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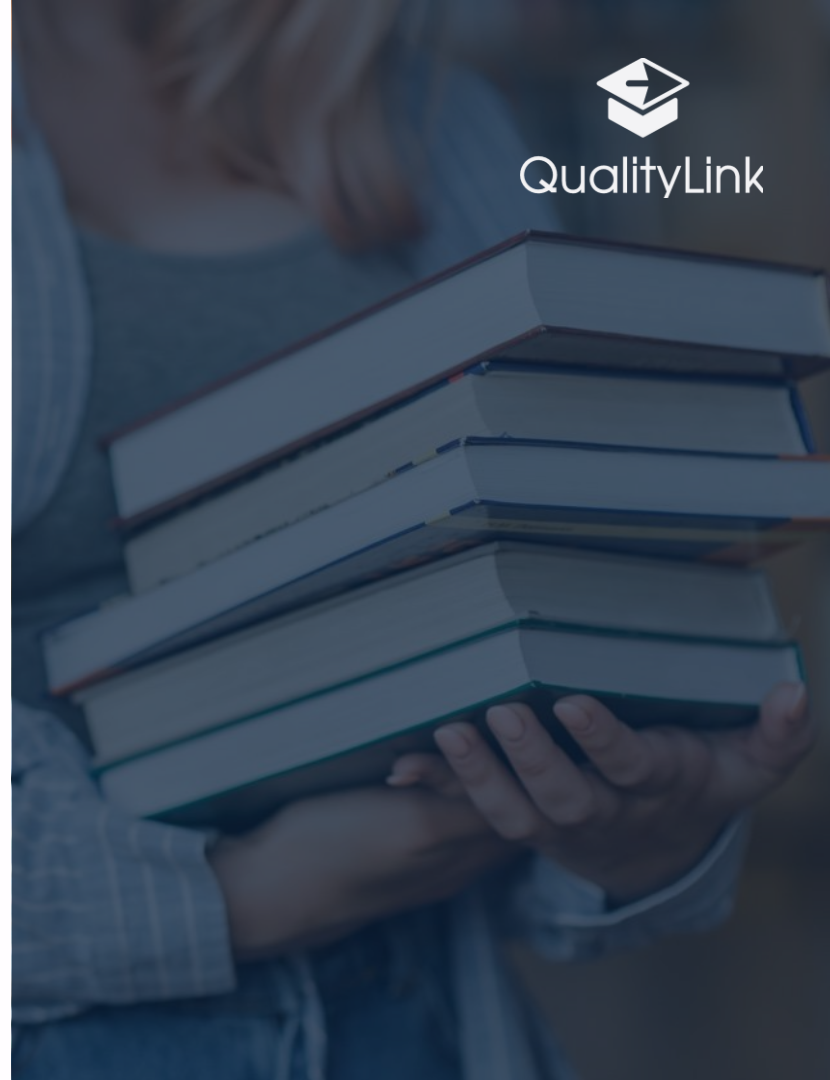
Creating an Open Ecosystem for Quality Data

Micro-Credentials Masterclass
20 March 2025, Zagreb

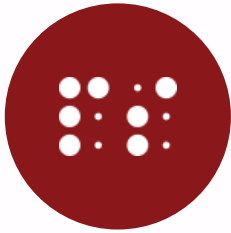
Ronald Ham (SURF) & Colin Tück (KIC)



QualityLink



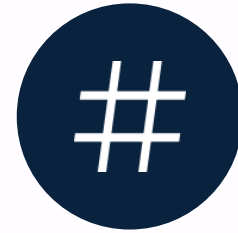
Current challenges



Diversity of micro-credentials and other short courses



Other data (ratings, recognition history, certifications, ...) rarely published using open standards



