



## Intellectual Output 2

# BADGING ONLINE ADULT SKILLS IN THE WORKPLACE COMPENDIUM

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## 1. Introduction

The aim of this Compendium is to present the Practices regarding the Online Badging of Adult skills selected and described by the partners in the first period of the RAINBOW YEARS project, included in the National Reports that can be found in the Appendix.

### **What is a digital badge?**

At their most basic level, digital badges are a new way to capture and communicate what an individual knows and can demonstrate. Badges can represent different levels of work and engagement, including more granular, specific skills or achievements. They hold particular promise for certifying the skills of adult learners in basic education programs, many of whom have few, if any, formal credentials (such as diplomas), but who are obtaining functional skills that would be valued in a workplace setting if a mechanism for certifying those skills and that knowledge was available.

The main characteristics of a digital badge are:

- Badges can account for learning both inside and outside the classroom, and can document performance-based assessments, for example in internships, volunteer experiences or work.
- Earning badges may motivate some adult learners.
- Adult learners may like having a web-based portfolio in which they accumulate recognition of their accomplishments.
- Programs may now have a way to recognize students' small, but real learning accomplishments, and to help students recognize their progress.
- Students may be able to demonstrate competencies that the employers value.
- Employers may be able to have students who are enrolled in work-based learning or community-based learning programs achieve meaningful work-related competencies and have them verified.
- Employers might participate in choosing the competencies that the badge recognizes.
- A badging system could include both individual small badges but also be planned to have these badges add up to larger badges or work-related certificates or licenses that are recognized by employers.
- A badging system, designed by a program or state could be put on a map of badges, so that adult learners would have a career path of badges and courses.
- Adult learners who enter a program because they are interested in one or two digital badges might then become interested in more badges, and possibly courses. This could be a way of attracting learners whose focus is work opportunities, but who also need stronger basic skills.
- From a program perspective, digital badges fit well with mastery learning and competency-based or performance-based curricula. A program that already uses a competency-based curriculum can easily organize the competencies into badges.
- Badging could be used for adult educator professional development.



The National Reports were quite heterogeneous. To give an idea of that a brief summary of the content and of the practices that were scouted per each country is following:

- UK: 6 cases of really widespread practices.
- GERMANY: 2 cases, both focused on certifying skills/abilities already owned (and maybe not recognized in Germany) and putting people in condition to work.
- FRANCE: 2 cases of very recent practices, started one year ago.
- FINLAND: 13 cases that show that digital badging is a common practice in Finland, widespread especially at micro-level (companies, small realities, etc.).
- ITALY: 1 case which gathers almost all the digital badges available in Italy since it is an Open community. The digital badging is misunderstood in Italy because there are no online opportunities to gain skills, it is mostly a way to collect the achievement (simply the award is not “hard” anymore –e.g. the piece of paper – is online).
- SPAIN: 2 case, both focused on Education area.

In the next paragraph the practices will be described.

## 2. Brief description of the National practices described

In this paragraph we want to describe the practices selected in order to understand them deeply and, afterward, being able to detect the common traits and the transferability of the practices.

The framework agreed in the first project meeting<sup>1</sup> and followed in the National Reports was the following:

Name of the practice
Provider of the practice
How does it work?
Who is addressed to?
Number of badges released / number of users of the community / info and activities of the community
Which kind of badges is possible to claim? What kind of skills - subjects - is it possible to gain?
Which impact have the practice had?

It is possible to find all the detail in the specific reports, in the next pages are reported the main general information about the practices.

### 2.1 Italy

The study carried out for this report has highlighted how the main initiatives in this field are public and mainly supported by universities and MIUR (the Italian Ministry for Education, University and Research) and are very recent and substantially still in a development phase.

The most salient experiences of Online Badging in Italy are linked to a single digital platform that is the Italian reference in the [international network of Open Badges](#) and it undertakes to disseminate its use in Italy as a digital method for attesting skills.

**Bestr:** is a digital platform based on Open Badges that supports lifelong and lifewide learning and allows the recognition and validation of skills acquired through formal learning paths, non-formal and informal.

