tutorials	online tutorials
seminars	seminars
discussion groups	email discussions
class discussions	discussion groups
	discussion forums
	web-conferencing tools
	synchronous and asynchronous

Learning type: Investigation

Conventional method	Digital technology
using text-based study guides	using online advice and guidance
analysing the ideas and information in a range of materials and resources	analysing the ideas and information in a range of digital resources
using conventional methods to collect and analyse data	using digital tools to collect and analyse data
comparing texts	comparing digital texts
searching and evaluating information and ideas	using digital tools for searching and evaluating information and ideas

Learning type: Practice

Conventional method	Digital technology
practising exercises	using models
doing practice-based projects	simulations
labs	microworlds
field trips	virtual labs and field trips
face-to-face role-play activities	online role play activities

Learning type: Production

Conventional method	Digital technology
producing articulations using:	producing and storing digital documents
statements	representations of designs
essays	performances, artefacts
reports	animations
accounts	models
designs	resources
performances	slideshows
artefacts	photos
animations	videos
models	blogs
videos	e-portfolios.

From *Teaching as a Design Science*, Diana Laurillard (2012), Routledge, New York
https://www.youtube.com/watch?time_continue=59&v=wnERkQBqSGM

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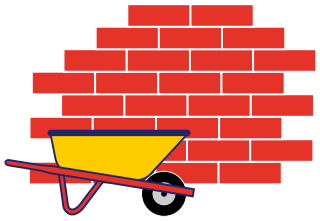
SPHERE Centralised Support to the Network of Higher Education Reform Experts

6 Short courses, pedagogy and learning paths

Stackability

Erasmus+

Educational pathways

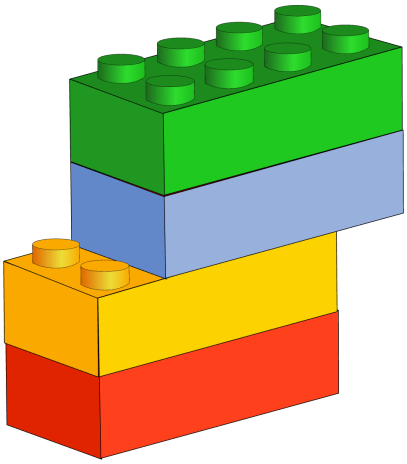


Stacking: smaller micro-credentials are stacked into a macro-credential (degree, diploma, certificate...) that recognizes a coherent set of skills or competencies;

Same for non-credit bearing courses stacking into a micro-credential.

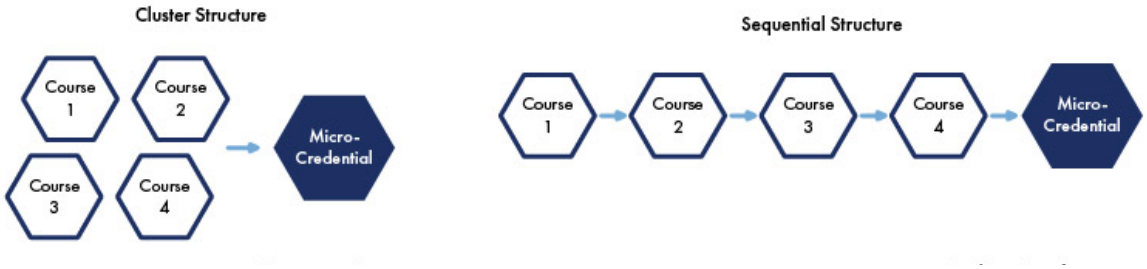
Laddering: micro-credentials that provide on-ramps to larger academic programs

Stackability



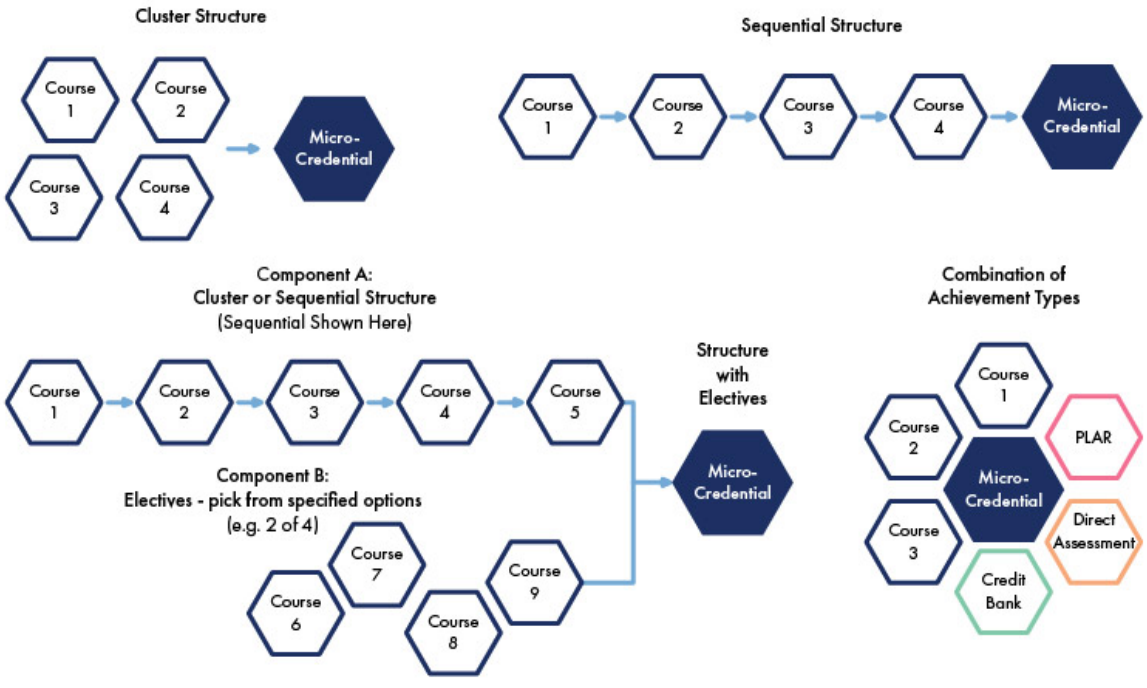
- Core component of EU standard
- Central aim: coordinate comprehensive offering for learners to gain more substantial qualification
- MC roadmapping should be design part of learning offer as a more agile, flexible and stackable approach to training and professional development
- Implies that credits from one institution should be recognised by others→ potential for joint programming

Micro-credential stacking structures



Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Micro-credential stacking structures



Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Curriculum mapping

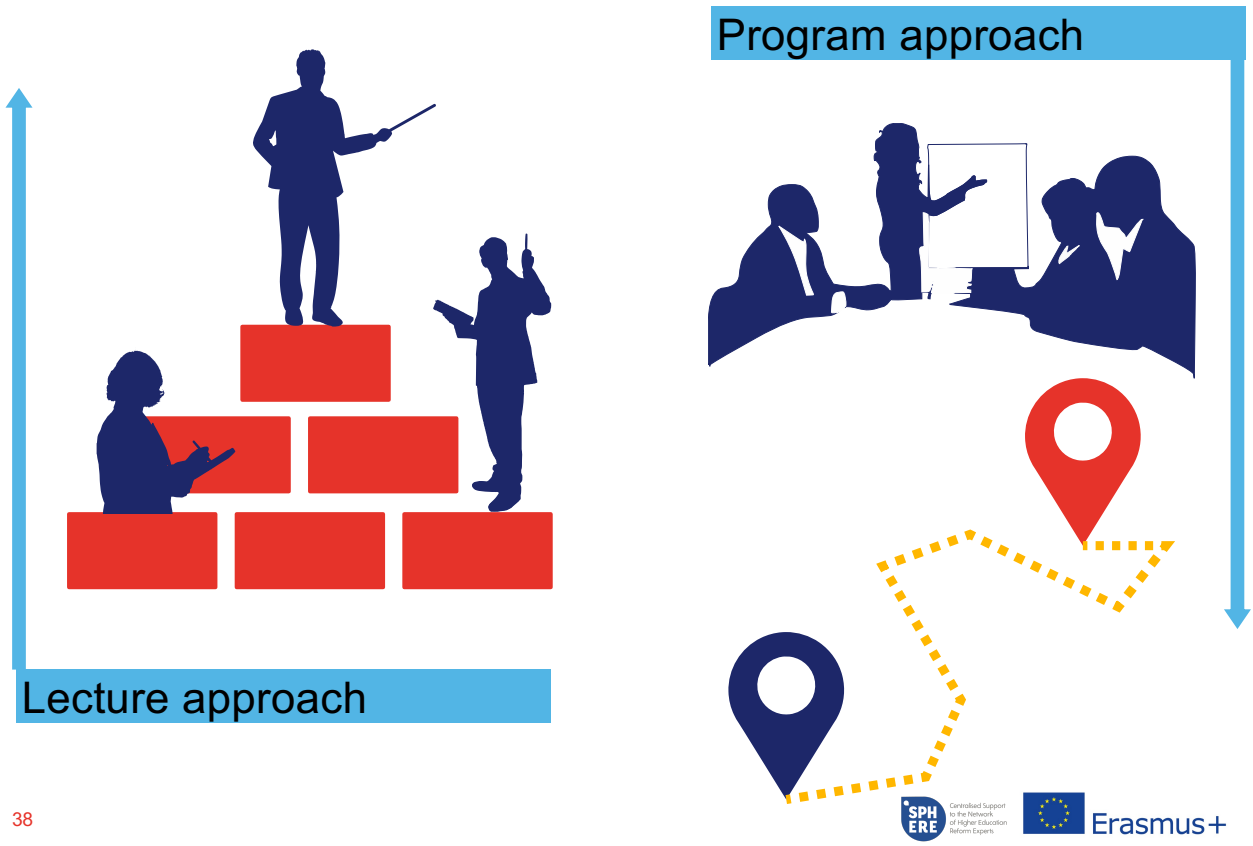
Alignment between the program-level learning outcomes or competencies and the contents of each course.

Table 1. Sample curriculum map.

Micro-credential competencies	Course 1	Course 2	Course 3	Course 4	Course5
Competency 1	Novice	Developing	Mastery		Mastery
Competency 2		Novice	Developing		Mastery
Competency 3			Novice	Developing	Mastery
Competency 4	Novice		Developing	Mastery	
Competency 5				Novice	Developing

- Course sharing between different MCs allows learners to get a second MC with less workload than the first one
- Curriculum mapping requires collaboration of all educators: program approach

Building a Curriculum



Comparison of both approaches

Lecture approach Content-based	**Program approach** Outcome-based
Individual organization: each teacher feels "owning" his or her courses. Teachers know little about what their colleagues are doing; they work in isolation.	**Collective organization**: teachers, gathered in teams around a program, feel collectively responsible for the training activities offered to students. Places and times are planned to discuss the learning to be developed and the means to be devoted to it.
Juxtaposition of expertise: the teacher builds his/her courses according to his/her expertise and what he/she finds important to transmit to the students.	**Shared educational project**: the student graduation profile is used as a reference for program management: the contents, learning activities and evaluation methods are decided collectively, based on this graduation profile.
Professional autonomy: teaching is considered an individual responsibility. Concerted action between teachers is rare.	**Participatory Steering**: the program is managed in a team-based manner. No one feels like owning a course. The team is looking to place "the right course in the right place".

Prégent, R., Bernard, H., Kozanitis, A. (2010), Enseigner à l'université dans une approche-programme. Montréal : Presse Internationales Polytechniques.

Steps Towards a micro-credential program

1. The vision
2. The competency framework
3. The intended learning outcomes
4. The construction of the courses
5. The audit

Adapted from: *Guide Kitmap Approche Programme*, Université de Nantes.
https://www.univ-nantes.fr/etudier-se-former/kitmap-un-kit-pour-deployer-l-approche-programme-1459376.kjsp

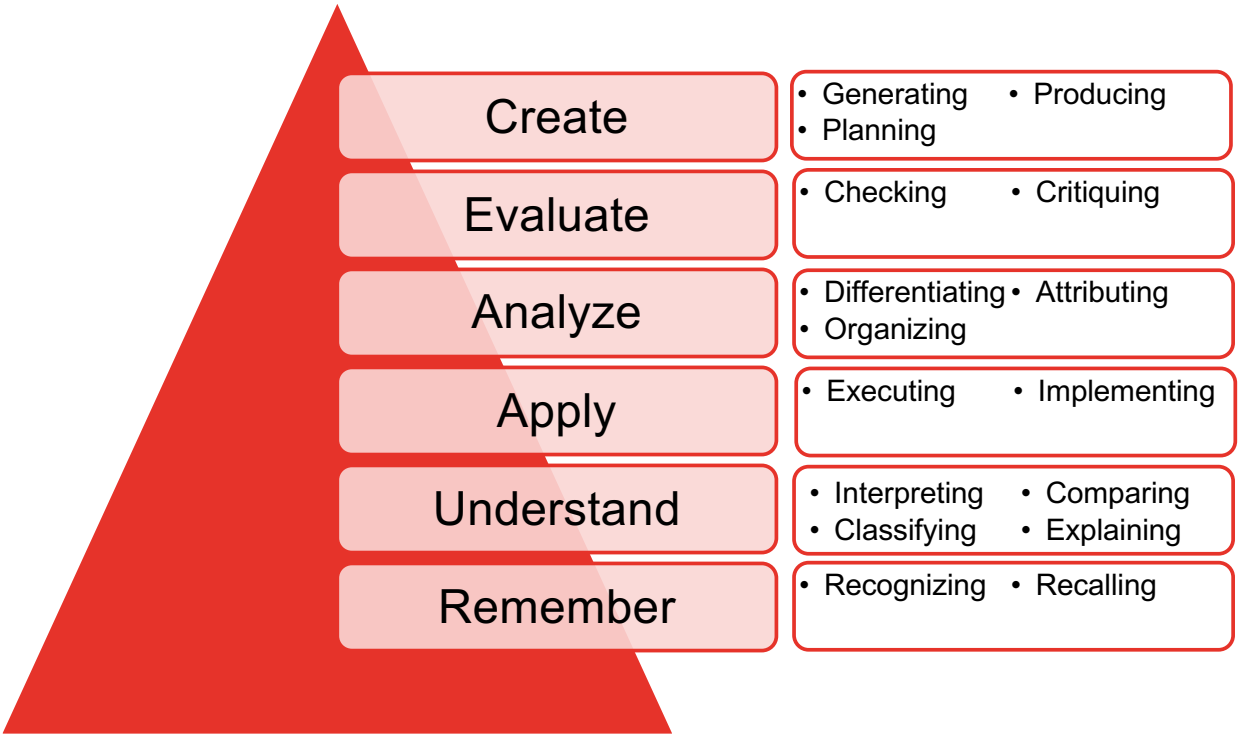
1. The Vision

- Defining the profile of the targeted learners
- Establishing professional and social relevance of the program
- Positioning of the program within the institution and the higher education area

2. The construction of the competency framework

- Identify professional sectors and careers
- Identify and analyze work activities
- Define the necessary competencies

3. The intended learning outcomes



A taxonomy for learning, teaching and assessing: a revision of Bloom's taxonomy of educational objectives. L. W. Anderson, D. R. Krathwohl, B. S. Bloom (2001), Longman Publisher, New York.

