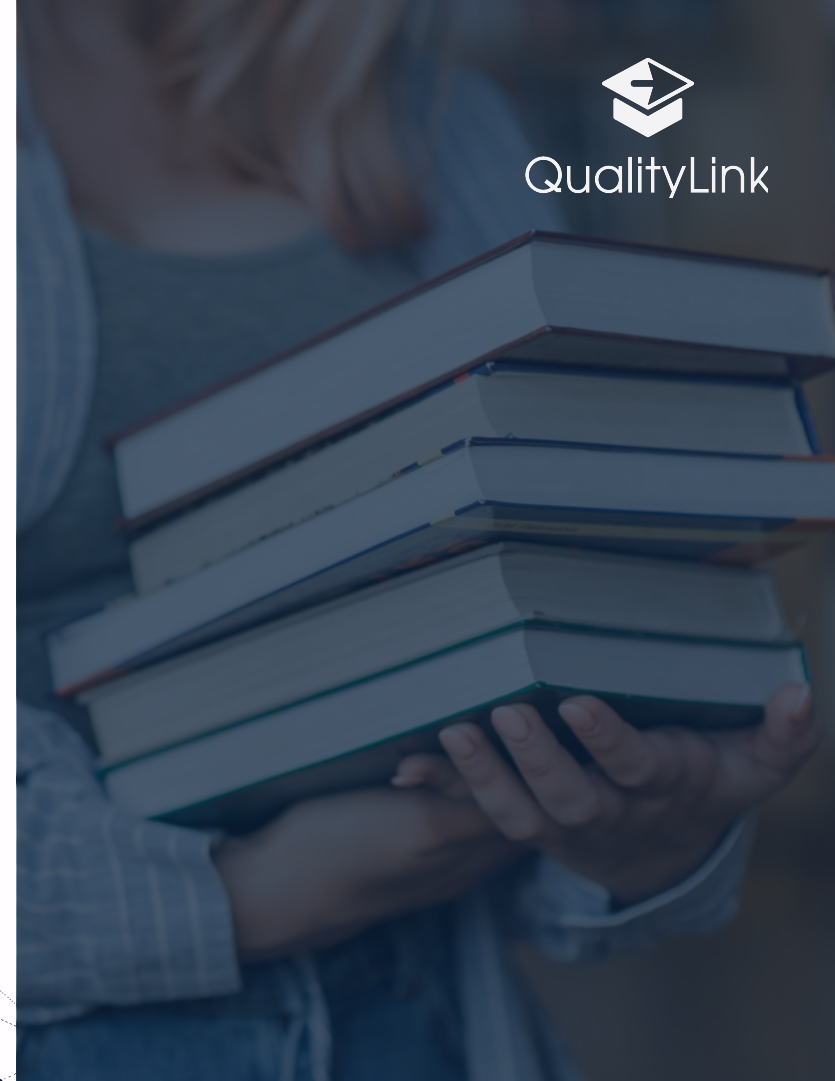
Co-funded by the European Union

QualityLink

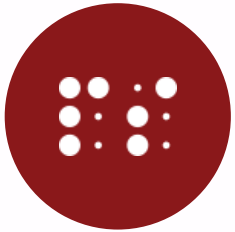
Creating an Open Ecosystem for Quality Data

W3C Verifiable Credentials for Education Task Force
19 May 2025

Colin Tück (KIC)

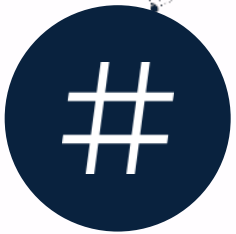


Challenges we tackle:



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

Erasmus+ project running Dec 2023 – May 2026 | Partners:

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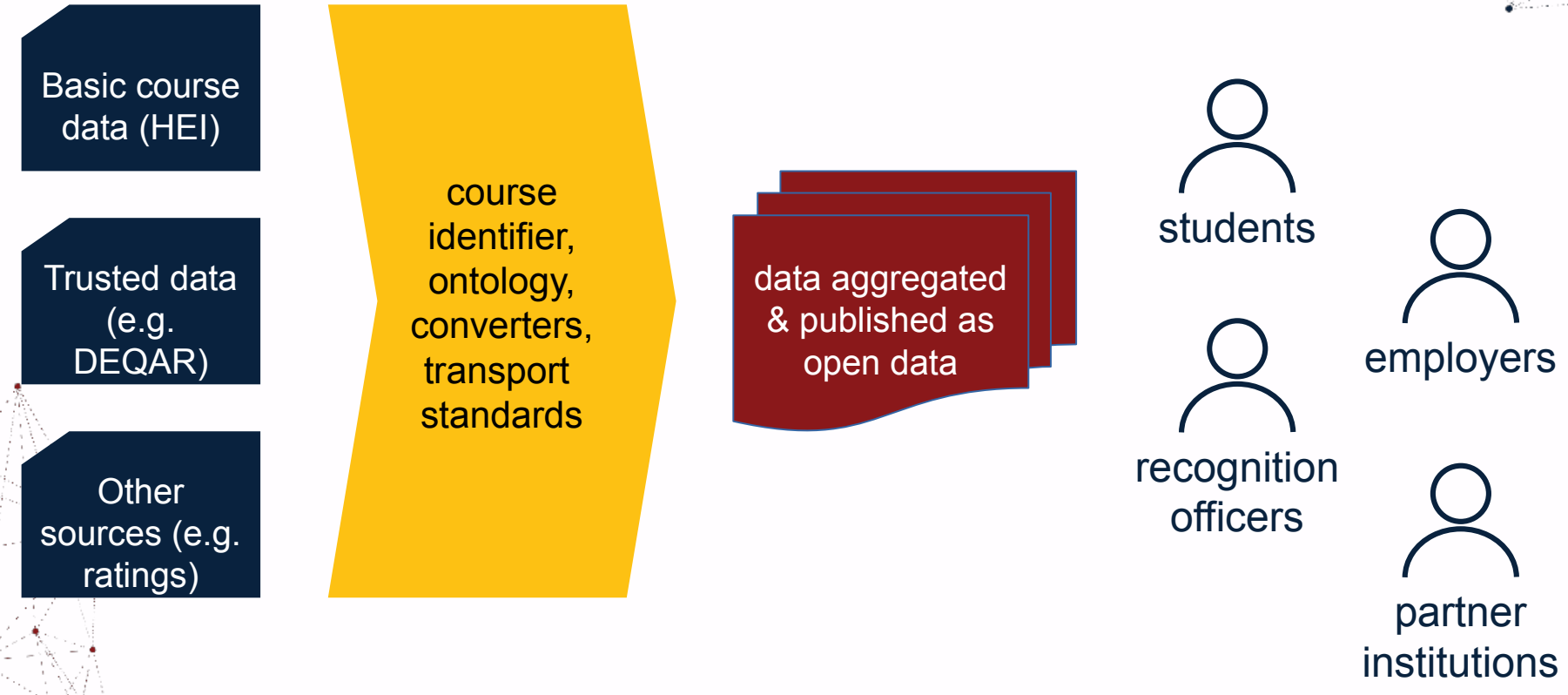
Vision for an open quality data exchange architecture

