



# MicroHE: What we have learned about digital and Micro-Credentials



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Knowledge Innovation Centre

# Getting the Terminology Right

a **credential** is a documented statement made about a person (by another person)

# Getting the Terminology Right

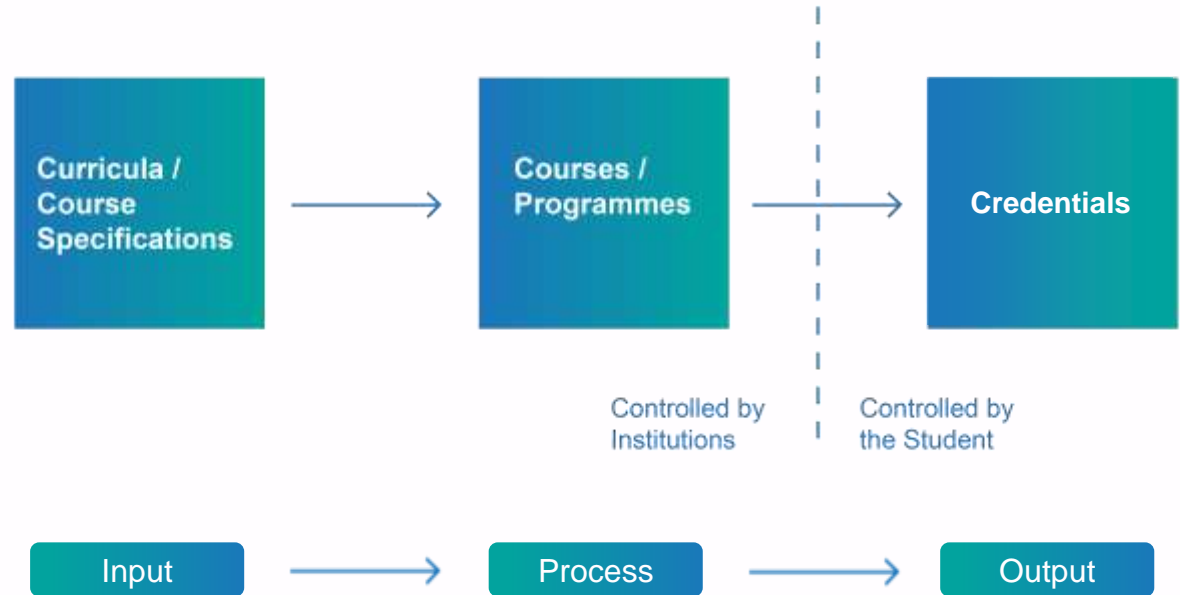
a **learning credential** is  
a documented statement  
made about a **person's learning**  
(by another person)

# Getting the Terminology Right

a **micro-credential**  
is a subunit of a credential

**Micro-Credentials instantiate learning which has happened at the end of a learning lifecycle**

# Getting the Terminology Right



Defining microcredentials

# A system of interoperable building blocks

# Micro Credentials are gaining prominence



**Mariya Gabriel** ✓ @GabrielMariya · May 26

🇪🇺 citizens should be able to gain skills at any stage of their [#careers](#).

We support higher [#education](#) institutions in offering micro-credentials - flexible & modular short [#learning](#) courses.

Today, we launch our 1st consultation group on this topic!



YUFE and 8 others

[www.microcredentials.eu](http://www.microcredentials.eu)

# Key Features of Micro Credentials



Modular



Stackable



Portable



Digital



Universal



# Key Features of Micro Credentials



Modular



## made up of distinct units

- Open Access
- Standardised Unit of Measure
  - credit system
  - expressed as learning outcomes
- Small
  - (10 ECTS-equivalents max?)

ECTS-equivalent = approx. 10 hours of teaching, and 15 hours of self-motivated study

# Key Features of Micro Credentials



Stackable



## Combining vs Stacking



# Key Features of Micro Credentials



Stackable



## Can be combined to create larger credentials

- Standardised
  - Credit system should express credit values
- Not *Too Small*
  - (1 ECTS equivalent min?)