Basic course data often not published in open & structured form

Use cases



Potential learners,
guidance



Recognition and
labour market



Alliances' joint
catalogues



Mapping and
benchmarking



Interoperability for
other apps



Europe-wide
visibility

Search by keyword

Enter keyword

Type of provider

☒ Option 1

☐ Option 2

☐ Option 3

Learning opportunity type

☒ Option 1

☐ Option 2

☐ Option 3

☐ Option 3

☐ Option 3

Learning outcome type

Select type



Language

Select language



Dimension subset item

Select item



Suggested Courses

Topic (ICT/other)



Title of course

Provider of course

Language

Workload in h

Application status: Open

Topic (ICT/other)



Title of course

Provider of course

Language

Workload in h

Application status: Open

Topic (ICT/other)



Title of course

Provider of course

Language

Workload in h

Application status: Open

	Course 1	Course 2
Title	Honey Bee Health (Apiculture)	Fundamentals of Accessibility
Outcomes	<p>Apis mellifera</p> <p>Identify current parasites of honeybees in Ireland and more widely, considering potential threats to honeybee health from imported bees and other products</p> <p>Describe the life cycle of the main honeybee pathogens</p> <p>Explain the importance of plants to honeybee health</p> <p>Link the diversity of microbes associated with honeybees with their influence on honeybee health</p> <p>Discuss human-mediated factors involved in decline of honeybee health.</p>	<p>student will know:</p> <ul style="list-style-type: none"> - The main accessibility concepts and terminology, - different stakeholders and their needs, - principles of legislation, - technologies to support accessibility ranging from traditional accessibility solutions to new ones such as AI and robotics, - principles of accessible translation methods and digital services, - how to apply theory to practical accessibility solutions
Level (EQF/QF-EHEA)	6	6
Language(s) of instruction	English	English
Costs (fee)	500 EUR	Free
Accurate and up-to-date information: learning outcomes in ESCO ontology	No (ESCO skills generated)	No (ESCO skills generated)
Type of assessment	Continuous Assessment	unclear, grading scale: pass-fail

Definition text, explaining what the data type represents

Disclaimer text, noting any considerations about provided data

Vision for an open quality data exchange architecture

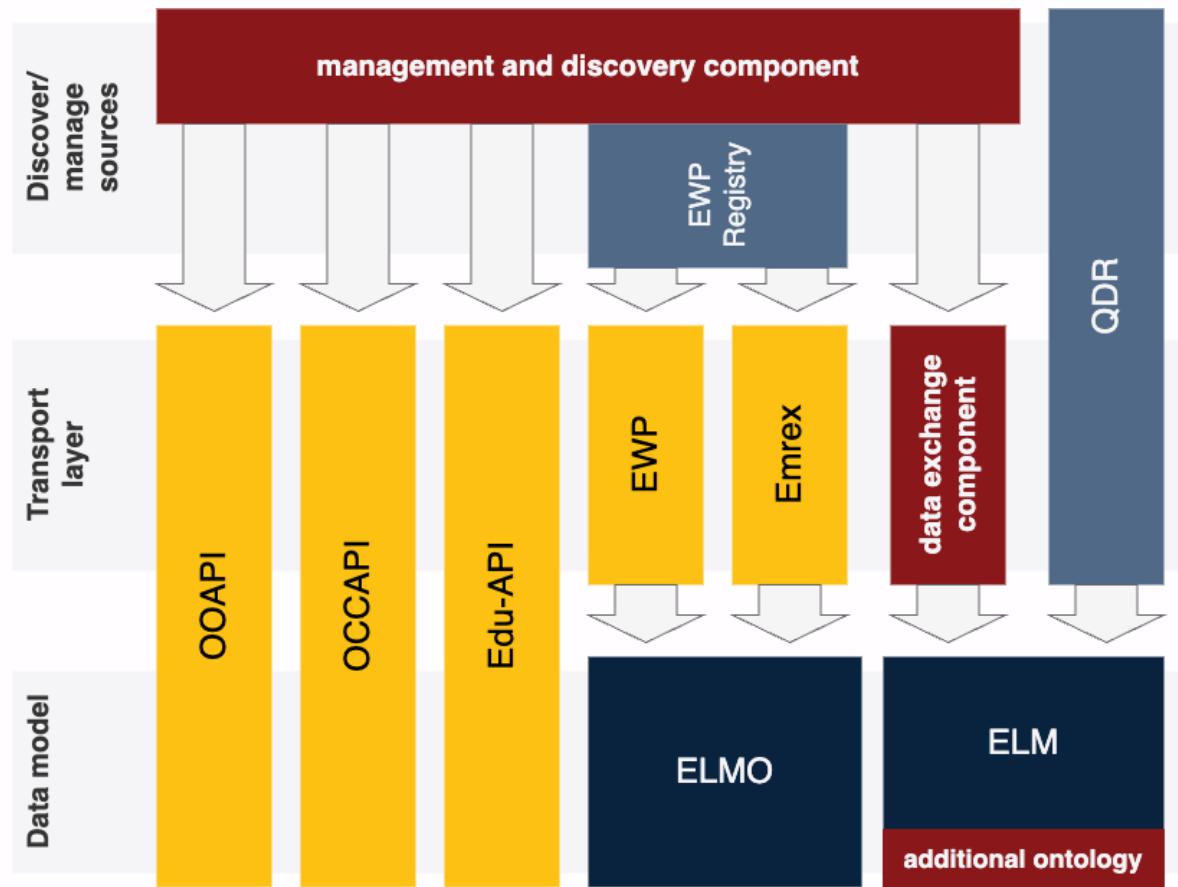
(in particular, but not only for micro-credentials)