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



Use cases

Potential learners, guidance

Recognition and labour market

Alliances' joint catalogues

Mapping and benchmarking

Interoperability for other apps

Europe-wide visibility

Architecture – principles

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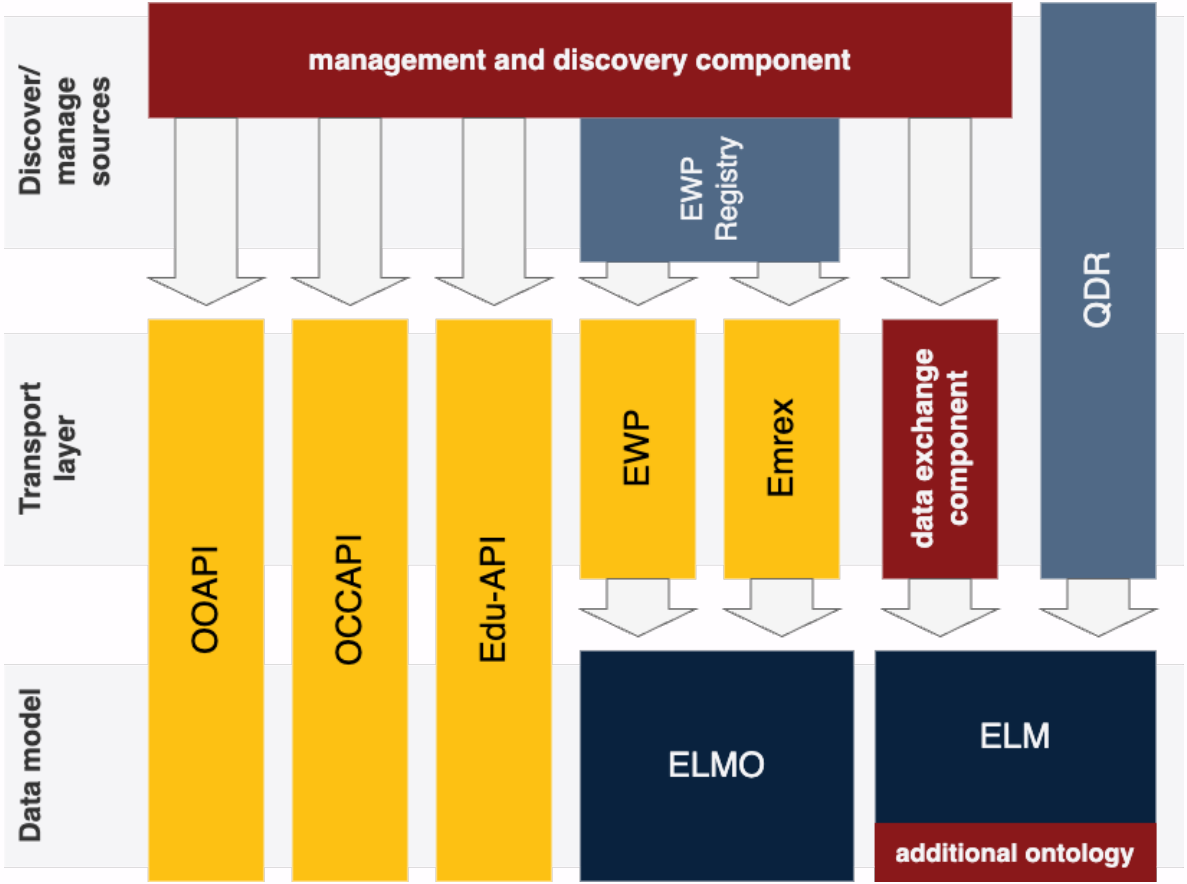
- Integrate seamlessly with existing standards/systems
- Ensure a low bar to adoption by HEIs
- Create flexibility (e.g. different routes) where helpful
- Open to future extensions (e.g. additional types of data)
- Any new components released open source