ECTS-equivalent = approx. 10 hours of teaching, and 15 hours of self-motivated study

# Key Features of Micro Credentials



Portable



## student-held and transferred

- Recognised by Different Institutions
  - To give access
  - To stack across institutions



content is  
quality assured

envelope is  
secured



Digital



**Assuming:**

**1000** Universities

**50** Courses per Uni

**Gives:**

**50000** micro-credentials

**2 sextillion possible combinations!**  
(of 5-credential packages)

# Key Features of Micro Credentials

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Digital



## Micro-Credentials are Digital Documents:

- Earned in **any mode** but
  - Awarded digitally
  - Stacked digitally
  - Recognised digitally

# Key Features of Micro Credentials



Universal



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# Key Features of Micro Credentials



Universal



MicroHe

**useful in any formal or non-formal learning**

- Applicable in Higher Education, VET, private training, continuing education)
- Can be used to create bridges between different learning contexts



# Micro- Credentials in Higher Ed

**Higher Education is already  
in the business of Micro-Credentials  
(as part of qualifications)**

# Results of Unbundling



Micro-Masters

NanoDegrees

Short  
Learning  
Programmes

## Short Learning Programmes

1. **Short, between 5 to 30 ECTS, average: 10-20 ECTS**
2. Focus is on academic skills/programmes/competence
3. Offered mainly online; face-to-face only optional or if intrinsic part of the programme
4. Exams are taken by offering universities
5. Must be accredited, level (for example, BA/MA) needs to be mentioned

# Results of Unbundling

Micro-Masters

NanoDegrees

Short  
Learning  
Programmes



## MOU on SLPs signed by:

UniDistance, Switzerland, Università Telematica Internazionale UNINETTUNO, Italy, The Open University of The Netherlands, Open University of Cyprus, Universitat Oberta de Catalunya, Hellenic Open University, Greece, Open University of the University of Jyväskylä, Finland, Universidade Aberta, Portugal, Universidad Nacional de Educación a Distancia, Spain, Fernuniversität in Hagen, Germany, Open University, United Kingdom, **University of Ljubljana, Slovenia**





MicroHe

Abendblatt Nr. 433 — Seite

# Berliner Börse

... ziemlich schwach und im Verlauf nicht erholt  
Wie ... 26. Aug. Die Börse war heute ausgesprochen schwach.  
... gestern ungedeutet, sind Maßnahmen anbringen. Advor-  
spricht Materialmangel an der Börse, etwas ab ... 4750 / ...  
word ... on, daß der jüdische Aktienbesitzer ...  
e Börse ... Zwar kommt das Material gerade ...  
... an ... Markt, aber die ...  
... weitgehend beeinflusst. ...  
Gerade bei den hervorzu ...  
... Abrechnungen ...  
... bei Salzdettfurth ...  
... Rhodmetall u. a. ...  
... auf ...

0 w i e n n i a

Digital Credentials

# The Case against Paper

# Key Features of Micro Credentials



4 Courses

Initiating and Planning Projects  
Budgeting and Scheduling Projects  
Managing Project Risks and Changes  
Project Management Project

UCI Division of Continuing Education

01/24/2017

**ILDIKÓ MÁZÁR**

has successfully completed the online, non-credit Specialization

## Introduction to Project Management Principles and Practices

A 4-course, on-demand Specialization authorized by University of California, Irvine Extension, and offered through Coursera.

*Margaret M. Meioni*

Margaret Meioni, PhD,  
MBA

Verify this certificate at:  
[coursera.org/verify/specialization/WRM9ZTAU975U](https://coursera.org/verify/specialization/WRM9ZTAU975U)