4. The Construction of the Courses

5. The Audit

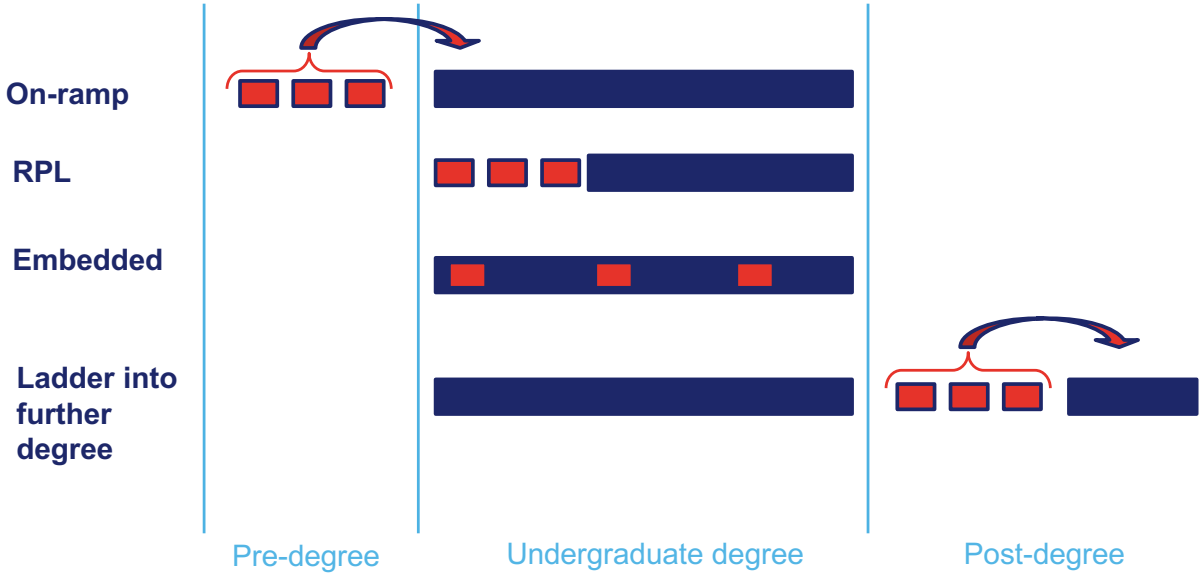
Vertical alignment	• What should students learn in this course towards the graduation competencies? • What is the entry level of this course?
Horizontal alignment	• What is the contribution of this course to other courses?
Internal alignment	• Are intended learning outcomes, teaching/learning activities and assessment tasks supporting each other?

Adapted from F. Chirat, D. Berthiaume, *Construire une maquette*, http://www.univ-poitiers.fr/images/medias/fichier/universite-de-lille-1-coherence-des-programmes-_1395322616399-pdf (accessed 26/1/2019)

6 Short courses, pedagogy and learning paths

Links between micro-credentials and degree programs

Possible relationships between micro-credentials and degrees



Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Ensuring the close matching of occupational and qualification standards

Micro-credentials

Labor market:
performance, competencies
"*What people need to do*"

=> **Occupational standard**
Short term vision

Diploma

Educational institutions:
learning & teaching
"*What people need to learn*"

=> **Qualification standard**
Long term vision

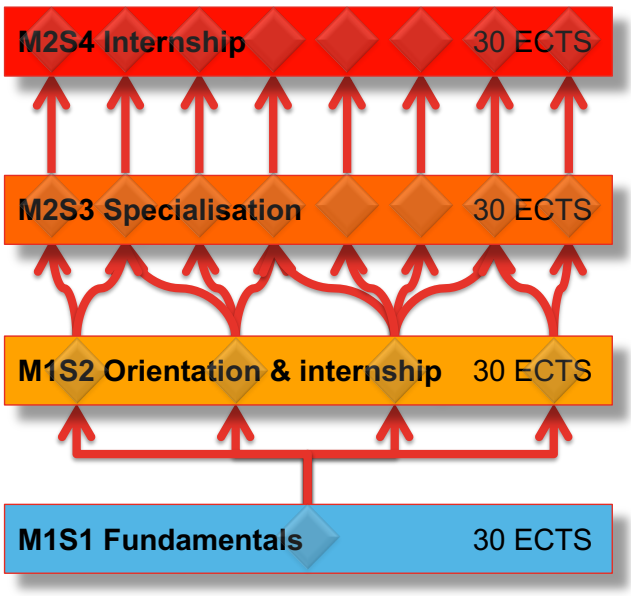
Compatible study programs are

- **Modular** (stackability)
- **Competency based** (learning outcomes)
- Provide **partial RPL** and **skill-gap training**

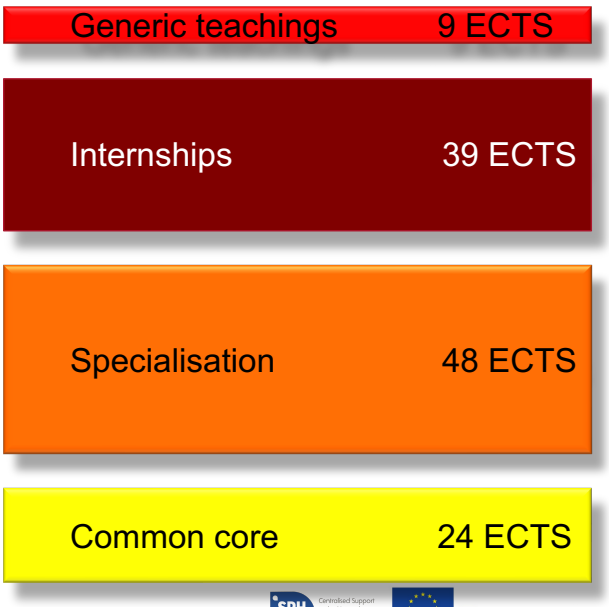
Study program with competence clusters

ex. Master of chemistry (2 years, 120 ECTS)

By semesters



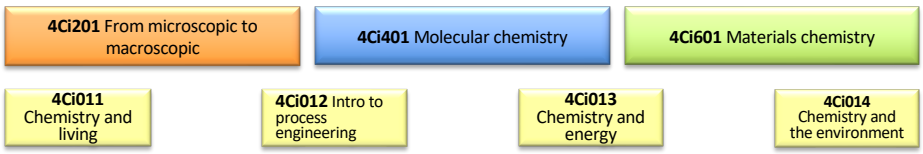
By competences



Modules in competence clusters

ex. Master of chemistry

Common core



Personalized specialisation

Generic teachings

Internships

What we have seen yesterday

Introduction to flexible learning pathways

1. What is flexible learning and who is it for?
2. The difference between flexible learning and blended learning
3. Problem context worldwide

Implementation of flexible learning and micro-credentials

4. Flexibility dimensions and their management
5. Micro-credentials and flexible learning in Higher Education
6. Short courses, pedagogy and learning paths

7

Strategic positioning of micro-credentials, institutional approaches, structure required

Questions for the leadership

- How do you strategically position them?
- What type of institutional leadership is required?
- What type of internal structures are required?
- What type of business model(s) are required?
- What could possibly go wrong?

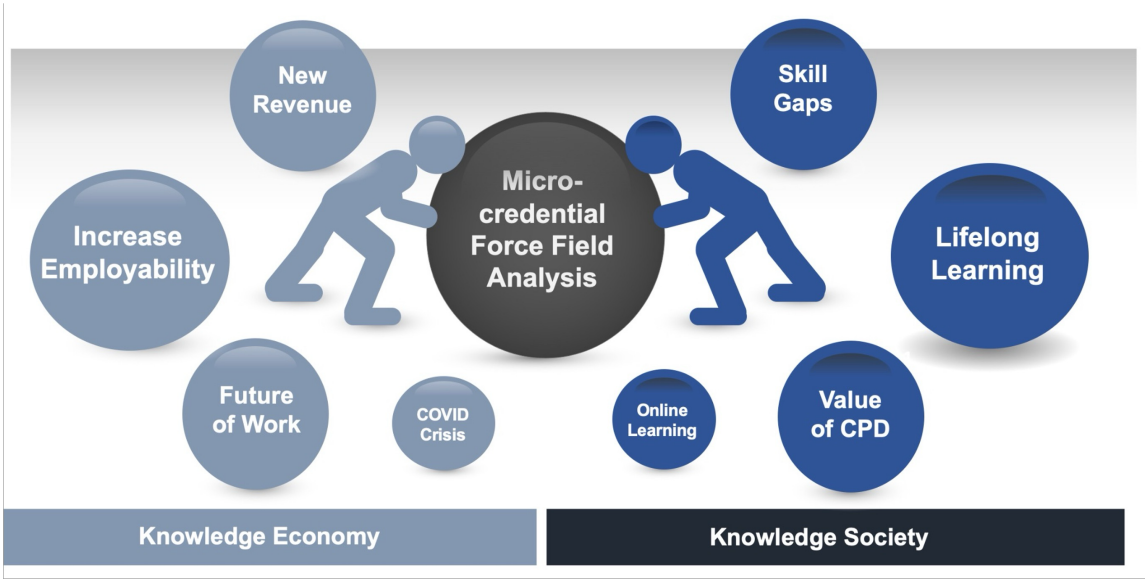
7 Strategic positioning of micro-credentials, institutional approaches, structure required

Embedding micro-credentials in HEI strategy

HEI strategy

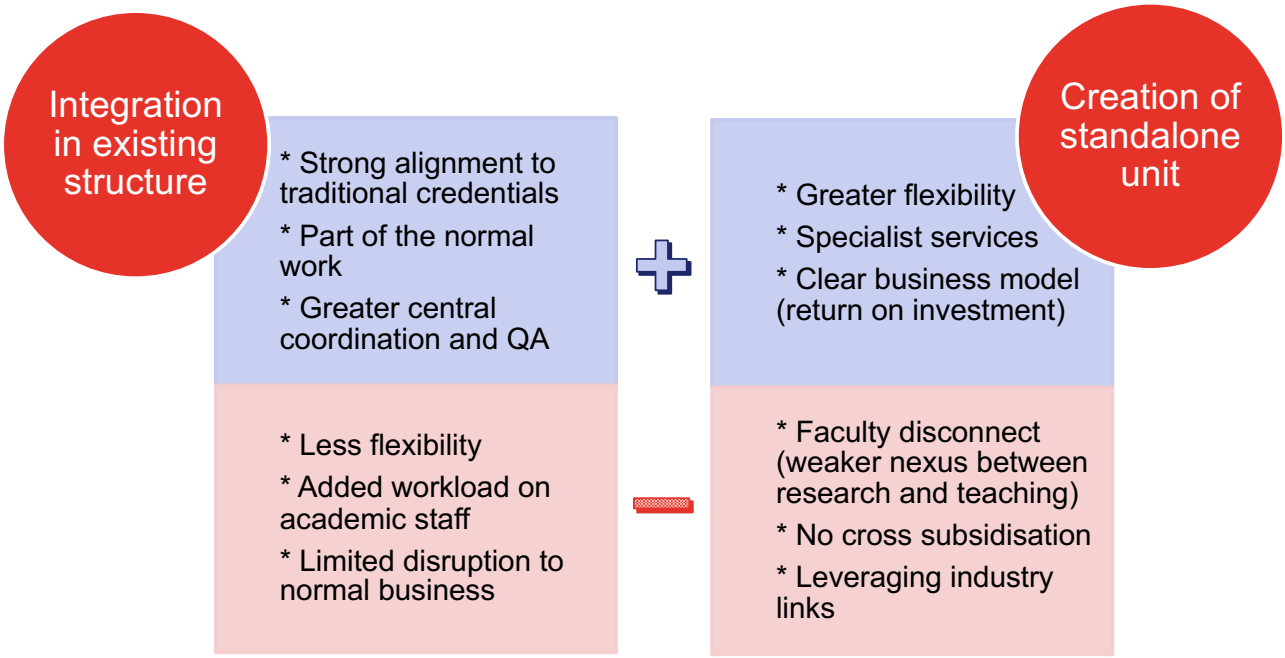
The basic premise is that a successful institutional micro-credential strategy needs to answer or at the very least address the 'why?' question.