It is an open community, which collects badges of every kind. The badges are digital but to earn it you need to attend the physical courses. Bestr is an online platform that aims at being a meeting point among the people interested in acquiring the digital certifications of their skills (learner), the trainers (issuers) and the companies that may show interest in badges that they certify the skills required for their collaborators (the endorsers).

Although the impact of the Besrt platform is not easily measurable, must be recognized to it the merit of having introduced in Italy the use of Open Badges to certify the skills.

Inside Bestr, a special focus was given to:

- **EDUOPEN:** currently the only case with online courses. EduOpen is a network of 17 Italian universities that offer university level courses active since April 2016. The Eduopen Project

<sup>1</sup> The first RAINBOW YEARS meeting was held in Bilbao on Thursday 30 November and Friday 1 December 2017.

has also been financially supported by MIUR, Italian Ministry of Education, University and Research. The courses hosted on the EduOpen platform are called MOOC, Massive Open Online Courses. These are free training courses, provided online and intended for a mass audience. The provision of these advanced training courses aims at the dissemination of academic knowledge according to the principles of Open Education.

- **BBETWEEN:** it focuses on acquisition and certification of SOFT skills. Bbetween is a project of University of Milan - Bicocca aimed to the increasing and valorization of transversal skills of citizens and students, active from 2016.

## 2.2 UK

There is a large amount of activity around the use of badges and more broadly digital credentials within the UK. Much of the activity and use of badges is from mainstream education, especially UK Higher Education and secondary schooling. Because of that, the cases were divided into macro-categories:

1. **Open source tech community:** with practices like *Badge the UK* and *We Are Open*, targeted for open source tech community and aimed at shaping the badging community within the UK. They include Doug Belshaw, one of the key proponents of badges for Mozilla Foundation.
2. **Higher Education:** including *University of Suffolk*, *York St John University*, *Coventry University*, *University of Sussex*, *Open University* and *Edinburgh University Students' Association*.
3. **Further Education and younger people:** *Sussex Downs College* is working with local employers to identify the skills, attitudes and behaviours they seek and how best you can evidence these. The most in demand skills form our employability passport, a set of badges that will give you a direct route to successful employment. In this section we find also the *Centre for Digital Youth Care*: this project identified two areas of particular benefit digital badging offers young people. The development of a digital badge addresses the need to support young people in their ability to communicate the skills they have to employers. Digital badging is also an informal and accessible form of online training and learning for young people as an alternative to formal education. This follows recent trends that show a shift in the acceptance by employers of informal and alternative training methods.
4. **Employers:** including the following examples
  - *IBM Skills Gateway:* IBM have been at the forefront of employers using digital badges to show value within their organization. Since its launch in 2014 53% of IBM employees across 190 countries have earned digital badges.
  - *Oracle:* it takes a similar approach to IBM. This article explains why they have adopted the use of badges: <https://blogs.oracle.com/certification/digital-badges-are-now-an-essential-tool-for-employers-and-candidates-alike>.
  - *Siemens:* Digital badges are one of many projects forming part of Siemens Education and the Curiosity Project programme, designed to engage young people in considering a STEM career. Siemens have created a Professional Development Academy where

individuals can start earning digital badges. Each badge is based on the Siemens Own Your Career development activities and aims to support Siemens employees communicate professional development skills.

- *World Chefs*: a new global benchmark for the culinary industry-assured by City & Guilds. The Worldchefs certification is the first and only global certification for the culinary industry.
  - *Ernst and Young (EY)*, one of the latest organization to start utilising digital badges as part of a wider initiative to prepare their 250,000 employees for the future of work. EY launched their own internal digital badging programme to develop skills in four key areas: data visualization, emerging technology, data analytics and data sciences.
  - *City and Guilds Group*: the Ampersand Awards were created to celebrate City & Guilds Group employees'. The research the Group carried out into their employer brand demonstrated the positive impact City & Guilds Group employees have on their customers, brands and each other.
  - *Scottish Social Services Council*, where Learners using materials produced by the Scottish Social Services Council can earn open badges for each of the modules they complete.
5. **Badging practices led by National and local government:** the most significant one is the *Cities of Learning project*, inspired by Chicago City of Learning project and its use of badges to recognise the achievements and skills of the citizens. Also *The Lambeth Digital Champions programme*, that help families improve their computer skills and get online.

