The 13th International Conference on ePortfolio, Open Badges & Identity that took place in Barcelona 8-10 June 2015 marked the transition of a conference principally focused on ePortfolios and the world of higher education to one reflecting the impact Open Badges have had on the world of formal and informal education. The presence and contribution of Médecins Sans Frontières (MSF) is witness of this transformation.

Barcelona was also the place where the Open Badge Passport initiative was launched. One of the winners of the DML Trust challenge, the initiative aims at establishing a native, distributed, open trust infrastructure based on a network of Open Badge Passports that seamlessly issue, receive, share and display badges. Fully compliant with existing standards and open source, the Open Badge Passport should create the conditions for the emergence of new types of ePortfolios and services to open the silos where ePortfolio and Open Badges data is currently stored.

We would like to thank again all the authors and presenters who came to Barcelona to share their enthusiasm and experience and make the ePortfolio and Open Badges a truly international and vibrant community!

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Don Presant  
Learning Agents, MSF Canada  
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Atish Gonsalves  
DisasterReady.org, USA                                                                                     |
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**The pivotal role of educational technologies in human capital development**  
Atish Gonsalves¹, Don Presant², Dominique Giguère³  
¹: DisasterReady.org, USA; ²: MSF Canada  
**Big Journeys to Small Steps**  
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City & Guilds, UK            |
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University of Oregon, USA  
**ePortfolios and Life Stories in a Senior Capstone Seminar**  
Susan Kahn, Karen Ramsay Johnson  
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**Life-long "Earnings" - Closing the skill-gap with Open Badges and ePortfolio**  
Simone Ravaioli  
CINECA, Italy                                                                                              |
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Proceedings
The Role of Open Badges in a Personal Learning and Performance Support System

Helene Fournier, National Research Council of Canada

Abstract

This proposal describes the Learning and Performance Support Systems (LPSS) program, a current initiative of the National Research Council Canada (NRC). At the core of the system is the personal learning record component which links to a person’s credentials, such as Open Badges. LPSS shifts the focus from the classroom to personal learning, allowing users to track various learning events, actions, and pathways as well as outcomes of their learning (whether experiential, formal and/or informal) over a lifetime. The initiative is informed by research and development work conducted by researchers at the NRC since 2008 on connectivist-type Massive Open Online Courses (cMOOCs) as well as research on Personal Learning Environments (PLEs).

Keywords: Open Badges, learning analytics, xAPI, learning pathways.

Open Badges and New Learning and Performance Ecosystems

Various Open Badges initiatives have explored alternative ways for learners to receive recognition for skills and achievements gained outside of the school environment, such as open credentialing and accreditation for all types of learning, including informal and interest driven. The Mozilla Open Badge initiative [1] has worked to build an ecosystem wherein badges can be issued for learning regardless of where or how it happens. These badges can be carried with the learner and combined to form living transcripts of skills and competencies that tell a more complete story about the learner.

MOOCs are also part of the new learning and performance ecosystem landscape, offering a wide range of open and accessible learning opportunities to learners across the world. Since 2008, Stephen Downes of the NRC has facilitated and co-facilitated several connectivist-type MOOCs. In parallel, a number of research studies around MOOCs have been conducted which have identified important gaps, especially around the types of support mechanisms required by learners to be successful in these new open and accessible learning environments [2, 3, 4]. There is, however, an overreliance on metrics commonly used in education to measure success in MOOCs, namely the number of enrollments, completion rates, and assessments [5]. Accreditation and engagement continue to pose a challenge in MOOCs—whether in dealing with the semantics of digital badges, automated grading, calibrated peer review, learning analytics for assessment and adaptive learning, distance proctoring, and engagement diagnosis and remediation [6].

LPSS and Open Badges

NRC’s LPSS system is currently exploring solutions for including Open Badges, in the context of MOOCs and Moodle environments for example, as part of ePortfolio contents such as Mahara, as well as integration as part of a person’s LPSS system in what is called the ‘personal learning record’ (PLR). A person’s LPSS system will keep track of everything related to learning – exercises followed, tests taken, games and simulations attempted, work read – and stores data in a single location. In this way, unlike a learning management system, it combines data from the learning environment, the work environment and even the social environment, thus enabling adaptive learning software to close the loop between learning and performance. The PLR can combine with a learner’s personal library and personal ePortfolio, and can link to credentials offered by and stored by learning institutions, MOOCs and open education or social network activities, such as badges [7].

LPSS defines potential content and additional functionalities of an ePortfolio, including functionality related to the capture, storage and tracking of personal interests, past achievements, awards and Open Badges as part of the personal learning record component of the system. In this context, Open Badges could be issued based on tasks, quizzes, or activities distributed by LPSS. Badges could also be displayed that are made public, from the user’s backpack(s), within a public ePortfolio page, or simply as a reminder or motivational factor for the user.

Research and development efforts within LPSS will explore far more than traditional grades, certificates, and transcripts but also events and actions related to learning accomplishments (i.e., xAPI statements) and how they will be recorded and tied to Open Badges as evidence of skills and
Competencies achievement through various learning paths. The challenge lies in what and how much to record and include as credible and valuable information about learning over an individual's lifetime.

Considering the richness of data associated with open badges - (meta) data stored in badges themselves, requirements, achievement evidence and timestamps, as well as data about learning pathways followed by students (i.e., learning traces) - it is expected that powerful predictive metrics and hidden value will come at the intersection of learning analytics and open badges. NRC researchers and developers on the PLR component of LPSS will explore the data associated with open badges and how this information may offer highly valuable input not only to predict what may be a good fit for the next learning activity, but perhaps even what a learner is capable of in a certain timeframe. This fertile ground could have substantial implications for recommending and exposing students to a variety of formal, informal learning, and experiential pathways utilizing data sources far more nuanced than grades and achievement tests.

**Challenges and Issues within LPSS**

The LPSS program will also explore the challenges of personal learning and performance support, including areas of focus such as learning analytics, big data and educational data mining, ethics and privacy issues in networked environments and the use of personal learning data feeding into the research and development process, agile methodologies for improving system design and efficiency, and finally issues open badges and credentialing mechanisms [8]. The ultimate goal of LPSS is to create a single point of access to all learning and performance support needs, with individual learning paths, context-aware support, searchable and verifiable skills and competency records. This research will inform the next generation of learning design, which includes a combination of machine-learning, analytics, and human interactions. Learning and performance ecosystems are the basis for sustainable education, far beyond the managerial and economic values too often imposed on educational opportunities.

Beyond the technological details of ePortfolios, Open Badges, and PLEs, this paper will provide insights into how LPSS will provide a learning ecosystem where trust and openness in a learning system can thrive.

**References**


http://www.educause.edu/ero/article/beyond-mooc-model-changing-educational-paradigms
http://prezi.com/owhcvtpwsu5g/moocs-new-research-questions-and-method/

1. Introduction

This paper is framed within the context of teachers training and it deals with the issue of documenting teachers’ professional development so as to value them in their professional growth and career paths. If from one side the current international literature shows consensus as regards the impact of teachers’ continuous professional development on school improvement (Eurydice, 2015) from the other side a formative evaluation culture as an instrument of growth and progress, struggles to become pervasive, at least in some countries such as Italy (Cranton, 1996; Timperley, 2008; King, 2014).

While this remains a priority in several countries’ school policies in which school autonomy is strictly tied to accountability, teachers lay inevitably between the fear of being judged and the need to receive a formative feedback on their professional progress and teaching practice.

Moreover, each approach aiming at creating an evaluation culture that is transversal to the teacher education paths, has also to face the challenge of overcoming the several discontinuities arising from the three main teacher education moments: ITE (Initial Teacher Education), Induction and CPD (Continuous Professional Development) (Caena, 2014).

The study presented in this paper is set within the Italian social-cultural, political and technical context (Bill 2994/2015- Buona Scuola) that is currently undergoing an important school reform addressing – among others – the important topics of incentivizing and documenting teacher education.

The purpose of this study was to analyse some massive Teacher Education (TE) actions operated in the last ten years by INDIRE, the unique body in charge of this function at a multi-regional or even national scale. The analysed action are characterized by being built around some cornerstone of a truly formative evaluation culture: 1) conducting teachers through the study and analysis of in-depth of significant and validated teaching practices; 2) accompanying them in planning and experimentation of activities in their real context, 3) documenting the process and the product of these experimentations to support reflective action, so to produce a real and effective professional change and activating a cyclical process of reflection and action (Rossi, 2008; Cerini, 2012, 2011).

The main aim of this analysis is to highlight how – in terms of methods and tools – teacher education was documented and valued in projects.

Basing upon this analysis, in this study we provide suggestions for elements that could converge in a possible teacher portfolio useful for accompanying teachers in keeping the progress of their development. Such elements, whose use has proven to be effective, properly supported by a combined ePortfolio and Open Digital Badge technology, can provide a suitable trigger to promote the widespread of a formative evaluation culture meeting the vision of ET2020-Education and Training strategic framework for European cooperation in education and training (Council of the European Union, 2009).

2. Background

2.1 International observatories and policy guidelines

The recent OECD report (January 2015), highlighted that nearly one in five 15-year-old students in OECD countries does not acquire the minimum skills necessary to fully participate in today's society (OECD, 2015). As a consequence, many countries engaged in improving the quality and relevance of their vocational education and training (VET) programmes or expanding their work-based training and apprenticeship systems.

Along the same direction the 2012 OCSE report recommend to Education Ministries to start an evaluation process to support the development of the teacher’s professional profile, to be grounded on a specific set of professional profile indicators corresponding to the ideal teacher. Such set of
indicators will have to be reliable (to indeed measure teacher’s practices), effective (to be designed and conducted in relationship with expected goals), fair (to not stoke disparity between teachers), sustainable (regarding time and resources) and sharable (belong the evaluation culture of teachers professional development).

National qualifications frameworks have also been revised, often in collaboration with the European Union, to increase transparency across education systems. To build a systematic and coherent teacher-appraisal framework, it is important that the approaches to evaluation are holistic adapted to the different stages of a teacher's career.

In this contest, in Italy, the recent Bill 2994/2015 La Buona Scuola recognised some focal points of the professional development of teachers profile: professional development schemes, mandatory and based on peer collaboration, tying up quality of teaching, training and value to the salary improvement. The key-words of the bill’s vision are qualified teachers, no more fixed-term contracts, training, innovation, open data, professional development schemes, evaluation and merit, transparency, accountability, autonomy, school for all, unlatching red tape.

The relevance of the teacher professional development as an agent of change, was among the main topics discussed during the European workshop “School Policy - Teacher Education” (Pettenati and Brotto, 2015), in this trajectory of professional development from ITE (Initial Teacher Education) to Induction and CPD (Continuous Professional Development) or in-service training.

International literature is in favour of the relevance and effectiveness of the conceptualization of teaching as a profession, in order to improve teaching practices, professional development of teachers, the results of students’ learning, the climate and organization of the school as a whole.

Such appraisal needs to be based on designs that are already proven effective, draw on multiple instruments of evaluation, be conducted by well-trained evaluators, offer differentiated evaluation approaches for teachers at various stages of their careers, provide for teachers’ active participation in the process, and be followed up by feedback, suggestions for improvement and lifelong learning opportunities.

2.2 A brief history of Italian context

In order to discuss a complex topic such as the role that evaluation culture in teachers professional development, we need to draw a portrait of Italian teachers and the current school context.

In the early ‘90, an Italian expert of school-applied organization theory, Piero Romei (1991), portrayed some important elements of the teachers’ culture: there is awareness of the qualitative nature of teaching and full knowledge of the implication that the teacher job has in the sphere of ethic and values because it consists in “producing culture’ working on ‘human materials’”; however, there are also individualism and self-referentiality due to the lack of external feedback, that however imply also the absence of appraisal system leading to some sort of professional reward.