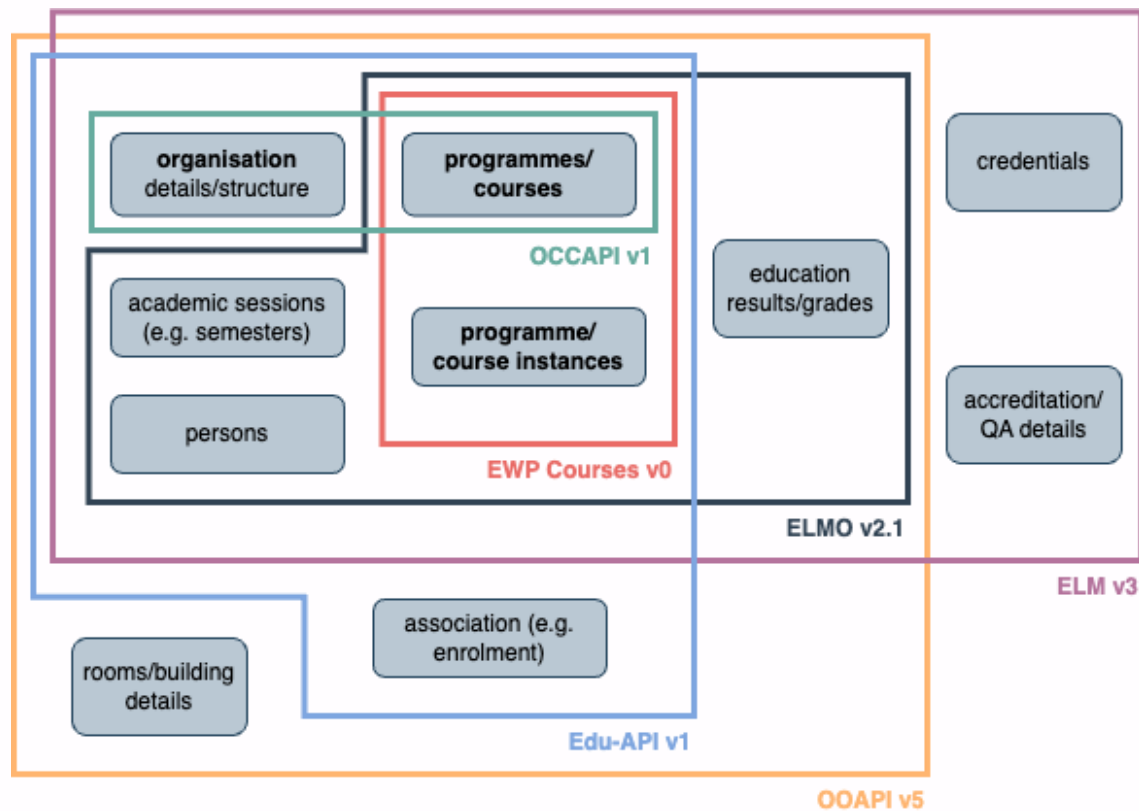
- Integrate seamlessly with existing standards/systems
- Ensure a low bar to adoption by HEIs
- Create flexibility (e.g. different routes) where helpful
- Open to future extensions (e.g. additional types of data)
- Any new components released open source