## 2.3 Spain

When analyzing the state of the art in Spain with regard to the online digital badges, the evidence was that there are very few platforms in the market. It is increasingly common to use digital badges to recognize the development of student learning, however we are still at the very beginning and they remain unknown among the community.

1. **EducaLAB Insignias:** is a meeting place for education where training and learning converge to support teachers so they can expand their knowledge by interacting and participating with teachers from different countries and cultures. This site offers interesting resources for teachers to improve their methodologies, it allows teachers to connect with teaching professionals from any country to exchange ideas and good practices and it also enables to create content and build learning and community scenarios around them. EducaLAB also allows to manage, store and show the digital badges of the participants that successfully complete one of the MOOCs that the INTEF (The National Institute of Educational Technologies and Teacher Training) offers, and that show the skills acquired in each course and the objectives achieved by each participant. It is Linked to Mozilla Backpack.
2. **Virtual classroom of PNTE Navarre:** the practice, provided by the Education department of the Government of Navarre, is composed by Courses of the distance education program of the

PNTE & Self-education courses, which do not have registration or completion deadlines, nor have tutoring, support or certification. The topics are mainly ICT, mathematics, coeducation, quality management.

3. **IKANOS:** it is an initiative to collaborate, share and provide information on what digital competences are and how these may be acquired. The initiative intends to contribute to the development of a society that is competent, highly participative and co-responsible, user of advanced, high-impact digital services and that through the innovating leverage of ICTs, it increases its competitiveness and improves the quality of life of individuals and their collective well-being. Developed by the Basque Government within the framework of the deployment of the Digital Agenda for the Basque Country 2015, the main objective of IKANOS is to promote the dissemination and adoption of the European Digital competences framework in the Basque Country, new ways of learning and certification systems. You don't obtain a badge but you obtain a report of the evaluation of your digital profile.

## 2.4 Finland

Finland is a country with a high level of Online Skills Badging practices. The following cases demonstrate the vast diffusion, from Companies, to public governments, to small associations (event the Scouts). In Finland there are 273 organizations participating in OpenBadgeFactory and they have 2,021 different badges. Overall standing from 2014 over 180,000 earned badges. Amount of earned badges is still quite low. Big issuers, like the city of Helsinki, which includes badges a part of their staff training, means over 11% of the total amount of earned badges.

1. **Badge Finland:** it is a joint network of Open Badge players whose aim is to disseminate information about the Open Badges concept and to promote cooperation between organizations. The Badge Finland network aims to make visible competences and learning versatile in different areas and industries, such as adult and continuing education, vocational training, association and organization, volunteering, etc.
2. **Sivis Study Centre:** it is a pioneer in free adult education. Sivis has made the first badge available and so far has total of 567 badges granted. Badge receiving percentage is 51%, it means that more than half of the students (earners) has received the badge. The receiving rate tells you how many of those who have been awarded the badge have accepted it. It provides different and heterogeneous kind of badges.
3. **Country defence organization Sotilaskotiliitto:** it has four own badges and five more in cooperation with Sivis organization. To receive this badge, a person must know the general principles of the membership register and knows the Personal Register Law. The register keeping badge earner can use the Country Defence Organization membership register program and knows the operating principle of the system. general principles of the membership register and Personal Register Law.
4. **Häme University of Applied Sciences (HAMK):** in 2017 HAMK introduced its own badges. The first set involved digital, communal work and contained, among other things, communication, content production, time management, workgroup and data protection.



