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# Using digital badges for recognition of soft skills

### Introduction

Digital badges are electronic symbols used for several purposes, e.g., to document performance and achievement as micro-credentials (Stefaniak & Carey, 2019), which may link, in a meaningful way, the worlds of education, work, and community. Implementing digital badges allows for an open, transferable, and stackable technology framework (Gibson, Coleman, & Irving, 2016) and provides transparency for teaching, learning, and assessment through recognizable and comprehensive learning aspects for all stakeholders. It is achieved by embedding metadata inside the image that provides information on how the learner earned it and who the issuer is. In contrast, the technical standards allow sharing digital badges with others. The feature of digital badges to provide evidence in the form of digital credentials could be attractive for vocational education and training (VET) and higher education (HE) students, who are willing to demonstrate employers' specific skills that are not otherwise visible in the official university transcripts including soft skills such as communication, leadership, and teamwork, problem-solving, time management.

The flexibility of open badges allows them to be integrated into both formal and informal learning environments, thus broadening their applicability in recognizing a wide range of skills. This study explores best practices for using open digital badges to recognize soft skills. We aim to address the central question: *What constitutes good practice using digital badges to recognize soft skills?* To answer this question, we have conducted a theoretical analysis and examined a case study from a university where data regarding digital badge design and application for students was collected in the Moodle virtual platform.

# **Theoretical findings**

Badges can catalyze the shift from traditional credentials that measure only the seat fact to the ones that measure competency achievement. Today, an interconnected and technology-rich world allows learning to happen everywhere, anytime, and any. These learning experiences need to be recognized, whether in a physical or online environment. At the same time, badges allow the learners to play an active role and gain learning recognition (Duncan, 2011). For example, Stefaniak and Carey (2019) discuss how three different higher education institutions using badges in various ways could widen the scope of experiences and increase the relevance of the results to other institutions. Authors suggest considering prevailing themes such as the value and purpose of the badge, design, and technical issues.

Attempts to find ways of recognizing soft skills can be seen in some EU projects. For example, the SoftSkills4EU project (2021), funded by Erasmus+, highlights using open badges to promote soft skills across Europe. This project aims to develop standardized systems for self-evaluation and validation of soft skills, making them more accessible and recognizable by employers and other stakeholders. The researchers (Perkins & Pryor, 2021) note that digital badges are a valuable tool for employers as they provide a more detailed description of employees' competencies than a diploma and can help to recognize soft skills such as communication, leadership, or teamwork. However, they are not yet well established in the labor market, and their recognition is still unexplored. This highlights the need to further explore good practice in using digital badges to assess soft skills in the education system and their recognition in the workplace. This is supported by the work of Davis and Singh (2015), who pointed out that badges can effectively inform potential employers about prospective employees' competencies, including soft skills.

Caron (2021) highlights the shift from traditional forms of recognition, such as awards and impact scores, to more inclusive and accessible forms of recognition through digital badges, emphasizing recognition of soft skills and learning achievements in connected learning environments. Research shows that open badges can effectively assess and motivate soft skills. Universities that use badges to document and monitor soft skills reinforce their importance alongside traditional assessment systems (Stefaniak & Carey, 2019). This dual recognition approach highlights the growing acceptance of soft skills within educational organizations. In discussing open badges, Motheeram et al. (2018) note the potential to reflect various skills and experiences, making them a versatile tool for recognizing soft skills in various educational settings. The design of open badges includes metadata that provides detailed information on the incompetencies to be recognized, which may include soft skills. This enhances the credibility and usefulness of the badges, as they convey the achievements, context, and criteria for their acquisition.

Integrating open badges in VET and HE further emphasizes their role in recognizing soft skills. Their use aligns with contemporary educational trends that emphasize lifelong learning and continuous professional development. This emphasis on lifelong learning, facilitated by digital badges, should inspire and motivate the audience to continue developing their skills and knowledge.

Digital badges in their contemporary form contain metadata that may be retrieved by clicking the image file to find out the requirements to earn the badge, the evidence or proofs of achievements for its award, the issuer of the badge, and other kinds of information related to the achievement of the digital badge. There is no central authority regulating the issue of badges; badges may be issued by anyone accessing the badge platform and may be shared when earned. The advantage of the digital badge is that it may be used to demonstrate professional development or even academic learning in terms of skills that the individual has developed, but they have not been captured in the traditional ways. This emphasis on recognizing soft skills through digital badges should reassure the audience about the relevance and value of their skills.

Degrees or credentials supported by a transcript of grades comprise one of the leading products of traditional VET and HE, yet recently, micro-credentials have begun to increasingly appear due to evolving practices involving digital badges (Gibson al., 2013).

Below is an example of one University's good practice in providing digital badges to recognize soft skills.