Architecture - high level overview



Landscape of technical standards





View Mappings New Mapping

My Specifications

Specification Name	Version	Mapped	Status	Author
Learning Opportunity Specification - Spine				
Learning Opportunity Instance - Spine				
Education Provider - Spine				
Colin Tück - ELM - Education Provider (ELM)	3.2	20/20	Mapped	Colin Tück
Colin Tück - ELM - Learning Opportunity Instance (ELM)	3.2	27/27	Mapped	Colin Tück
Colin Tück - ELM - Learning Opportunity Specification (ELM)	3.2	38/38	Mapped	Colin Tück
Ronald Ham - ELM - Education Provider (OOAPI - organization)	v5	16/13	Mapped	Ronald Ham
Ronald Ham - ELM - Learning Opportunity Instance (OOAPI - courseoffering)	v5	26/28	Mapped	Ronald Ham
Ronald Ham - ELM - Learning Opportunity Instance (OOAPI - programoffering)	v5	26/28	Mapped	Ronald Ham
Ronald Ham - ELM - Learning Opportunity Specification (OOAPI - course)	v5	31/26	Mapped	Ronald Ham
Ronald Ham - ELM - Learning Opportunity Specification (OOAPI - program)	v5	36/32	Mapped	Ronald Ham

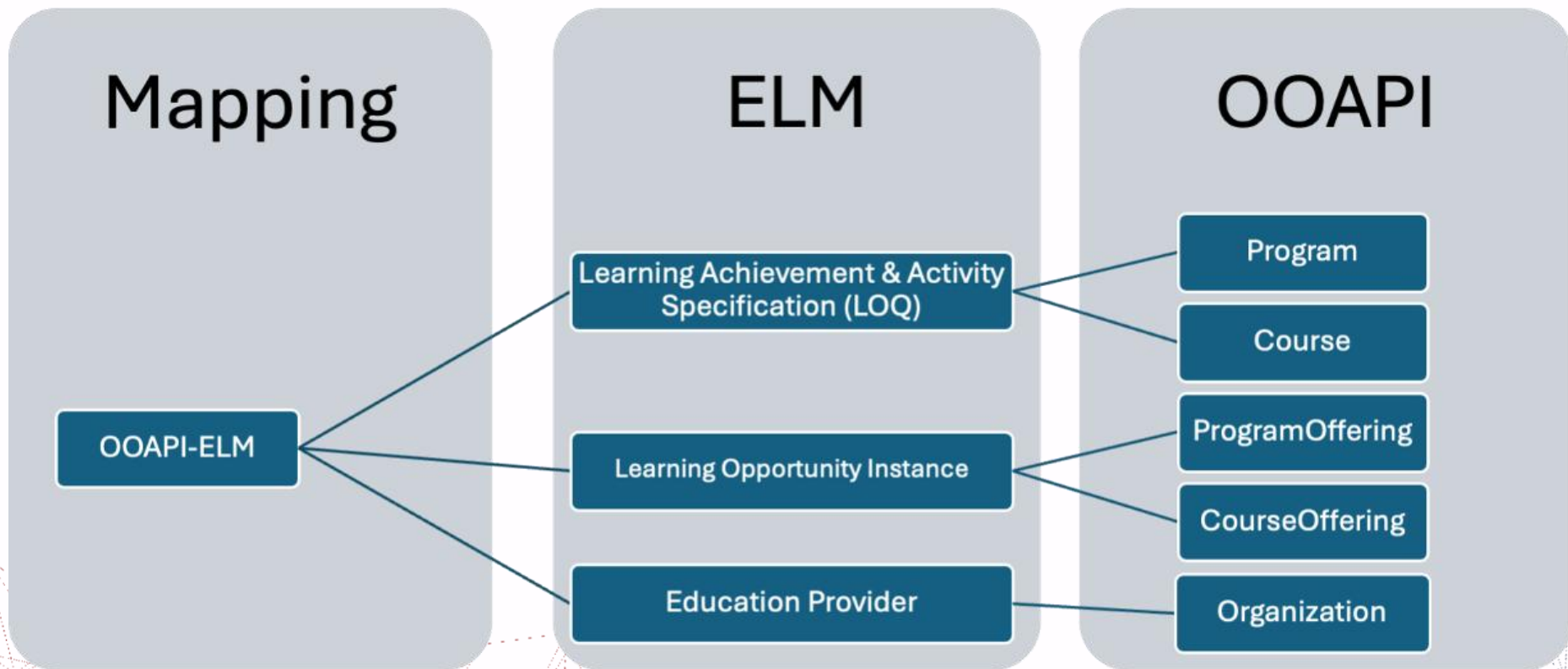
<https://mappings.skilldata.info/mappings-list?abstractClass=Learning+Opportunity+Instance&cp=4>

On the tooling:

- Starting with the tooling has a learning curve
- DESM only maps RDF:
 - OOAPI yaml
 - ELM SHAQL

On the specifications:

- ELM LOQ and OOAPI have different granularities



High level mapping (visually in DESM)

Shared mappings:

ELM updated on March 17th 2025.

OOAPI - course updated on March 14th 2025.

OOAPI - program updated on March 17th 2025.

Property name
homepage

Definition
The homepage.

Origin
ELM (3.2)

150%

Schema: ELM (3.2). Property: homepage

Identical

Definition: The homepage.

Relevant class(es):

Expected value type: elm:WebResource

UPDATED: The definition is identical in wording and intent. This does not consider the extent for how the property is used.

Schema: OOAPI - course (v5). Property: link

Identical

Definition: URL of the course's website

Relevant class(es):

Expected value type: string

UPDATED: The definition is identical in wording and intent. This does not consider the extent for how the property is used.

Schema: OOAPI - program (v5). Property: link

Identical

Definition: URL of the course's website

Relevant class(es):

Expected value type: string

UPDATED: The definition is identical in wording and intent. This does not consider the extent for how the property is used.

Property name
NQF level

Definition
The qualification level as specified by a National Qualification Framework. It is recommended to use the QDR List of qualification frameworks.

Origin
ELM (3.2)

140%

Schema: OOAPI - program (v5). Property: levelOfQualification

Reworded

Definition: None

Relevant class(es):

Expected value type:

The definition is identical in intent, with wording differences.

Schema: ELM (3.2). Property: NQF level

Identical

Definition: The qualification level as specified by a National Qualification Framework. It is recommended to use the QDR List of qualification frameworks.