5. **Oulu University of Applied Sciences:** 5 badges as part of the Comprehensive Teachers' Project for Finnish Entrepreneurs developed by Vocational Teacher Education unit, School of Professional Teacher Education. Part Names enhance the knowledge and skills of teaching staff in entrepreneurship education.
6. **Finlands Scouter:** Badges from Finnish Scouters demonstrate skills that are relevant to either the work or school world. The brothels have made the labeling work about 1½ years and have made five badges for different camp life needs. Later, they have co-operated with Sivis organization about chairman, secretary, and fundraiser marks.
7. **The Martha Organization:** The Martha Organization is a Finnish home economics organization, founded in 1899 to promote well-being and quality of life in the home. It carries out cultural and civic education and does advocacy work in Finland.
8. **Espoon seudun koulutuskuntayhtymä Omnia:** Omnia works together with two universities of applied sciences HAMK and OAMK in online-portal. Esko Lius, the Key Expert in Digital Learning in Omnia, told that in they use badges in various experimental and pilot projects with our stakeholders, among others.
9. **The City of Helsinki:** Helsinki municipality workers have to learn basic information technology skills. From the project start they have issued about 20000 badges. There are 52 badges for ICT-skills of teaching staff (Introduction of software, Learning process control, Producing communal information, Ethics, moral and copyrights, Information security and electronic identity).
10. **Osaamisen pelimerkit –project:** in two years, the project will create an open badge for the gaming industry to identify informal skills. This is done in co-operation with the game houses and aims at a coherent set of skills and assessment criteria that are based on the real needs of working life. The aim is also to identify the needs of individual and community competence and competence development, thus enabling the education of the sector to be developed in relation to the demands of working life. The purpose of the knowledge-based system is to facilitate the transition from study to the working life, whereby the potential employer sees the applicant's skill level more clearly than the marks of the certificate.
11. **Oppiminen online (Learning online):** it is a gamification-based learning portal for education of vocational teachers. The aim is to provide the teachers with educational content that is aimed at updating Ope.fi skill levels in a fun and challenging way by collecting badges. Implementation is based on the identification and recognition of competence through brand-specific criteria.
12. **Kesko:** it is a Finnish trading sector pioneer. It operates in the grocery trade, the building and technical trade and the car trade. Divisions and chains act in close cooperation with retailer entrepreneurs and other partners.
13. **Comcraft Oy:** the company provides services in e-learning, it is also an issuer that produces badges to personnel and customers of companies. Comcraft can also offer their customers extra value with badges.

## 2.5 France

Basing on the presented practices France has decided to approach the Online Skills Badging topic only in the last years.

1. **PIX:** PIX is an online public service for assessing and certifying digital skills, which is currently being developed. Its aim is to support the elevation of the general level of digital skills (i. Information and data literacy; ii. Communication and collaboration; iii. Digital content creation; iv. Safety; v. Problem solving) and to help preparing the digital evolution of all citizens. Currently, PIX represents a community of 50,000 users.
2. **Lorfolio Grand Est:** it is a very new practice, released in February 2018 for people willing to change jobs, to train or evolve in their current position, to think about their projects and to value their skills, to choose new career paths. It allows to gain skills to
  - I. define and lead the professional project;
  - II. facilitate the reflection on the skills for a job search or career development;
  - III. enhance the skills by combining evidence of what they can do;
  - IV. identify and keep track of the lived experiences;
  - V. be directly informed of all events useful to the professional development.

## 2.6 Germany

In Germany digital badges are not wide-spread and the discourses concerning informal learning and its certification are bifurcated: mostly the discourses on the topic are driven by the technology-oriented international community, while the national vocational education and training (VET) field, which are strongly influenced by interest groups, is not connected to them.

1. **Beuth Bonus:** targeted to higher education graduates with ICT higher education degree AND/OR working experience in the field of ICT abroad. The goal is to certify skills like i. Team play; ii. Leadership; iii. German language; iv. Management; v. Social media; vi. Interculturality.
2. **MY SKILLS – (Identifying Professional Competencies):** for people without a German vocational qualification but with several years of experience on the job OR with a German vocational qualification who have not worked within their profession for several years OR with a foreign vocational qualification which is not recognised in Germany OR with no references (vocational certificates or letters of recommendation). Different professions: Automotive mechatronics technician; Vendors; Agriculturists; Cooks; Skilled workers in metal technology/construction technology; Skilled workers of structural engineering/bricklayers; Carpenters; House painters.
3. **MENTO – (Collegial Network for Basic Education and Alphabetisation):** for people with disadvantages in literacy and numeracy are addressed by mentors at workplace. No badges are issued but it is relevant to the project as it has created structures which are necessary for implementing a badge-based system: a network of trusted persons who are well aware of the needs of the target group and have already raised the awareness for the issues in companies.

### 3. Considerations over the presented Online Skills Badging practices

After the presentation and the description of the practices some considerations are needed.