# Key Features of Micro Credentials



**4 Courses**

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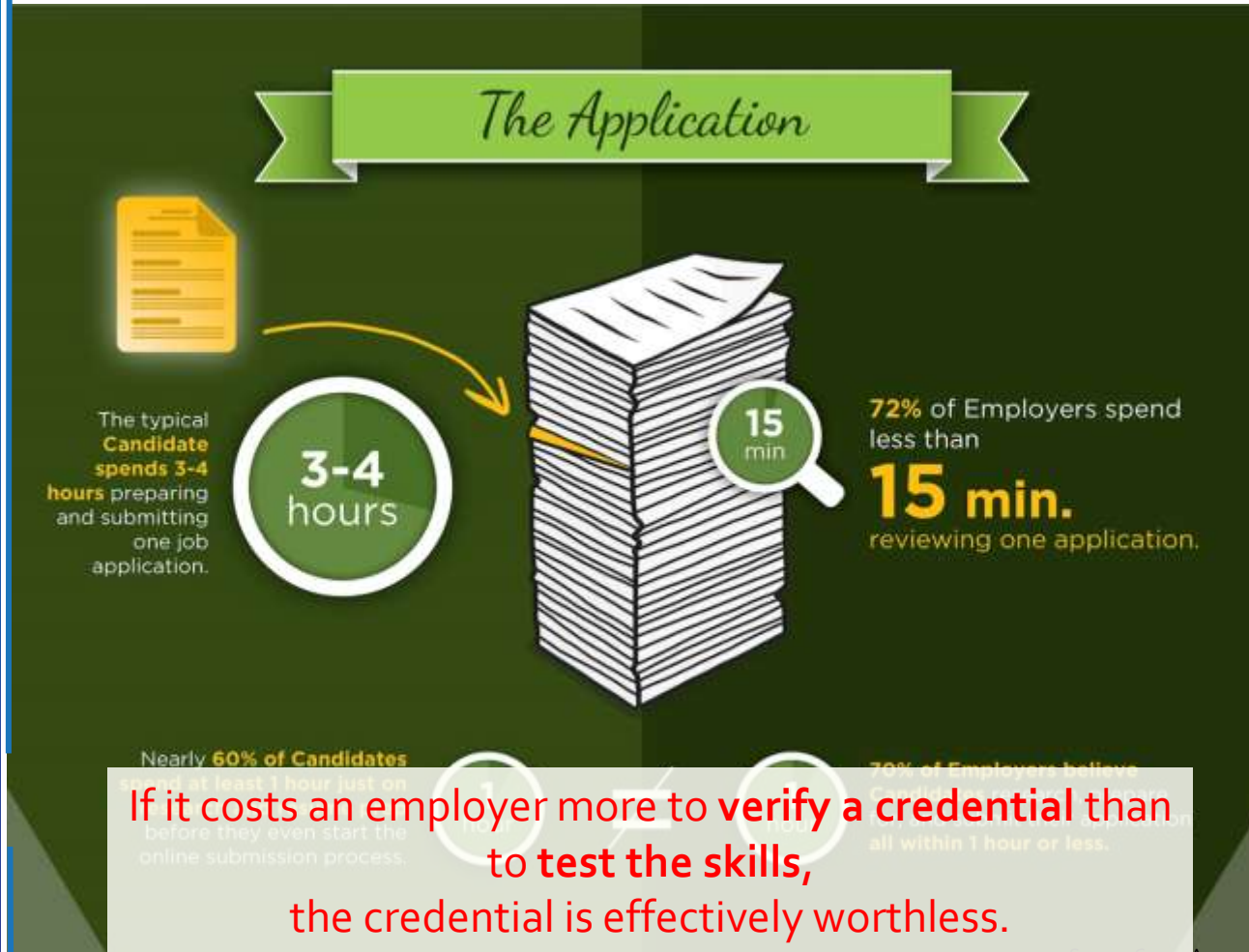
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Margaret Meoni, PMP,  
MBA

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# Complicated Credentials are devalued



# Lack of Standards leads to Exclusion





# Signing Intermediaries charge rent

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| <a href="#">BUY NOW</a>                              | <a href="#">BUY NOW</a>                              | <a href="#">BUY NOW</a>                              | <a href="#">SCHEDULE &amp; CALL</a>     |
| Single user only                                     | For more than 1 user, call 1-877-720-2040            | For more than 1 user, call 1-877-720-2040            | All of our Business Pro features, plus: |
| Send documents for eSignature. 5/month               | Send documents for eSignature                        | Send documents for eSignature                        | Integrations, connectors                |
| Basic fields   | Basic fields   | Basic fields   | APIs                                    |
|  | Personalized branding                                | Personalized branding                                | SSO                                     |
|  | Comments   | Comments   | Advanced branding                       |
|  |  | Collect Payments                                     | Customizable usage limits               |

