

Bestr: Open Badges and SIS to empower Lifelong & Lifewide Learning

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Keywords

Open Badges, Lifelong Learning, Non-formal Learning, skills, Student Information System, credentialing, recognition.

1. Summary

Everybody is a learner, everybody learns all the time. University students also learn outside university. How can technology help turning the nowadays need for constant learning into growth opportunities - for learners, for universities and for the job market? Bestr is a web-based platform, leveraging Open Badges to valorize Lifelong & Lifewide learning. Integrated with the Student Information System and as open as Open Badges are, it aims at bridging the gap between learning inside and outside university, between learning and working, between working and living.

This paper presents the brand new integration between Bestr and ESSE3 - the Student Information System used by 80% of Italian universities -, and how this lets universities recognize informal learning in their formal paths, maintaining the full control over the quality of such learning experiences and their value according to the student's path inside university.

2. OPEN BADGES TO VALORIZE SKILLS

Lifelong learning is not a pretty slogan anymore: it has become mandatory for every professional to keep growing, to build his/her own unique professional path, capable to keep pace with the ever changing requirements of the job market. The large amount and immediate availability of learning resources online have also made even more common for learning to take place everywhere - especially outside learning-dedicated environments: reading articles, watching videos, engaging in specialized communities. All this learning is a learner's valuable asset, but misses to be properly recognized as it doesn't include an official certification.

On the other hand, employers are eager to find people with specific skills - especially soft skills, which are not usually part of a formal curriculum studiorum: McKinsey's data about skills gap and skills perception is quite significant and prompts all players (learners, employer, learning providers, assessment providers, public administrations) in taking a step towards bridging the (perceived) skills gap and taking into account EU's recommendation on the validation of non-formal and informal learning.

2.1. Bestr

Bestr is a web platform where skills are represented as Open Badges: any organization can issue Badges through Bestr, provided that it carefully describes the skills, achievements or membership the Badge represents, and the criteria used to assign it to a learner. This means that every experience can be valorized: an internship, a language course, a volunteering activity, a hobby - as long as an organization is defining and verifying it in a clear fashion, it can become a Badge, and a learner can claim it.

Once made visible through Badges, skills become real: learners decide to get them, so they can expose them in ePortfolios and digital resumé; companies and organizations can endorse them, learning providers can suggest learning paths to gain them, assessment providers can verify them. These are the actions allowed and encouraged by the Bestr platform.

Through Open Badges, Bestr aims at giving visibility to all skills: the ones desired by companies, the ones owned by learners and the ones developed by learning providers.

3. ENDORSEMENT TO RECOGNIZE VALUE

The “openness” of Open Badges has become even more effective with the release of the *endorsement* extension in Open Badges Specifications v1.1 in May 2015: with endorsement external organizations - i.e. organizations not involved in the process of designing, assessing, or issuing a Badge - can express their endorsement for a given Badge, at any point of the Badge’s life. Endorsement thus becomes the way of expressing the broader trust network that crystallizes around a given skill - aka Badge - and gest to play a big part in the process of adding value to the Badge: the Badge value is now defined by the trust and value recognized to the issuing organization plus the trust and value recognized to the endorsing organizations.

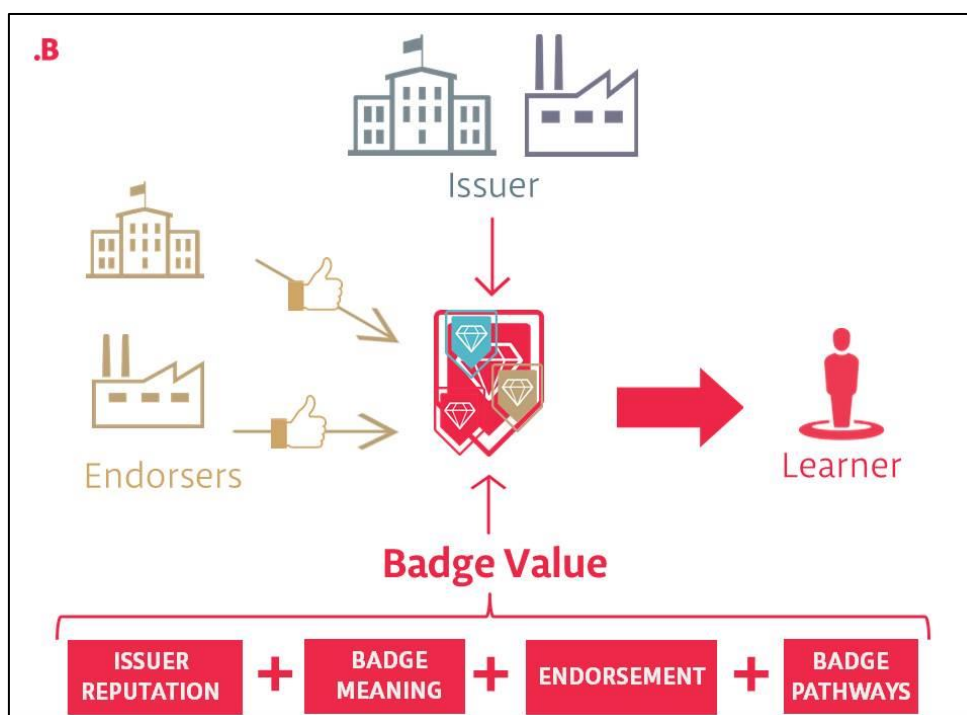


Figure 1

4. FROM OPEN BADGES TO CREDITS: INTEGRATION WITH SIS

For the learner, a Badge endorsed by an employer might mean more chances to get a job, and a Badge endorsed by a learning institution might mean a chance to have his/her learning recognized within a formal learning path.