Rationale and strategic positioning

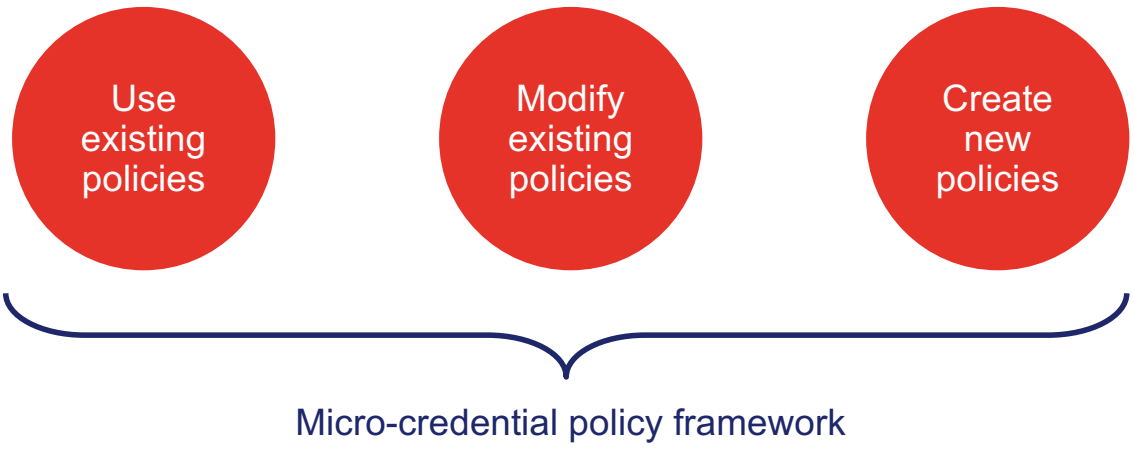


Brown, M, McGreal, R and Peters, M. 2023. A Strategic Institutional Response to Micro Credentials: Key Questions for Educational Leaders. Journal of Interactive Media in Education, 2023(1): 7, pp. 1–17. DOI: https://doi.org/10.5334/jime.801

Internal structures for managing micro-credentials



Developping micro-credential policies



Principles of SUNY's micro-credential policy

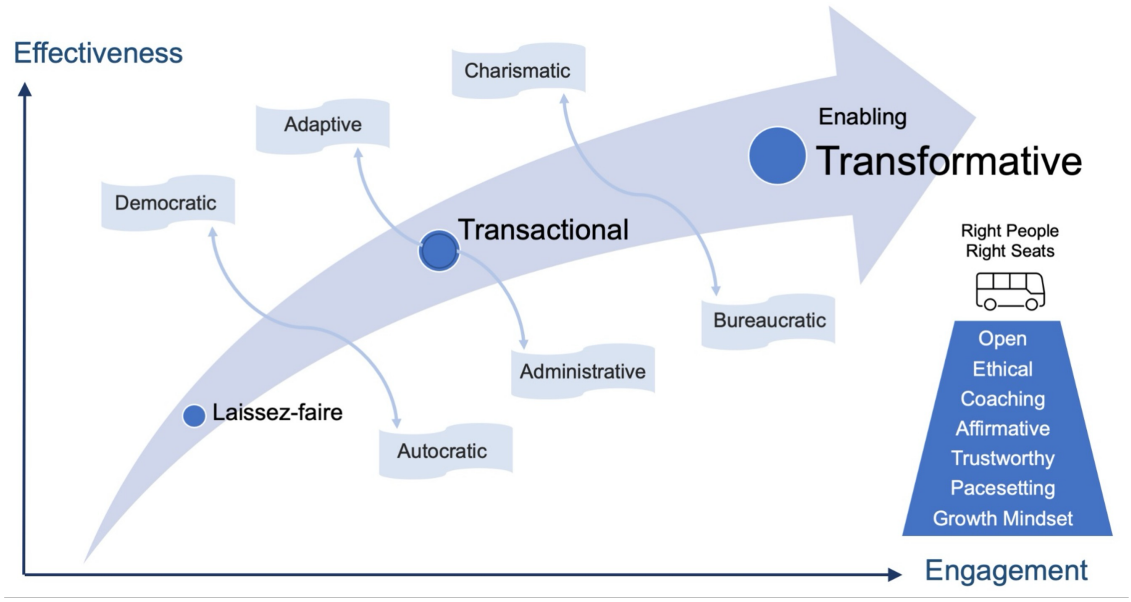
1. **Academic quality** is paramount for micro-credentials; **faculty governance** participation is required.
2. Micro-credentials are **initiated locally**, developed and approved according to local campus policies and procedures, and consistent with campus mission, SUNY policy, and state/federal regulation.
3. Micro-credentials designed to **meet market needs** should be informed by current data from appropriate markets and align with relevant industry/sector standards.
4. Micro-credentials are inherently more **flexible and innovative**.
5. Micro-credentials should be **portable and stackable**.

https://system.suny.edu/media/suny/content-assets/documents/academic-affairs/microcredentials/SUNY-Micro-credential-Policy-Summary.pdf

7 Strategic positioning of micro-credentials, institutional approaches, structure required

Governance and team

Institutional leadership approaches



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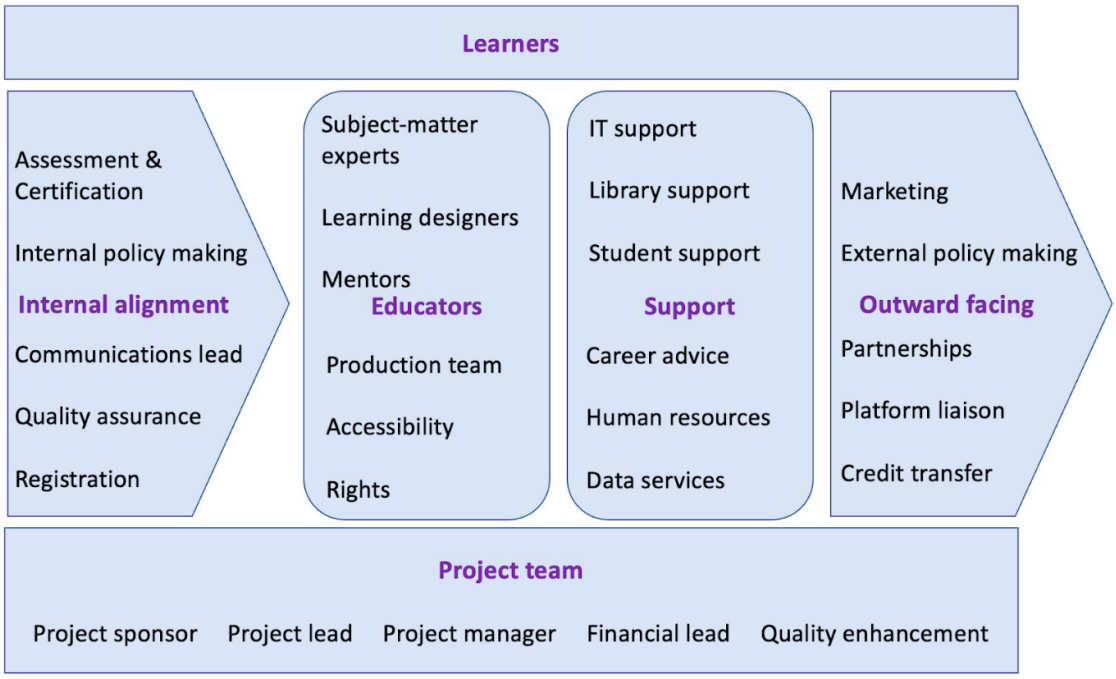
Building a team

Key roles on micro-credentials



Ferguson, R. and Whitelock, D. 2024. Microcredentials for Excellence: A Practical Guide. London: Ubiquity Press. DOI: https://doi.org/10.5334/bcz. License: CC BY-NC 4.0

Key roles on micro-credentials

• **Project team roles** drive forward the micro-credentials programme, forging links between other roles and developing a long-term strategy.

• **Educators** include the various groups of people responsible for developing and delivering the courses.

• **Support** covers the work of a variety of support teams, including student-focused support such as the library and the careers service, as well as staff-based support from human resources and data services.

• **Internal alignment** is concerned with ensuring that institutional services such as policies and quality assurance are extended to cover micro-credentials, and that staff understand this new strategic initiative.

• **Outward-facing roles** make links with external bodies and take responsibility for marketing the courses.

• **Learners** have a role to play in defining what micro credentials become, providing input and feedback, as well as interacting to form a learning community that extends beyond the cohorts on individual micro-credentials.

Ferguson, R. and Whitelock, D. 2024. Microcredentials for Excellence: A Practical Guide. London: Ubiquity Press. DOI: https://doi.org/10.5334/bcz. License: CC BY-NC 4.0

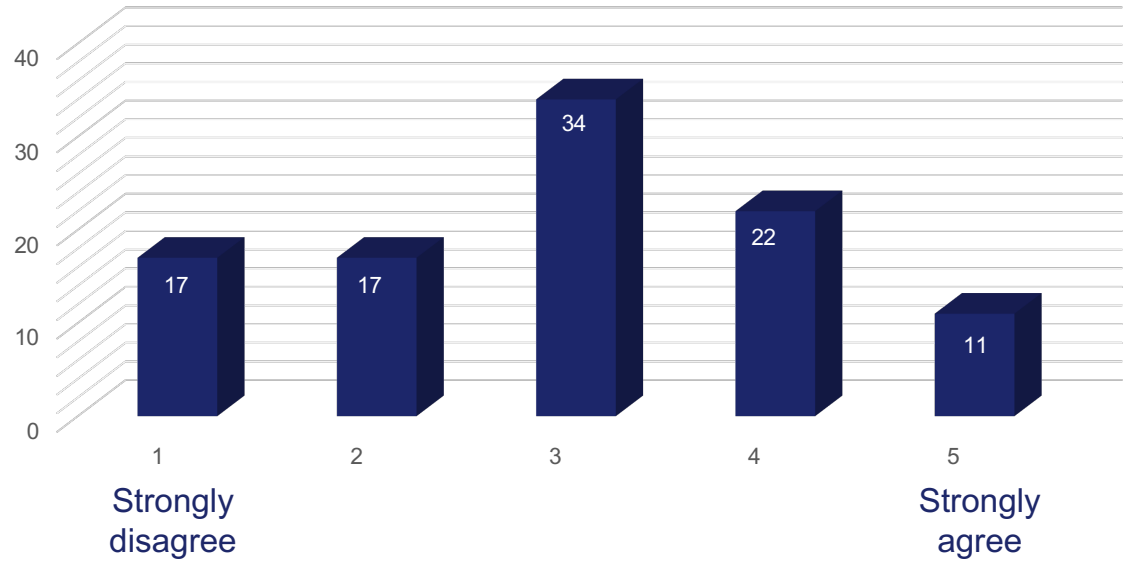
7 Strategic positioning of micro-credentials, institutional approaches, structure required

Stakeholder involvement

(Employers, learners, policy-makers)

Perception of academic degrees by business leaders

Higher education institutions in this country are graduating students with the skills and competencies that MY business needs.



Lumina-Gallup study: What America needs to know about higher education redesign (2014), https://www.luminafoundation.org/files/resources/2013-gallup-lumina-foundation-report.pdf

Decline of academic degrees in job postings

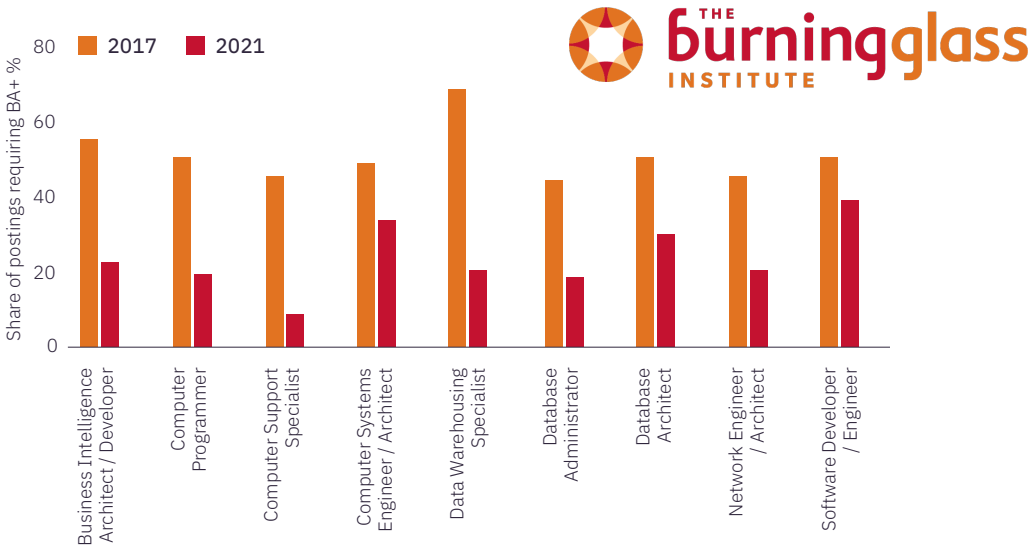


FIGURE 6: **Accenture: Degree reset in IT occupations**

Notes: Bars show the vacancy-weighted share of BA+ postings in specific IT occupations at Accenture. Source: Analysis of Emsi Burning Glass data, 2017 and 2021.

The Emerging Degree Reset, Burning Glass Institute 2022, https://static1.squarespace.com/static/6197797102be715f55c0e0a1/t/6202bda7f1ceee7b0e9b7e2f/1644346798760/The+Emerging+Degree+Reset+%2822.02%29Final.pdf

Information from employers

- The suite of competencies that are difficult to find in the workforce;
- Authentic ways in which these competencies are used;
- The types of evidence that would convince them that someone has mastered these competencies.