As noted in School Autonomy in Europe. Policies and Measures: “Over the past twenty years, schools have been the subject of much deliberation and have undergone many reforms, in particular as regards their autonomy” (Eurydice, 2007, p. 3). ’90 was a “decade of expansion of school autonomy” (p. 11) and exactly at the end of that period in Italy the “Regolamento recante norme in materia di Autonomia delle istituzioni scolastiche” (Rules for autonomy of schools institutions) (DPR 275/1999) was issued.

What has changed for Italian teachers so far? Still in 2007, Romei talks about putting “the hands to the problem of the schools functioning to accomplish a real autonomy” (p. 13) and try to design a “theory of school” that can sustain a school able to give teachers proud, satisfaction, reward and self-realization. Also he points out that, at that time, there was not a system able to give a performance evaluation and capable to track teachers careers, to give an answer to the teachers’ expectations. Many sustain that the natural counterpart and complement of school autonomy is the accountability systems (Pandolfini, 2014; Cipollone, Montanaro, Sestito, 2012, Fondazione Giovanni Agnelli, 2014) and quite commonly they are to be developed together (Eurydice Italia, 2009). In Italy the “Sistema Nazionale di Valutazione” (National System of Evaluation) has it happened in 2013 with the promulgation of DPR 80.

Giovanni Agnelli Foundation (FGA) report on School Evaluation (2014) also highlighted the great importance of accountability. Analyzing “soft” accountability models implemented in European countries, the foundation report notes that: “in presence of clear and shared educational standards, accountability becomes a resource in order to patronize and promote teachers’ skills development and
quality school improvement”; soft accountability and appraisal system can give to school useful feedback for teachers’ and principals’ professional growth.

Last, what has changed from early ‘90 in teachers’ identity and opportunity of professional development? Teaching and Learning International Survey (TALIS) 2013 provide a focus of teachers perception and puts out that “meaningful appraisal and feedback are geared to teacher development and improvements in learning [...]. They help teachers improve their teaching skills by identifying and developing specific aspects of their teaching [...]” (p. 120). TALIS 2013 confirm that in Italy there is not a formal teachers’ appraisal system and Italy results also among the countries where “more than 30% of teachers report that they did not receive feedback on their teaching in their school from any of the five sources identified in the TALIS survey” (p. 129) that are “peers, teacher mentors, principals and, in some cases, external evaluators or agencies” (p. 126). “Yet for such feedback to affect teaching practices, links between performance assessments and professional learning should be actively developed and cultivated” (p. 120) thus leading us to focus on the dimension of professional development.

For Italian teachers, participation in professional development activities is lower in 2013 than in the previous survey and TALIS data provide convincing evidence that the shortage of incentives for participating in professional development is “a substantial issue for teachers in Italy (83%)” (p. 112).

3. Quantitative and qualitative tools to monitor and validate training courses: INDIRE experience

This study draws on research conducted by a research area of INDIRE (Italian National Documentation, Innovation and Educational Research Institute) related to the evolution of teachers training models towards a possible integration with training evaluation systems. In this research, we conducted a study on the projects developed in the last 10 years of in-service teachers training provided by the Institute, in order to identify the quantitative and qualitative tools historically used to monitor and validate the trainings achievements.

We hence analyzed tools used in several in-service teacher training projects related to:

- teacher training projects on specific base subjects1 - aiming at the improvement of knowledge and skills of teachers on a specific base subject: Italian Language, Foreign Languages, Mathematics and Science. The training plans of these projects, very complex and articulated for different levels and thematic paths, was illustrated and explained by a tutor: a teacher expert on that specific subject, and was structured with tools, resources, purposely designed teaching methods and approaches;

- teacher training projects for the use of ICT2 – with the main goal of improving teachers’ digital knowledge and skills concerning the use of ICT to support and enhance the teaching and learning processes. Again, teacher training path was implemented with the support of a tutor, depending on the knowledge level, for different grades of progressive complexity, and also depending on the thematic of interest and/or teaching subject;

- school improvement projects3 – addressed to school heads and middle management, with the aim to support schools in the evaluation, self-evaluation and continuous improvement processes. In this last case, the project design envisaged the presence of one or a team of expert tutor/consultant with the task to accompany the internal school team in the various steps from self-evaluation, evaluation and improvement activities, using tools, resources and methods inspired and derived from the school effectiveness and school improvement research.

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1 For instance INDIRE’s e-learning project M@t.abel, Science education, Language, literature and culture in an European dimension (L1 and L2) Linguistics and literature education in a plurilinguism perspective in the target B10 “National Projects on Distance Learning (ODL)” of the NOP - National Operational Programme 2007-2013 “Skills Development” (co-financed ESF), administered by the Italian Ministry of Education.


A common training model underlie the above projects, and was characterised by the following distinctive features:

- **a blended learning** (Bellier, 2001, Calvani e Rotta 2000, Trentin 2004, Ranieri 2005) model combining face-to-face meetings and online activities to achieve the training goals and complete the total number of hours using synchronous and asynchronous communication tools (web forum, web conference, chat, etc.), document sharing and collaborative work (online whiteboard, wiki, blog, repository) tracked by a dedicated tracking system;

- the core of the model is the realization of specific tasks, individually and/or through peer collaboration and the key figure of the **tutor**, who organizes and manages the training path balancing face-to-face and online activities, mediating the use of resources, animating the online interaction and supporting the various studying and working phases.

Within this common frame, the training model evolved in the last few years so as to further increase the development of teachers' professional skills with a specific focus on teaching practices, aimed to their changing and improvement.

Therefore INDIRE adopted an **on the job** training model composed of the following three main steps:

- study and analysis in-depth of significant and validated teaching practices;
- planning and experimentation of activities in their real context
- documentation of process and the product of these experimentations to support reflective action, so to produce a real and effective professional change and activating a cyclical process of reflection and action.

This training model is grounded on the idea of the teacher as a “reflective practitioner” (Schön, 1987): a teacher that is able to pose problems depending on his/her own professional context, to identify possible solutions, to observe and to consider their effectiveness and suitability, reflecting during and after the action - “reflection in action” and “reflection on action”. Depending on the result of this reflective activity, it is possible to reconsider not only the implemented strategies but also the premises, the assimilated meaning schemes, so to produce new ones, more appropriate and well aware thus leading to a truly “transformational learning” (Mezirow, 2003).

With the aims to accompany, support, validate and confirm this process the training model provides specific quantitative and qualitative tools that have been the object of the comparative research documented in this paper, to identify common and distinguishing elements. We analyzed tools and structure of the different training courses, concerning both the activities requirements to the teachers in training and the tasks assigned to the tutors. In the same way we also studied the training activities addressed to the development of the tutor professional figure, essential part of all the teachers training courses conducted by INDIRE.

Coherence and consistency elements of the different training courses accounted for in this paper, are related to the same steps envisaged in the courses, of the skills to be achieved for each of these steps and therefore of the different tools used to support and validate these ones. Such common elements are synthesized in the following Table 1.
### Table 1: Common and distinguishing elements of the different teachers training paths studied in this paper

Since the tutors themselves needed to be trained to properly support teachers on their turn, we envisaged dedicated specific tutoring training courses with a specific structure very similar to that one of the teacher in training. These courses provided both activities and opportunities to develop peculiar teachers' skills and specific training moments and activities to enhance methodology and cross knowledge and skills distinctive of the tutor professional role, following the concept of training as a moment of participative action research.

In these last years, depending on the evolution of the training model, also the profile and role of the tutor is deeply changed towards the definition of a specific professional identity, so to allow the creation of list of “senior tutors”. The main goal of tutors training is the construction of a grounded “professional culture oriented to reflection in and on action, continuous research and change towards improvement, combining the double hermeneutic (Giddens, 2005) of experiential knowledge (reflection on teaching practices within the school community) and scientific knowledge (empirical facts)” (Pastori 2014, p. 241) therefore considering both qualitative and quantitative data.

Depending on the specific elements of the training or supporting projects, the tutor could choose among different tutoring styles (Keddy & Johnson, 2011) from the one of expert-mentor, with an evidence of the asymmetry of the knowledge and skills levels and that one of coach, process
consultant/facilitator, in which is instead emphasized the symmetry of the relational aspects (Schein, 2001).

With the aims to achieve this expertise even for the relational and communicative aspects, trainee tutors also required to plan and manage training/teaching activities and lessons, to participate in role playing and simulation, to examine in depth themes such as active listening, direct and indirect mode of communication and other related to group managing and adult education.

To monitor and validate these knowledge and skills too, the training model provides specific tools such as the “training agreement” a sort of “research agreement” (Nigris 2014) that tutors and teachers in training use to agree upon training goals and reciprocal tasks and responsibility and the “tutor programme” to share organization and managing of face-to-face and online training activities. Some of this information are reported also in the final “certificate” that the teachers when the training path is completed.

Together with these qualitative tools, the training model provides also quantitative tools to monitor the training activities in the online platform, the completion of the task assigned and the knowledge and skills achievement both for tutors and teachers in training.

Each learning platform dedicated to a specific teachers training course, implements a tracking system that records several online activities. Among these: the download of learning materials, participation to discussion forums, production of individual or collaborative papers, accomplishing of online surveys or forms, activities in the virtual classroom (e.g. sharing of learning materials, participation to classroom "discussions" with forums, chats, blogs, dashboard and private mail messaging), participation to videoconference sessions, organization of events with the classroom calendar.

Every teacher could monitor his/her own learning progresses using the online "ePortfolio", a tool that holds a real-time report of every activity accomplished. Every learning platform has its own rules, meaning that teachers have to accomplish the learning activities according to what is needed to complete the course, and the ePortfolio can be very useful to check this learning progress.

While the ePortfolio is available for every course participant, the learning platforms provide another tool, called "eRegister", dedicated only to courses and classrooms tutors: these special users can be considered as a teacher in a classic classroom managing his/her students activities represented by the teachers in the platforms. With the eRegister tutors can monitor their teachers’ progresses, validate their activities or prompt them to accomplish the required steps to complete learning course goals. Every activity, when considered “valid” from a learning point of view, will give a sort of "score" to the teacher. This “score” is attested by a combination of automatic tracking and qualitative validation: some activities, such as the number of downloads of learning materials, are directly valued without need of human validation, others activities, such as the participation to discussion forums, the production of papers, need to be validated by a human supervisor, also checking for the activities' appropriateness.

At the end of the learning cycle, every teacher will gain a "certificate" based on his/her score, simply attesting the participation of teachers to learning courses.

Following the growth of web technologies, the tracking system, and so the data available for ePortfolio and eRegister, evolved from a local context towards a global and cloud one in which is easier track the complete path of each user.

This allowed to implement precise and punctual monitoring systems dedicated to INDIRE researchers, who can thus evaluate the users' activities, control the learning platforms' trends and tune the training plan learning offer; for instance, if a tool provided by the platform is used by a very low percentage of participants, probably it's useless or too difficult to use, and so it could be reengineered or even abolished.

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4INDIRE platforms are developed in PHP, Javascript, HTML, CSS and the data store is provided by Oracle databases. The third parts software instead are developed with their own rules and technologies, for example Wordpress is still based on PHP scripting but stores the data in MySQL databases, while Adobe Connect stores them in Microsoft SQL databases.
The learning platforms provide, as said, several online tools, mainly developed by INDIRE, and adapted parts software adapted to suit the courses needs, such as Wordpress for blogging and Adobe Connect for videoconference.

This lead INDIRE to develop software-bridging solutions, transparent for the users, to integrate these tools in our learning platforms, and to collect all their data in a common store, i.e. the tracking system, integrating them with the platform tracking data.

This goal has been achieved mainly using the common APIs (Application Programming Interface) provided by the third parts software, which allows to collect and treat data, according to the learning activities provided by the learning courses.

4. From documentation through recognition to appraisal... Thinking to a solution

As underlined, INDIRE courses offer to learners, teachers and/or tutors, specific tools to bring them through main phases of teachers’ reflective path, in which they carry out specific activities of analysis, observation, documentation, and oriented to the creation of a “product” (document, video etc.). As we have seen are used either qualitative monitoring systems either quantitative tracking systems, in order to have a quite complete overview of the process and documentation of the products. Last but surely not least, collaboration is a mainstay of our learning model, so it is very important to have trace of the interaction with peers, with the tutor and analyze the scaffold that they offer.

