

Empowering Learners Through Competence-based Recognition: The Open Educational Badges Wallet as a Scalable System for Inclusive Learning Pathways

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The growing recognition of non-formal and informal learning presents both a challenge and an opportunity for education systems, labor markets, and individual learners. While micro-credentials, and digital badges have become more widespread in recent years, many implementations lack a coherent and user-centric approach to the recognition of transversal, competence-based learning. Our current research and user studies indicate that the potential of digital credentials can only be fully realized if two components are addressed simultaneously: first, the technical, and pedagogical design must enable easy creation and issuing of badges; and second—and more critically—we must create meaningful use cases for learners.

This session presented the Open Educational Badges (OEB) Wallet System --- an open-source, learner-oriented platform designed to make competence development visible, actionable, and recognizable across educational and professional contexts. Grounded in the idea of 'open recognition' as well as our ongoing research with users, issuers and acknowledges, the OEB Wallet enables learners not only to collect badges, but to derive insight, orientation, and empowerment from them. The Wallet has been tested and refined in various learning contexts, including youth empowerment programs, vocational orientation, and informal community learning initiatives.

Our research showed that a key transformative element lies not in the badge itself, but in the infrastructure that makes these credentials interpretable and connectable. To this end, the OEB ecosystem introduces two major innovations:

1. Semantic connectivity through European Skills, Competences, Qualifications and Occupations (ESCO taxonomy): We use AI-assisted tools to support issuers in mapping badge content to ESCO competencies. This dramatically lowers the entry barrier for quality badge creation and ensures that badges are interoperable, comparable, and meaningful within wider skills frameworks.
2. Learner-centered use cases within the Wallet: The Wallet allows learners to generate dynamic competence profiles based on their collected badges. This represents a shift from simply collecting achievements to actively making sense of one's learning journey. Learners are supported in using badges as instruments for self-orientation, goal setting, and discovering new learning and career paths.

By combining theoretical grounding, practical use cases, and hands-on experiences, this session encouraged participants to engage in collaborative exchange and co-design ideas for future design while examining how open, connected, and meaningful recognition can be realized at scale --- and how we can unlock the full potential of lifelong learning with Open Badges. The session began with a brief walkthrough of the wallet's core functions --- including intuitive navigation, competence mapping, and dynamic profile creation --- to give participants an overview of how learners experience and interact with the tool. Following this demo, the group discussed a series of concrete use cases, including practical scenarios such as vocational orientation for young people, applying for a new job, reflecting on informal learning, and navigating lifelong learning pathways, and engaged in a hands-on trial during which participants explored the OEB Wallet from a learner's perspective and the underlying design principles. The pros and cons of this support for learners and the consequences that might be triggered were also discussed. Participants considered the kinds of support structures, visualizations, and feedback mechanisms that make digital recognition truly meaningful and empowering for learners.

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