



## EPICA Initiative Newsletter – 4th Edition – March 2019

### EPICA WAS PRESENTED AT THE STAKEHOLDER MEETING ON DIGITAL EDUCATION

*BY FEDERICA MANCINI, OPEN UNIVERSITY OF CATALONIA (UOC)*

The EPICA project was presented at the **Stakeholder Meeting on Digital Education that convened 10-11 December 2018 in Luxembourg**. The event was organised by the European Commission, with the aim to gather information on the ongoing projects on digital education, focusing in particular on the lessons learned and the future vision from the project perspective. The session was chaired by Rehana Schwininger-Ladak, Head of Unit, Unit G.2, DG CNECT, Interactive Technologies, Digital for Culture and Education. Among the participants were Anne Bajart, Deputy Head of Unit and Project Officers Alina Senn, Stefanie Hille, and Marcel Watelet.

EPICA was presented by Federica Mancini from the Open University of Catalonia (UOC), who explained the project's successful achievements, challenges, success stories, and promising areas/ elements that could be scaled up and deployed after the funding period.

Eighteen other projects were presented by the participants and grouped according to their specific topics:

- technologies for better human learning and teaching (BEACONING, MATHISIS, NEWTON, SlideWiki, TESLA, WEKIT);
- technologies for learning and skills (CRISS, eCreateLearn, iMuSciCA, Next-Lab, and STORIES, weDRAW);
- international partnership building in low- and middle-income countries (GO-GA, EPICA);
- open knowledge technologies: mapping and validating knowledge (CompLeap, SkillsMatch);
- advanced digital gaming/gamification technologies (RAGE);
- gaming and gamification (GameCAR, SOCIALENERGY).

Some of the participants in the event expressed their interest in the EPICA project and in being informed of its future progress and results. Their expression of interest may also lead to the creation of fruitful synergies and future collaboration with participants of other projects.

The second day, the attendees were involved in a workshop aimed at collecting ideas for the future EU funding programmes. After a round of short pitches, the ideas presented were clustered into topics based on similarities and ranked by the participants. Small working groups were organised to collect reflections on the selected ideas/topics and to produce a flip chart containing a SWOT analysis.



Partners at a brainstorming session, during their two days meeting in Luxembourg

Several interesting reflections came up from the groups. Among them was the need to invest extra resources in:

- teachers' professional development for the adoption of new pedagogies
- promoting the uptake of existing tools and platforms bridging between Erasmus and Horizon projects
- identifying best practices in- and outside general curricula
- finding effective ways to develop the key competences
- creating hubs of innovation
- developing inclusive and adaptable learning environments
- other related endeavours.

The two-day event also included several presentations:

- Alina Senn (PO) introduced the upcoming call for proposals for 'An empowering, inclusive Next Generation Internet';
- Rehana Schwininger-Ladak led a session on future programmes under the new MFF (Multiannual Financial Framework) – Digital Europe Programme & Horizon Europe Programme;
- Stefanie Hille discussed the role of the European Union in supporting Member States and educational institutions in the modernisation of their educational systems.

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## WORKING TOWARD DIGITAL CREDENTIALS AS A TYPE OF UNIVERSAL CURRENCY

BY ILDIKO MAZAR, RESEARCH & DEVELOPMENT ASSOCIATE, **KNOWLEDGE INNOVATION CENTRE**,  
AND EPICA EXTERNAL ADVISORY BOARD MEMBER

Qualification, skill, and competency recognition, just like learning assessment and non-formal learning validation in the past, are important aspects of both continuous professional development and the up- and re-skilling of existing workforce. What's making credential recognition both significant and challenging is that with physical mobility being mainstream in education as well as employment, and the acquisition of essential digital and soft skills often being the result of non-formal learning events and experiences, people expect to be able to have their qualifications, achievements, and work experiences widely acknowledged. Whether judged by higher-education institutions (HEIs) upon one's return to formal education or by employers when a new job application is received, any credential should be understood, in an equally comprehensive way, by:

1. its holder,
2. the education/learning provider, and
3. the prospective employer.

To facilitate this, commonly understood and acknowledged digital currencies, such as ECTS credits or university degree certificates, as well as vocabularies like the European Qualifications Framework (EQF) levels and **ISCED-F codes for subject areas**, are required. Equally necessary are open and ubiquitous documentation templates that allow a thorough and precise interpretation and validation of credentials by any of the above-mentioned stakeholders.