To give an evidence of the complexity of teachers learning path is important either from a motivational point of view either in order to create an evaluation culture in a framework of professional reflection.

In our landscape appraisal has to be a formative assessment, in order to give a scaffolding structure to help teachers improvement and to be perceived as an opportunity of professional growing and personal satisfaction. As we have seen, we can approach the same kind of course either with recognition or with assessment aim. But in both cases is fundamental to have a structure able to sustain teachers in the construction of their professional identity and in their growth. Thinking to a solution we look at Open Digital Badges.

4.1 Open Digital Badge, the currency to emerging the lifelong learning processes

Learning extends across multiple contexts, experiences and interactions: it is no longer just an isolated or individual concept, but learning today happens everywhere, is inclusive, social, informal, participatory, creative and lifelong.

Open Digital Badges are among the possible solutions available today for recognizing and showcasing the acquisition of new skills & literacies across acquired in different context, thus paving the way to sustaining teachers in the construction of their professional identity and in their growth.

A ‘badge’ is a symbol or indicator of an accomplishment, skill, quality or interest. “Get recognition for skills you learn anywhere” is the slogan of Mozzila Fondation, in order to respond to the complex problem of learning assessment and assessment for learning. A digital badge is an online representation of an earned skill, a new online approach to recognize learning outcomes: in this sense, Badge sparks feedback between Experts and Learners about their learning projects, and a Badge is symbol of mastery than comes out of those conversations (P2P, 2013).

Starting from the experience of Peer to Peer University (2011) or Khan University, Digital badging initiatives have gained attraction in multiple professional domains and for a number of purposes, from incentivizing actions and behaviours to tracking performance outside normal channels of assessment and evaluation (Mozilla Foundation, Peer to Peer University, & The Mc Arthur Foundation, 2012).

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5 See https://wordpress.org
6 See http://www.adobe.com/it/products/adobeconnect.html
7 From their website: “The Peer 2 Peer University is a grassroots open education project that organizes learning outside of institutional walls and gives learners recognition for their achievements. P2PU creates a model for lifelong learning alongside traditional formal higher education. Leveraging the internet and educational materials openly available online, P2PU enables high-quality low-cost education opportunities”.
8 See https://www.khanacademy.org/
Digital badges can support connected learning environments by motivating learning and signalling achievement both within particular communities as well as across communities and institutions.

In this sense, Badges are not "credit" but rather a "currency" whose value is determined by the user (Paolini, 2013): the badges allow you to collect and validate a variety of experiences and at the same time badges make it possible to give a role as providers of education to both institutions (schools, universities etc.) or to other subjects (museums, organizations, communities etc.).

Badges can be awarded for a potentially limitless set of individual skills regardless of where each skill is developed, and the collection of badges can serve as a virtual resume of competencies and qualities for key stakeholders such as peers, schools or potential employers.

Specifically, badges support:
- Capturing and translating the learning across contexts;
- Capturing of the Learning Path;
- Achievement Signalling;
- Motivation;
- Supporting Innovation and Flexibility;
- Identity/Reputation Building ;
- Community Building/Kinship.

Further, badges can serve as a means of social capital, and community-oriented or -defined badges could formalize camaraderie, team synthesis or communities of practice.

The ODB diffusion goes with the disruptive MOOC movement (Conole, 2013), for instance P2P University, Kahn Academy, Kanvas, Coursera, the European Project EMMA9 and finally the experience of University of Leicester10, where "Open Badge are visual representations of achievements, learning, skills, interests and competencies"; Open Badge can augment traditional educational practices, they can accommodate formal and informal learning paths.

In Italy, for the Continuos Professional Development - CDP of the teacher professional profile, we shall consider two relevant experiences about the introduction of ODB: the AICA experiences for technological skills opened to everyone and the case of HOC-LAB of Politecnico of Milano (Paolini, 2013) dedicated to teachers. In this framework, the adoption of Open Digital Badge to describe and design a professional profile springs special interest where they could be connect with a formative rubric.

4.2 Badge technical features for documenting teachers’ learning paths

According to Mozilla Foundation, badge ecosystem includes development and deployment of the Open Badge Infrastructure (OBI), the underlying technology that supports badge issuing, collection, and display (Mozilla Foundation, 201211).

"Assertions" are representations of awarded badges, used to share information about badges that a user has earned. "An assertion includes multiple items of data, such as: badge name and description, issuer, date, criteria URL, evidence URL and badge image URL." (Wiki.mozilla.org, 2014). Assertions can be “hosted” and “signed”12.

A hosted assertion is a file containing a well-formatted badge assertion in JSON (JavaScript Object Notation). This should live at a stable URL on the issuer’s server: it is the source of truth for the badge and any future verification attempt will hit that URL to make sure the badge exists and was issued by the issuer.

A signed badge is in the form of a JSON Web Signature (JWS). Signed badges use the Mozilla Signature issuer API to pass a signature rather than a URL13.

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9 http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/emma
10 http://www.slideshare.net/dajbelshaw/open-badgesleicester + http://staffblogs.le.ac.uk/telsocsci/category/open-badges/
11 http://openbadges.org/legal_faq/#open-badges
12 https://github.com/openbadges/openbadges- specification/blob/master/Assertion/latest.md
13 https://github.com/openbadges/openbadges-specification/blob/master/Assertion/latest.md
Assertions can be improved with custom information so long as they don't clash with specified properties: these information are called “Additional properties”.

Badges, if well formed and compliant with the Open Badge Infrastructure, can be exported and displayed in multiple places. For example, Mozilla offers an hosted service, called “Badge Backpack”, which is a repository where Earners can collect badges from a variety of issuers. Earners can view and manage their own collection, “as well as build and publish groups of badges”\textsuperscript{14}. Mozilla Badge Backpack manage the earners identity with an authentication platform called Mozilla Persona: earners must join it to benefit of the services offered by the Backpack. However, Backpack is not the only “showcase” available for the earned badges, many online and social platforms (for example Linkedin) allow to show the badges on the user’s personal page.

Institutions and organizations that want to display badges on their websites can follow the guidelines provided by the Mozilla Backpack APIs for Displayers (https://github.com/mozilla/openbadges-backpack/wiki/Open-Badges-Onboarding:-Displayers).

It’s worth highlighting that the badges display on third parts platform is an individual users’ choice: in a possible future, INDIRE will only provide the earned badges, leaving the users free to use them as they prefer.

4.3 How these features make badge a possible technological holder for the evidences of teachers learning paths

In teachers training, badges provide both an interesting and a viable solution for several reasons. Badges can be of different kinds; they can be provided simply as feedback or with a motivational purposes; they can be used for certification after rigorous and defined assessment process. Several badges, either motivational or of certification, can be collected in a more high-level badge. These meta-badges are developed top-down, created and issued by organizations to target specific sets of skills, or bottom-up, as reflections and narratives around sets of badges important within a certain community or for a particular individual (Mozilla et al. 2012, p. 7)

We can say that it is possible to use badges in order to give an attestation or to give a certification, so they can be used either in a recognition or in an assessment perspective.

Badges are “transparent and information-rich” (Grant 2014): the assertion can include various kind of information, some of which particular interesting for our learning scope, such as the "evidence" that point to a URL of the work that the recipient did to earn the achievement, or the "criteria" that point to a URL of the criteria for earning the achievement. Moreover, the "extension" opportunity is particularly interesting in order to describe the complexity of a teachers’ learning path.

For these reasons badges seem very good candidate to become the technological holder of all kind of evidences and data either quantitative or qualitative of a teachers learning path.

Moreover, badges are interesting also because can be used in a lifelong learning perspective in order to collect all the information that, as we have seen, the ePortfolio of our courses show only inside the single platforms.

One of the most interesting perspective of Badges rely on the fact that they can be integrated with portfolio tools:

Badges and portfolios can be used together to provide different views of a learner’s accomplishments, so that badges offer a quick visual representation of learning and community validation, whereas portfolios document the learning behind the badges (Spiro 2014, p. 356)

And they can also be integrated in a portfolio view, were portfolio is understood not only as a tool but also as a reflective practice oriented either to acquisition of consciousness of their professional development (Rossi, 2008), either to the construction of their digital identity (Ranieri 2014).

So the badges can give to the teachers either an evidence of a formal evaluation or a tool to share the peculiar phases of the professional growing with all the members of their community from peers to principal, from students to families.

\textsuperscript{14} http://openbadges.org/legal_faq/
5. Conclusion

Giving an evidence of the complexity of teachers learning path is important from a motivational point of view and in order to create an evaluation culture in a framework of professional reflection. The combined use of Open Digital Badges and portfolio tools provide a possible solution to meet this objective.

The primary result of this preliminary study is a classification of the validation, monitoring and documentation approaches used in a set of INDIRE massive TE actions (see Table 1), so as to provide motivated suggestion of the use of such tools in a possible teacher portfolio, keeping track of the progress of teachers training.

On the basis of this analysis we are designing our next teacher educational programs aimed at supporting teachers professional growth and at developing tutors professional skills and competences, and we intend to experiment ODB and ePortfolio for teachers continuous professional development, on a nation-wide scale.

The proposed approach can also contribute towards the continuum of professional development, since:

- It can favour a well documented and more qualifying transition from pre-service training, traineeship and probation phases in the early stage of the teacher career
- It can support a more focused matching between school demand of teachers and teachers profile in the selection and appointment of personnel to the schools
- It can serve to record and showcase teachers achievements and thus make more visible formative, professional and didactic credits, to pave the way for an evidence-based rewarding mechanisms for educators
- It can contribute to the definition of national quality criteria and teachers standards and refer to them for contributing to a more successful European education and training culture.

The underlying philosophy behind this proposal meets the Italian national vision proposed in the Bid La Buona Scuola, to support teachers in developing a more aware perspective of strengths and weaknesses of his/her professionalism, to favour autonomy and accountability, with the main objective of improving the quality of school system as a whole.

References


Cambi, F., Catarsi, Colicchi Lapresa, E., (2003), Le professionalità educative. Tipologia, interpretazione e modello, Roma: Carocci

Cerini G. (a cura di) 2012, Una certa idea di valutazione, Homeless Book, Faenza


Cerini, G. (a cura di) 2011, La strategia del portfolio docente, Tecnodid, Napoli


Chevallard, Y. (1985), La trasportion didactique, du savoir savoir savant au savoir enseigné, Grenoble: La Pensée Sauvage


EMMA Project, European Project EMMA http://platform.europeanmoocs.eu/


P2P - Peer to Peer University (2011), *History and value*, see https://p2pu.org/en/about/


University of Leicester for EMMA [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/emma](http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/emma)
Pouring new wine into old wineskins

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In this position paper I intend to reflect on my experiences of using ePortfolios in the UK since 2007, and share the insights I have gained from observing their use in other countries, as well as by home and international students in the UK. I will discuss what I think are the key conditions for the success of ePortfolios. I will finally attempt to argue that we cannot expect learners to fully engage with, enjoy or benefit from ePortfolios, or for that matter, other truly disruptive technologies, if we continue to graft them onto old curricula that operate as part of existing academic cultures. Like new wine, they will explode the old wineskins and be wasted. However, the aim is to provoke debate around this claim.

