

GAMIFY AND RECOGNIZE PRIOR LEARNING: HOW TO SUCCEED IN EDUCATORS' FURTHER PROFESSIONAL TRAINING WITH OPEN BADGES

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ABSTRACT

Traditional further professional training has been losing its position and importance in teacher upskilling. Traditional modes of training delivery do not work well in situations where much of the competences have been gained informally, or when teachers find it difficult to attend training days that fit poorly to their schedules or location.

This paper is a case study on how a gamified and open badge-based MOOC, namely "Learning Online" improved and recognized educators' skills related to new pedagogies and ICT in Finland. "Learning Online" consists of a 2-day boot camp, weekly online webinars and Facebook activities, and an open badge-based system for recognizing competencies. Teachers could participate in various areas of the entire system, which meant that they could visit the site oppiminenonline.com solely to apply for badges on the basis of their prior learning or also choose to join a team and participate in the game of earning the most badges.

The results of using open badges in Learning Online have been very positive. This teacher professional development program exceeded the set goals. Instead of the initially targeted 800 badges, over 4,000 were applied for and over 3,600 granted. After the initial project the system has expanded, and there are talks to make it a nation-wide system. It has also contributed strongly to the development of wider educational thinking and practices of open badges in education. Badges make it easy to create and share an ePortfolio.

KEYWORDS

Further professional training; gamification; open badges; 21st century skills; MOOC; key competences

1. INTRODUCTION

Technological revolution and digitalization affect not only societies and culture, but also education and the development of educators' competences profoundly.

"Taken together, these results [of OECD Skills Outlook 2013 survey] underscore the crucial importance of information-processing skills in adults' participation in the labour market, education and training, and in social and civic life. "

(OECD Skills Outlook 2013, page 28, http://skills.oecd.org/documents/OECD_Skills_Outlook_2013.pdf)

The *OECD Skills Outlook 2013* points out that Finland (along with Japan) is a top performer. Even so, the need for upskilling the 21st century skills – or digital skills, as they are defined in the EU key competences – in the rapidly changing and digitalizing world is clear.

As this McKinsey report *How the world's best-performing school systems come out on top* formulates, "The quality of an education system cannot exceed the quality of its teachers" (http://mckinseysociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf)

Nowadays in Finland, much of the working-life linked education and training relies heavily on the recognition of prior learning. The TVET curriculums are competence based, and all students have personalised learning plans on primary and secondary level education. Particularly digital skills are in many cases obtained in non-formal or informal contexts.

There is a clear trend that teachers do not attend typical training days as often as they did previously. On one hand, they prefer to take care of their daily duties, on the other hand, they state that a day spent in training is not a very contemporary way of upskilling.

The learner's role has changed a lot as digitalization has changed the patterns of information retrieval and creation. From the point of life-long learning, learners must have more self-initiative and learn to share and promote their own competences. This has led to the emergence of new kinds of training methods, e.g. MOOCs (massive open online courses) and particularly cMOOCs where peer mentoring and collaborative learning are central.

All these changes put pressure to move forward from traditional further professional training to more flexible and learner-centric methods.

2. THE NEW APPROACH TO EDUCATORS' FURTHER PROFESSIONAL TRAINING: CASE LEARNING ONLINE

Three Finnish educational institutes – Omnia, The Joint Authority of Education in Espoo Region, Oulu University of Applied Sciences / School of Vocational Teacher Education, and HAMK School of Vocational Teacher Education – have developed a gamified and open badge based MOOC to strengthen the pedagogical and digital skills of teachers and trainers in the TVET and polytechnic sectors. This project called “Learning Online” (“Oppiminen Online” in Finnish, see <http://www.oppiminenonline.com/in-english>), was originally a limited 1.5 year project, planned to end in December 2015. Due to its popularity, it continues today and may expand to a comprehensive national programme for teachers further professional training.