People familiar with open-education practices could immediately say that such templates already exist in the form of **open badges**.

This, of course, is a valid observation, but I would argue that open badges have so far been unable to get traction in higher education because they are a bit “too open” and “too flexible” to be applied in a sector in which formal accreditation and standardisation are crucial components of quality assurance.



*Photo by ZSun Fu on [Unsplash](#)*

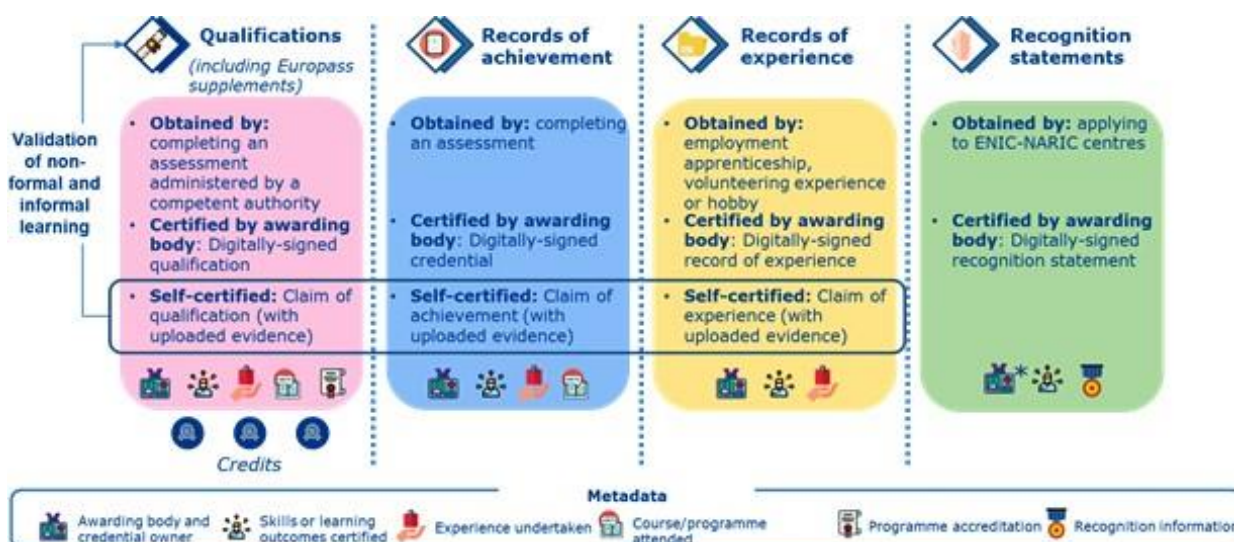
So how can we achieve the best of both worlds? That is, how can we establish highly structured and standardised mechanisms of credentialisation that are principally open and transparently interoperable?

Certain global trends are clearly urging the production of more open digital credentials. Higher education, for example, is becoming more open and flexible – with joint degree courses and some universities sharing their MOOCs on popular platforms like Coursera and Udacity. Moreover, the labour market’s demand for constantly changing and unique sets of knowledge, skills, and competencies is pressing HEIs to pay more attention to issuing credentials that are open, portable, and quick and easy to validate. Best-practice cases of the latter are still rare.

In Europe, there are several standards and innovative technologies helping to advance credential recognition, but they are fragmented, and all seem to have some restrictions in their use. They include the following:

- Europass is the still-evolving, go-to online CV template for many job seekers in Europe. It can provide – in addition to a well-structured CV – a Certificate Supplement for people who hold a vocational-education-and-training certificate, as well as other EU-supported documents and self-assessment tools to produce annexes, such as the Europass Language Passport.
- The European Qualifications Framework (EQF) indicates the level of various qualifications, but not micro-credentials or those earned through non-formal education.
- The European Diploma Supplement provides a standardised template with additional information about a study-programme diploma, but only for degree-level education.
- The European Credit Transfer System (ECTS) describes individual learning units in terms of knowledge, skills, responsibility, and autonomy, but it is only used in higher education.