My journey with ePortfolios (in four chapters)

Chapter 1: On the real purpose of education

Back in 2000, I was researching transitions to higher education using in-depth interviews with First Year university students. Despite being very revealing of the students experiences and they way in which they made sense of them, these narratives served no immediate academic purpose beyond helping me with my research. However, a few years later, I came across self-development paper based portfolios produced as assignments in the context of ‘extended degrees’. Similar to ‘access courses’, extended degrees enabled mature students who had been away from education for some time, or did not have the required qualifications, to enrol one year early and pick up or brush up on key academic skills before they started a course at university. The unit I taught was appropriately entitled ‘Return to Learning’. As I read these portfolios, it became apparent to me that they embodied the students’ struggles and achievements in a similar way as the narratives I had been researching. What was remarkable was that these stories of personal development and achievement had found their way into the curriculum. This meant that students’ reflective practice had begun to achieve legitimacy, and potentially could be treated in a similar way as other types of more established practices, such as academic argumentation (essays), or scientific report writing. This was also a time when the notion of Personal Development Planning (PDP) began to appear in UK higher education. I quickly made the connection and realised that PDP could provide that ideal framework for reflective learning. For me, PDP was about encouraging learners to take stock of their values, needs, interests and abilities to formulate learning goals. They could decide what they wanted to learn and provide clear reasons for these decisions. The role of the tutor was to help the learner translate these goals into effective plans that they could use to guide their learning. Tutor and student would then work jointly to implement this plan and achieve the goals. I became convinced this should not be an add-on to the curriculum, but should be the way all subject knowledge ought to be taught.

My newly found zeal inspired me to work with Personal Tutor Groups in the first and second year of a Psychology undergraduate degree. In such groups a tutor would meet with 12 to 15 students fortnightly to work for an hour on a combination of self-development tasks as well as transferable skills. I introduced paper based portfolios so students would record their reflections and achievements.

Chapter 2: Going digital

In 2007, a colleague and I piloted a Blackboard tool for building eportfolios with students in computing and psychology (Gaitan & Manton, 2008). We started with a survey of PDP-related practices and then implemented the ePortfolios for a semester. We interviewed the students at the end about their experiences of using the system. Based on this piece of evaluation research, the university opted for a different system: PebblePad, with its funky and yet simple interface. It was a suite of reflection tools that also allowed storage of artifacts and the publication of an eportfolio that was attractive. I immediately fell in love with it and convinced the Head of Department to adopt it as the platform for the portfolios that students would produce at the end of each year of their undergraduate degree. A few colleagues also bought into it and we provided training to all personal tutors. We introduced all new psychology students to the practice of reflection as early as we could with a small task on PebblePad at induction, which they could eventually incorporate into their ePortfolio. Most seemed to like it and enjoyed personalising the environment. I remember the strident pink background that some of them chose. Many students uploaded their photo and made it their space. These were the days before facebook. We now know very well how frequently many users like to update their photo profiles.

In order to provide a theoretical foundation to all this, I undertook qualitative analysis of portfolios produced at the end of the first and third years to try to disentangle the learner’s development and
discovered that the inputs, processes and outcomes referred to knowledge, awareness, motivation and skills (Gaitan & Atlay, 2008). I then proposed a set of conditions or qualities of learning that would lead to such development. I called it ‘realistic learning’.

The combination of PDP (a national initiative), learner development-realistic learning (our own conceptual framework) and ePortfolio technology seemed unbeatable, or so we thought. As it happened, not all staff and students engaged with these ideas and practices with the same enthusiasm. In fact, they had strong favourable or unfavourable attitudes. A short study I carried a few years later (Gaitan, 2012), revealed how the students’ attitudes to ePortfolios were shaped by the technology, the guidance received, difficulties with disclosure, and most important, a perception of purpose (or lack of it). The first of this aspects refers to the user’s ability, to previous experiences with IT, and the availability of technical support, but also to a fit between user and system. The latter includes both the instant like/dislike for the look/feel of the interface and a familiarity that grows out frequent use of a tool.

Related to the element of technology, the guidance provided by the tutor was crucial; students spoke of very enthusiastic tutors and tutors who did not want to have anything to do with the ePortfolios. The element of disclosure is a sensitive one. Students seemed apprehensive about not knowing who would read their portfolios or question the idea that they would be marked. However, the most important factor is the perception of a purpose. It does not matter how much tutors explain why having an ePortfolio is useful, if learners do not accept these reasons or generate their own reasons, their attitudes towards ePortfolios will be negative. Now, there were several types of purposes, from an instrumental one (it will help me find a job) to a more intrinsic one (it helps me improve my learning or learn about myself). I remember a student who produced very effective ePortfolios that ticked all the boxes, in the First Year all the way through to Third year, but never saw the point of it. These factors were of course inter-related. Not seeing the purpose results in not making the effort to engage with the technology and wanting to give up at the first obstacle.

Some years ago students created a facebook group page entitled ‘I hate PebblePad’. Furthermore, the students’ attitudes were related to the tutors’ attitudes. The latter was expressed in phrases uttered in corridors, such as ‘There is too much reflection in the curriculum!’, and staff meetings, where staff expressed more strongly the reasons for disliking ePortfolios: Some of them said that supporting and assessing students’ personal development was not really their roles or that the marking was too subjective. At the heart of this, in my view, are two fundamental issues: The first one is a conceptions of subject knowledge as separate from personal development. This is an idea of education as a purely objective and impersonal enterprise and learning as the acquisition of knowledge which needs not be related in any way to the learner. It perhaps also sees learners as essentially rational individuals that operate in social vacuums. Teachers can engage in a sanitised relationship with their students. However, all educators know that you get whole individuals with complex backgrounds, histories of success and or failure, habits of mind, varying degrees of prior knowledge and interest in certain topics, all of which influence what and how they learn. What’s more. they are changing individuals, that is developing persons. And what can be more important than supporting that development?

Chapter 3: A rough path

I have read hundreds or even thousands of ePortfolios in the last eight years and continue to marvel at their richness. They reveal the human side of education which seldom comes across in today’s mass-led, market-oriented, highly bureaucratic HE. They present learners in a light I don’t see in the classroom. Every now and then the reasons behind poor achievement feature in a weak student’s ePortfolio in ways that lead me to empathise and appreciate the scale of their efforts.

Year after year, our external examiners praise us for having ePortfolios, for our clear marking criteria and the quality of the feedback we give to our students.

However, I have had to defend the importance of ePortfolios all along. I have adapted them to new demands (e.g. including a greater focus on employability) and made painful concessions so they don’t disappear from our curriculum. For instance, I have reluctantly agreed to greater prescription in terms of content: Defining the sections of an ePortfolio (My background, Learner Experiences, Learner Development and Prospective View). I have accepted that an ePortfolio, like other assignments, must conform to word limits (to make marking less time-consuming). But you cannot stop the tide.
ePortfolios are still in place in our curriculum, but they are now produced using Word or as blogs, mostly because these are easier to construct and require almost no technical support. So, you could say that they just about survive. In my opinion, abandoning the ePortfolio platform (PebblePad), feels as if we have thrown away the baby with the bathwater. These eportfolios are no longer digital reflection tools or multi-media environments with the personal visual aesthetics that celebrate a student's development. Many are produced, like other assignments, at the last minute. And many students wish they did not have to do them.

But, in addition to having identified the four aspects of technology, tutor guidance, disclosure and purpose, I would like to propose that the success or failure of personal development ePortfolios depends on a broader ecology, the academic culture. Primary and Secondary Education in the last decades unfortunately, has been led down a very dangerous route in the UK that has narrowed the focus down to the bare minimum. There is no time or space to engage in an in-depth critique here and others have done it far better than me (Ken Robinson, Ron Barnett, among others), so I will simply summarise some of the key issues. The excessive emphasis on results, that is, on very specific outcomes, at the expense of a wider scope, and no value given to processes has had disastrous consequences. The importance of grades has become unbearable in secondary education with accusations of teachers teaching to pass exams, coaching their students on how to answer so that markers can tick the boxes. Schools tell parents that revision for exams is the most important time in young people’s education! So, they might as well not have bothered to turn up the whole year. And when these students arrive at university they are suddenly expected to have broad knowledge and passion for a subject, to be inquisitive and engage in autonomous and collaborative learning. It comes as no surprise, that most do not fulfill these expectations. Therefore, it is easy for universities to try to continue with the previous trend of hierarchical teacher-learner relationships, with highly prescriptive curricula, structured assignments, traditional assignments, except that there is a huge reduction of the contact between lecturers/tutors and students. Yes, students spend a lot of time working on assignments and most universities have invested heavily in IT to support them. With huge financial pressures, students’ work commitments increase and they will tend to prioritise outcome-related assignments over reflective ones, like ePortfolios. They have learnt to be instrumental and will ask ‘what’s in it for me?’, ‘will this be assessed?’, or ‘what proportion of the overall grade is this?’ University teaching staff are also under huge pressure, mostly due to their multiple roles which is now the norm: teaching, administration, marketing, university committees, research and publishing, commercial activities, professional activities, engagement with the community, all expected of one person. With an inhuman workload, who can find the time to support, read and mark ePortfolios? Until academic cultures change dramatically, ePortfolios will remain disruptive in the sense that they will be the awkward technology that’s out of place, clashing with the rest, and our attempt to champion them will be seen as rocking the boat. I think there is another way: teach differently and learn differently.

‘Teach differently and learn differently’ can mean change on an institutional scale or at the level of specific modules or units. However, changing the academic culture is not a matter of top-down versus bottom-up approaches. It is not either or, but both. As Norman Jackson explained (Jackson, 2006), in relation to putting creativity at the centre of higher education, it is good that there are many individual teachers doing good things and that there are pockets of good practice, but that is not enough. As he put it, ‘organisations and cultures themselves have to be changed’. And added, ‘Such changes have to be led through sympathetic, inspiring and energetic leaders’ (p. 4). As Evangeline Harris Stephanakis once said to me (at the ePic 2011), the success of ePortfolios at Boston College owes much to the full support of the Provost who constructed his own ePortfolio and shared it will all staff. But it is not just about inspirational leaders, universities with a very strong ethos offer fertile grounds where the seeds of reflection and ePortfolios can grow. As Kristin Norris at the same conference explained, Indiana University - Perdue University Indianapolis with its strong commitment to civic learning is a good example (Norris, Plater, & Buyarski, 2011). I shall only mention the importance of large scale inter-institutional projects, such as Connect to Learning in the US, which can identify what works and share the findings. Institutional change received significant attention in their report (Enyon, Gambino, & Török, 2014). In the UK JISC has played an important role, but I do not think it can change institutions.

Chapter 4. Where next?

Like others in the sector, I feel ready to move on. What I mean is not that I have given up, but that I am exploring other alternatives. Several digital tools have featured at the last ePic conferences: digital storytelling, patchwork text assessments, and now, open badges. I have been using ePortfolio technology to support patchwork text assessments.
The experience I am going to share with you is an example of what I earlier called ‘teach differently, learn differently’ at the level of a unit or module. I have taught a unit entitled ‘Critical Social Psychology’ as an option for final year students studying an undergraduate degree in Psychology. Until 2008 we had taught using traditional teaching methods: a weekly lecture and a fortnightly seminar. Our assessment methods were also traditional: a 1,000-word essay position paper and a 2,500 word essay, both had a set question. The results so far, were that the weakest students struggled with the complex literature and performed poorly or plagiarised. The team agreed that the students needed to have ownership of their learning starting with the opportunity to choose a topic of their interest (options were: aggression, personhood, relationships and emotions) and explore it using mainstream social psychology and then critical social psychology. Based on an experiential learning approach (Kolb, 1984; Boud, Cohen & Walker, 1993; Gregory, 2006), we also decided to encourage the students to draw on their prior knowledge, rather than assume they would start from scratch. Additionally, elements of inquiry-based learning were introduced in the shape of group sessions where students would generate questions themselves and then follow them up individually in two cycles of inquiry, coming together to share their progress. So, both assignments were now about the topic of their choice. While, the first assessment was now based on their prior knowledge, the second one was still an essay. I recall well that the next year the students were shocked to hear me say, at the first lecture ‘Please, do not read anything for the first assignment’. They were so used to relying entirely on external sources of knowledge and assuming they knew nothing. We explicitly invited to take stock of what they knew and to write about their experiences. However the greatest impact of the changes could be seen in relations to the second assessment. As we can see in table 1, in 2009-10 submission rates improved significantly, although the average grade dropped by two grades. In 2010 we participated in a JISC-funded action research project along with five other universities and we were able to replace the final essay with a Digitally-enhanced patchwork text assessment (PTA) (see http://dpta.wordpress.com/).