# Paper Credentials

- expensive and time consuming to acquire
- hard to use and share
- hinder **Open Education** by failing to evidence flexible learning pathways in a transparent manner
- exclude the people who need them most
- can be abused by networks of intermediaries
- do not inform policy

# Policy Initiatives #1

The screenshot shows the top portion of a website. At the top left is the European Commission logo. To its right is a language selector set to 'English' with a small 'EN' icon. Further right is a search bar with a 'Search' button. Below this is a breadcrumb trail: 'European Commission > Education & Training > European Education Area > Digital education action plan action 3 digitally signed qualifications >'. The main header area is dark blue with the text 'Education and Training' in white. Below the header is a white navigation bar with a pink highlight under 'Education in the EU'. Other navigation items are 'Home', 'Policies', 'Resources and tools', 'News', and 'Events'. The main content area is dark blue with the title 'Digital Education Action Plan - Action 3 Digitally-Signed Qualifications' in white, and the subtitle 'Storing and sharing qualifications online' in a lighter blue.

European Commission

English EN

Search

European Commission > Education & Training > European Education Area > Digital education action plan action 3 digitally signed qualifications >

## Education and Training

Home Education in the EU Policies Resources and tools News Events

### Digital Education Action Plan - Action 3 Digitally-Signed Qualifications

Storing and sharing qualifications online

# Policy Initiatives #2

## 9. Common European **skills data space**

The skills of its people are Europe's strongest asset. In a global race for talent, the European education and training systems and labour markets need to quickly adapt to new and emerging skills needs. This requires high-quality data on qualifications, learning opportunities, jobs and the skill sets of people. Over the past years, the Commission has put in place a range of open standards, reference frameworks and semantic assets to increase data quality and interoperability<sup>70</sup>. As announced in the Digital Education Action Plan<sup>71</sup>, the Commission also developed the Europass Digital Credentials framework to issue credentials to learners in a secure and interoperable digital format.

The Commission will:

- Support Member States in the development of digital credential transformation plans and in the preparation of re-usable data-sets of qualifications and learning opportunities (2020-2022);
- Establish a governance model for the on-going management of the Europass Digital Credentials Framework in close cooperation with Member States and key stakeholders (by 2022).

# MicroHE

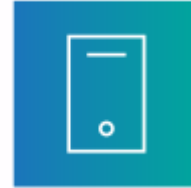
## Components of Our Project



Understanding  
prevalence



Technology  
standards



Technology  
demonstrator



Forecasting

# Our Partners



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[Credentify](#)

## Partners

View all items: Home / Partners



Vytautas Magnus  
UNIVERSITY



# Understanding Prevalence

## HE Institutions Lack Understanding of Micro-Credentials



- Institutions are lacking practical already existing examples of Short Learning Programmes & Micro-Credentials
- Institutional chain of command missing for SLPs/Micro-Credentials (e.g. roles are unclear)
- Business model is missing and considerable share without plans to develop one

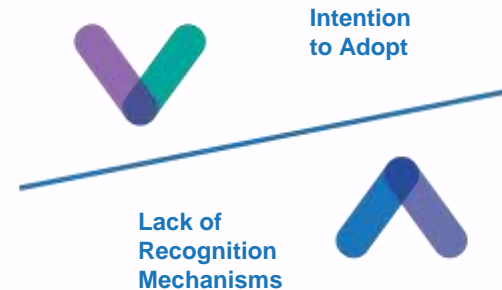
# Understanding Prevalence

## Recognition mechanisms enable Micro-Credential adoption

Our study indicated that recognition mechanisms lead to increased intention to adopt Micro-Credentials

"...MCs need to be easily accredited by accreditation agencies."

"...MCs need to be compatible with national/European qualifications frameworks."