Contributions from employers

- Finding **subject matter experts** who can help develop and teach micro-credentials;
- Participating in the **development of course materials** that give learners an authentic feel for what their industry or community wants and where it is headed
- Providing **access** to their community, workplace, and/or equipment for tours and field trips, or even for work- or community-integrated learning opportunities.

Employer partners

Type of employer partners

- Specific employer or home-made advisory group
- Industry or professional association, Chamber of commerce

Potential employer contacts

- Program advisory committee
- Personal contacts of faculty staff
- Research collaborations
- Alumni
- Development office, Foundation

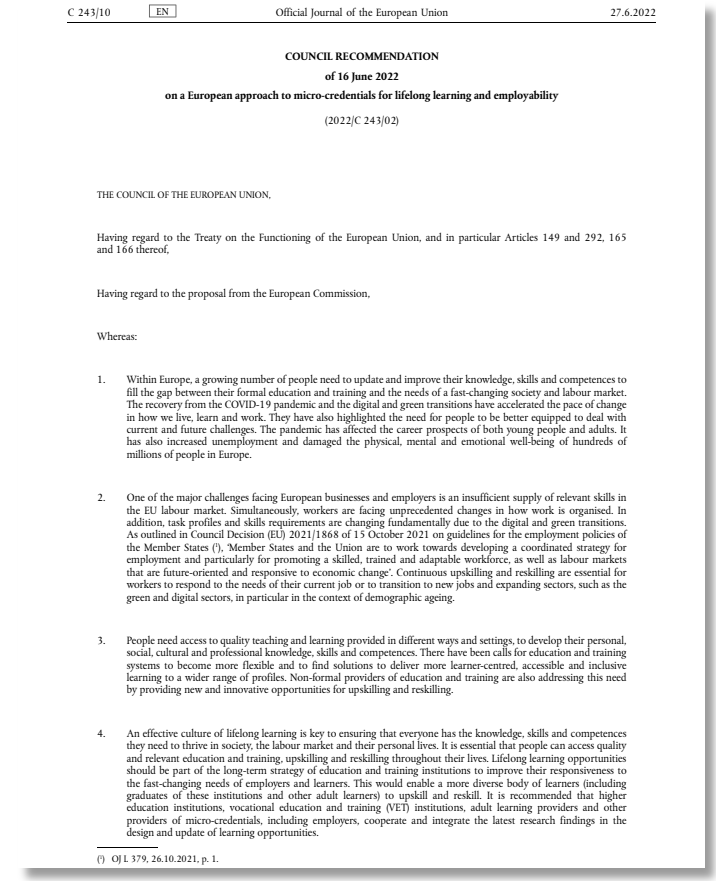
Students as partners

- Reduce power imbalance
  - Students: Greater trust and sense of belonging to the community
  - Faculty: Opening to new topics and reflection on practice
- Participating role of students
  - Curriculum design
  - Program marketing
  - Community development
- Values for learner-staff partnership
  - Respect
  - Responsibility
  - Reciprocity

Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Policy-makers

- Set social and educational rights
- Fix rules and procedures
- Provide support



C 243/10 EN Official Journal of the European Union 27.6.2022

COUNCIL RECOMMENDATION
of 16 June 2022
on a European approach to micro-credentials for lifelong learning and employability
(2022/C 243/02)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Articles 149 and 292, 165 and 166 thereof,

Having regard to the proposal from the European Commission,

Whereas:

1. Within Europe, a growing number of people need to update and improve their knowledge, skills and competences to fill the gap between their formal education and training and the needs of a fast-changing society and labour market. The recovery from the COVID-19 pandemic and the digital and green transitions have accelerated the pace of change in how we live, learn and work. They have also highlighted the need for people to be better equipped to deal with current and future challenges. The pandemic has affected the career prospects of both young people and adults. It has also increased unemployment and damaged the physical, mental and emotional well-being of hundreds of millions of people in Europe.

2. One of the major challenges facing European businesses and employers is an insufficient supply of relevant skills in the EU labour market. Simultaneously, workers are facing unprecedented changes in how work is organised. In addition, task profiles and skills requirements are changing fundamentally due to the digital and green transitions. As outlined in Council Decision (EU) 2021/1868 of 15 October 2021 on guidelines for the employment policies of the Member States (1), 'Member States and the Union are to work towards developing a coordinated strategy for employment and particularly for promoting a skilled, trained and adaptable workforce, as well as labour markets that are future-oriented and responsive to economic change'. Continuous upskilling and reskilling are essential for workers to respond to the needs of their current job or to transition to new jobs and expanding sectors, such as the green and digital sectors, in particular in the context of demographic ageing.

3. People need access to quality teaching and learning provided in different ways and settings, to develop their personal, social, cultural and professional knowledge, skills and competences. There have been calls for education and training systems to become more flexible and to find solutions to deliver more learner-centred, accessible and inclusive learning to a wider range of profiles. Non-formal providers of education and training are also addressing this need by providing new and innovative opportunities for upskilling and reskilling.

4. An effective culture of lifelong learning is key to ensuring that everyone has the knowledge, skills and competences they need to thrive in society, the labour market and their personal lives. It is essential that people can access quality and relevant education and training, upskilling and reskilling throughout their lives. Lifelong learning opportunities should be part of the long-term strategy of education and training institutions to improve their responsiveness to the fast-changing needs of employers and learners. This would enable a more diverse body of learners (including graduates of these institutions and other adult learners) to upskill and reskill. It is recommended that higher education institutions, vocational education and training (VET) institutions, adult learning providers and other providers of micro-credentials, including employers, cooperate and integrate the latest research findings in the design and update of learning opportunities.

(1) OJ L 379, 26.10.2021, p. 1.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022H0627(02)

8

Process of delivering micro-credentials

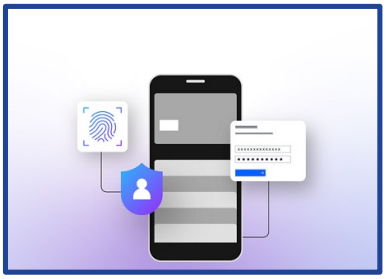
8 Process of delivering micro-credentials

Europass model

Digital infrastructure

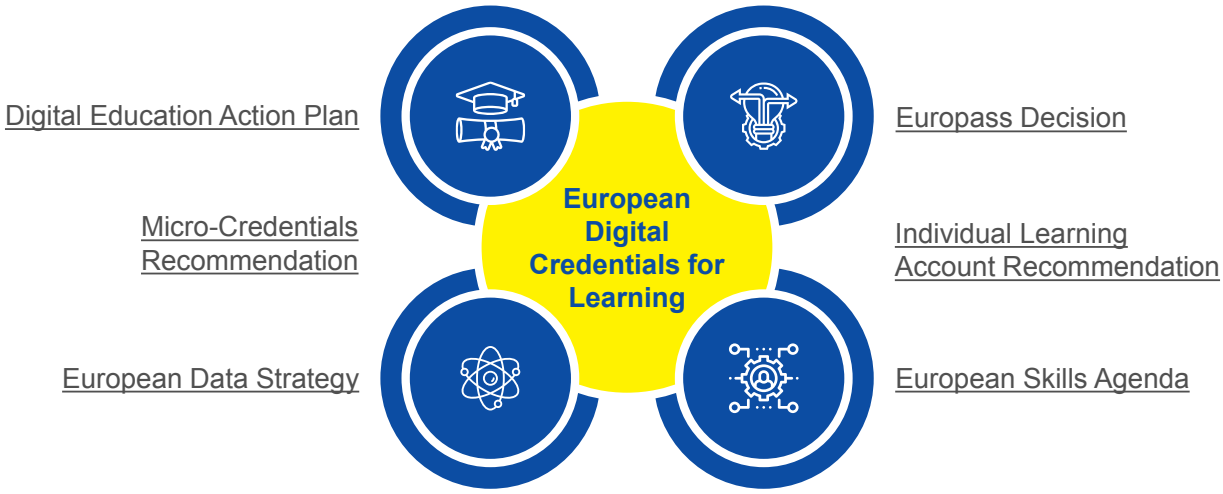
A digitally signed credential

- A credential, in its most essential form, is a **documented statement** containing claims made about a person
- A **European Digital Credential for Learning** is a claim related to the learning achievement of a person
- A **digital signature (e-Seal)** guarantees the origin and integrity of the document



Ildiko Mazar, *European Digital Credentials for Learning*, presentation in Barcelona 2023

CENTRAL TO THE EU'S POLICY AGENDA



Completing the European Education Area (2025)

Ildiko Mazar, *European Digital Credentials for Learning*, presentation in Barcelona 2023

WHY DOES THE EC NEED A DIGITAL CREDENTIAL INITIATIVE?

OBJECTIVES

- Empower citizens to own their credentials
- Reduce market fragmentation
- Create an EU Skills Data Space
- Make digital credentials multilingual by default
- Remove barriers to recognition
- Provide accreditation & transparency tools

BENEFITS

- Captures formal, non-formal & informal learning
- Addresses all levels of education
- Applicable to the whole course lifecycle
- Interoperable
- Aligned with European recognition instruments
- Free & open source

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European Commission

EUROPEAN DIGITAL CREDENTIALS FOR LEARNING

COMPONENTS OF THE INFRASTRUCTURE

The EDC infrastructure encompasses the technical specifications to implement the framework. It comprises the following core building blocks to help operationalise the framework

Standards

Services

Software

Centralised Support to the Network of Higher Education Reform Experts

Erasmus+

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European Commission

SYSTEM FUNCTIONS

Issue

credentials and send them to their owners

Any standard compliant issuer can award info-rich, tamper-evident digitally signed credentials (fast, free and paperless)

Store

credentials securely in a single online or offline wallet

EDCs can be directly deposited into any standard compliant credential wallet

Verify

if the credential is authentic, valid and issued by an accredited organisation

Instant, automatic authentication and verification checks verify credential's authenticity, validity, integrity and issuer's accreditation status (if applicable)

Share

the information in the credential with any other person or organisation with just a click

Owners can share their EDC(s) from any standard compliant wallet securely by custom links for fixed time periods

Centralised Support to the Network of Higher Education Reform Experts

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EUROPASS COMPONENTS

INTEROPERABILITY

Europass infosite

Presents information as described on the Europass decision and the first access point to register and use the digital tools.

e-Portfolio

Set of online tools & information to manage every step of your learning and career.

Jobs, qualifications and courses search

Central database to search for courses and jobs throughout Europe.

Digital skills Test

Open source tool to assess and improve digital skills. Based on the Digital Competence Framework.

Digital Credentials

Set of standards, services & software allowing institutions to issue digital, tamper-proof qualifications and other learning credentials.

https://europass.europa.eu

Build IT Infrastructure: Online Registration, Data Collection, LMS…

- Streamlined application, registration, data collection and reporting – credit- and non-credit
- Track enrollment, persistence and completion
- Student ID support - Single student ID for access to supports;
- Demographic data; Potentially employment data for longitudinal research, evaluation and monitoring
- ‘What happens next?’ Following micro-credential completion: did they enroll in another micro-credential, did they enroll in the related degree program?
- Be able to assess the effectiveness of each micro-credential and the overall micro-credential program.

8 Process of delivering micro-credentials

Quality assurance

What is Quality Assurance?

"Quality assurance refers to **the systematic processes, policies, and procedures that are put in place** to ensure that an institution's programs **meet or exceed established standards**. It is an evaluative activity that applies to program approval, program review, and even organizational review. It aims to maintain excellence in program offerings.

Quality assurance **protects and maintains the reputation of the institution with learners, other institutions, employers, and other stakeholders** by committing to a set of transparent criteria that all of the institution's offerings must meet or exceed. The process **is formal, its outcomes are public, and it serves to build trust in the institution's offerings.** "

Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

Who is Quality Assurance For?

Learners
-Affordable program;
-Short-term (achievable) length of the program;
-Ability to progress in one's career
-Higher wages
-Understanding of how to apply the target skills;
-Relevance of the assessments to work environment

Employers
-Meet a specific workplace need that directly support industry job roles and job descriptions that are in demand;
-Recruit skilled workforce;
-Diversity, equity, and inclusion strategy for recruitment
-Retain and reskill/upskill current employees; Career pathways.

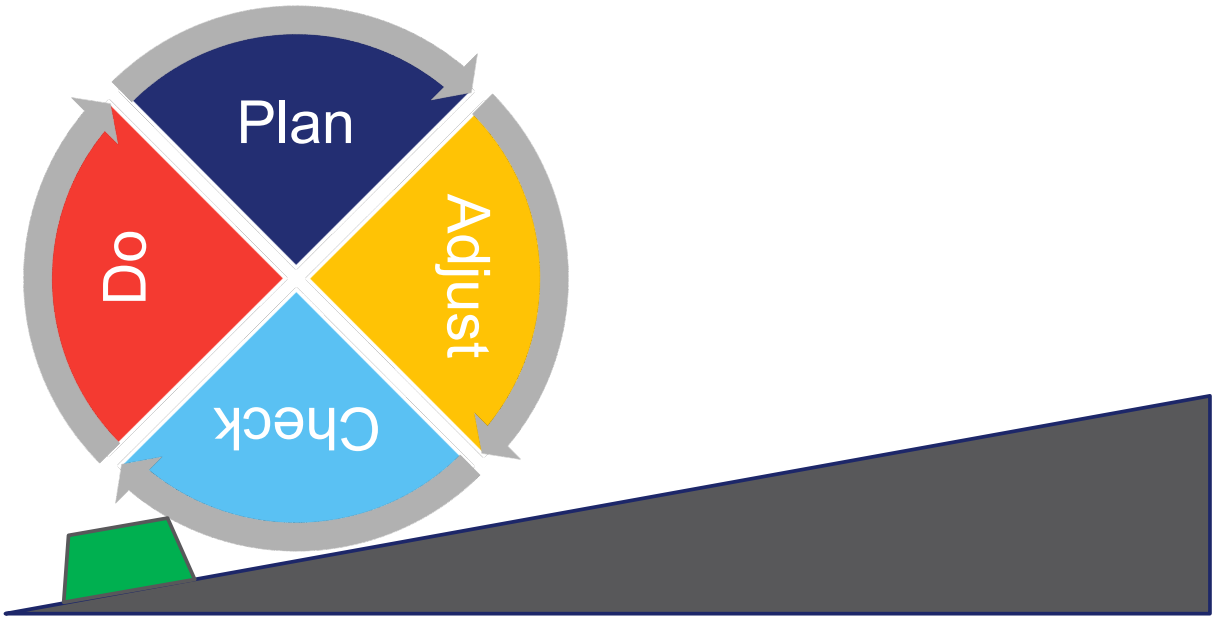
Instructors
-Engagement of learners into the program
-Evidence of learning;
-Authentic assessments;
-Retention of learners into the program;
-Curricular alignment to employment

Administrators
-Meeting a specific workforce development need; Learner success, in the program and beyond it
-Enrollment rate and Completion rate;
-Revenues generated from the program;
-Whether the marketing is effective
-Portability of the credential for learners

Quality Agencies
-Evidence of the quality assurance processes for the program
-Curricular alignment
-Employability of graduates
-Transparency of tuition, fees, and costs to learners
-Return on investment for learners.

Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. BCcampus. https://opentextbc.ca/bcmicrocredential/

PDCA Cycle (Deming Wheel)



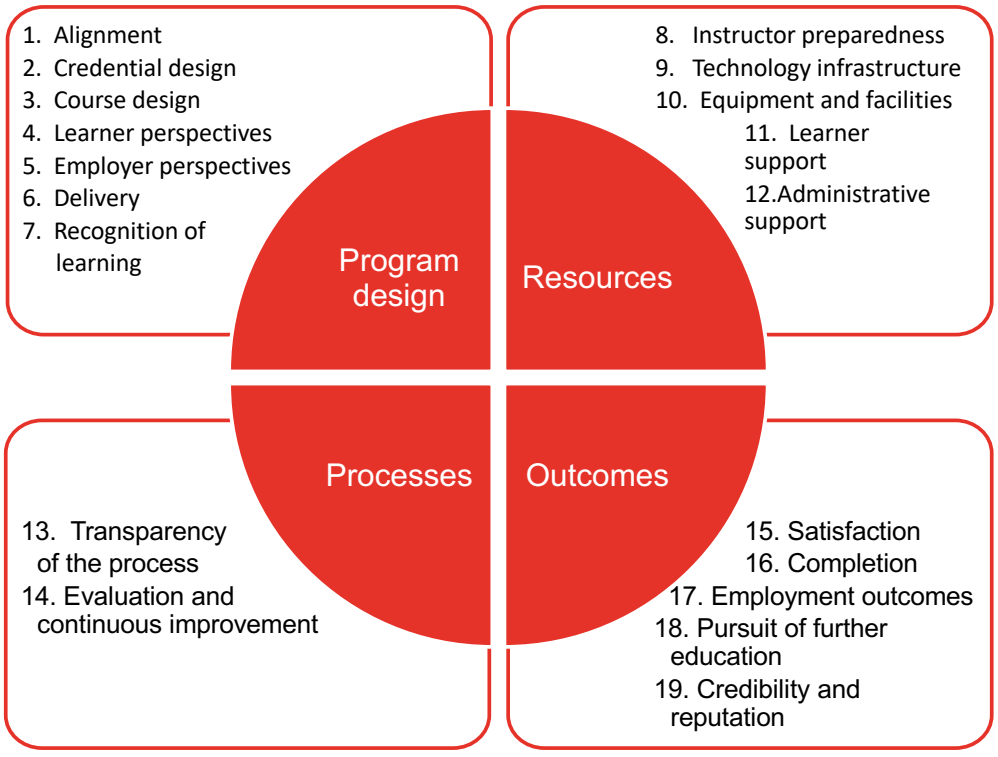
International micro-credential quality standards

Final Report Micro-credentials Higher Education Consultation Group (EC 2020)

A micro-credential quality framework should include

- a defined list of critical information elements to describe micro-credentials;
- alignment with national qualifications frameworks (NQFs) and the European Qualifications Framework (EQF): defined levels, standards for describing learning outcomes;
- quality assurance standards;
- defined credits: European Credit Transfer and Accumulation System (ECTS), defined learning outcomes and notional workload;
- recognition: for further studies and/or employment purposes;
- portability: issuing, storage and sharing of micro-credentials;
- platform solutions for the provision and promotion of courses leading to micro-credentials;
- incentives to stimulate the uptake of micro-credentials.

Micro-credential quality assurance checklist



8 Process of delivering micro-credentials

Marketing and launch

Validate Market Research and Identify Champion

- Perform market analysis
  - Pandemic impact on the local economy?
  - Labor Market Research
  - State/regional significant industries
  - Skills gap analyses? What are employers saying?
- Identify Champions
  - Faculty
  - Students
  - President/Provost
  - One or two prominent business partners
  - Local chambers of commerce
  - State-wide business organizations/chambers of commerce

Strategic Communications Plan

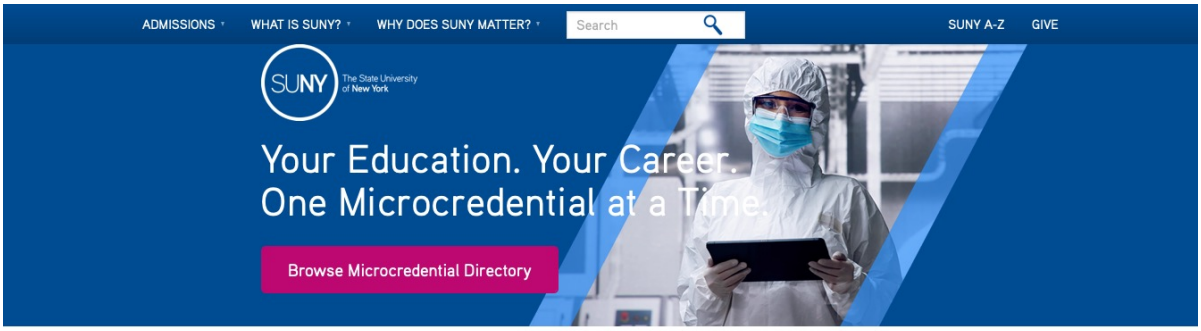
MC´s are a new concept and continuous and transparent communication is a must

- Internal and external strategies are needed:
  - Faculty and staff need to know your micro-credential definition and program goals and be able to give an elevator pitch
- Develop specific key messages for each audience
  - Existing students, alumni, prospective students generally, adult learners, business/industry partners, P-12 partners, community partners, Chamber of Commerce, economic development
- Recognize that the key leverage points are the same here as with other programs offered
  - Quality, faculty leadership, a policy-driven approach endorsed by the institution, alignment to highest standards in the profession and market needs
- The team is in the best position to draft, review and refine messaging with help from communications
- Include as part of the communications plan, your strategy for launch promotion

Launch

- Your website is key (ex. https://www.suny.edu/microcredentials/)
  - Landing page with your program goals and guiding principles
  - Key messages for different viewers
  - List of micro-credentials with links to specific pages for each
- Press release (include quote from team co-chairs, partners, students, alumni)
  - Social media campaign starts
  - Speaking engagements
  - Letters to partners with a request to meet to discuss in more detail

https://www.suny.edu/microcredentials/



Added value through SUNY's award-winning approach

SUNY microcredentials are compact academic credentials taught by SUNY faculty that empower you with essential skills, knowledge and practical experience in high-demand fields.

Designed to be completed in months, not years, SUNY microcredentials ready you to secure employment, keep pace with changes in your industry, and/or advance in your career. Credit-bearing microcredentials also jumpstart your academic journey, providing college credit toward certificates, initial or advanced degrees, and opening new doors to success in life and career.

SUNY microcredentials can also be customized or created to meet specific workforce needs of businesses, organizations, P-12 districts, State agencies and more.

For You

A quick introduction to all that SUNY's microcredential program has to offer – no matter where you are on your academic or career journey, and some quick tips for getting started on your search.

Learn More ›

For Partners

Learn how SUNY's microcredential program can contribute to your organization's recruitment, retention, and employee success.

Learn More ›

9

TAM Montenegro, 27-28/5/2025

Facilitation of personalized educational paths

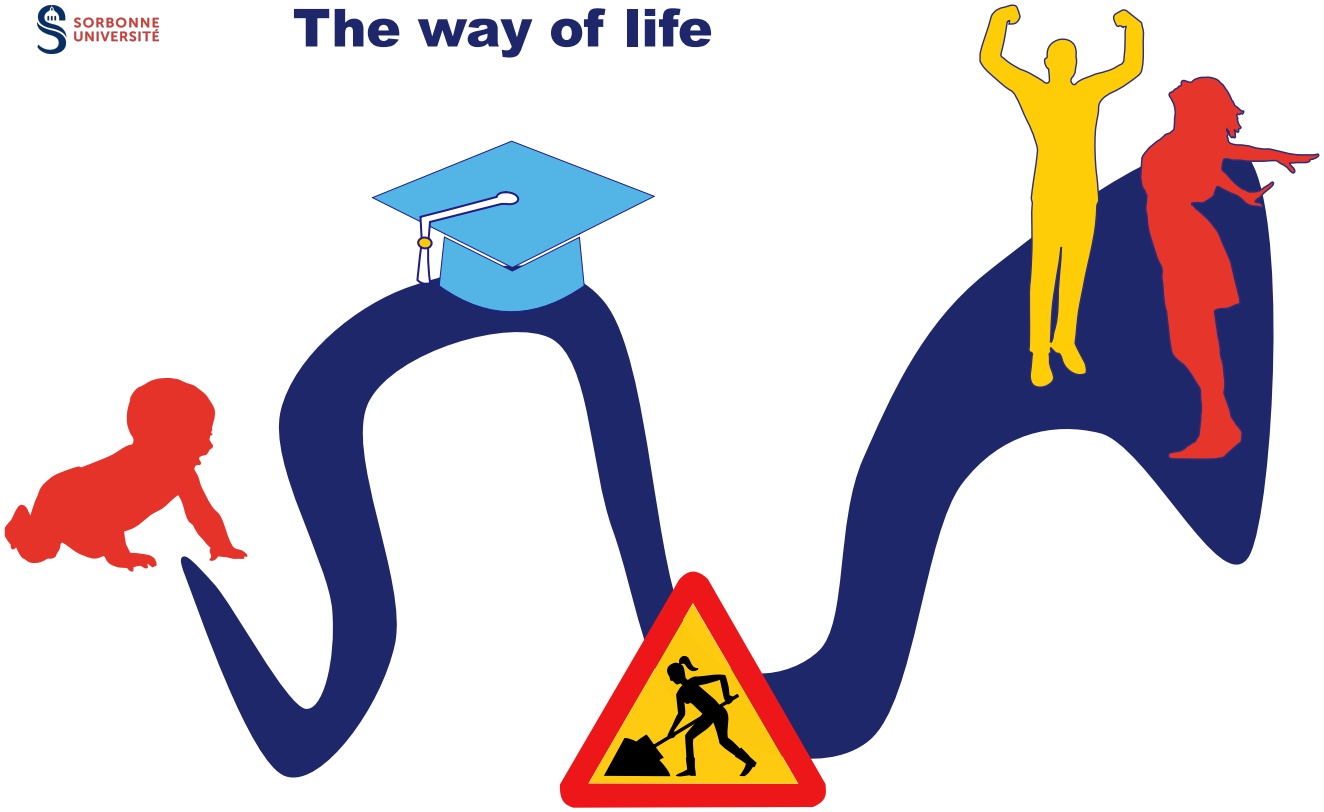
BERNOLD HASENKNOPF

SORBONNE UNIVERSITÉ

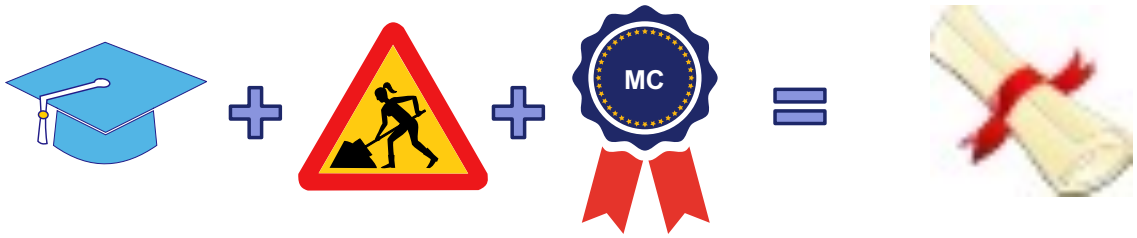
SPHERE Centralised Support to the Network of Higher Education Reform Experts

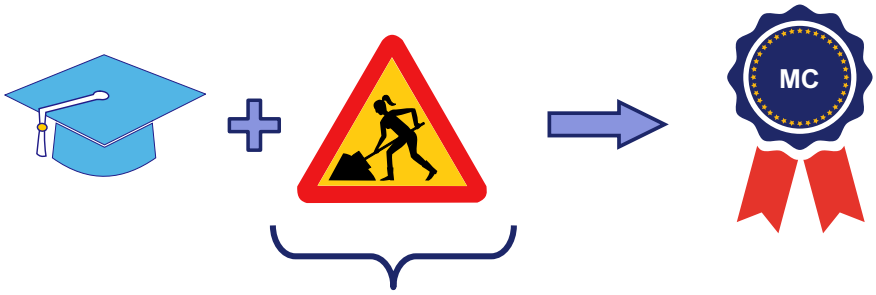
Erasmus+

The way of life



Micro-credentials and Recognition of Prior Learning





Learning in informal settings (e.g. workplace) must be recognized

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1

Recognition of Prior Learning

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Recognition of Prior Learning (RPL)

The term “recognition of prior learning” should be understood as **a process**, undertaken by qualified personnel, **of identifying, documenting, assessing and certifying** a person’s competencies, acquired through formal, non-formal or informal learning, based on established qualification standards.