Richard Winter (2003a) defined PTAs as: “consist[ing] of a carefully structured series of short pieces of writing, carried out at regular intervals throughout the course - typically over a term or semester”. The “small-scale writing tasks are varied in style and genre”. (e.g. accounts of personal experience, critical reviews, research proposal, etc.); “each piece of writing is shared with other students” and the tutor. At the end: “students submit an overall assignment consisting of their collection of short pieces (edited and perhaps amended) together with a final retrospective commentary” (see also Winter, 2003b).

We were convinced that the requirement to write short pieces (‘patches’) would appear less daunting to the students. Also, the possibility of make changes and editing them until the final deadline would contribute to lowering the stress. The structure was as follows:

- Patch 1 (400 words): Prior knowledge and experiences associated with the chosen topic from a small range of options (emotions, aggression, personhood, relationships).
- Patch 2 (400 words): What mainstream social psychology has to say about the phenomenon (based on two key questions).
- Patch 3 (400 words): How critical social psychology would conceptualise the phenomenon (based on two new questions).
- Patch 4 (800 words): A critical review of an article presented at a seminar.
- Final commentary (500 words): A reflection on the learning journey and a position with respect to the two approaches.

The PTAs were written as blogs in PebblePad to which the tutors had access for monitoring and assessment purposes. As can be seen in table 1, although the submission rate dropped slightly, the average grade was much higher (11 = B-). And no cases of plagiarism! Interviews were carried out with 19 students after the grades had been submitted. They pointed out that the PTAs had supported their learning and, in some cases, it had felt far less stressful than the traditional assessments where there is one single final submission. Many said that the assessment represented their learning process well, as much as the final stage of their knowledge. Many said they had enjoyed this new way of learning that seemed justified in the unit. The average grade is leveled at the 9 (C), and plagiarism has disappeared all together. Unit evaluations have also been very positive year on year.

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<td>Submissions</td>
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<td>2008-9 N=43</td>
<td>34 (79%)</td>
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Table 1. Submission rates and performance for Assessment 2 over the last six years. Grades use a scale 1 (F-) – 16 (A+). DOs: Disciplinary offences (plagiarism)

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However, the best is yet to come. We have carried out research using the PTAs to document construction of knowledge and shifts in thinking. I have shown some of the results at this conference in previous years (Gaitan et al, 2012, 2013). So, I'll be brief.

We have analysed statements made in each of the patches from the 2010-11 cohort in order to identify the components of the arguments and classified them as main claims, supportive claims, examples/data, quotations and questions. We also added the notion of epistemological comments (‘epi-comments’) which included numerous statements that were not about the phenomenon, but about some aspect of the learner's knowledge of the phenomenon. The categories of main claims and epi-comments constitute extensive and complex taxonomies. One of the most interesting finding was that a third of all statements were epi-comments, about as many as main claims (see figure 1). This shows how important it is for the students to comment on the knowledge they are using. Therefore, it is possible that these types of statements help connect and make sense of their arguments.

Figure 1. Statements across the four components of the PTAs for all participants.

A further research project carried out in 2012-13 allowed us to explore trajectories of developmental change that can take place over the 12 weeks that the students work on their PTAs. As can be seen in Figure 2, while most of their first patch, and specially the second patch is devoted to making claims, the frequency to claims drops in the third and the fourth patches. The opposite happens with epi-comments, as students progress from patch 1 to the final commentary.
Among the main claims, there is a tendency for initial patches to have many more claims that attempt to define the phenomenon, then in the second patch to explain it in causal terms (typical of mainstream social psychology) and later to make claims about the phenomenon from a perspective, be it a theory or model (in patch 3). In terms of the types of epi-comments, there is an increase in statements that refer to the context of ideas in patch 3 and the final commentary. These trends can be interpreted as suggesting microdevelopmental changes that occur in the students’ personal epistemologies (Baxter Magolda, 2004; King & Kitchener, 2002; Perry, 1979). The significance of this is that it seems possible to evidence changes in the ways students think as they progress through the course. However, it is still early days.

Conclusions

I would like to argue that ePortfolios are truly a form of disruptive technology that clashes with old curricula and traditional pedagogies based on transmission of knowledge. They irritate consciousness and are met with uneasiness because they rock the boat. Of course, students, like everybody else, can find reflection awkward because it puts the focus on them, but if they can find a purpose and other conditions are right, they can derive great benefits from it. ePortfolios are too cumbersome and time-consuming for academics overloaded with administration and pressurised to produce research and fulfil multiple roles. I feel that the new technologies will succeed or fail depending on whether they can be made to fit into the existing structures without too much incongruence. In the meantime we can produce small scale applications (like the patchwork text assessments) with a good chance of success.

References


Design and implementation of ePortfolios in a Master level degree at the University of Bologna

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Introduction

In the context of rapid and profound changes linked to phenomena such as globalization, the constant development and innovation of information and communication technology, and the changes taking place in the contemporary labour market, the higher education system has also been involved, in the last decades, in a relevant transformative process. To make increasingly numerous and complex the functions assigned to university has contributed the growing heterogeneity of the student population in terms of age, socio-cultural background, expectations and motivations, learning styles, previous experience and skills.

At the European level, the response provided to the challenges posed by these complex changes and to the need of lifelong learning in a knowledge-based society was addressed by the so-called Bologna Process. Among the priorities identified in the reform of the higher education system, there was a need to shift the focus from teaching to learning by adopting a more student-centred teaching approach. This approach enhances and recognizes students' knowledge, skills and experiences gained in diverse contexts, including non-formal and informal settings, and helps them take control of their own learning process in order to respond in flexible and constructive ways to the changes and adjustments demanded by increasingly nonlinear and unpredictable life paths. Moreover, these aims are linked to the established need to express curriculums in terms of learning outcomes expected by the students, as well as the emphasis placed on quality assurance both to evaluate the effectiveness of courses and programs in terms of levels of achievement of the expected results, and to review and redesign curriculums to improve their quality (ENQA, 2014).

There was a need for devices and instruments to support active and self-directed learning by students to help them: reflect on their own learning experiences, to self-evaluate their achievements and to better outline their professional identity by planning the development of their skills in a conscious and dynamic way. This has led, in recent years, to an increased discussion of the use of the ePortfolio in higher education. In many countries, research and projects have been carried out using this tool for different purposes and in the last few years the first studies and experiences have appeared also in the context of the Italian University (eg. Giovannini & Moretti, 2010; Gui & Pozzi, 2006; Rossi, Magnoler & Giannandrea, 2008; Rossi & Giannandrea, 2006).

In light of the growing interest of implementing the ePortfolio in higher education, this paper concerns a in progress research based on a quasi-experimental design (one group design) (Cohen, Manion & Morrison, 2011) that is in turn part of a larger national research project called “Educational Achievements, Social Inclusion and Cohesion” that involves several Italian universities. Within this project, the research unit at the University of Bologna has sought explore the specific issue of the use of the ePortfolio as a tool to enhance educational success and competence recognition in view of inclusion and transitions to and from the workplace. Compared to the different aims and target considered as part of our local research project, here it is examined the ePortfolio model developed within the Master in Sciences of Adult Education and Lifelong Learning at the University of Bologna, which is currently being implemented and tested with 37 students who are attending a second level degree program to become experts in the educational and training processes addressed to adult learners. Although we planned to test some sections of the ePortfolio also with students from other degree programs both scientific and humanistic as well in contexts outside the university, the model presented in this paper concentrates on specific users, namely on students with professional projects in the educational and training sector. It is in light of that focus that the fundamental principles and choices underlying the model presented can be read and understood and are described in the following sections in a conceptual and operational perspective.

Research questions

Given the contextual factors outlined, there are two main issues underlying the present research: the first is more closely linked to the learning experience of the individual student and the second is the design of the overall curriculum.
Firstly, if the teaching environment is undergoing significant transformation and becoming more learner-centred, in which the students are at the centre of the learning process and must learn to plan, monitor and self-evaluate this process in order to become self-regulated learners, it is necessary that the teaching/learning process is consistent with the overall picture.

Secondly, the implications arising from these changes on the level of curriculum planning should be considered: given the increasing emphasis on the professional and personal development project of the students it becomes essential to investigate the quality of curriculum in relation to the expected learning outcomes and their link to the labour market demands in order to enhance graduate employability.

Two main interrelated research questions were derived from the problems outlined. Firstly, can the ePortfolio be a useful tool to guide students on their reflection of the learning process and how can it be especially useful to those students who are studying to become experts in educational and training processes? Secondly, can the ePortfolio stimulate reflection on university courses which could, in return be useful for the redesign of curriculums based on the learning outcomes expected?

Theoretical Assumptions and Basic Choices of the ePortfolio Model

It is difficult to univocally define what an ePortfolio is and what its functions, in education, are. Based on the literature and multi-country experiences it emerges as a flexible and multifunctional tool, with different meanings depending on the intended purpose and audience (Jafari & Kaufman, 2006; Zubizarreta, 2009). In general, an ePortfolio can be described as a purposeful and organized collection of artifacts selected by the author to provide evidence of their learning and acquired skills. The main advantages of the electronic version of the instrument, compared to the more traditional paper portfolio, are not only the increased ease of access, consultation and transport but the electronic version also amplifies the possibility of sharing and feedback exchange, while allowing the inclusion of multimedia artifacts. The electronic version also facilitates the expansion and the update of its contents in a dynamic and longitudinal view, and finally promotes more complex processes of reflection, connection and organization with respect to such contents (Giovannini & Moretti, 2010).

Referring to this, the double identity of the ePortfolio as process and as product seems increasingly clear. The following definition of JISC (2008) emphasizes the link between those that Barrett (2011) defines as the “two faces” of the same instrument: “An ePortfolio is the product, created by the learner, a collection of digital artifacts articulating experiences, achievements and learning. Behind any product or presentation, lie rich and complex processes of planning, synthesising, sharing, discussing, reflecting, giving, receiving and responding to feedback. “These processes ...are the focus of increasing attention, since the process of learning can be as important as the end product” (JISC 2008, p. 6).

Although this definition highlights the growing attention given to the processes involved with the construction of an ePortfolio, its application in higher education still seem to focus mainly on the product role of ePortfolio, intended as a tool for evaluation or presentation purposes (eg. Barrett, 2004). In the first case, the tool is used to assess students’ performance in relation to established goals and academic standards; in the second case, it is instead used to promote graduates’ employability and facilitate their access to the labour market. In both cases, the students are encouraged to focus on the learning products and results achieved rather than on the learning processes. Furthermore, especially if the ePortfolio is used by teachers for summative evaluation purposes, students tend to see this instrument as an additional workload to be burdened with in order to fulfil teachers’ requests, rather than as something coming from their will (eg. Chau & Cheng, 2010; Cheung et al., 2009; Gerbic et al., 2011). Referring to this, Barrett (2011) states that a major challenge today with ePortfolio in education is to promote and maintain learners’ intrinsic motivation to engage in the ePortfolio process, leading them to understand the meaning and the value it may have for their learning and development.

We believe that this challenge becomes particularly relevant in relation to the specific target group for which the ePortfolio model presented in this paper was intended. With students attending a graduate program designed to train experts in educational processes it is important to utilize the potential of ePortfolios not only as a tool to promote self-awareness and self-evaluation in relation to the skills possessed, but also as a tool to promote ongoing reflection on how these skills are gradually developed and how they can be improved. We therefore made the choice to give priority to the process instead of to the result by designing a model of ePortfolio for professional and personal development able to support students during the two years of the degree program. This model can be used for monitoring and regulating their learning processes and strategies, reflecting on their strengths.
and weaknesses and in collecting evidence that can document their progress and their acquisitions. So the students, having a more aware and articulated picture of the acquired skills in reference to the learning outcomes of the degree program, should be enabled to present themselves in the best way to potential employers. In addition, it was established at both the process and the product levels, to promote a coherent and integrated view of learning experiences, to anchor the academic formal learning to non-formal and informal ones coming from extra-academic contexts and allowing students to focus on the skills gradually acquired regardless of place and time in which they had been developed.