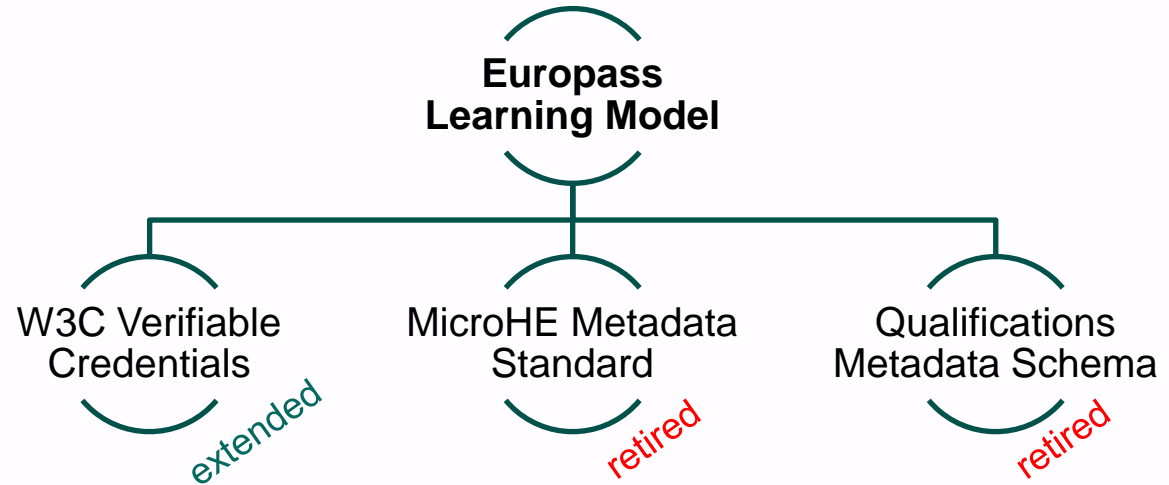


## MicroHE Metadata Standard Main Innovations



- Qualifications, Modules and Micro-Credentials to be expressed with same vocabulary across all levels of education
- Captures Formal, Non-Formal learning using same vocabulary
- Allows for credentials of different types from different providers to be bundled into larger credentials

# Evolution of Standards



# Technology Demonstrator



ABOUT

SCIENCE

BLOCKCHAIN

CASE STUDIES

GET STARTED

**The first European issuer of blockchain-secured stackable ECTS credentials that are university and student owned, and verifiable anywhere, anytime.**

GET STARTED

GET IN TOUCH

# Technology Demonstrator

## 'Self-Sovereign' model for managing MCs



- Allows user to collect micro-credentials from different institutions in the network and save them in the same wallet
- Allows user to collect a batch of credentials and request a new credential on the basis of them from any institution within the network
- Credentials stored on the blockchain

**credentify.eu**

# Forecasting Key Drivers for Transformation

Flexible and Personalized offerings



**New Learner Paradigms**

Resolving skill Mismatch



**Synergies between HEIs and Employers**

Demonstrating granular competence

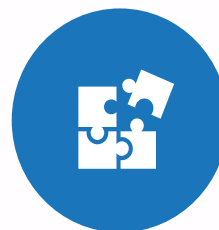
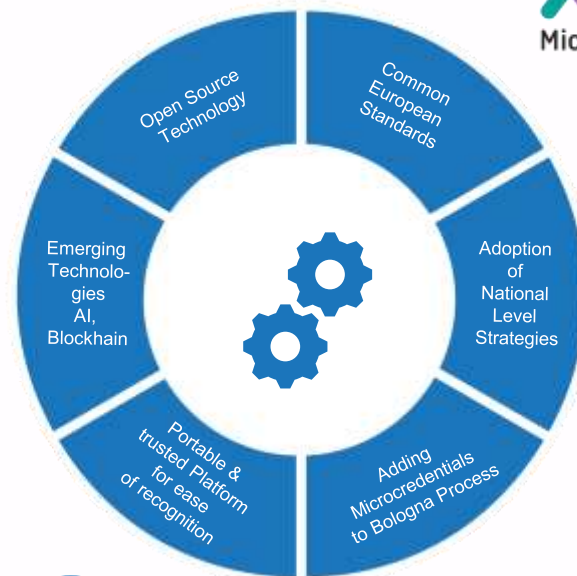


**Redefining Recognition**

Improved quick cycle education access to the disadvantaged



**Societal Impact**



**Drivers Facilitating  
Microcredential Adoption**

# Forecasting Impacts of Micro-credentials

# THANK YOU FOR YOUR ATTENTION

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You can download this presentation at:  
<https://www.microcredentials.eu>