So, Open Badge endorsing - if properly integrated within Student Information System - could also be a shortcut for Universities to digitize the recognition of non formal and informal learning - whether it happened inside or outside university - into credits or admission points, and include it in the Diploma Supplement.

By interacting directly with the Student Information System used by 80% of Italian universities (ESSE3), Bestr encourages this process and provides universities with digital automation tools capable of allowing a quick and paperless recognition of non-formal learning activities, while still maintaining the control over what gets recognized, keeping up to the high standards typical of a university and making sure that recognition happens coherently with each student’s course of study.

4.1. Bestr and ESSE3: how it works

The endorsement of a Badge is a completely free operation for a University on Bestr: through endorsement, the university expresses a positive approach towards the Badge, and this can also be publicly motivated with a brief statement. ESSE3 allows the operator in the university administration to view all the Bestr Badges recognized as valid by that University, including Badges issued by the University and those which have its endorsement. For each Badge, the University can establish whether any, or how many, credits may be recognized for students who hold them, depending on their degree course and didactic activities.

Through ESSE3, a university can view which of its students have - on Bestr - obtained the Badges it approves. In accordance with rules laid down for each degree course and didactic activity, credits are recognized for students holding the Badges. For example, a student who holds a badge corresponding to an active educational experience, relevant to his degree course and supported by a final examination of a standard which has been checked in advance by the University and confirmed with an endorsement, may have the whole of that didactic activity recognised. For the same Badge, but for a student following a degree course that is less relevant, recognition may still be conferred as extra-curricular didactic activity, potentially as an extra amount, for which credits, area, type of activity and discipline will be defined.

5. CONCLUSIONS

With this implementation, Cineca's aim is to provide Universities with a digital instrument to implement rapidly, and in an innovative way, something that is already a long established idea of university teaching: recognizing the value of a language certificate obtained through an experience abroad, or an internship that has developed competencies that are complementary to a degree course, and so on. The disruptive element does not lie just on the technological side, making recognition easier, faster and more transparent for all the operators, but also in the fact that, by making use of Open Badges, recognition can be activated for competencies that, until a very short time ago, were not identified in a sufficiently structured way to be taken into consideration by a University.

The integration between Bestr and ESSE3 has been released in April 2016; the first universities involved are the University of Milano Bicocca and the members of EduOpen Network, a new Italian MOOC platform providing Open Badges through Bestr as attendance certificates for its courses.

6. REFERENCES

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7. AUTHORS' BIOGRAPHIES



Matteo Bertazzo holds a Master Degree in Computer Science from Ca' Foscari University of Venice, Italy. After a research fellowship in Location-based Services from the National Research Council he works as web developer and technical project manager. He currently works as Solution Designer and PMP® certified Project Manager at CINECA InterUniversity Consortium. He has been involved in a number of Education and Digital Humanities projects, both for the consortium's members and for EU-funded projects. He currently leads the development of Bestr, the Italian Open Badge platform. See Linkedin profile at

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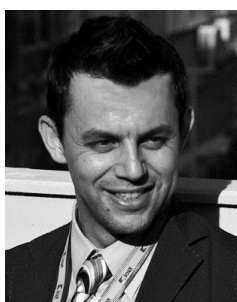


Chiara Carlino takes care of the online and offline communication for the Bestr project, as well as for Kion and its offer. With a literary background and a bachelor in Philosophy (2005), she works at the intersection between humans and technologies: from semantic web to digital communication, from web analysis and monitoring to user interfaces, from functional requirements to technological applications capable of changing social interactions - such as Open Badges. Chiara already presented at Eunis 2010 (Warsaw) and 2011 (Dublin), and is co-organizer of the 14th Epic Conference (<http://openepic.eu>).

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Federico Giacanelli fell in love with Physics first, getting a Master Degree in Theoretical Physics from the University of Bologna (1993) then a Physics PhD from the University of Torino (1998). He then fell in love with the Internet and the Web, dedicating the rest of his life to networking administration, Multimedia and streaming services, Ontology based portals, Blogs and CMSs at CINECA InterUniversity Consortium. He loves exploring digital human interactions so he works on web application design, from gathering functional requirements to UX design. He is currently responsible for Bestr UX development. See Linkedin profile at <https://it.linkedin.com/in/fedgiaca>



Born and raised in Italy, **Simone Ravaioli** holds a Bachelor and Masters Degree in Management Information System from Loyola University Chicago.

After a corporate experience in the US he returns to Italy in 2006 through CINECA, the leading consortium of Italian Universities dedicated to developing software for HE. He currently holds the position of International Affairs Manager and Country Manager Turkey. Simone is founding member of RS3G - an international group of HE implementers focusing on data exchange standards. He also represents RS3G in the European Standardization Committee (CEN). In 2010 he is appointed Chair of the first EAIE Task Force called DSDP - Digital Student Data Portability. In 2014 the epiphany with Open Badges turned him

into the Chief Dreamer of Bestr, the first Italian badging platform and with that a deep involvement with the international community. Simone is a Slow Food activist and considers himself a "Free-Mover" and a Conversation Instigator.