Learning Record Store Conceptualisation and Specification of Application and Data

WP 1.4 Data Collection and Structuring

Co-funded by the European Union

PACE VET
Digital Credential

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PACE VET

Project Leader

Betriebswirtschaftliches Forschungszentrum für Fragen der mittelständigen Wirtschaft e.V.
Contact: Jörgen Eimecke
info@bfm-bayreuth.de
www.bfm-bayreuth.de

Project Partners

Verband für Medien und Veranstaltungstechnik
Contact: Guntars Almanis
info@vplt.org
https://www.vplt.org/

Erasmus Hogeschool Brussel
Contact: Johan van den Broek
johan.van.den.broek@ehb.be
https://www.erasmushogeschool.be/nl

Steunpunt voor de productionle, ontwerpende, en technische krachten von de brede culturele sector
Contact: Chris van Goethem
chris@stepp.bemailto:angela.pittl@cis-es.org
https://www.stepp.be

Overleg Scholing Arbeidsmark Theatertechnik
Contact: Els Wijmans
info@osat.nl
https://www.osat.nl

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1. Introduction

The project team took stock of information and data available from within (LLDT, sectoral layer) and outside the (ESCO, Europass) the project.

2. Existing Information and Solutions

2.1 Lifelong Learning Document Tool (LLDT)

The Lifelong Learning Document Tool (LLDT) was the centrepiece of the TeBeVAT process. With the help of this manual tool, the candidate carried out a self-assessment of his competences and documented what he had learned in the past, including background information on the person's CV. It was used to collect information that could prove that he had the competences stated in the self-assessment.

Thus, it served as a forerunner of the candidate's portfolio for the PACE-VET project. Originally, it was called a diagnostic tool because the mentor uses the same tool for the TeBeVAT competence scan. He assesses whether there are gaps between the candidate's self-image and the mentor's image and advises him on training and further education if necessary.

As all this was seen in the context of lifelong learning, the tool was renamed LLDT. In PACE-VET, this became a portfolio that not only contains proof of qualifications, but also competences and insights that cannot be proven, such as reading specialist literature or attending a lecture at a trade fair, as well as the documentation of practical work experiences. This results in the PACE-VET app and is thus an important part of the evaluation process.

2.2 Europass

Europass is an initiative that was first presented online in 2005 to increase transparency of qualifications and the mobility of workers within the European Union. It is a service of the European Commission (Directorate General for Employment, Social Affairs and Inclusion). Originally, it provided an online platform to compile and store 5 specific "Europass" documents that were designed help potential employers, educational establishments and training providers understand which subjects have been studied, what training has been completed, or how much experience has been gained working:

1. European CV,
2. Language Passport to document language skills, qualifications, and experience,
3. Mobility Supplement as a record of skills and experience gained learning or working in Europe,
4. Certificate Supplement explaining the content and level of vocational qualifications,
5. Diploma Supplement explaining the content and level of academic qualifications.

Taken together, these documents are called the "European Skills Passport".

The new Europass platform was launched in July of 2020. Users can now register and create a "Europass Account". This is a personal and secure online space to record all their skills, qualifications, achievements, and experiences. It also claims to be a lifelong learning and career management tool for its users.

According to the Europass website[1], the "Account" offers the following services:

Europass Profile

describes skills, finding interesting jobs and learning opportunities, managing applications, and creating CVs and cover letters. It is a personal space where participants can record experiences and achievements: work, learning, different kinds of skills, publications, awards, licenses, memberships, volunteering. New sections can be created to add images, files and links to media that are relevant.

Europass Library

is a database within the profile to add, save and share all supporting documents: certificates, motivation letter, cover letters, CVs, photos, or any other document.

- CV Editor: to create a CV or many CVs with just a few clicks from the Europass profile or from scratch.
- Cover Letter Builder: allows the creation of a cover letter that stands out while following a standard structure.
- My Skills Section: skills can be added to this section and Europass will suggest other relevant and related sets of skills participants might also have. These skills also come with descriptions that will help the participants understand the related sets of skills by describing and defining them in the context of different jobs.
- Your Interests participants can define interests and understand their learning or career goals by adding topics they are interested in, where they want to work or study and what goals they want to achieve.
- European Digital Credentials (EDC) are digital diplomas and certificates presented in a way that is recognized across Europe. In theory, European Digital Credentials should be available from education or training institutes. They are signed with a unique e-seal that make them authentic and easily verifiable to employers or recruitment professionals.