A series of steps taken in sequence that considers learning outcomes, and that provides learning

International Labour Conference 2023

https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_885099.pdf

Centralised Support to the Network of Higher Education Reform Experts

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Recognition of Prior Learning (RPL)

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Involvement of trained RPL practitioners in different roles

Recognition of Prior Learning (RPL)

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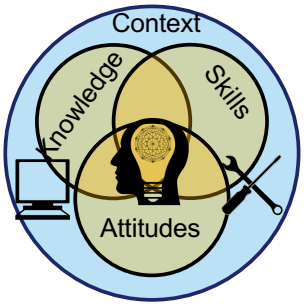
Knowledge, skills and attitudes mobilized in a specific context



Recognition of Prior Learning (RPL)

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Formal learning occurs in an organized and structured environment in terms of learning objectives, time or resources (e.g. an education or training institution).

Non-formal learning is the result of intentional effort to learn with some learning support present. But it takes place outside a formal (accredited) learning environment (e.g. trainee/trainer relationships).

Informal learning is involuntary and purely incidental during daily activities – work, family or leisure.

Recognition of Prior Learning (RPL)

The term “recognition of prior learning” should be understood as a process, undertaken by qualified personnel, of identifying, documenting, assessing and certifying a person’s competencies, acquired through formal, non-formal or informal learning, based on **established qualification standards**.

Learning outcomes
National (European) Qualification Frameworks

Terminology found in the internet

	APEL	Assessment of prior experiential learning
	APL	Assessment of prior learning
	PLAR	Prior learning assessment and recognition
	RAC	Recognition of acquired competences
	RAS	Recognition of acquired skills
	RCC	Recognition of current competences
	RNFIL	Recognition of non-formal and informal learning
	RPL	Recognition of prior learning
	RVCC	Recognition, validation, and certification of competences
	VNFIL	Validation of non-formal and informal learning
	VAE	Validation of acquired experience

Recognition of Prior Learning

History and situation in France

Culture of credentialism in France

La certification	*La qualification*
Diploma after a formal learning program	Requirement before entering the labor market

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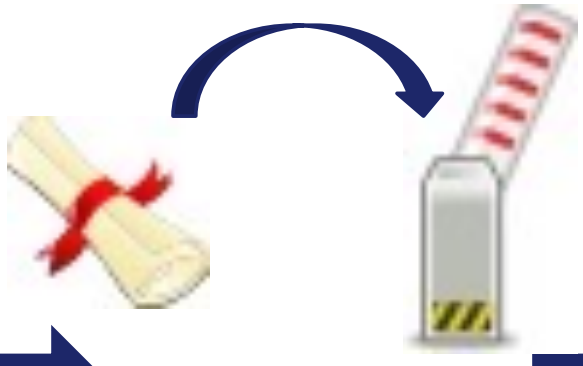


Recognize autodidacts

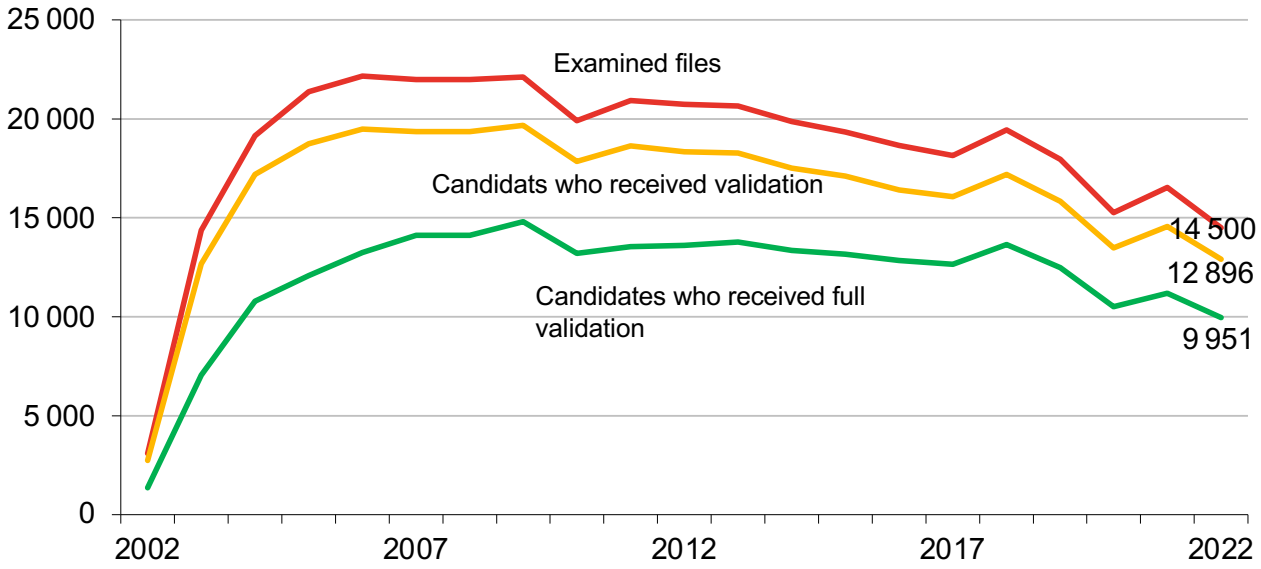
1934: *Loi relative aux conditions de délivrance et à l'usage du titre d'ingénieur diplômé*
Law on the conditions of issue and use of the title of graduate engineer

Law on Validation of Acquired Experience (2002)

- Many Ministries involved (education, agriculture, health, labor, youth, defense, culture, ecology)
- Common National Qualifications Catalogue (RNCP *Répertoire national des certifications professionnelles*)
- Obligation for institutions to offer their accredited certifications also by VAE
- 3 years of activity in the field (later reduced to 1 year)

Patrick Werquin, *Recognition of prior learning in France*, Eur J Educ. 2021, 56:391-406

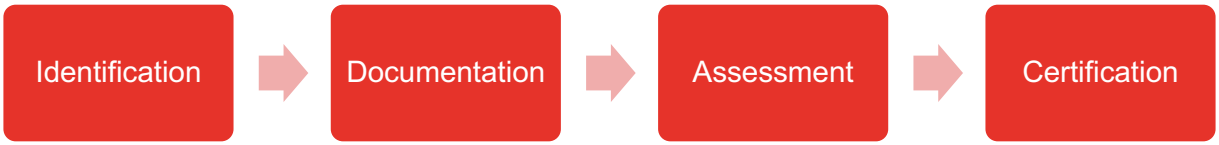
RPL in France since 2002



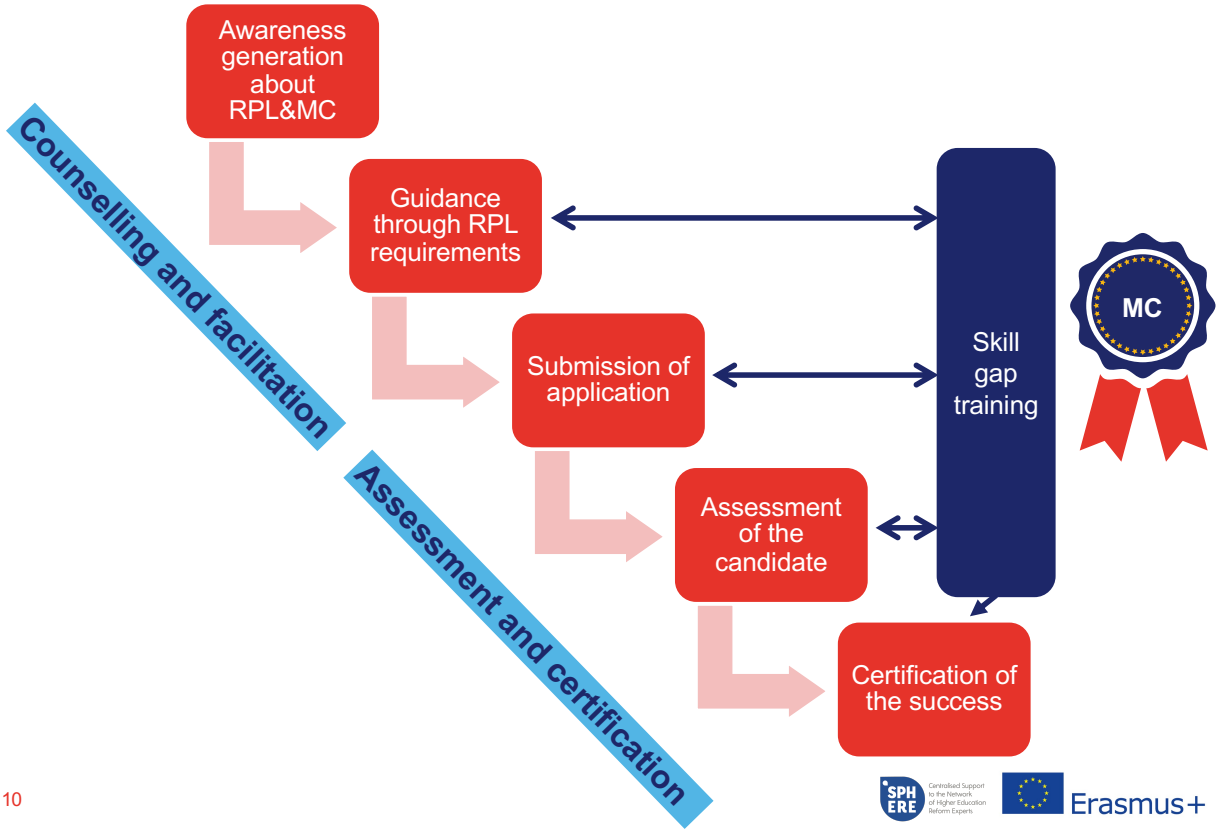
2

Academic support structures

RPL validation flow chart



RPL system flow chart and skill-gap training



Building blocs for an RPL&MC system

1. Building awareness about RPL&MC and providing effective counselling services to candidates
2. Integrating RPL&MC policy with policy, legal and regulatory frameworks for education and training system
3. Ensuring the active participation of all stakeholders, particularly social partners, in the development, implementation and evaluation of RPL&MC
4. Having an effective institutional framework for RPL&MC
5. Ensuring the availability of sufficient numbers of competent RPL&MC professionals
6. Ensuring the close matching of occupational and qualification standards

111 Aggarwal, *Recognition of prior learning: Key success factors and the building blocks of an effective system*, **International Labour Organization** (2015). https://www.ilo.org/publications/recognition-prior-learning-key-success-factors-and-building-blocks

Building blocs for an RPL&MC system

7. Developing effective and efficient assessment tools and methodologies appropriate to the context of target groups
8. Promoting cost-sharing and a sustainable, equitable funding mechanism for RPL&MC
9. Providing skills upgrading opportunities for RPL candidates
10. Ensuring a quality assured RPL&MC system and creating awareness about it
11. Establishing an effective monitoring and evaluation system, and collecting and disseminating information about the impact of RPL&MC offer
12. Promoting knowledge management and sharing

112 Aggarwal, *Recognition of prior learning: Key success factors and the building blocks of an effective system*, **International Labour Organization** (2015). https://www.ilo.org/publications/recognition-prior-learning-key-success-factors-and-building-blocks

Building blocks for an RPL&MC system

1 Awareness, Vocational Guidance and Counselling

1. Building awareness about RPL&MC and providing effective counselling services to candidates

- Create occasions to become aware of RPL&MC
  - at the workplace
  - in public
- Avoid confusing, technical language that is a barrier for the target population in all communications
- Include self-evaluation of competences
  - Computer / web-based questionnaires
- Build confidence
  - Personal contacts with RPL&MC staff

1. Building awareness about RPL&MC and providing effective counselling services to candidates

Effective guidance and counselling

- can include on-line testing for competencies
- must be centered on the candidate
- give feedback on candidates initiatives and learning evidence provided

Building blocks for an RPL&MC system

2 Integrating RPL&MC with policy, legal and regulatory frameworks for education and training systems

2. Integrating RPL&MC policy with policy, legal and regulatory frameworks for education and training system.

- Ensure parity between RPL and formal education
  - Alternate pathways to qualifications
- Develop Life Long Learning in synergy with initial training
- Include RPL in national policies for employment, poverty reduction, development, migration, education...

Building blocks for an RPL&MC system

3 Stakeholder ownership and commitment

3. Ensuring the active participation of all stakeholders, particularly social partners, in the development, implementation and evaluation of RPL&MC

- Identify relevant stakeholders for your RPL program
  - National authorities, Social partners, HEIs, Companies, NGOs...
- Establish a cost-benefit balance for each relevant stakeholder; all stakeholders must be aware of their potential benefits from RPL
- build trust in RPL system

Building blocks for an RPL&MC system

4 Institutional framework and capacity for RPL&MC

4. Having an effective institutional framework for RPL&MC

- Entrust responsibility to existing or new institutions only when they have the necessary capacity
  - Additional resources
  - Incentives to promote RPL&MC
- Empower institutions and support them through national frameworks

Building blocks for an RPL&MC system

5 RPL&MC professionals

5. Ensuring the availability of sufficient numbers of competent RPL&MC professionals

- Develop formal qualifications and training programs for RPL&MC professionals, in particular assessors
  - Networking of professionals
  - Mentoring of newcomers

Building blocks for an RPL&MC system

6 Matching occupational and qualification standards

6. Ensuring the close matching of occupational and qualification standards

Labor market:
performance, competencies
"*What people need to do*"

=> **Occupational standard**
Short term vision

Educational institutions:
learning & teaching
"*What people need to learn*"

=> **Qualification standard**
Long term vision

- Modular study programs that are **competency based (learning outcomes!)**
- Partial RPL and skill-gap training
- Stackable credentials

Building blocks for an RPL&MC system

7 Assessment methodologies

7. Developing effective and efficient assessment tools and methodologies appropriate to the context of target groups

Common principles

1. Validation must be voluntary.
2. The privacy of individuals should be respected.
3. Equal access and fair treatment should be guaranteed.
4. Stakeholders should be involved in establishing validation systems.
5. Systems should contain mechanisms for individual guidance and counselling.
6. Systems should be underpinned by quality assurance.
7. The process, procedures and criteria for validation must be fair, transparent and underpinned by
8. quality assurance.
9. Systems should respect the legitimate interests of stakeholders and seek balanced participation.
10. Validation must be impartial and avoid conflicts of interest.
11. The professional competences of those who carry out assessments must be assured.