Architecture - high level overview



Landscape of data standards used in Europe

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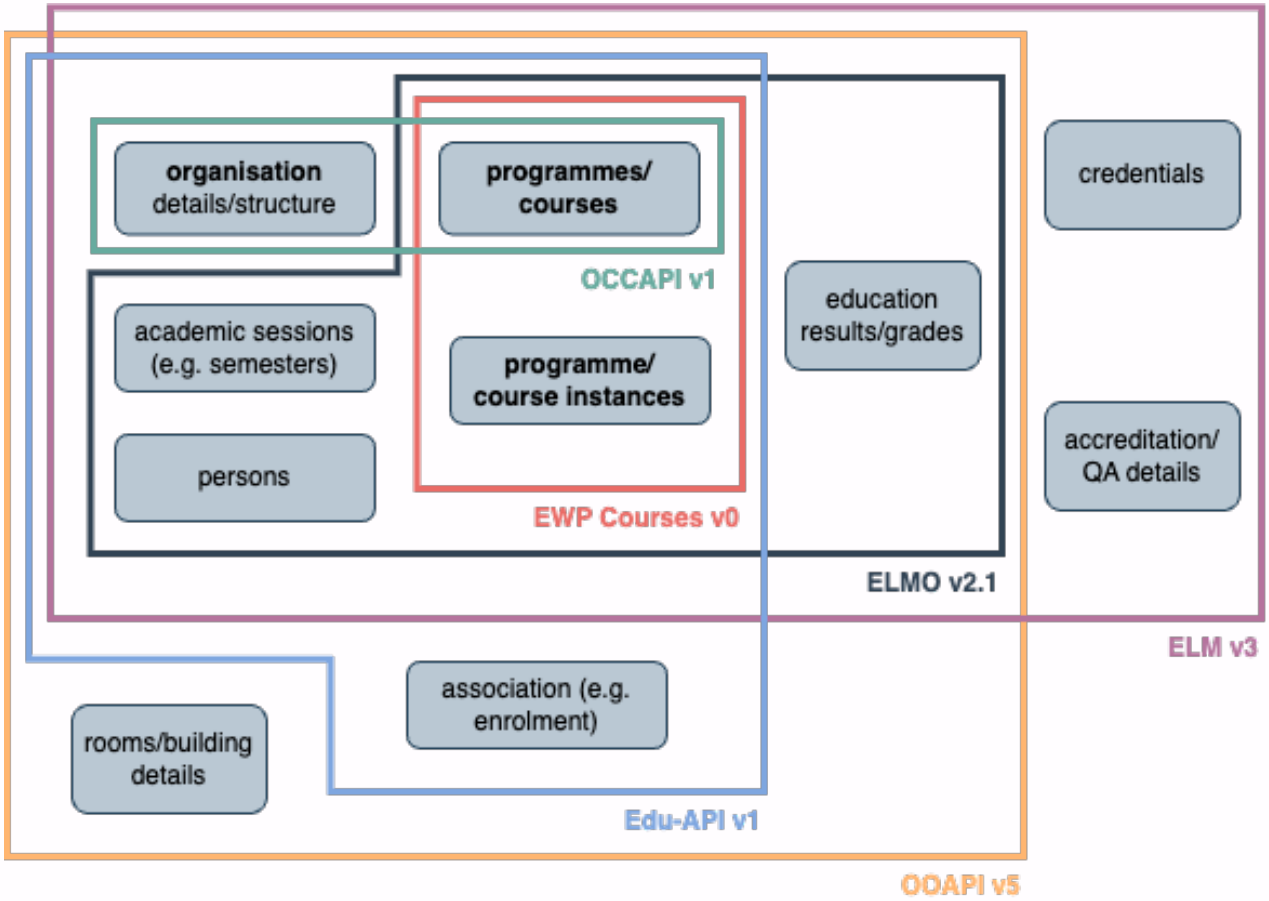
Standard	Maintained by	Used by	Tech
ELM	EU	EDC, QDR	RDF ontology & profiles
ELMO	EMREX	EWP, EMREX	XML schema
OOAPI	SURF	Dutch HEIs, European alliances	REST API
OCCAPI	EUF	Some HEIs	REST API
Edu-API	1EdTech	Various	REST API
DEQAR	EQAR	EQAR & QA agencies	REST API

Coverage of information domains



Terminology used

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General	Learning opportunity specification *Permanent, usually with a stable set of learning outcomes and credits*	Learning opportunity instance *Offering in a specific year or semester, or at specific location*
ELM	Learning Achievement Specification	Learning Opportunity
ELMO	Learning Opportunity Specification	Learning Opportunity Instance
OOAPI	Program / Course / Component	P/C/C Offering
OCCAPI	Programme / Course	*(not covered)*
Edu-API	Collection / Course / Component Template	C/C/C Offering
DEQAR	Programme	*(not covered)*