“Learning Online” consists of a 2-day boot camp, online training and an open badge based system for getting competencies recognized. In order to join a team and be included the gamification, teachers had to participate in all of these. In order just to get recognized, they could (and still can) skip the boot camp and trainings and just apply for badges. This recognition of prior learning is a central method for validating the ICT competences of teachers and trainers, since much of it has been achieved informally and non-formally.

During the boot camp, the participants got a chance to plan their own personal learning pathway on fulfilling their professional needs. Participants of the boot camps formed three teams to support social aspects of learning, like peer support, team spirit and sharing of best practices.

Apart from the bootcamps, all of the training was given online including weekly webinars in Adobe Connect, and counselling and peer mentoring in a Facebook group. All the webinars were recorded and are freely available on the project site under the Creative Commons CC BY-NC-SA (4.0) licence.

The competences that teachers were gaining during the project were based on the national “ope.fi” teacher ICT skill identification system. (See Finnish website <http://opefi.wikispaces.com>) The system is not a standard, but a three-level framework, offered as a nationwide guideline. It is a wide structure derived from management and working culture designed for managing online learning environments and collaborative pedagogies. For the needs of “Learning Online”, four areas of expertise in which the training and the badges were defined:

- ICT Tools for Learning
- Pedagogical Models
- Networks in Projects and Development
- Enriched Learning

Under these areas, 50 limited skills/competencies were defined and badges created, eg. “Facebook in counselling” or “Pedagogy for authentic learning environments”. The badges were designed so that the simply having the knowledge of tools or methods as such did not suffice. The applicants had to show how they had applied or designed to apply this knowledge in a practical setting. This means that they had to reach higher order thinking skills as defined in the Bloom's taxonomy (rev.).

The system was set up in a badge creation and management system called OpenBadgeFactory.com, where the badges were created, applications handled and where all information on the badges and achievements reside. The teachers find the badge applications on www.oppiminenonline.com site, send their application

and an expert of the organizing institution reviews them. If the application is approved, the teacher gets an email containing the link to the badge. Otherwise the teacher is asked to improve the application.

The participants set up their own badge backpack. In the beginning, the Mozilla Backpack service was used, but when OpenBadgePassport.com came available, that became the standard solution, as it provided a more flexible environment. From there, the badge earners can share either badges or sets of badges directly to LinkedIn, Facebook or as hyperlinks in job applications, emails or other communication channels.