- The European Skills, Competences, Qualifications and Occupations (ESCO) database provides a standard terminology of skills, competences, qualifications, and occupations, but these terms are not used or referenced in any of the above-listed tools.
- The European Commission funds education innovation in many ways, including Horizon2020, which finances EPICA. There is also the Erasmus+ programme, which (co-) funds collaboration among various European projects that deal with validation and recognition issues. The following are a few of the major ones:
  - The ReOPEN project developed validated non-formal open-learning practices, allowing for transparent recognition of skills, qualifications, and competences by education providers and employer organisations. It also established instruments (a course template, a learning agreement, and learning-offer-description tools on the course level) that demonstrate the link of non-formal open learning with formal curriculum and employers' needs.
  - The OEPass and MicroHE projects, which exploited and sustained valuable outputs from previous relevant projects like the OpenCred study, have developed two valuable tools: a viable foundation for a European credential-documentation mechanism (Learning Passport) and a digital credential-sharing platform (Credential Clearinghouse), which takes into account differences among European educational systems.
  - The e-SLP project's objectives include the formulation of institutional policies, strategies, and frameworks for the development and delivery of flexible, scalable short learning programmes (SLPs) in Europe. It also strives to empower university leadership and staff in the realms of curriculum and course design, quality assurance, and recognition for SLPs that comply with the EQF.



In addition to funding projects like those listed above, the European Commission is also conducting expert consultations and investing great efforts and intelligence into developing its own European framework for digitally signed credentials (to be launched in early 2020).

The **Knowledge Innovation Centre** has been closely involved in this consultation, bringing to the table results and lessons learned from EU projects and other thematically relevant experience. We hope to continue playing an important role in liaising between the Commission and these transnational collaboration efforts.

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## SKILLS ASSESSMENT TOOL WITH COLLABORATIVE LEVERAGE

BY EPICA INITIATIVE TEAM

In an increasingly fast-paced ecosystem, **employability** consists of several variables that make a candidate stand out – a diverse amalgamation of creativity, communication and entrepreneurial skills; all these are becoming more and more important for businesses looking to hire. Companies no longer seek out one-dimensional employees who have ‘tunnel’ expertise/skills. Rather, companies are on a quest to make their money go further and are proactively on the hunt for dynamic individuals who can perform a host of tasks – people who are adaptable and can add value to their companies, in essence reduce their overheads by having someone who can complete multiple tasks.

‘In a race against machines’, the pressure on employees to be the all-in-one package is one that demands candidates continuously seek out solutions to supplement their capability. A demand that more often than not, falls short due to a lack of direction in available tools – one that consistently tracks an individual’s knowledge and, provides feedback on objective milestones for personal development. Demonstrable skills and knowledge important to employers must be documented and verifiable.

For this, **the ePortfolio is invaluable in highlighting skills that a person has obtained through their work**, official recognitions and certifications which allows them to not only envisage their progress but to have firm validation of the skills they have. For students, the choice to concentrate on specific themes/areas deemed weak through the ePortfolio assessment feedback, means they can focus their energy on strengthening those areas.

The power of the ePortfolio in presenting a complete overview of an individual’s capacity and skills acquired in both formal and informal education will enable comprehensive assessment for

progressive preparation employment. This “digitalised collection of artefacts including demonstrations, resources, and accomplishments that represent an individual” (Lorenzo & I`elson, 2005), can be focused on obtaining particular skills for employability that a student deems essential to their growth.

Devised to be a student-centered approach to learning, **EPICA's ePortfolio** (developed by MYDocumenta) comes with a fundamental feature that allows continued access to the ePortfolio, (separated from the academic environment) as a personal tool for personal purposes to improve employability and work position, consisting of all contents, evaluations, recommendations, etc.

EPICA's ePortfolio will utilize open badges which can be exported and visualised in many online environments, that offer a good guarantee and reliability due to a traceability feature; one that details information about its issues – particularly by whom, when, and based on what results.

The scope of utilizing the ePortfolio in assessing users, particularly as a tool for employability means, students can mix and match their skills to particular jobs. They are at liberty to decide the competences and evidences