First of all the target to which many practices address to: a lot of badging systems are focused on the **ICT area** and on the **Education**, and provide courses and skills accreditation for related competencies. A possible explanation is that ambits already own a positive mentality about the *openness to new digital tools, the sharing of results, the creation of an online portfolio of personal achievements, etc.*

Another important aspect is the provider of the practice: many of badging systems are **provided by Public Administrations** (like Cities or Ministries or Governments): this is relevant to replicate and transfer the practices, because all the implementation steps should have been transparent and there would be a traced road.

In theory, almost every example is **replicable** in other countries and **extendible** to other targets (see the next paragraph).

Thinking about the creation and application of a badging system to the objectives of our project requires the **measurement of the possible impact** of that, based on the impact of the selected practices: however, this measure does not rely on a single quantitative indicator, like the number of users. Sometimes it is very hard to measure the impact of such practices, on one hand because some of them are really recent, on the other hand because the quantitative side / evaluation of impact is not really significant for the providers (the initial phase is meant to be vague, the focus is on the spreading and advertising of the tool).

A final post scriptum: the practices relatives to the companies' badges will not be deepen in the project because they do not represent a method for our goals.

## 4. Replicable characteristics for digital badging of our target

The idea of platforms that serve as a meeting point among learners, trainers and companies through the certification of knowledge and the sponsorship of companies on what are the most useful knowledge for their business is a concrete way to try to reduce the skills-gap between the demand for skills expressed by the labour market and the supply of skills developed by the educational system.

The possibility to follow online courses, which are also recognized by universities, meets the need to continue their training even outside the regular course of study and encourages the sharing of knowledge in courses of an academic nature.

The target users of the Online Skills Badging practices are already potentially much diversified depending on the nature of the badge issuer organization. However, the main field of application of this practice remains the university one, even if it could easily be extended to the world of professional training and certification of the skills already held by the learner.

The recognition, development and certification of soft skills can be promoted not only in the university but expanding the target of users of these color courses who are interested in deepening this type of skills that are increasingly expendable in the labor market.

In order to be able to transfer the practice to the best it is necessary, however, that the level of the courses be differentiated, making them accessible not only to those who already have a high level education and consequently also extending the topics of the courses.

There are approaches addressing low- and unskilled workers, but none directed specifically towards the target group of older workers.

Some of the practices described in the previous pages are specifically addressed to particular kind of communities, so it would require a great effort to adapt them to our target. We will use the acknowledgment of their existence and working to build a context frame regarding the Online Skills Badging and its wide spreading. Another important aspects to consider is the idea of creating different Online Skills Badging tools targeted per sector: they could address the PA, and provide badges for administrative/legal skills applied to this ambit.

However, the chosen good practices illustrate the aspects that need to be taken into account when implementing the approach chosen in the Rainbow Years project:

- Employability can best be enhanced through the combination of hard and soft skills;
- Links of digital badges to formalised systems of qualifications and credentials enhance their relevance;
- It is important to assess the motivation of potential participants in the programme from different perspectives;
- It is crucial to co-operate with actors who have direct access to the target groups (trade unions, workers' councils, the Federal Employment Agency).

Earning badges is not enough. You need to have a possibility to present your competences. Badges are one kind of a study book to show how you make progress. The aim is to promote, for example,



communal or creative activities, and to make work more meaningful. Badges can be obtained at workplaces for example from helping, asking good questions, solving the problem, finding essential information, and so on. Building badge criteria, it is not necessarily to focus on the result, but the aim is to support the continuous processes of work. Right badge in right place and the community behind the badge is important. Meaning for one individual or community could be huge.

What if you have several hundreds of badges? Badge inflation is also a risk that is often referred to. Of course, there is a risk because the philosophy of the Open Badges concept does not include official and centralized quality control. The quality of the label is the responsibility of the issuer itself, so that the "non-worthy" signs cannot be barred from outside. The recipient of the badge decides if the badge is useful to him or not. It is likely that credible badges recognized by the communities will survive and build a wider Open Badges ecosystem.

The power of the community is working and sharing together. A well-functioning community shares information in a positive development spirit to its members. Community members are encouraged and they speed up each others. Badges help to make progress or know-how, competition in good spirits becomes easy. At the same time, the community will become skilled in mapping and partitioning tasks into suitable parts because the compilation of brand criteria forces this work.