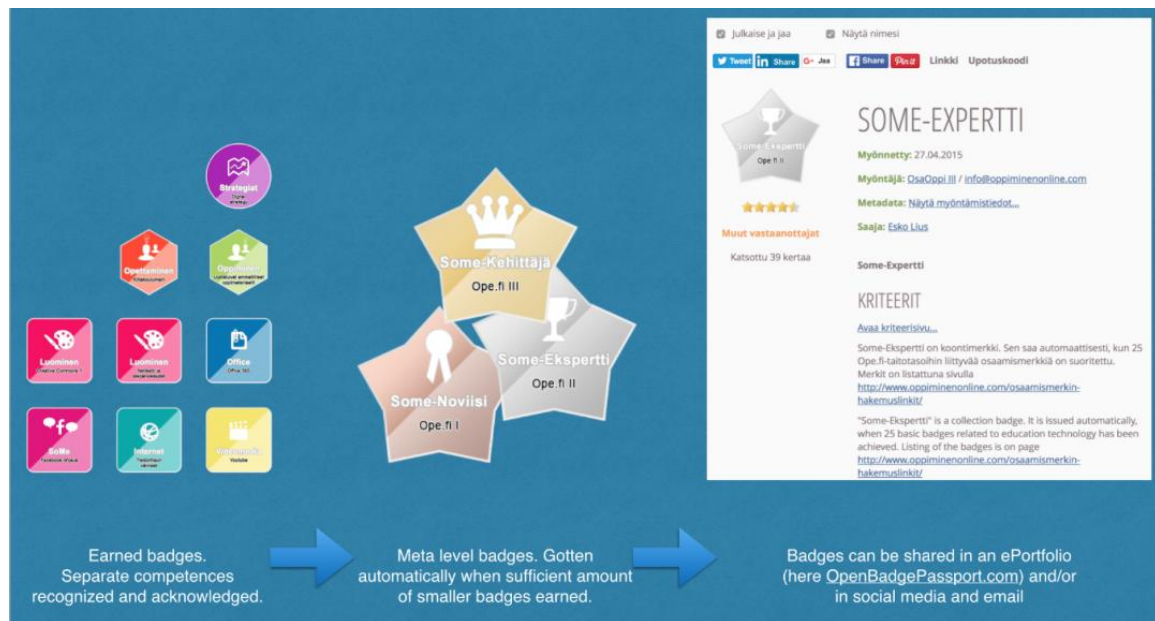


Figure 1. Process of applying and gaining open badges in Learning Online

Example on a badge application and an earned badge:

- Digital Strategies badge: application,
<https://openbadgefactory.com/c/earnablebadge/NE3EPMdKOPd2/apply>
- Badge in the earner's portfolio (including criteria and evidence):
https://openbadgepassport.com/badges/badge_info/944/280

The major difference between an open badge and a traditional certificate is that not only the criteria, but the evidence is open and can be assessed by anyone that the badge has been shared with. In this case the badge is also a sign of a personal and practical professional skill, contrary to the traditional training certificates that indicate that a person has attended a certain kind of a training.

The boot camps were held in each city of the three organizing institutes: Espoo, Hämeenlinna, and Oulu. The camp participants formed three groups, and started competing with each other on which group would get the biggest amount of badges during the 13 months before the end of the project. Various methods were used to keep the fire burning: facilitation and competition hosting on Facebook, small prizes every month, a bigger prize for the overall winning team, etc.

The results of using open badges in further professional training have been very positive, as Learning Online exceeded the set goals. Instead of the targeted 800 badges, over 4300 were applied for by 414 applicants and over 3700 were approved. 16% of applications required further consulting by the reviewing experts.

377 Learning Online users have rated the badges' values. An average rating of all the badges is 4/5 stars. The competence criteria have been viewed approximately 42,000 times.

Considering the active use, the ratings, direct feedback and the sector media coverage, the pilot project was successful. That has led to a decision to continue Learning Online after the initial pilot. Now there are negotiations for granting special national financing for expanding this pilot towards a common national model also for general education teachers.

For an educational organization, badges provide an effective tool to collect and analyse information on the competences of the staff. If the teachers allow, their badge data can be imported to their relevant HR systems, and the management can view and analyse the situation of the various departments. Thus, the learning analytics provided by badge statistics form a base for staff development. From the earner's point of view, the badge-based portfolio offers a tool to organize and share all imaginable areas of expertise, to be shared flexibly as relevant sets for each need or occasion.

3. CONCLUSION

The case at hand presents the advantages of designing competence development for teachers' on the basis of gamification and open badges.

Gamification proved to be one of the success factors behind the project. Showing the current amount of badges for each team encouraged the participants to gain more. It also encouraged teachers to collaborate and help their peers. The "Learning Online" Facebook group was actively utilised for raising teams' spirits. The organizers regularly gave out small prizes for notable achievers, and the winning team got a grand prize at the end of the project.

Open badges offered a tool and platform opportunity for this new kind of teacher upskilling. As the organizers defined the badges, criteria and shared the work loads together, it was easy to get the system up and running. Because of the qualitative nature of the applications – teachers had to describe their application of the competences – handling the applications has been time-consuming. The next step may be designing a crowd-sourced system of assessing applications. For example, a teacher who has already gained all badges that relate to the "Google" category might be eligible to review new applications for that category, and get a "Reviewer Badge" for completing that activity.

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