  They can describe:
  - activities (e.g. classes attended),
  - assessments (e.g. projects),

[1] https://europa.eu/europass/en/about-europass; last checked on January 17th, 2024

- achievements (e.g. skills developed),
- professional entitlements (e.g. registration as a medical doctor) and qualifications.

They should be legally equivalent to paper-based certificates in all Members of the European Education Area. In practice, they could be a digital version of a course certificate or any other type of credential.

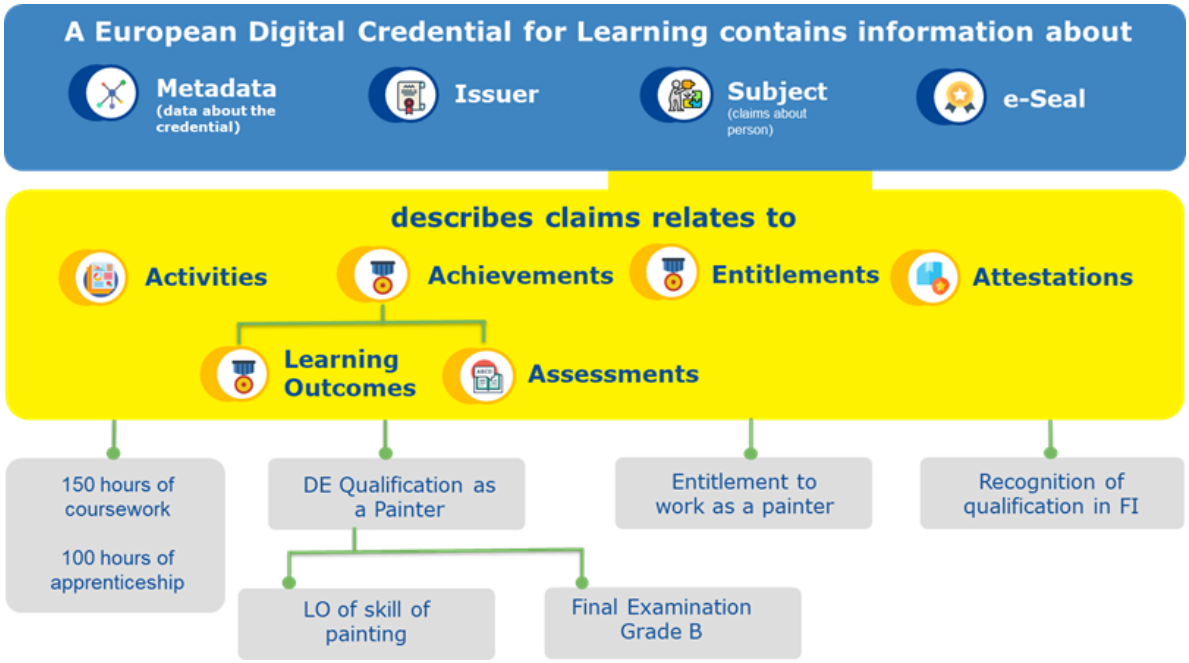

Figure 1: European Digital Credentials

Diagram: https://europa.eu/europass/en/stakeholders/european-digital-credentials; last checked on January 18th, 2024

The European Learning Model (ELM)

The European Learning Model (ELM) is the data model used for all learning concepts in Europass. It is a multilingual data model providing a single vocabulary for the description of learning in Europe.