See: European Commission DG EAC; Cedefop. *European guidelines for validating non-formal and informal learning* (2015)

7. Developing effective and efficient assessment tools and methodologies appropriate to the context of target groups

1. **Debate** offers the candidate an opportunity to demonstrate their depth of knowledge as well as their communicative skills.
2. **Declarative methods** admit an individual's personal identification and recording of their competencies and are normally signed by a third party in order to verify the self-assessment.
3. **Interviews** can be used to clarify issues raised in documentary evidence presented and/or to review scope and depth of learning.
4. **Observation** enables the extraction of an individual's evidence of competence while they are performing everyday tasks at work.
5. **Portfolio method,** which uses a mix of methods and instruments employed in consecutive stages to produce a coherent set of documents or work samples that show an individual's skills and competencies in different ways.
6. **Presentation,** which can be formal or informal and can check the individual's ability to present information in a way that is appropriate to the subject and the audience.
7. **Simulation** and evidence extracted from work, i.e., where individuals are placed in a situation that fulfills all the criteria of the real-life scenario in order to assess their competences.
8. **Tests and examinations** to identify and validate informal and non-formal learning through, or with the help of, examinations in the formal system.

Tools and instruments for validation

European guidelines for validating non-formal and informal learning, Cedefop 2023

Types	Reliability, validity and related issues	Scalability and cost	Main relevance to stages of validation
Self-assessment (self-declarative)	• validity and reliability can be questioned	• high scalability • low cost	identification
Fixed response/ multiple choice (close-ended forms)	• support standardisation and reliability • if not properly worded prompt to bias and limited individual and contextual adaptation	• high scalability • low cost (initial development might be expensive)	assessment, certification
Written tests (open-ended forms), including essay	• reliability might be limited due to different interpretations from evaluators • limited validity for certain assessment • some standardisation is possible • room for contextual adaptation	• limited scalability • low cost • evaluators need to be well trained	assessment, certification
Dialogue based/ interviews	• validity depends on level of structure and competence of the interviewer • can capture contextually dependent and tacit skills • reliability a possibility but not a given	• limited scalability • cost intensive (time and money) • evaluators need to be well trained	identification, assessment

Tools and instruments for validation (cont'd)

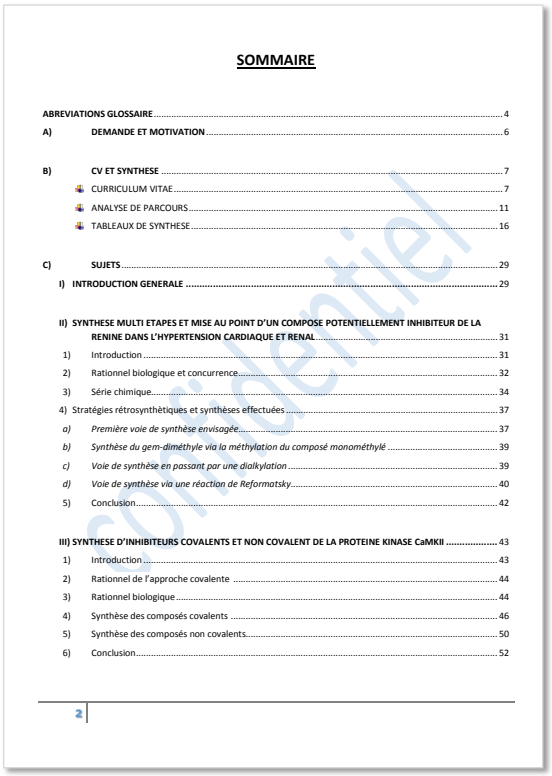
European guidelines for validating non-formal and informal learning, Cedefop 2023

Types	Reliability, validity and related issues	Scalability and cost	Main relevance to stages of validation
Simulation and controlled job practice	• supports validity • potentially strong reliability • captures contextually dependent and tacit skills and competences	• potentially scalable • cost intense	assessment, certification
Portfolio of evidence	• might include different things (performance outputs, performance achievements, productivity measures, quality performance measures, etc) • flexible • combinations of evidence strengthen both validity and reliability	• scalable but flexible • cost depends on the level of support provided	identification, documentation, assessment, certification
Reports from others (colleagues, supervisors, clients, etc.)	• reliability might increase with many observations • validity might depend on the number of reports	• scalable • low cost	identification, documentation, assessment, certification

Outline of a typical learning portfolio

- Motivation letter
- Curriculum Vitae
  - Job description
  - Education
- Tabular overview of achieved learning
  - Evidence provided
    - *Current* – Must be from the last 5 years or accompanied by additional evidence demonstrating how you have stayed up-to-date.
    - *Authentic* – Must be your original work or a contribution that you personally made.
    - *Relevant* – Must relate to the subject matter and align with the course or program learning outcomes.
  - Personal reflection on the provided evidence and the achieved learning
- Supporting documentation

Example of an RPL file at Sorbonne Univ. for awarding a master degree



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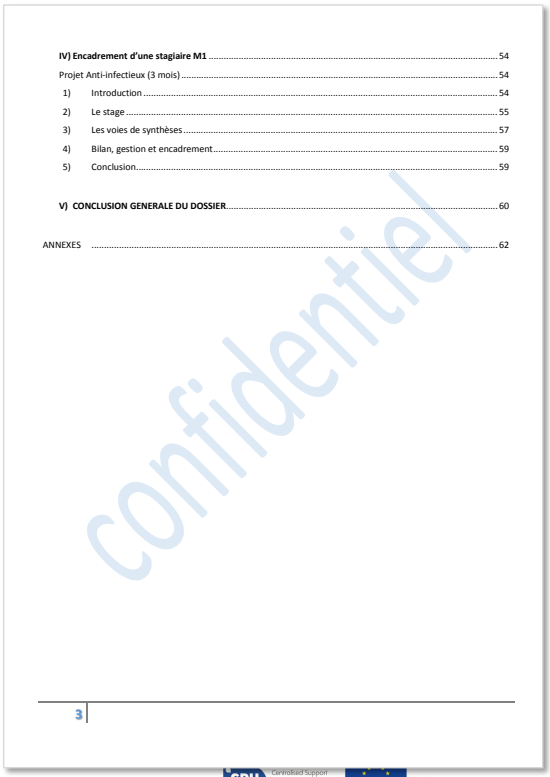


Example of an RPL file at Sorbonne Univ. for awarding a master degree

TABLEAUX DE SYNTHESE

1 – VOS ACQUIS PROFESSIONNELS

Année	Lieu d'exercice (entreprises, adresses, secteur d'activité, CA…) Description unité de travail, service…	Fonction, niveau de responsabilité, missions et compétences exercées	Apprentissages réalisés (vos acquis dans ces expériences)
Sept 1999-Oct 2001	***Société Panchim Ziléco*** Zone du Bois Chaland à Lisses 91090 Société de synthèse à façon. Vente d'intermédiaires réactionnels du gramme à la tonne. Usine de production à Elbeuf (Normandie) CA 18 M€ Fermée en 2006	**Apprentie en BTS Chimie** à l'ENCPB et dans la société Panchim sous le tutorat de Mr Le Guen. ***Missions :*** Reproduire des modes opératoires décrits et expliqués par mon maitre de stage. Mener à bien les synthèses données et effectuer le flaconnage aux normes avant d'envoyer aux fournisseurs. Rédiger un rapport à l'issue des 2 ans pour le BTS. Respecter les normes qualité. Suivre les règles de sécurité très importantes en laboratoire de demi-grand Apprendre à utiliser les logiciels de dessins de structures chimiques (Isis Draw). Rédaction du cahier de laboratoire.	***Apprentissage réalisés : NOTION*** Découverte de l'entreprise, de sa charte qualité et sécurité. Réalisation des synthèses données, rédaction des protocoles expérimentaux. Livraison des composés aux clients dans les emballages et les délais demandés. Aide à la mise en place de la norme qualité ISO 9001 avec un collègue. Suivi des règles de sécurité, analyse de risques avant de lancer chaque réaction. Recherches des fiches de données de sécurité pour chaque réactif et solvants mis en jeu dans les réactions effectuées. Rédaction détaillée de tous les protocoles mis au point.

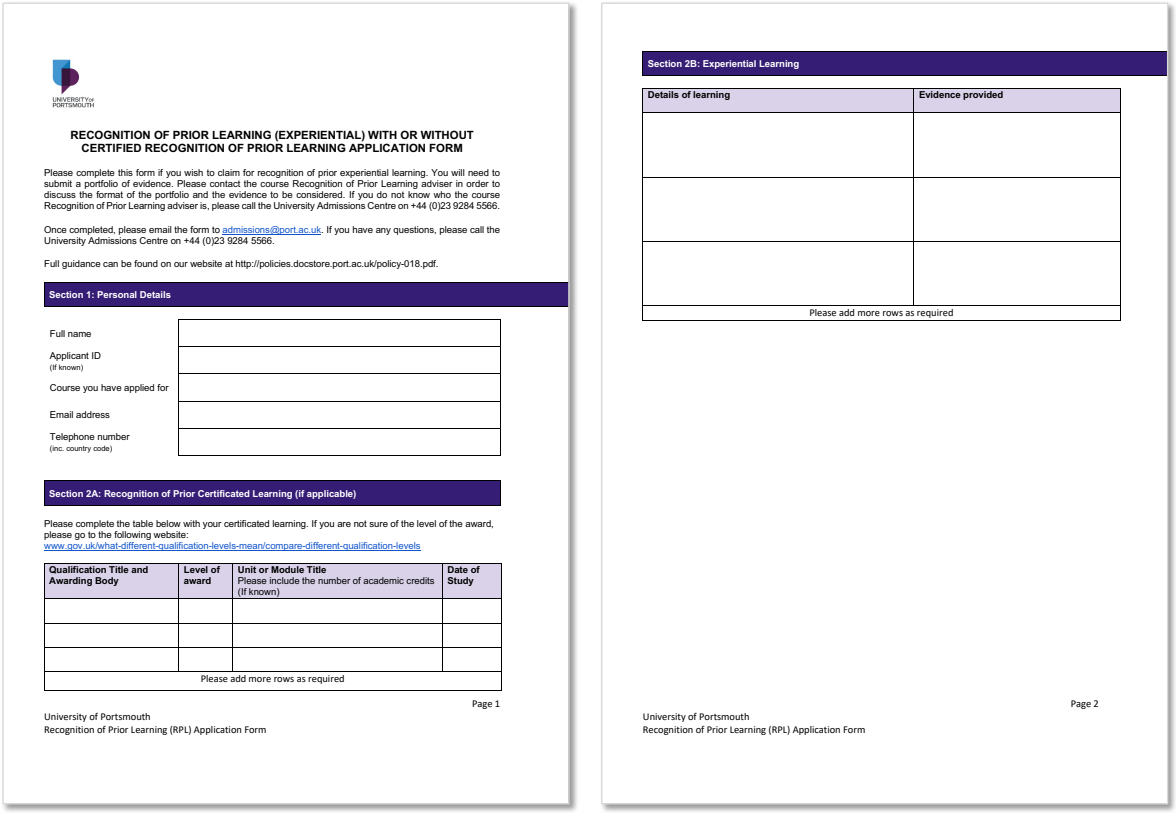
Example of an RPL file at Sorbonne Univ. for awarding a master degree

1 – VOS ACQUIS PROFESSIONNELS (Tableau de synthèse à remplir obligatoirement)

Décrivez chronologiquement vos différentes expériences professionnelles. Précisez les compétences exercées et les apprentissages réalisés. Indiquez le niveau de responsabilité et joignez les justificatifs (attestation d'employeur, appréciation du chef de service…)

Année	Lieu d'exercice (entreprises, adresses, secteur d'activité, CA…) Description unité de travail, service…	Fonction, niveau de responsabilité, missions et compétences exercées	Apprentissages réalisés (Vos acquis dans ces expériences)
14 juillet 2005 au 31 août 2005	***Laboratoire de Chimie Organique (LMO UMR7611)*** ***Campus Pierre et Marie Curie, Sorbonne Université, Paris 4 place Jussieu, 75005 Paris***	Assistante Ingénieur Stagiaire sous la responsabilité hiérarchique d'une chargée de recherche et du directeur du laboratoire. **Missions :** ➢ Contribution à des projets de recherches **Compétences :** ▪ Réaliser des études bibliographiques et analyser les résultats pour poser une question ou définir des protocoles ▪ Mise en œuvre des protocoles de synthèse organique dans le respect des règles d'hygiène et sécurité ▪ Savoir utiliser les appareils de caractérisation et les logiciels afférents ▪ Savoir utiliser les logiciels de traitement de données pour mettre en forme les résultats **Niveau de responsabilité :** ●○○○○	- J'ai découvert le travail en laboratoire de recherche. - J'ai mis en pratique les acquis de formations. - Je suis devenue autonome dans la mise en œuvre d'une synthèse organique. - J'ai renforcé mes connaissances scientifiques et interprétation des résultats. - J'ai appris à appréhender le matériel informatique pilotant les instruments de caractérisation. - J'ai découvert le travail en équipe.