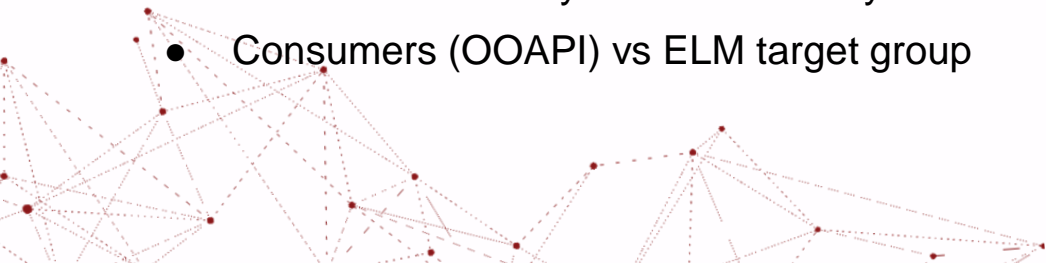
Relevant class(es): elm:Qualification

Expected value type: skos:Concept

UPDATED: The definition is identical in wording and intent. This does not consider the extent for how the property is used.

Findings: Learning Opportunity Specification

- How to deal with data that is provided once in OOAPI and used multiple times in ELM
 - How do you split the data? Should business rules / best practices be created?
- How to deal with data that is provided multiple times in OOAP and once in ELM
 - Simple concatenation? But what about the other way around?
 - e.g. Learning outcomes and learning outcome summary
 - Workload/study load and credits
- How to deal with missing data:
 - should it be added should model be extended (Lacuna management)
- What to do with enumerations and vocabularies
 - Abbreviations, codes and identifiers
 - Mode of study/mode of delivery
- Consumers (OOAPI) vs ELM target group



What are the criteria for this data, what attributes are needed?

Does a course catalog need to support enrolment information?

- Enrolment/application dates
- Duration
- Student numbers



In general not in full scope as information should be present before providing learning opportunity specification or learning opportunity instance data

Biggest differences:

OOAPI misses some attributes that could be added:

- eIDAS identifier
- tax/fiscal identifier
- accreditation



- Improve DESM workflow
- Add other specifications:
 - Edu-API
 - DigiVisio
 - ELMO (EWP course API & ELMO/EMREX)
 - OCCAPI
 - ...
- Align on vocabularies

<https://op.europa.eu/en/web/eu-vocabularies/europasstable>



How to engage or contribute?

- **Now:** tell us which **quality indicators** are the most relevant to you
- **Soon:** review our **draft specifications** and share your feedback
- **Later** this year: expose your own course catalogue in our **pilot platform**



<https://quality-link.eu/>



QualityLink

THANK YOU FOR
YOUR ATTENTION!

Short description of QualityLink

QualityLink aims to address all stakeholders' needs by furnishing them with all relevant information about courses and micro-credentials from a diversity of sources to improve recognition decisions and allow learners to follow flexible learning pathways. To make sure that the standards are of high quality and have ownership in the community, the consortium will create a Standards Consultation Board – a group of higher education interoperability experts from across different countries. Through creating open standards and collaboration, the project aims to establish the infrastructure for aggregating quality information from a wide range of sources.

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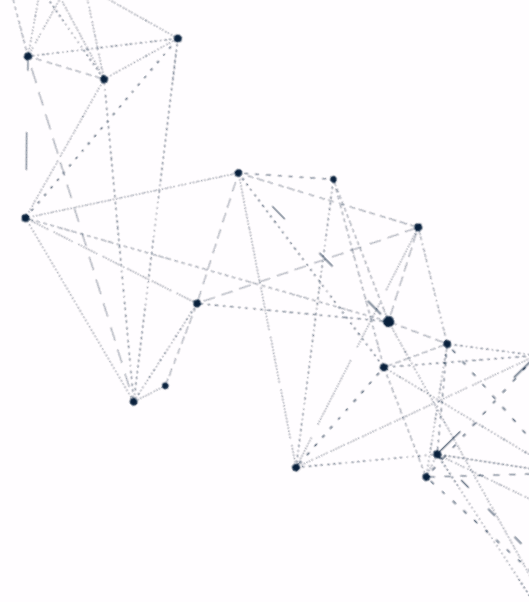
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