The ELM consists of four different levels:

- European Information Model definitions and standards found in a variety of policy documents and recommendations linked to standards for learning and qualifications in Europe. This is complemented by glossaries for additional terms from other sources.
- European Learning Model a general ontology of all concepts that can be used in relation to learning and employment in Europe.
- Application Profiles apply specific sets of rules and restrictions on top of the general ontology to ensure that vital data on learning opportunities (e.g. their provider), qualifications (e.g. linked learning outcomes, thematic area and qualifications framework level), accreditations (e.g. accrediting agent) and credentials (e.g. the

designation of their issuers and owners) are always supplied (Read more here). These rules set for instance the minimum amount of data to be provided to describe a learning opportunity (for instance, it always needs to have a title), and the format in which it should be provided to ensure cohesion and interoperability

- Sectoral Extensions of the data model to allow the creation of specific additional application profiles to support specific use cases and to adapt the ELM to specific needs.[2]

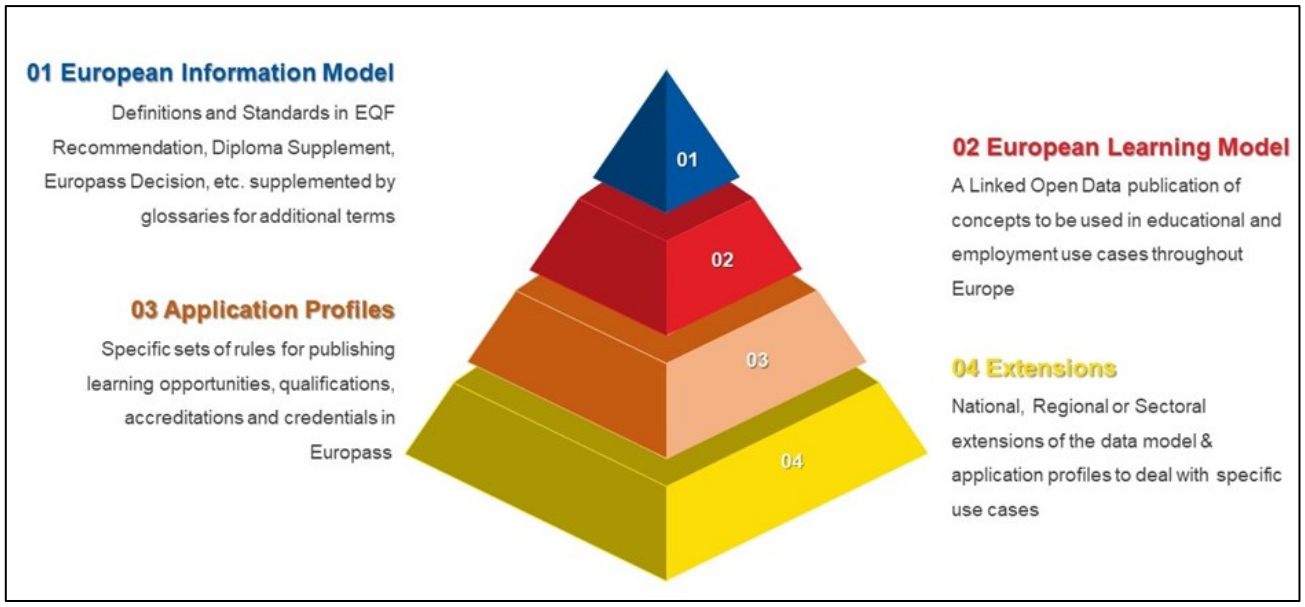

Figure 2: The European Learning Model

Diagram: https://europa.eu/europass/et/qdr-european-learning-model; last checked on January 18th, 2024

ELM Services

According to the EU, the ELM should offer the following "common" services:

- Provide information about Learning Opportunities and Qualifications This allows a record of information in a unified way. Information about learning opportunities and qualifications, including the description of qualification standards, can be used for course catalogues, training announcements and learning opportunity databases, allowing universally comprehensible data to be easily exported and described in the same way across borders.
- Create and issue Credentials: A digital credential is a documented statement about a person's learning, e.g. details of event participation, or a set of learning outcomes that describe the knowledge and skills acquired through a particular learning opportunity. The ELM provides the vocabulary to recreate a traditional paper-based certificates and

[2] European Commission; Introduction to the European Learning Model; https://europa.eu/europass/da/node/2128; last checked on January 18th, 2024

enhance their data content and quality by allowing to provide rich information within the credential itself.