In order to support the learning process, a pedagogical framework was designed in line with a social constructivist and learner-centered perspective (Barrett, 2004; Brown Wright, 2011; Kember, 2009; Prosser & Trigwell, 1999), emphasizing the students’ active role in the learning process in order to make them more responsible for their own learning and their own personal, educational and professional project. For this purpose, a central role is assigned to reflection, understood in a broader sense of what is often found in the literature. As noted Mason (2011) based on his analysis of various ePortfolio systems and platforms and various ePortfolio projects carried out in higher education, reflection, while playing a fundamental role in ePortfolio’s implementation and development, is often regarded and encouraged as an activity in the past tense, having place after a learning experience (what and how I learned?). Instead, in our model we considered and promoted reflection as an ongoing activity, addressed to the present and while the work is fresh (what and how I am learning?), and as a proactive and forward-looking activity (what and how I can learn more? and where and how I can improve?).

Consistent with these assumptions, we decided to exclude any use of ePortfolios for the assessment of students’ learning outcomes. Although the international literature emphasizes that this tool can also be used for an authentic assessment (Wiggins, 1993) in contrast with a summative and traditional evaluation (eg. Chang, 2001; Butler, 2006; Smith & Tillema, 2003; Smits et al., 2005; Wade et al., 2005; Wickersham & Chambers, 2006), in no instance did we use the ePortfolio for a formative or summative evaluation of students’ achievements, aimed to obtain credits or pass exams. In our perspective, ePortfolio is designed primarily as a tool that can foster a “break” from the students’ ordinary expectations and attitudes, promoting a transition from a traditional product-centered perspective to a more process-centered one focused on awareness and control of their own learning and on the ability to independently and effectively direct and regulate it (Pellerey, 2006; Zimmerman, 2002).

Another choice underlying the discussed model was to give great importance both to the implementation of a well-structured mentoring and support system for students involved in ePortfolio development, and to the role of peer interactions, while make the process of building a shared rather than individual activity.

Finally, in connection to what was stated in the introduction about the emphasis placed on curriculum design and on quality assurance in the Bologna Process, the ePortfolio model was designed not only to support student learning and development, but also as a useful tool in monitoring the degree program and its link with learning outcomes expected. Despite having ruled out any use of ePortfolio for formal assessment purposes, we believe that it can provide teachers and decision makers with useful information to reflect on the quality of the curriculum and to improve it.

**ePortfolio articulation and structure**

Although the implementation of ePortfolio, especially in education, arises in a multiplicity of forms and structures (Cambridge, 2010; Cambridge, Cambridge & Yancey, 2009), according to Barrett and Garrett (2009) there are three distinct components of an ePortfolio system: the digital archive (repository of evidence), the tools to support different processes, and the different presentation portfolios developed for different purposes and audiences.

Compared to this general structure, the proposed ePortfolio for professional and personal development have some specificities. First, it is configured as a space rich in materials and supports: such as operational guidelines, solicitations for reflection, useful links, a pedagogical guide (focused on the pedagogical sense of ePortfolio and on the presentation of some fundamental concepts) and a technical guide. Furthermore, while starting from a single repository, it is divided into three ePortfolios closely interrelated: an ePortfolio to support the learning process, one for a personal stocktaking (with reference both to individual curricular activities and to the whole academic path) and finally one for a self-presentation to employers.
The first, aimed to scaffold students throughout the degree program, has a major role in the model, since it is designed to stimulate student reflection on their learning process in order to develop the ability of self-regulation in an increasingly effective way and to improve their cognitive and metacognitive strategies. This ePortfolio aims to promote self-monitoring and critical analysis on learning strategies and on academic learning experiences (formal learning) related to the various curricular activities (lessons, workshops, training), but also in connection to extra-academic learning experiences (non-formal and informal learning). Moreover, when we talk about learning we refer both to the curricular ones and to key competencies.

In the second, whose construction should be facilitated by the work done in relation to the first because of the strong link between the processes and the results of learning, reflection on the results achieved in relation to each curricular activity and to learning outcomes profiled by the degree program as a whole becomes a central issue, as well as planning to improve identified weaknesses. This ePortfolio directs students towards the selection of evidence of knowledge and skills acquired, thereby allowing an increasingly awareness and the responsibility of defining their professional and personal projects.

The third one, having the opportunity to draw from the reflections and statements located in other two ePortfolios, is aimed at documenting, pondering and tailoring a self-presentation for potential employers.

The link between the three different tools is then identified in the gradual consolidation of the ability of students to direct their own learning, assuming that the development of such a skill will make them better at self-evaluating the competencies they have acquired and to better present themselves to prospective employers.

The implementation of the Mahara platform has enabled students to manage the development of their ePortfolio and the choice of contents to be included and to be shared with peers with a high degree of autonomy. However, in this online learning environment, students could benefit from a pre-defined structure enabling them to better navigate the different sections.

The first section (Section A) is intended to support the learning process and contains reflective journals for each curricular activity and for key skills. It also includes questions and triggers scaffold student reflection as well as operational guidelines for editing, saving and sharing their reflective journals. In the second one (Section B) students are encouraged to self-evaluate their achievements with respect to the learning objectives of each curricular activity and on the key skills considered; it has a structure similar to that of the first section but it additionally contains a specific journal that stimulates students to make an overall mapping of knowledge and skills acquired in relation to the learning outcomes expected at the end of the degree program. The last section (Section C) allows students to organize multiple ePortfolios presentations depending on purpose and audience.

Furthermore, in our model the ePortfolio is designed not only as a means to foster the personal and professional development of the student, but also as a source of valuable feedback to the institution on the acquisition of specific skills related to the various curricular activities required by the end of the master level degree program. Regarding the role for ePortfolio in Higher Education, Roemmer-Nossek and Zwiauer (2007) refer to the usefulness of the instrument at different levels; individual and institutional, but they delimit the areas considered in the ePortfolio to those they define as “generic competencies”. By asking for reflection and self-evaluation also on specific goals of each curricular activity and on learning outcomes of the degree program, the proposed ePortfolio model can provide information and evidence that can be used by teachers to review and improve methods and contents of their courses as well as by study program directors and others concerned with curriculum development to foster curricular redesign and quality improvement processes.

**Student support and tutoring initiatives**

The creation of “structures” to guide and support students' thinking is fundamental to stimulate deeper levels of reflection and to increase their abilities of reflective thinking by including more mental activities and a broader domain of content. Starting from this we have developed and implemented a tutoring system articulated in different activities at different times, mainly according to the model proposed by Salmon (2011).

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15 The decision to use Mahara ePortfolio system was made after an experience conducted with the Sakai platform, which proved to be too complex for students (see Giovannini & Riccioni, 2011).
From the beginning it was decided to offer a wide range of tutoring initiatives to respond effectively to the various needs of students at various stages of work: regular support seminars, individual or group meetings, distance support internal to the platform (explanatory materials, reflection guidelines, exchange of feedback and discussion through forums) and remote support via external tools (technical and pedagogical guides, contact through Skype, phone and e-mail). The choice to translate the Mahara learning environment from English to Italian was made to eliminate the language interference.

According to the literature, (eg. Cheung et al., 2009; Ehiyazaryan-White, 2012) besides the technical and operational aspects related to the use of the instrument, it appears necessary to promote and clarify the concept of the ePortfolio, its various functions, the benefits it can bring to learning, development and employment, and also insisting on the importance of the reflection role within the instrument. In addition, it was taken into account the fact that technical difficulties together with the commitment of the skill development needed to produce adequate reflections on the learning process, can generate a “cognitive overload” and that the implementation of an ePortfolio can be perceived by students as an expensive process in terms of time (Naudè, 2010).

Operationally, in the first phase of the implementation process several seminars took place. On one hand they were intended to illustrate to students the aspects related to the usefulness of this work and on the other hand they aimed to provide a guide to explore this new online learning environment. In the later stages, both by face to face support as well as the distance support as mentioned above, the tutors responded to doubts and difficulties and they provided individualized feedback with respect to the work in progress of individual students.

First results and conclusion

The first findings lead us to highlight the resistance expressed with regard to the use of ePortfolio by some of the students involved, due to different factors. Data was collected by face-to-face communication during the tutoring meetings and from their initial points of view with respect to the starting use of the ePortfolio. At first students’ difficulties to self-reflective with regard to their learning process was revealed, probably due to poor habits, since in earlier education this ability was not solicited. The need to become more accustomed with the structural and technical features of this unfamiliar e-learning environment was also highlighted. Students also referred to the great deal of time required to perform the ePortfolio tasks. Finally, they seemed uncomfortable with both teacher and peer evaluations.

Until now, students show a preference for face to face support meetings (organized on a regular basis) in settings provided with appropriate technical advice. This specific condition is characterized by the students’ co-presence, elicited exchange and discussion among peers. It has led the research team to structure a peer tutoring system, alongside the one described above.

In conclusion, the first results show that although new technologies can promote the expression of students’ different learning styles, their creativity and their motivation to learn, they do not automatically lead to the innovation of educational contexts and processes. It is necessary that they be integrated in a pedagogical framework that promotes a student-centered approach.

The main findings expected at the conclusion of the research project will lead to analysis and critical reflection about the validity, usefulness and feasibility of the proposed ePortfolio model in a degree program in the field of education. The potential benefits will be highlighted not only for students but also for instructional and curriculum assessment within the program itself. In addition, it is expected that some sections of the ePortfolio model may be extended to other application contexts, such as other degree programs or agencies and services for employment and continuing education.

References


Introducing ePortfolios in Italian employment centres: an exploratory research

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Introduction

The last 50 years have been marked by profound changes in economics, geopolitics, technology, society and the environment. The world of work has faced many transformations such as: globalization, market diversification, mobility, outsourcing and technological developments. These transformations have radically and quickly changed the way people work and their lifestyles. One of the most important challenges of our times concerns people's employability. In such an uncertain and dynamic context, it seems increasingly complex to ensure acceptable levels of employment, especially in countries such as Italy, penalized in the global competition in relation to emerging markets (Bresciani and Franchi, 2006).

In education, many authors underline the need for individuals to learn lifelong; otherwise they risk being excluded from the so-called “knowledge society." Besides, in order to participate actively in the world of work, people are supposed to be well aware of their own limits and resources. To do this, they may need new pedagogical opportunities to learn key competencies, such as learning to learn and to develop self-reflexivity in a perspective of transformative learning. Internationally the interest in ePortfolio is growing for the role that it seems to play in fostering the skills needed in a knowledge-based society, addressing not just students but also workers-citizens with a lifelong learning perspective. As we discovered, ePortfolios have been used in several contexts in order to develop employability and self-awareness and to showcase the effective skills to prospective employers. Many authors assume that the constituent elements of the ePortfolio, such as reflexivity, capitalization and transferability of skills, can effectively promote employability by increasing the job seekers’ awareness about their own skills acquired in different contexts (formal, non-formal, informal) and by giving the employer more information for selection purposes.

In this paper we investigate whether ePortfolios can be applied within Italian employment centres (Centri per l’impiego), which are state-run employment agencies that deal with job seekers and serve as a link between them and employers, in order to increase users' employability and self-awareness. The perceptions and attitudes of operators, employers and recruiters are explored, in order to study in depth the hypothesis of creating an ePortfolio tailored to the employment service centres in the Bologna area, with the purpose of including the offer already present and customized for its users.

This study in progress is part of a larger research project called "Educational Achievement, Social Inclusion and Cohesion", which involves several Italian universities and in which one of the authors of this paper is the scientific director of the research unit at the University of Bologna.

Background and Conceptual framework

It is difficult to univocally define what an ePortfolio is and what its functions are (e.g. Barrett, 2011; Giovannini and Moretti, 2010; Jafari and Kaufman, 2006; Rossi and Giannandrea, 2006). In this research context we refer to the following definition: "An ePortfolio is a personal digital collection of information describing and illustrating a person's learning, career, experience and achievements. ePortfolios are privately owned and the owner has complete control over who has access to what and when" (EIfEL, 2010, 35). Therefore the ePortfolio represents the 'capital' developed by reflective learning at an individual or an organisational level and is designed to exploit/valorise their assets in a particular context. (Ravet, 2007).