In some countries, given to the reforms in the employment, training, guidance policies focus on individuals, on the fact people had to be actor of their career path, without too much intermediaries for example in the upcoming reform dealing with continuous vocational training, coming, for instance in France, to the point that the Government announced an app to allow workers and job seekers to access and buy places in training scheme directly. The limits of such approach, however, were already pointed out. Moreover, even if this approach responds positively to an insistent demand from the private training unit, which sees in it an opportunity to develop its activity, it will only work if the people seize their rights, regardless of their socio-professional profile, which is far from being won for those who have few or no qualifications and employees of small firms who do not have any relay in their company.

## 5. Suggested elements to improve the practices and recommendation for using them in the project

Some interesting notes regard the possible use of the Online Skills Badging on our target of interest in the project, i.e. the older adult workers. This category presents some traits that need to be considered with special attention, like the aversion to change and the difficulty in using digital and technological tools considering them really useful and effective.

It is also important to underline the gap existing between online courses and digital badges that do not go along in all the shown cases, therefore it is required a sort of compensation between offline and online material.

Moreover before developing the badges we should develop a framework of skills that should framework be common for everybody, and a good solution could be the Europass CV format.

To make the most of the potential of a platform that meets the demand and supply of skills and allows users to certify their skills, it is necessary that more organizations interact and that certified skills cannot be acquired only with courses in attendance but also through real online training courses or online certification of skills already acquired in an informal way and in one's career.

After these considerations, a list of “ideal” characteristics that the Badging system should own was created.

Ideal characteristics of the Online Skills Badging Practices:

- Full compatibility with the Open Badges standard, allowing the export of the badges stored and their import into other compatible backpacks, as well as display them on Social Networks or other web-based platforms;
- Allowing a self-assessment of digital competences based on the structure of a European standard framework (e.g. IPTS);
- Providing graphic results of the digital profile obtained (so called Scorecard);
- Allowing the creation and the downloading of a personalized and complete profile report;
- Issuing feed-backs and providing guidance for the user on certain elements of interest;
- Giving the opportunity to start from the initial education field and to be used in continuous vocational training and employment policies;
- The badges should be beyond territorial level;
- The possibility of attending courses in accordance with their own learning times;
- The community of teachers, tutors and course colleagues who support the person in the training path;
- The multiplicity of different training needs that the training courses hosted on the platform meet;
- The simplicity and intuitiveness with which the portal pages are navigable.
- Recognition of prior achievements to allow the application of badges on an already existing system;
- The possibility to certify also the soft skills as well as the most directly related skills to a profession. However, it is essential to extend the type of courses by adding online courses to



current courses that are mostly held in attendance and to increase the number of courses accessible not only to students and to university employees but also to outsiders.

- Great communication of the tool and availability of a physical guide to explain how to use the system step by step (considering that on average the digital level of older workers is low): these explanations and instructions could be replicated on a the actual system through videos and virtual assistant, to strengthen the easiness of use and encouraging even the most refractory users.

## 6. Final considerations

For sure the Online Skills Badging is a very promising tool that could really provide a strong contribution to our project goals intervening right on the weakest point of the path that people over the age of 50 have to face, i.e. giving them on one hand the possibility to extend their knowledge and acquire new skills to try re-entering the labour market; on the other hand help them to engage in a stimulating activity, fighting the risk of demoralisation, and starting a reflection on the experience they gained, the competences they have and the chances they can really take.

Some *caveat* to keep in mind were pointed out in the previous pages that should be taken into consideration to develop a digitally-enabled mid-life skills review that can help prepare workers to be more resilient to labour market challenges they face in the future. As already stressed out the digital tools, even a perfect Online Skills Badging, cannot substitute the support and the consultancy of people working in organizations dedicated such as PES or Unions.



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- There has been some discussion about this very issue on Google Group's Open Badges forum: <https://groups.google.com/forum/#!searchin/openbadges/research%7Csort:date/openbadges/tZqoJp2d1s/-2DemVj4AQAJ>. It would be worth following this discussion to see if anything materialises.