# Good practice example – University case

The data was collected using Moodle's virtual learning environment at Vytautas Magnus University (VMU). At VMU, both students and teachers are awarded digital badges. Digital badges can only be seen by users (e.g., students, teachers, administrators, staff members) of the University's Moodle platform. Unless the Moodle platform user decides to transfer their earned digital badges to any of the open digital badge collection systems, outsiders cannot observe one's achievements listed through digital badges. As a result, a remark can be made that the Moodle system is closed here, and digital badge recognition is still within the institution. Besides, it is essential to stress that digital badges are only valid for a definite period.

Document analysis has been performed to analyze digital badges in the Moodle platform regarding their design and application for students. A content analysis of the metadata of digital badges was performed to find information on their type and purpose. This has allowed exploration of the main reasons why digital badges are being given to students and the establishment of a system of categories of types of digital badges. The sample of the document analysis has been determined with the assistance of a Moodle administrator. The administrator has provided information about the courses where digital badges have been activated and issued to students. The analysis is based on one-semester courses taught in social sciences and Humanities programs. 357 digital badges were issued in one semester, of which only 77 were for soft skills also, motivation, and encouragement.

An example of a digital badge issued to students for soft skill. The badge was issued by the subject lecturers.

# **Digital Innovation**

#### Digital badge metadata

Name	Digital Innovation
Language	Lithuanian
Description	<ul> <li>This badge indicates that the learner has successfully created a learning subject in the digital learning environment Moodle and has acquired the skills: <ul> <li>Develop a digital assessment strategy in a distance learning environment with a link to learning outcomes.</li> <li>Define clear and measurable assessment criteria that reflect the learning outcome in relation to a planned reporting activity.</li> <li>Design a digital badge.</li> <li>Apply tools to monitor learners' learning progress.</li> <li>Develop assignments for distance learning assessments.</li> <li>Ensure that the digital assessment strategy and its implementation are ready through the application of the quality assessment criteria.</li> </ul> </li> </ul>
Created on	
Image	SKATTMENINIS SKOATYVUMAA VYM/IDIAEDON DOS EDOTTAS
Image author's name	Vytautas Magnus University
Image author's email	
Image author's URL	https://www.vdu.lt/en
Image caption	

#### Issuer details

Issuer name	Vytautas Magnus University
Badge expiry	This achievement has no set expiry date.
Criteria	The badge is issued upon completion of tasks:
	<ul> <li>An assessment strategy has been developed and transferred to a distance learning environment and linked to learning outcomes.</li> <li>A digital badge inventory has been developed and transferred to the distance learning environment Moodle.</li> <li>Preparation for the assessment of learning outcomes in the Moodle digital environment.</li> </ul>

The analysis of metadata descriptions of digital badges has indicated that students can be awarded digital badges that acknowledge their soft skills, such as active involvement in innovations, communication, leadership, creativity in preparing presentations, collaboration, or teamwork. As previously discussed, Caron (2021) follows the same trend when discussing the introduction of digital badges to recognize soft skills and learning achievements, highlighting their role in motivating active learning and professional development.

The analysis of digital badges has indicated that course teachers give badges to students at VMU. Teachers are responsible for the establishment of digital badges. The content analysis has helped differentiate between three main categories of digital badges for students: assessment badges, badges for motivation/encouragement, and badges for soft skills. As the analysis has revealed, many digital badges delivered to students at VMU have been used for assessment purposes. Moreover, an analysis of digital badges has indicated that the course teachers give badges to students at VMU. Teachers are responsible for establishing digital badges, which may lead to the assumption that the reward process for students with those badges can be pretty subjective. Finally, the analysis has demonstrated that

teachers lack some skills in creating digital badges because descriptions are relatively poor or the overall design is informal and unprofessional.

### Conclusion

In summary, theoretical analysis and case study revealed the practice of using digital badges to recognize soft skills. Open badges are valuable for recognizing and promoting soft skills in education. Their ability to provide detailed information on competencies and to bridge the gap between education and employment underlines their importance in the evolving field of skills recognition and encourages HE and VET institutions to think about solutions in the context of competence development and recognition.

Research highlights the importance of soft skills in the learning process, as digital badges motivate learners to be more engaged and to develop the skills they need. It is also important for future research to find ways to integrate digital badges into recruitment practices, as their recognition in the job market remains underexplored.

The case study of the University demonstrates digital badges that serve as recognition to acknowledge students' soft skills, such as active involvement in innovations, communication, leadership, creativity in preparing presentations, collaboration, or teamwork. While showcasing individual good examples, it also shows that teachers lack some skills in creating digital badges or are unaware of their broader applicability because of the total number of digital badges issued, which is only a minority related to the recognition of soft skills.

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