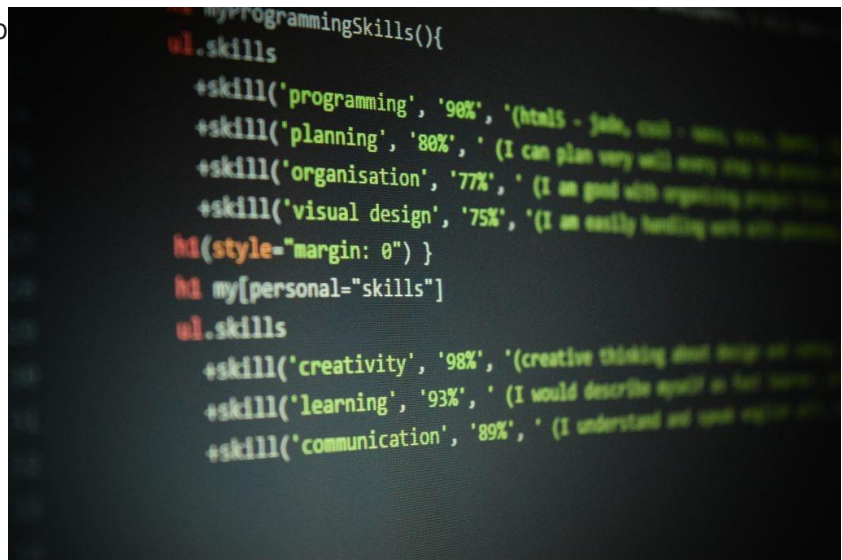
that potential employers can access or view.

Evidently, an objective of this initiative is to ultimately **enhance the quality of learning outcomes and ensure students are fully equipped with the skills needed in the job market.**

The empowerment that comes with the ability to monitor learning processes, ability to visualise strengths and weaknesses and having readily available tools to

overcome those weaknesses provides a profound level of self-confidence and awareness that are required in the job market. Primarily, ePortfolios have been shown to be sustainable, continuous and evidenced-based assessment that allows users to connect implicit knowledge with constructed knowledge.

By providing a tool that allows users to reflect and (re)structure their learning, it enables them to own their learning objective with the view that, their success is dependent on their active usage and proactivity.



*Skills, photo by Branko Stancevic*



## THE INTERVIEW OF THE MONTH | BAKARY DIALLO, PH.D, RECTOR OF THE AFRICAN VIRTUAL UNIVERSITY

*Interview to Bakary Diallo, Ph.D, Rector of the African Virtual University, a Pan African Intergovernmental Organization and one of the Partners in EPICA Initiative.*

We hear a lot about skills gaps in regard to university graduates and the labour market. What would you say are the main contributing factors that lead to this disparity?

There are two. The first is the gap between university programmes and needs of the labour market. Universities that are not currently doing so should review their programmes by adopting innovative practices such as micro-credentials or badges, students' analytics, ePortfolios, and skills needed for the 21st century. They should do this in collaboration with employers. The second factor is related to what is being termed the Fourth Industrial Revolution and the new skills

sets that come with it. This is quite a new phenomenon, and it will take some time for universities to be able to set up programmes and train graduates with the right skills.

From your point of view, which academic fields, businesses or industries suffer the most because of this, especially in Kenya?

In Africa, almost all academic fields, businesses and industries are affected. However, I would say the most acutely influenced one is information technology because of the emergence of artificial intelligence.

What is an ePortfolio, and how is it different from a CV or a graduate certificate?

I used ePortfolios in my classes back in 2004 when I was a lecturer at the Faculty of Education, University of Ottawa in Canada. At that time, it was an electronic folder with students' artefacts. The ePortfolio was then assessed as part of the learners' formal evaluation. The concept has evolved since then; now it also serves as a tool that allows students and graduates to share their talents and skills, especially with employers.





### How, in your opinion, does having an ePorBolio benefit a student and graduate?

An ePortfolio can benefit students and graduates in many ways. It can help them acquire additional skills in planning, organizing, and communicating, as well as in information technology. It also provides the ability to share their talents quickly and effectively.

### Who stands to benefit from receiving access to an ePorBolio, i.e. how will this be useful to employers?

As an employer, I want to know more about a candidate, beyond the formal interview process and letters from referees. An ePortfolio can be an added advantage: it can actually allow me to have a sense of candidates' abilities and how they would fit in a position. As mentioned above, an ePortfolio can also serve as a formal or informal evaluation tool for lecturers.

### What do you think are the most crucial steps that still need to be negotiated for a successful implementation of EPICA's strategy, such as overcoming technological requirements, increasing the visibility of the initiative, improving funding etc.?

It will certainly be important to have a user-friendly interface that allows easy management of the ePortfolio. Increasing visibility will be key, but perhaps it will also require coming up with an adoption strategy. This means convincing institutions, students and graduates about the advantages of the EPICA ePortfolio.

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## EPICA Initiative Consortium Members



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To learn more about EPICA Initiative co-funded by the H2020 Programme of the European Union, and the purposes that underpin it, please browse our website: <http://epica-initiative.africa>.

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