In Italy the use of ePortfolios are limited to a few experiences, especially for what concerns career development and transitions from unemployment to employment (e.g. Donato and Rasello, 2011; Rossi et al., 2008). The main Italian institutions regarding employability and transitions from unemployment to employment are the so-called “employment centres.” These centres are public offices that have dealt with the Italian labour market since 1997, and offer all the services necessary to support the effective matching of demand and supply of labour. Their users are mostly unemployed and looking for a job and apart from the specific circumstances that they share these users represent an extremely heterogeneous, group with respect to nationality, culture, education, work experience,
age, sex, and socio-economic conditions. Since, as we found, ePortfolios can help to promote employability, we addressed the employment centres as they also deal with this issue.

As a part of the exploratory study, analysis of specific literature on the subject has been carried out. In addition to studies on the potentiality of career ePortfolios for job searches in the economic crisis (e.g. Herman and Kirkup, 2008; Lievens, 2014), reference was made to the specific material prepared for employers and for those who deal with orientation, selection and management of human resources (e.g. AeP, 2009) as well as empirical research carried out among employers (e.g. Boody, 2009; Brady, 2008; Brammer, 2007; Fisher et al., 2010; Leece, 2005; Moretti and Giovannini, 2011; Nodoye et al., 2012; Ward and Moser, 2008; Whitworth et al., 2011; Yu, 2012) and the effectiveness of projects in which the ePortfolio has finalized employment of disadvantaged groups (e.g. Stevens, 2008). These studies and proposals, although related to different contexts from those we considered, were analyzed because of their relevance to possible problems to be addressed and to the research methods.

The ePortfolio that we considered in our exploratory study about job seekers not only acts as a tool with which they can present themselves to the labour market but also provides an opportunity to the job-seeker to conduct a process of self-awareness and self-valorisation and to develop a prospective view of themselves as a whole. The ePortfolio consists of two main sections, the first being targeted at those looking for a job and the second section aimed at employers.

The first section for job seekers can be primarily considered as a process and development ePortfolio consisting of the five following elements: (1) I recognise myself (including both learning and awareness raising tools in order to identify one's own strengths and weaknesses, interpret key life experiences in order to recognise knowledge, skills and competences acquired and to reflect on learning processes); (2) I introduce myself (personal information, education, certifications/publications, work experiences, knowledge-skills-competences and evidence); (3) I network (the professional and personal network of the working environment which allows job seekers to identify existing sources of support and those groups of which membership is beneficial); (4) I imagine (the job seeker has to imagine him/herself in five years time and describe what he / she would like to achieve in professional or personal terms); (5) I plan (on the basis of the previous elements the job seeker can design a continuous development plan).

The second section aimed at the labour market is a “presentation ePortfolio” consisting of five elements: (1) Who I am; (2) My educational and training path; (3) My working path (by describing each single experience and the related knowledge/skills and competences acquired); (4) My personal path (interests, hobbies and related competences); (5) My professional competences and life skills (this part will be derived from what has been included in the previous elements.)

**Purpose of the Study**

This research is a pre-experimental study that aims to explore the validity of our proposal for ePortfolios in employment centres. The hypothesis of our research was that the constituent elements of the ePortfolio, such as reflexivity, capitalization and transferability of skills, can effectively encourage the matching between demand and supply of labor, on the one hand promoting in the candidates awareness their skills, acquired in different contexts (formal, non-formal, informal), on the other hand ensuring the employer more completeness of information for the recruitment.

This study seeks to answer to the following research questions:

- What are the tools currently used in the employment centres? Does the information available through these tools overlap with ePortfolios? Can employment centres promote the encounter between demand and supply of labour?
- Have the participants that we interviewed (operators of the employment centres, recruiters and employers) had the opportunity to learn about ePortfolios?
- What information is required by recruiters and employers during the job interview? Are methods used today satisfactory?
- In according to the model that we proposed to them during the interview, what are their attitudes about ePortfolios? How should an ePortfolio be used when looking for a job? For the recruiters and employers, what are the pros and cons of using ePortfolios. What should an employment ePortfolio include? At what point in the recruitment process would they use the ePortfolio? What would the design and content of their ideal ePortfolio be?
Method

In accordance to the approach of this exploratory study, we tried to answer these questions in order to make decisions about further research developments.

The first step of our research was to conduct an investigation about local employment centres’ offers to job seekers in terms of actions, tools and resources. We proceeded on the one hand to analyze the tools and procedures already being used in the employment centres, and on the other to collect the views of the operators of such centres about their concerns of the possibility of adding other instruments such as the ePortfolio. In relation to the latter, we have tried to investigate, through semi-structured interviews, the degree of knowledge of the ePortfolio and the potential advantages and disadvantages of this tool.

Information on tools currently used in the employment centres were collected by analyzing the procedures of seven employment centres in the Province of Bologna. The views of the operators of such centres were detected by semi-structured interviews face to face with seven operators of the employment centres studied who gave their availability to the interview.

A further step of the research consisted of semi-structured interviews to the stakeholders (recruiters and employers), in order to gather information about their views on the most important skills of potential workers, on their perspectives on using an ePortfolio for recruitment purposes, and on their opinions about it.

The selection criteria were based on heterogeneity workplaces, having the task of new staff recruitment, and on the availability for the interview.

Principle Findings

Research showed that the tools used by the employment centres are: a guidance interview, a shared database for all users containing the main information about them (the same as a traditional CV), materials with information about the world of work and the news, special forms with indication of the socio-economic data, personal circumstances, and the motivations of users (only for people with peculiar troubles), in order to direct each user to the proper specialized service.

The services of the employment centre users are divided up between basic services, meant for all (welcome and first information, administrative procedures, informative materials, guidance interview, recruitment, internships) and specialized services, aimed at specific target-users (training, laboratories, tutoring/accompaniment for employment).

According to the views of the operators detected by exploratory interviews, the main problems of the employment services are inadequacy of the infrastructure, diminishing resources in the face of a growing need of users, organizational hitches represented by the coexistence of multiple contractors alongside the operators of the Province, the normal difficulties arising from having to deal with users in crisis situation (with risks of stress and burnout), lack of consideration of the employment centres by the society and little institutional enhancement. Another emerging problem is the fact that the employment centres result poor as an intermediary (as a natural consequence of the Biagi law which introduced into the market other subjects, such as private employment agencies): only 4.3% of users find a job through them. Another criticism is surely represented by the lack of knowledge of users about the labour market. If employability, as we found, lies in the encounter between the individual, with his/her knowledge and skills, and the world of work, clearly the lack of knowledge of both aspects does not contribute to increasing people’s chances in finding a job. The findings also suggest that users are scarcely aware of their skills and have little entrepreneurial spirit. Nevertheless the tools currently used, characterized by asymmetry between user and operator; do not contribute to the increased proactivity among users.

Without claiming to give an exhaustive answer to problems so complex and deep-rooted, we explored the hypothesis that the introduction of the ePortfolio in employment centres can help improve some of the problems described.

As anticipated, we asked seven operators, all working in different employment centres, to talk about their perceptions on the services offered by the employment centres and, after a short presentation of the ePortfolio, to give opinions and advice on it.

About the first issue, all the operators agreed to assign little relevance to the employment centres in promoting the encounter between supply and demand, due to different reasons. There is a lack of
contact with local companies and, according to operators, the employment centres give only "guidance" functions to users. They are generally satisfied with the tools used, even if the lack of contact with the companies makes them less effective. Some operators though underlined that the most important thing, putting aside the tools, is the relationship between the operator and the user and the way the operators propose the tools to the users.

Questioned about the possibility of introducing new tools, most operators resulted as pessimistic, because of institutional uncertainty, lack of funds, and the complexity of the public system.

Except for one, none of the operators had heard of ePortfolios. After a short presentation of the ePortfolio, we asked them what they thought about its potentialities as a tool for employment centres. Two operators thought that the ePortfolio would not be a proper tool for employment centres, because it was too difficult to fill in, even for the operators, and that the companies (most of which are small companies, some in mountain areas) wouldn’t use it as a hiring tool. Two operators thought that it would depend on the skills of the users and on the size of the company: it would suit young users better than older unschooled users or foreigners, and it would suit big corporations better than small ones.

Finally, two operators were optimistic about the use of ePortfolios in the employment centres, because it is a tool that helps to demonstrate to employers what candidates really can do and it helps them to distinguish themselves from other candidates. About the tool itself, they suggested to implement it both in a simple and more complex way, and one operator suggested to add some attitude test, such as the "big five" test.

The operators have mostly expressed concerns about the difficulties of introducing the tool with reference to the Italian context (such as the lack of relevance of the centres in facilitating the matching of demand and supply of labour, the difficulty of proposing new tools because of lack of funding, and technical issues experienced by lower-skilled users). However, putting aside the contextual factors, even the critics have spoken positively about the potential of the ePortfolio, in encouraging motivation, self-awareness and employability.

As mentioned before, another step of the research was contemplated in semi-structured interviews with the stakeholders (recruiters and employers), in order to gather information about their perspectives on using an ePortfolio for recruitment purposes, and on their opinions on it. We also asked questions about those competencies that they felt as being most important for the workers, as well as asking whether candidates generally lack of some specific abilities, or not.

Based on interviews with nine recruiters and employers, which as we said operate in heterogeneous workplaces, quite similar opinions emerged. First they all gave much importance to key competencies as, they claimed, are contrary to the technical skills as they are not easily acquired in a short time.

None of the nine respondents had heard of the ePortfolio previously. On the other hand, in Italy there are very few experiences of its use. After an explanation and examples were given to them, all of the nine respondents underlined the advantages of the information contained in the traditional curriculum vitae part of the ePortfolio (for them being indispensable), as well as making it possible to highlight the practical and effective skills, soft skills and other aspects hardly brought to light during the interview or other instruments.

All nine respondents would use the ePortfolio as a tool for recruitment, although two of them would use it not for all profiles. The majority of respondents also said that the instrument would qualify as a direct submission by the candidate through links, if the ePortfolio was placed in a platform-database and provided that it was updated. Most of them would consult it after a first based-on-CV screening and before the selection interview itself. One employer would suggest using it during the interview, accompanied by an explanation of the candidate.

Respondents found the added value of ePortfolio similar to other tools such as Facebook, Linkedin and Almalaurea. However they agreed that actually the ePortfolio seemed to have something more or different than other systems cited. One extra "added values" was given as: the greater ease of obtaining access to all the information in one place: the presence of evidence, the presence of past employment information as well as extra-work activities. Another value is that the ePortfolio has within it many functions such as the collection of elements and networking, whereas other tools have only one. The final added value is the effort of the person who has compiled it. Their wishes on the tool mostly concerned ease of use, exportability, completeness and possibility to choose the information actually needed for recruitment purposes.
Conclusion

The proposal of the introduction of ePortfolios in the local employment centres, even though still in its first stages, has already raised the institutions’ attention and could be a first step towards the target of providing such tools for every citizen.

Next steps of our research would contemplate:

- further development of the ePortfolio model;
- further interviews to the stakeholders in order to obtain a more complete picture of the context;
- the implication of institutional representatives;
- an exploration of the possibility of introducing an ePortfolio in other environments, such as Italian vocational training centres (Centri di formazione professionale).

References


The Open Badge Passport as the ePortfolio of Open Badges to Reflect on Learning

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Abstract

The current paper explores the possibilities of Open Badges and the Open Badge Passport implemented as eportfolio in the context of non-formal courses in ICT for senior learners. Data obtained through the Open Badge Factory platform shows a relevant activity by students. Also, students were asked to express their opinions about the experience by means of a survey, and results highlight positive perceptions about the possibilities of Open Badges and the Open Badge Passport to represent learning. Conclusions suggest some ideas for further implementations and research based on the hypothesis that the combination of both might become a powerful tool in the enhancement of learning in a wide range of educational contexts.