Using DESM for mapping

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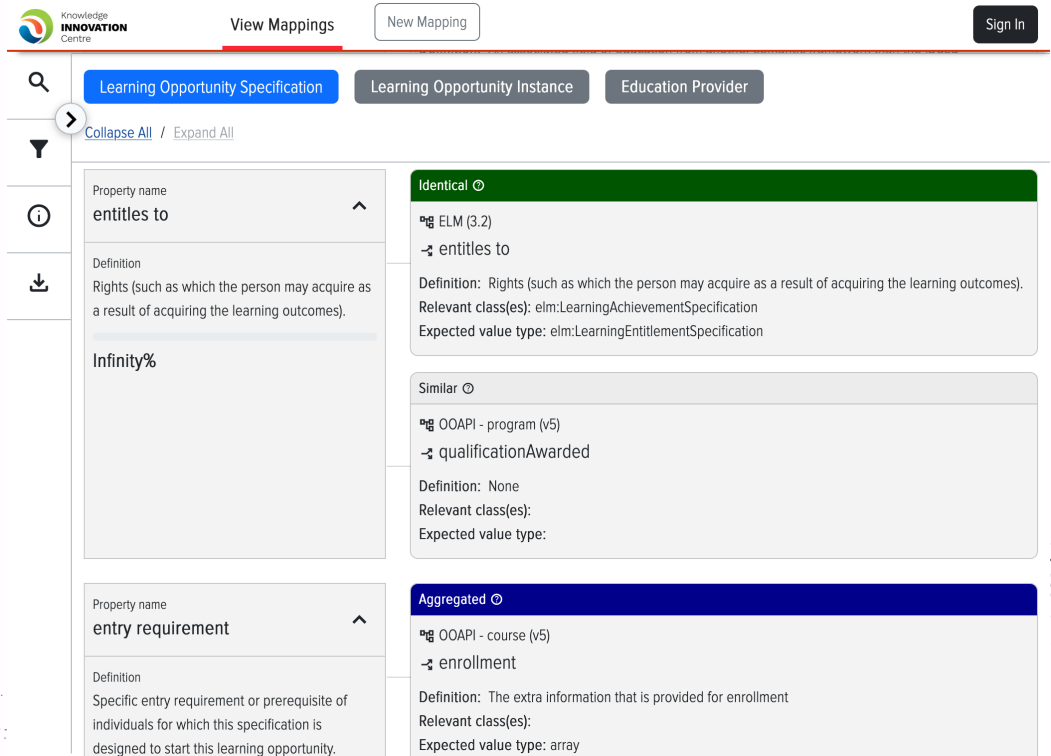
https://mappings.skilldata.info/mappings-list?cp=4

Benefits:

- Good user interface
- Browse and filter properties
- Scales well to many standards

Limitations:

- Difference in abstract classes, i.e. concepts not matching 1:1
- Class inheritance not straight-forward
- Does not build your converter