- Employer Recommendations: ELM captures all aspects of learning, it can be used for the detailed description of non-formal and in-service learning as well, in a standardised, data-rich format that will be understood by employers or learning providers.
- Issue Identity Documents: These can be student cards, evidence of membership of e.g. professional associations, teacher cards and other identity documents linked to learning. By using the ELM, these documents can be standardised to help their recognition outside of their issuing organisation, sector or country.
- Ease the Recognition Process: Provide a single multilingual standard to describe learning, support and accelerate the recognition processes of diplomas, study-periods abroad and other documents which may be presented to competent authorities across the EU.
- Information / Accreditation: Publish information on licensing and accreditation of educational institutions and/or their programmes, as well as issuing accreditation credentials to licenced or accredited organisations.[3]

User Cases ELM

The European Commission currently sees six user groups for the ELM when connected to a Europass Account:

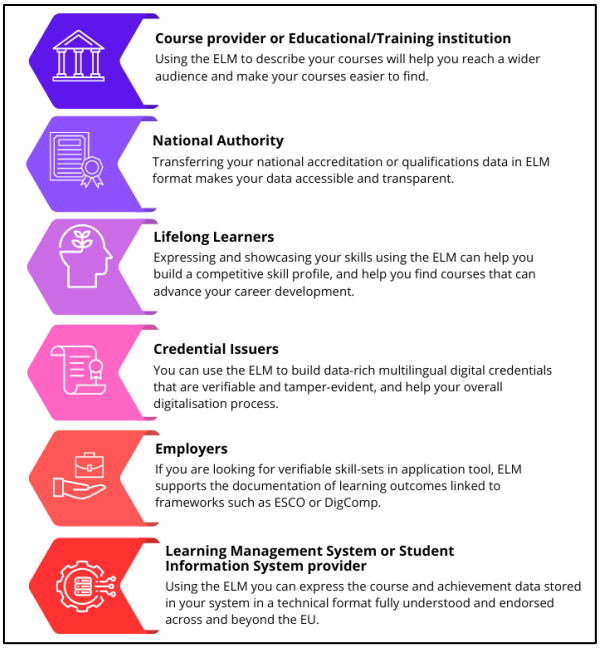

Figure 3: User groups in the European Learning Model

Diagram: https://europa.eu/europass/da/node/2128; last checked on January 18th, 2024

[3] European Commission; Introduction to the European Learning Model; https://europa.eu/europass/da/node/2128; last checked on January 18th, 2024

ELM: Application Profiles / Concepts

Application Profiles apply specific sets of rules and restrictions on top of the general ontology to ensure that vital data on:

- learning opportunities (e.g. their provider),
- qualifications (e.g. linked learning outcomes, thematic area and qualifications framework level),
- accreditations (e.g. accrediting agent),
- and credentials (e.g. the designation of their issuers and owners)

are always supplied. Rules and restrictions could be the minimum amount of data to be provided to describe a learning opportunity or the format in which it should be provided.

As with any database-system, properties (editable or read-only parameters associated with an application) in the ELM may include different attributes to denote activity completion or volumes of learning, but also associations between concepts. To understand how the concepts relate to one another one must recognize that the ELM consists of three different layers of concepts. These interact with one another and lead to individual information and data that is specific to its owner:

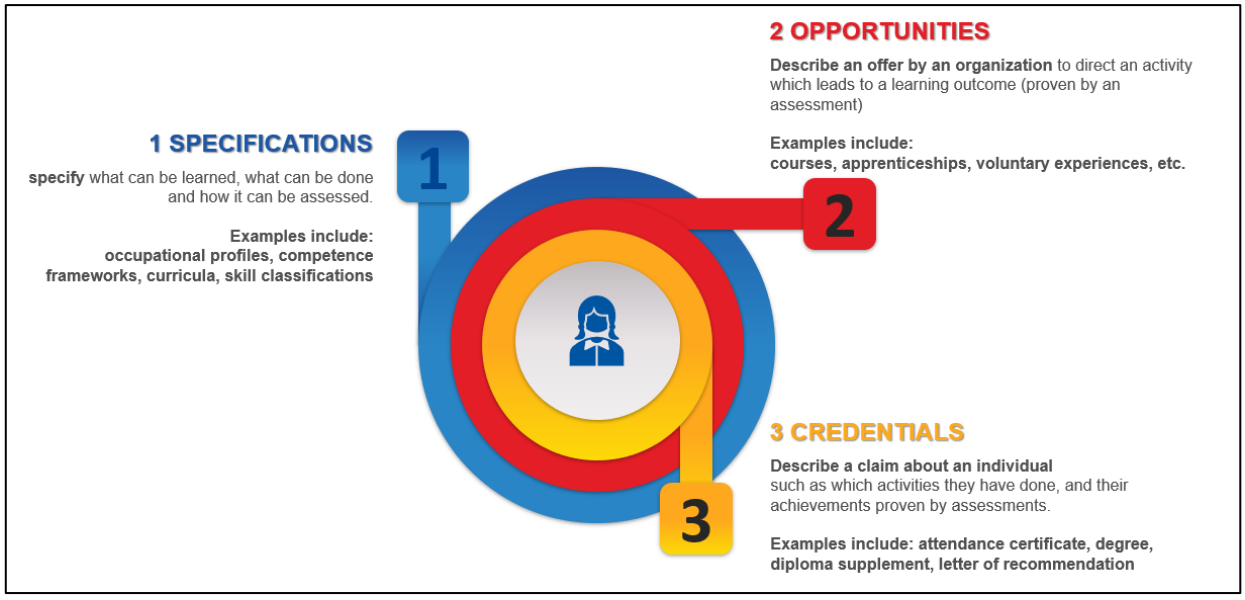

Figure 4: Elements of the European Learning Model

Specifications

A foundational concept that can be thought of as the theoretical framework. It specifies what can be learnt, what can be done and how the acquisition and retention of learning outcomes can be assessed.

Opportunities

A description of a particular offer provided by an organisation. This could be a description of a course within the context of a particular opportunity, with a specific start and end date and the designation of the opportunity provider.
Credentials

2.3 ESCO

In 2017, the Recital 17 of the Europass Decision states that "Following appropriate testing and having due regard for the position of Member States, ESCO (Homepage ESCO) could be used by the Commission within the Europass framework. ESCO is the multilingual classification of European Skills, Competences, Qualifications and Occupations. ESCO classifications identify and categorize skills, competences, qualifications and occupations relevant for the EU labour market and education and training. However, the use of ESCO in EUROPASS by Member States is "on a voluntary basis, following testing with, and evaluation by, the Member States".

In 2018, in the Second meeting of the Europass Advisory Group and as stated in the Europass e-Portfolio, Concept Note, Document for 13 December 2018, the new Europass Decision sets out that "following appropriate testing and having due regard for the position of Member States, ESCO could be used by the Commission within the Europass framework".

Semantic assets such as ESCO can play an important role in implementing the new Europass framework.

ESCO skills and occupations are used in the following ways:

- In the Europass Profile, end-users can select an ESCO occupation or use free text to fill the field "occupation or position held" for a specific work experience. End-users can also select a language from the list of ESCO skills.
- In the My Skills section, end-users receive ESCO skills as skills suggestions to build their skills profile and they can also manually add ESCO skills.
- In the My Interests section, end-users can specify what interests them in the form of interest tags. Next to free text, end-users benefit from controlled lists like ESCO occupations and skills to create interest tags. The interest tags will serve as one of the inputs to offer tailored courses and job suggestions on the Dashboard.

Specifications

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Opportunities

A description of a particular offer provided by an organisation. This could be a description of a course within the context of a particular opportunity, with a specific start and end date and the designation of the opportunity provider.

Credentials

This top level allows the concepts to be applied at the level of the individual.

2.4 ETTE (European Theatre Technicians Education Project)

The aim of the project was to communicate the aspects of professional qualification that are relevant for occupational safety and to develop an internationally comparable level and standards. This is necessary because events are often held at an international level.

To build trust in ETTE among those who have their health and safety skills certified, a standardized approach was needed to ensure that skills were measured equally. This resulted in the development of an examination procedure based on the EN ISO/IEC 17024 quality standards. Candidates who pass the examination receive the European Safety Passport, which covers safety skills only.

To be able to train practitioners in their work environment, open educational resources for the competences were developed. The resources can be used in collective training and further education as well as in individual or online learning.