Sample RPL form at HEI



UNIVERSITY OF PORTSMOUTH

RECOGNITION OF PRIOR LEARNING (EXPERIENTIAL) WITH OR WITHOUT CERTIFIED RECOGNITION OF PRIOR LEARNING APPLICATION FORM

Please complete this form if you wish to claim for recognition of prior experiential learning. You will need to submit a portfolio of evidence. Please contact the course Recognition of Prior Learning adviser in order to discuss the format of the portfolio and the evidence to be considered. If you do not know who the course Recognition of Prior Learning adviser is, please call the University Admissions Centre on +44 (0)23 9284 5566.

Once completed, please email the form to admissions@port.ac.uk. If you have any questions, please call the University Admissions Centre on +44 (0)23 9284 5566.

Full guidance can be found on our website at http://policies.docstore.port.ac.uk/policy-018.pdf.

Section 1: Personal Details

Full name	
Applicant ID (If known)	
Course you have applied for	
Email address	
Telephone number (inc. country code)	

Section 2A: Recognition of Prior Certificated Learning (if applicable)

Please complete the table below with your certificated learning. If you are not sure of the level of the award, please go to the following website:
www.gov.uk/what-different-qualification-levels-mean/compare-different-qualification-levels

Qualification Title and Awarding Body	Level of award	Unit or Module Title Please include the number of academic credits (if known)	Date of Study

Please add more rows as required

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Recognition of Prior Learning (RPL) Application Form

Section 2B: Experiential Learning

Details of learning	Evidence provided

Please add more rows as required

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Recognition of Prior Learning (RPL) Application Form

Assessment: What can go wrong?

- Lack of essential skills
  - Candidates don't have underlying writing skills, language, self-reflection...
- Lack of validity
  - Evidence is inappropriate to prove the learning outcomes
- Lack of reliability
  - Different evaluators don't assess the same, or one evaluator is not consistent with several candidates
- Lack of transparency
  - Candidate does not get appropriate information on the evaluation criteria

Building blocks for an RPL&MC system

8 Costs and funding

8. Promoting cost-sharing and a sustainable, equitable funding mechanism for RPL&MC

Costs for candidates depend on

- the qualification and the amount of RPL undertaken
- the costs of MC (skill-gap training)
- the economic model of the higher education institution responsible for the RPL&MC process (publicly funded, private for profit...)
- opportunity costs (lack of salary for the time spent on RPL&MC)

Building blocks for an RPL&MC system

9 Skill-gap training

9. Providing skills upgrading opportunities for RPL candidates

Customized, flexible short-term programs

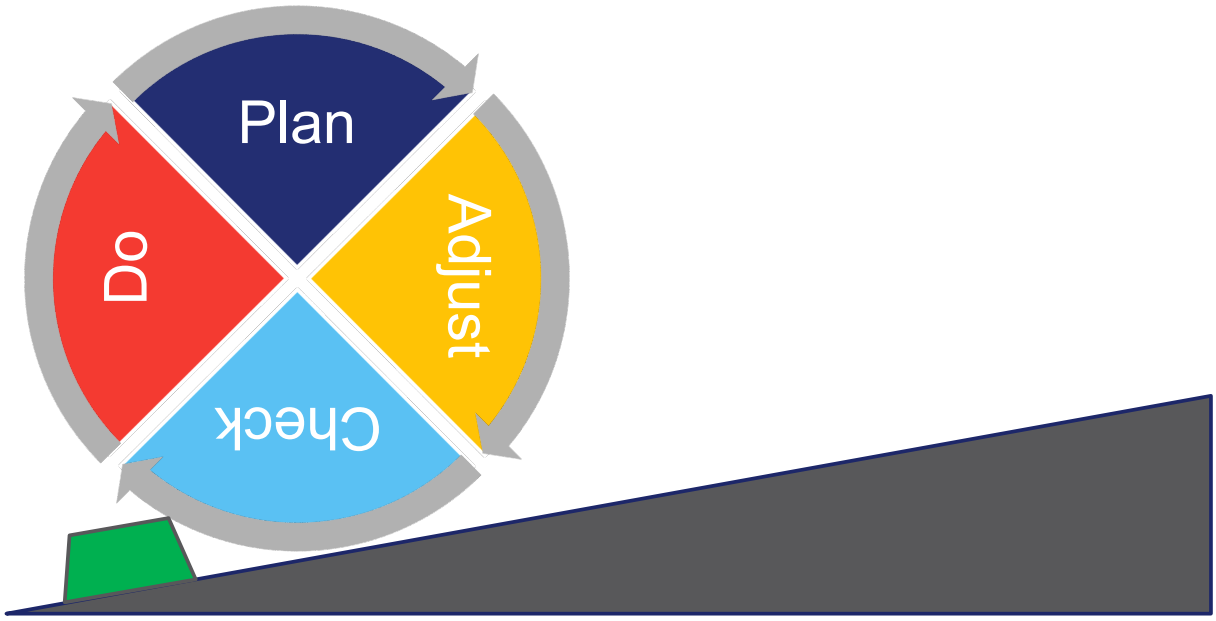
- at weekends and in the evening; en bloc teaching (summer schools...)
- competency-based with clear learning outcomes
- stackable modules

= MICROCREDENTIALS

Building blocks for an RPL&MC system

10 Qualitity assurance

PDCA Cycle (Deming Wheel)



10. Ensuring a quality assured RPL system and creating awareness about it

Quality assurance mechanisms should be

- comprehensive, covering issues such as using competency standards for assessment;
- ensuring the availability of competent RPL&MC practitioners;
- collaborating with employers' and workers' organizations, and other relevant stakeholders;
- developing assessment tools and methodology as references for practitioners;
- accrediting RPL&MC centers;
- moderating assessments;
- developing monitoring and evaluation frameworks;
- conducting independent auditing of the RPL process as a whole;
- and disseminating results of evaluation and audit to all stakeholders.

143 Aggarwal, *Recognition of prior learning: Key success factors and the building blocks of an effective system*, **International Labour Organization** (2015). https://www.ilo.org/publications/recognition-prior-learning-key-success-factors-and-building-blocks

Building blocks for an RPL&MC system

11 Monitoring and evaluation

11. Establishing an effective monitoring and evaluation system, and collecting and disseminating information about the impact of RPL&MC

Track the implementation, outcomes and impact of RPL&MC

- Numbers of candidates who enrolled, dropped-out, appeared in the assessment and passed the RPL&MC
- Views of successful candidates about career progression, improvements in performance, self-esteem, remunerations, ease of access to further education...
- Employers' views as to improvements in performance at work
- Views from higher education institutions about the performance of students entering through the RPL route compared to those who took the formal pathway
- Stakeholders' views who are interested or disinterested in RPL&MC and why

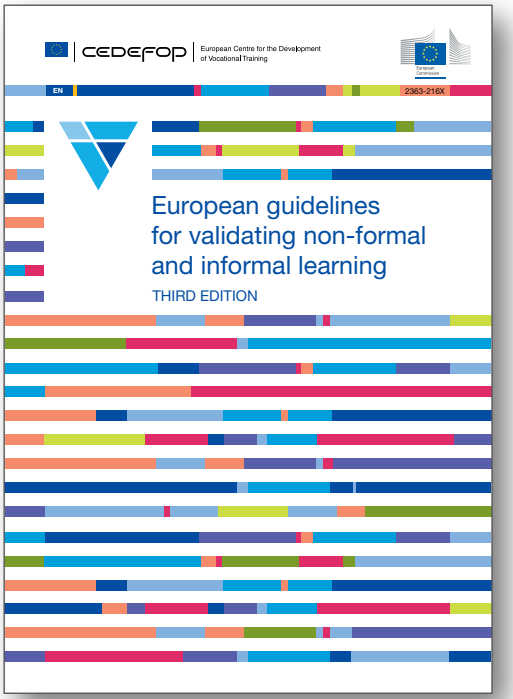
Building blocks for an RPL&MC system

12 Knowledge management and sharing

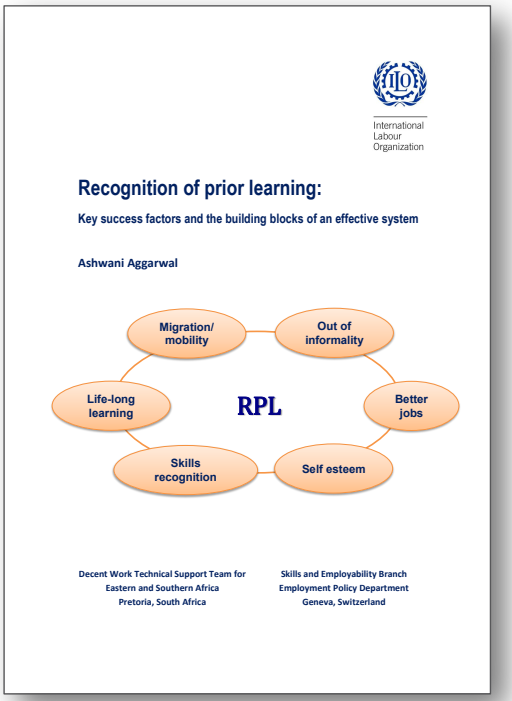
12. Promoting knowledge management and sharing

- Partnerships and knowledge sharing between RPL providers
- Developing and sharing common tools
- Benchmarking and establishing best practice

Some reference documents: RPL

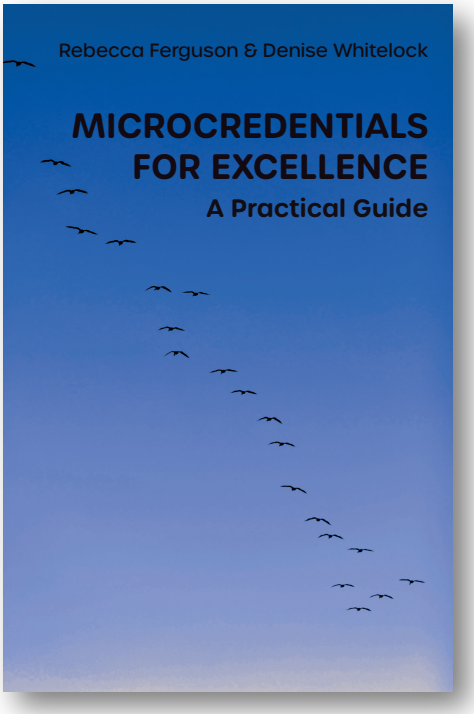


https://www.cedefop.europa.eu/en/publications/3093

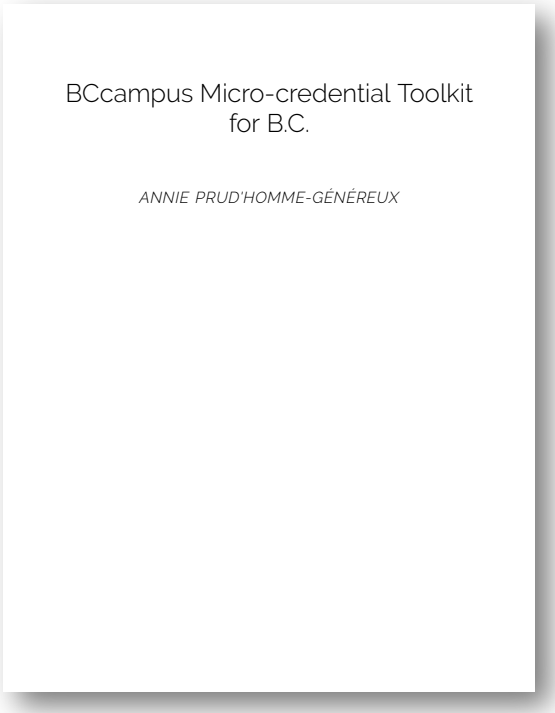


https://www.ilo.org/publications/recognition-prior-learning-key-success-factors-and-building-blocks

Some reference documents: MC



Rebecca Ferguson and Denise Whitelock, 2024
DOI: https://doi.org/10.5334/bcz



Prud'homme-Généreux, A. (2023). BCcampus micro-credential toolkit for B.C. https://opentextbc.ca/bcmicrocredential/

3

In place of a conclusion

Learner ownership

Learner ownership of micro-credentials (and RPL)

Key aspects of learner ownership of micro-credentials

Control over learning path

- Learners choose credentials based on their goals
- Flexible, self-directed learning
- Moves away from rigid, one-size-fits-all education models

Portability

- Learner can repurpose credentials in various contexts across institutions, employers, and borders

Sharing and visibility

- Learners decide where and how to showcase their credentials
- Micro-credentials are stored digitally; Shareable on platforms like Europass, LinkedIn
- Includes metadata (e.g. skills, issuing institution)

Stackability

- Microcredentials can build into larger certifications or degrees
- Supports continuous, lifelong learning

Why learners ownership matters for all of us

- **Empowers learners** to take charge of their development.
- Increases **transparency** of skills and achievements in learning offers.
- Helps with **career mobility** and adapting to a changing job market.
- Shifts the focus from traditional credentials to **demonstrable, practical competences**.

Final thoughts

Micro-credentials and **Recognition of Prior Learning**

- **transform education**: from transmission of knowledge to training and recognition of competences
- **put learners at the center of skill development** by a personalized learning path
- **bridge the gap** between education and employment, and serves the well-being of society


Thank you for listening.
Good luck with your RPL&MC
CC: BY-NC-ND
bernold.hasenknopf@sorbonne-universite.fr
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