Vertical structure

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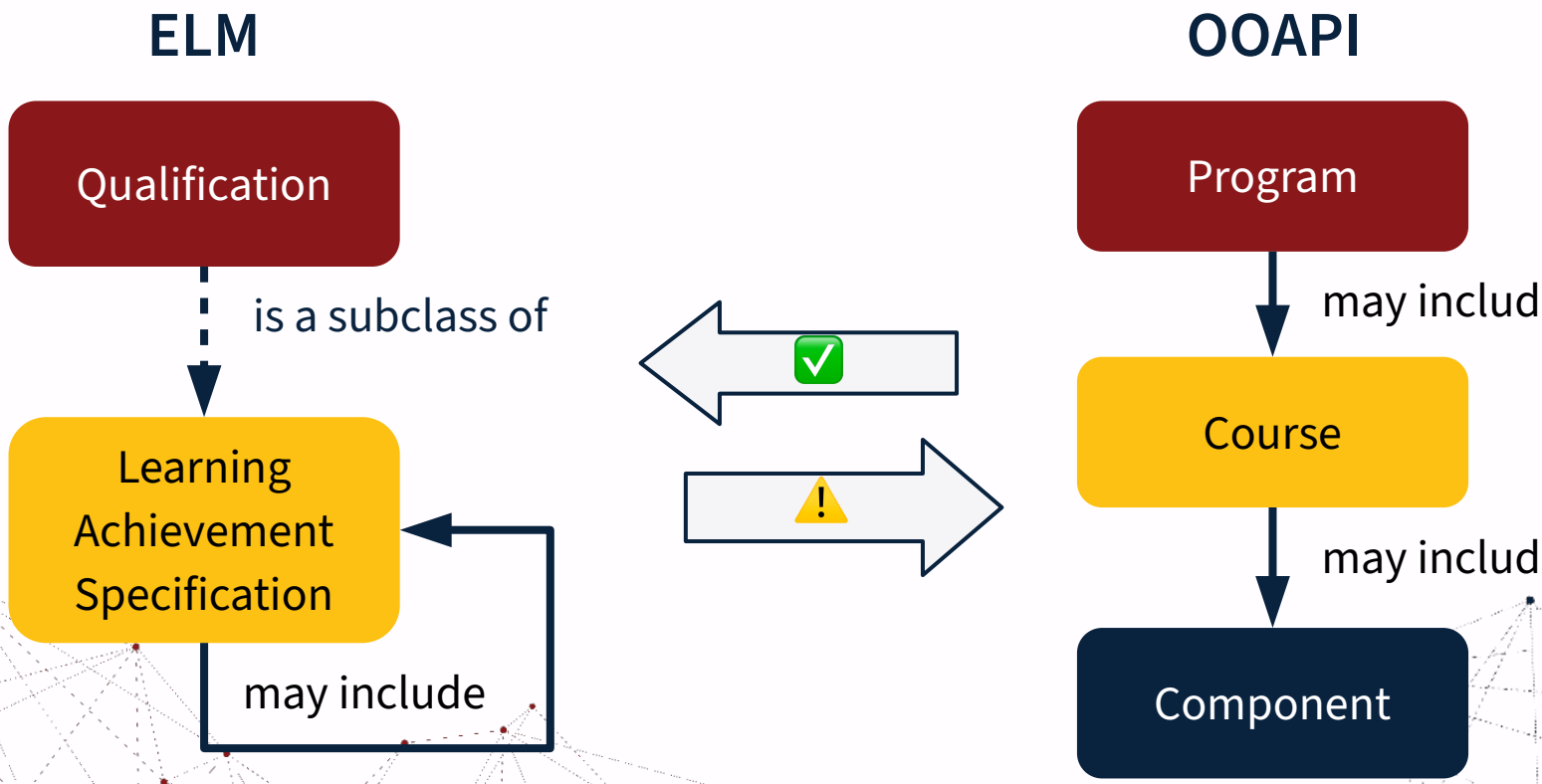

Conceptual differences

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- Learning outcomes
  - ELM: summary, ESCO and other frameworks/classification
  - OOAPI, OCCAPI: array of textual descriptions
  - DEQAR: summary & ESCO
  - Edu-API: intended learning outcomes not included in standard spec
- Qualifications frameworks (QF) and level
  - ELM: native use of European Qualifications Framework (EQF)
  - OOAPI: refers to Dutch national QF and EQF together
  - Edu-API: “graduate”, “undergraduate”, “doctoral” – plus “ext:...”
  - DEQAR: native use of Bologna/EHEA QF (“short cycle”, “first cycle”, “second cycle”, “third cycle”) plus “other”

Controlled vocabularies

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ELM	OOAPI
learning schedule	modeOfStudy
Part time light	full-time
Part time intensive	part-time
Full time	dual training
	self-paced
Instance	Specification

ELM	OOAPI
mode	modeOfDelivery
Workbased	distance-learning
Project based	on campus
Presential	online
Online	hybrid
Hybrid	situated
Blended	
Research-Lab based	
Specification	Specification

What's next

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- **Consultation**: review our **draft specifications** and share your feedback

https://quality-link.eu/technical-specs/

- **And**: tell us which **quality indicators** are the most relevant to you
- **Next**: working on data **converters and aggregators**
- **Later** this year: expose your own course catalogue in our **pilot platform**

https://quality-link.eu/

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THANK YOU FOR YOUR ATTENTION!

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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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