The resources are the ETTE manual[4] with the ten competences with descriptions and all the important content that needs to be known, exercises, links to sources for further reading, etc. There is a version for students and a teacher/assessor version[5]. The latter contains exam questions and suggestions for integrating ETTE content into teaching.

The 10 basic skills are:

- Work with respect for your own safety
- Contribute to a safe and sustainable working environment
- Work ergonomically

[4] ETTE_handbook_v_01_00_EN_00_DEV.PDF
[5] ETTE_assessment_and_teaching_training_engl_complete.pdf

- Use personal protective equipment
- Know the risks of fire, smoke and carbon dioxide
- Work safely at height
- Work safely with mobile electrical equipment under supervision
- Work safely with a range of tools
- Work safely with chemicals
- Equipment and rigging-Performance equipment

Even if ETTE is not moving towards EQF 4, it can still serve as a source of knowledge, especially regarding the assessment process.

2.5 Microcredentials

To promote lifelong learning, small, targeted educational units or training courses that teach specific skills or competences in a particular field offer an alternative or complementary option to traditional academic education. Unlike traditional degrees or certificates, which often require extensive programmes, microcredentials are designed to deliver relevant skills quickly and in a targeted manner. These units can come in a variety of forms, including digital badges, certificates, or small parts of degrees.

Currently, the definition boundaries between microcredentials and sectoral or professional skills are neither well defined nor even agreed upon within the European Union. Trust and transparency play key roles in the value and currency of microcredentials.[1]

The advantages of microcredentials are:

- Flexibility: Microcredentials enable flexible and lifelong learning. They can be acquired online or face-to-face, allowing learners to accommodate their own schedule and preferences.
- Speed: Completing microcredentials usually takes less time compared to traditional degree programmes.
- Relevance: Microcredentials place a strong focus on the applicability of knowledge. They are designed to teach practical skills that can be applied directly in a professional environment.
- Digital validation: Microcredentials can also be issued in digital form, for example as digital badges or certificates. These digital credentials can be easily verified and shared on an online platform.
- Modular structure: The microcredentials should be designed in such a way that they are divided into modules. This enables learners to acquire only the skills they need rather than completing a more comprehensive course.
- Recognition of skills: Microcredentials are increasingly recognised by companies and organisations as valuable evidence of specific skills or knowledge. They can help to

improve career opportunities or facilitate the transition between different professional fields.

They therefore offer an agile, effective and low-threshold way of visualising one's own skills, professional development and thus lifelong learning in a rapidly changing world of work.

The European Centre for the Development of Vocational Training (Cedefop)[6] plays an important role in recognising skills and supporting education and training policies in Europe. In the context of microcredentials, Cedefop endeavours to create mechanisms for the validation and recognition of these small units in order to facilitate the mobility of workers and improve the transparency of qualifications.

Cedefop emphasises the importance of microcredentials as a tool for adapting to the ever-changing demands of the labour market. The organisation promotes the development of clear standards and quality guidelines for microcredentials to ensure that they are recognised by employers and educational institutions alike.

Overall, Cedefop's work helps to facilitate the integration of microcredentials into formal education systems and to promote the acceptance of these flexible learning formats in order to do justice to individual educational pathways and professional development.

3. Conclusions

Although many solutions for the administration of certificates abound, none of them address validation of learning outcomes. Validating specific competences based on ESCO for the live performance and event technology sector have been addressed in the Erasmus+ projects ETTE, TeBeVAT and Essence. To create a viable use case and for recognition within the sector, the application must provide more than the administration of certificates while respecting current solutions (e.g. Europass) in the EU. The PACE-VET application must be formatted as a portal for candidate’s lifelong learning.

[6] Cedefop (2023). Microcredentials for labour market education and training: microcredentials and evolving qualifications systems. Luxembourg: Publications Office. Cedefop research paper, No 89. http://data.europa.eu/doi/10.2801/566352; page 8

Strategic Report

We thank the co-authors from:

BF/M-Bayreuth

STEPP

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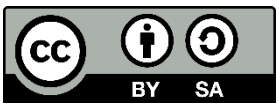
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