Keywords: Open Badges, Open Badge Passport, eportfolio, reflection, senior learning

Introduction

In today's society it is already acknowledged that learning is no longer confined to formal learning nor an isolated experience. Learning extends across multiple contexts and experiences, and represents a social, informal, creative, participatory and lifelong concept (Mozilla Foundation, 2012). In the same way, the learning environment is not only the classroom, but many other spaces that are distributed and spanning both time and space, in informal and non-traditional environments (Meriläinen, 2015). Similarly, there are also new important skills which fulfil basic needs to become active participants in modern society. In this context, learners are "active participants and producers in an interest-driven and lifelong learning process" (Mozilla Foundation, 2012). However, much of this learning is ignored in current accreditation systems and formal education. Open Badges -from now on OB- can make skills and alternative learning, which are not commonly recognized in formal education, more viable and visible for both students and observers, by acting as a bridge between informal and formal learning and serving as a more complete narrative of one’s personal identity (Finkelstein, Knight & Manning, 2013). In this sense, the experiment presented here focuses on the use of OB to recognize ICT skills acquired by senior students and connects especially with the importance for this kind of students to become active participants in our modern and connected society.

Background

Nowadays OB are being implemented in a wide range of contexts (Walker, Lee & Lonn, 2015) with varied impact on learning and motivation Abramovich, Schunn & Higashi, 2013), which have to be carefully designed in order to avoid the possible negative effects already observed in previous research (Abramovich, Schunn & Higashi, 2013; Ravet, 2015a). If a badge is "a symbol or indicator of an accomplishment", a digital badge is "an online record of achievement" (Mozilla Foundation, 2012). Graphically, they are usually represented by an icon, and technically offer "stored metadata, such as the issuer, description and evaluation criteria for learning" (Gamrat et al. 2014). Also, it is remarkable to say that OB have been defined as "online representations of learning experiences and activities that tell a story about the learner's education and skills" (Gamrat et al., 2014), a description that focuses on the possibilities of badging for reflection on the story of one’s own learning.

The usages of OB have been typified by Ahn, Pellicone and Butler (2014), who distinguish the following perspectives: as a motivator for behaviour, as a pedagogical tool and as a signal or credential. In the first group of activities, OB are mainly integrated in contexts of gamification to act as a motivator, and also as achievement rewards (Ponti, 2015). In the second category, badges are used for scaffolding within learning processes, in which OB can play a key role in feedback together with the role of mentorship by teachers and peers. Thirdly, OB have been used as alternative credentialing such as diplomas from educational institutions. The value of OB as micro-credentialing has been questioned by Ravet (2015b) with the comparison of micro-loans as the fallacy of empowerment due to their individuality and the current usage in the "(power) system", among other issues.

Displaying OB in social networks, web sites and e-portfolios is an added value of OB, since it is a way to show what one can do and so is a way of sharing one’s own identity and reputation (Gibson et al.,
2015). It has also been argued that OB can facilitate and improve the construction of “rich, trustworthy e-portfolios” (Ravet, 2015c).

OB have been the object of increasing interest due to the possibilities they offer to recognise learning and motivate students (Glover, 2013; Jovanovic & Devedzic, 2015). Therefore, by exploring beyond these topics, and focusing on the pedagogical perspective, this study is the initial step in research based on Open Badges in the enhancement of reflection over learning (Charleer, Klerkx, Santos & Duval, 2013). Finally, the integration of a very innovative platform in this study, the Open Badge Passport -from now on, OBP-, with an e-portfolio-based approach, enhances this perspective of reflection on learning.

The Study

Context

At the University of the Balearic Islands, in the off-campus centre in Ibiza, eportfolio work has been carried out for some considerable time. Thus, student teachers have been documenting their learning through their Teacher Education programme since the 2009-10 academic year (Tur & Urbina, 2013; 2014). The Open Badge Passport represents a step forward in this line of eportfolio research.

The current study reports the use of Open Badges and Open Badge Passport in an ICT course for senior learners at the University of the Balearic Islands in the Ibiza off-campus centre. The participants are 15 senior students between 60 and 75 years of age with a basic level in the use of Internet and social media. The Open Badges are issued and stored in the Open Badge Passport, both from the Open Badge Factory.

The activity

The course design is based on the Personal Learning Environment concept defined in three main areas of activity: accessing information, creating one’s own knowledge and sharing content (Castañeda & Adell, 2013). The design of the badges is based on a considerable granularity since each badge represents a very concrete skill or limited content. Thus, the course was aimed at initiating senior students in the use of social media for learning, communicating and eventually, for the construction of their identity.

Open Badge design

There were three main milestone OB, integrating diverse skills. So, the milestone OB called Treasure Hunter integrates three skills in relation to accessing information: accessing newspapers and news sites; user-generated content such as blogs; and reference sites. The Treasure Creator englobes together badges representing skills in relation to the digital creation of artefacts: blogs, photos, videos and collaborative objects. The Treasure Sharer milestone OB represents the ability to communicate through email, networking and microblogging sites. The three milestone badges are necessary in order to obtain the super milestone one, which represents the main aim of the course, which is to become the Digital Senior.

Figure 1. Open Badges in the ICT course for senior learners
Additionally, there are some other OB originally designed to represent attitudinal aspects demonstrated by the senior students. However, since the group showed an impressive positive attitude towards the development of their digital skills, these badges were not given the initial role for which they were intended. The milestone OB were designed to be issued once students had gained two of the related OB. However, half-way through the course, due to the difficulties observed in the creation tasks, the Treasure Creator OB was given after the successful collaborative activity based on a digital canvas.

**Methodology**

The research has two main objectives. The first is to collect information about real usage by senior learners of their OB and OBP as well as about the operation of the services used. The second aim is to explore students perceptions on the role of OB and the OBP to represent learning and enhance reflection. In order to achieve these research aims, a mixed approach has been designed. Thus, quantitative data is presented about the system usage and participant opinion, which is explored through a Likert scale with five possible answers, being 1 fully disagree and 5 fully agree.

Students who were able to initiate their Open Badge Passport were asked to answer a very short questionnaire on their experience although only 11 students answered it. The questionnaire is divided into two main sections, one about Open Badges and the other about the Open Badge Passport, with 9 and 8 questions respectively. It is based on a previous questionnaire about sense of ownership, control and impact on learning initially designed by Buchem (2012) and later revised by Buchem, Tur and Höltterhof (2014a; 2014b). After the revision process by experts some other questions were added in order to focus on specific challenges about OB.

**Data**

**Badge usage**

The Open Badge Factory platform offers data on diverse aspects of the creation and delivering of OB. Some data has been selected to show students’ engagement in the activity.

In figure 2 it can be seen that most OB were delivered - and the ones that were not was mainly because of design problems, so it was nothing to do with students resistance. The 14 badges created were issued in 35 events, which means that were delivered in different moments, when students had achieved the diverse skills, respecting their learning rhythm. The total number of earners is very high in relation to the actual number of students in the group, what is evidence of a considerable activity of issuing badges. Figure 3 is the list of most accepted OB. As can be seen, the two most accepted were accepted more than once, something which might be construed as a sign of initial confusion, since the badges were designed to represent the achievement of a short and specific skill, and therefore to be delivered and received only once during the course. However, the other eight OB were accepted once by the vast majority of the group (in all the cases between 12 and 15 students).
Figure 4 confirms that all OB have been stored in students’ OBP. The Open Badge Factory facilitates information such as the date of the issuing event, the expiration time of the OB if contemplated and the issuer.

![Figure 4. Data of all OB issued. Open Badge Factory](image)

The following figure (figure 5) represents data of a single OB. As can be observed, in this case, it was only issued once, after the activity was carried out by students with a great deal of success in two sessions, and all of them except for one, received and stored their OB in their Passport.

![Figure 5. Data of a single OB. Open Badge Factory](image)

Participants’ perceptions

In this section we present the results of six questions in relation to feelings, ownership and reflection. The questions have been put together to be able to compare perceptions towards both elements. Thus, with this aim we have selected the three questions that were similarly repeated in both sections.

I am proud of my Open Badges / Open Badge Passport

As can be seen in graphic 1, the vast majority of students feel both proud of their OB and OPB with the slight difference that in the case of the OBP there is a extremely reduced part of the group that neither agrees or disagrees.
I feel that it is mine
The presence of neither “in agreement” nor “in disagreement” increases in the sense of ownership and also disagreement appears as can be seen in graphic 2. However, it is obvious that the greater part of the group agrees or fully agrees in the case of OB (85%) and the OBP (62%).

They reflect what I have learned
These two questions offer the same result as the previous one, so there is a very low rate of disagreement and neutral answers (graphic 3). What is remarkable here is that although students are mostly positive about OB (92%) and the OBP (69%) as in previous questions, it is the only occasion on which the OBP achieves higher rankings of full agreement.
Discussion and Conclusions

According to the work carried out by students and the satisfaction expressed by senior participants, the ICT course has been a great success. Likewise, the usage of the Open Badges and Open Badge Passport can also be considered as successful since students demonstrated their understanding of its aim and achieved positive conclusions towards their possibilities for learning. As data allows us to observe, the fact that all OB were mainly stored on students’ OBP is in itself evidence of the success of this pilot implementation. Thus, in this case, there was no need to “spray and pray” (Ravet, 2015d) as seems to happen in most OB issued. Furthermore, the fact that the attitudinal OB were not issued once they were recognised as being unsuitable for the students’ highly motivated and committed profile is in line with the hypothesis suggested that OB can also have negative impact (Abramovich, Schunn & Higashi, 2013).

A general overview of students’ answers allows us to observe the very positive initial impression they received from the experience of constructing their passport. In all six questions the vast majority of the group is in agreement with the question. However, there are two slight differences that can be pointed out about the OPB because some interesting hypothesis can be suggested. First of all, it is noticeable that the OBP receives more neutral answers than the OB alone, especially in the case of ownership. This is extremely curious because, had some qualitative data been collected rigorously, some incoherence by students might have arisen. Thus, some students, when exchanging impressions in class settings, highlighted that the OPB was more theirs than the single OB because it contained their names. Based on this hypothesis, it would be very interesting to explore in greater depth students perceptions on ownership in further research. Furthermore, the fact that the slight disagreement emerging from this selection of data is in relation to the sense of ownership also recommends further implementation and exploration since the concept may be to abstract to be grasped in a first contact. Secondly, it is also remarkable that the OBP receives more answers in full agreement in the question about reflection, which is coherent with the pedagogical perspective and main aim of this project; enhancing reflection. Thus, based on these results, it can be argued that since the OBP as an eportfolio of OB reflects the learning story of the student, it may also enhance and promote reflection on learning. Obviously, more research is needed in order to be able to confirm this hypothesis with more relevant data and definitive conclusions.

The Open Badge Passport by the Open Badge Factory has a simple and clear interface design, with which senior learners have become rapidly familiar. So, the very user-friendly system is highly recommended for any person regardless of the context, digital skills or age. For example, it might be understood that both OB and OBP may be suitable only in the context of digital courses or only for students with digital skills. The fact that these students had initial digital skills seems to point out that both OB and OPB can be used in a wide range of contexts.

The integration of the OB and OBP in the course design has been based on the aim of enhancing reflection on learning, assessment as well as the creation of one’s own identity by displaying achieved skills (Gibson et al, 2015). The main potential of this conception is going beyond the usage in gamification or credentialing and focusing on the pedagogical perspective (Ahn, Pellicone & Butler, 2014). In this context, OB and OBP have been thought to go beyond awards and become true drivers for reflection on learning. Students have received their OB and stored in their OBP, which has worked in a similar way to process of learning documentation in eportfolios. Students commented among themselves why some were receiving one OB and others were receiving different OB. This activity of reflecting and telling the story of each received OB is the initial step of a deeper critical thinking skill such as reflection. The visualization of the OB was a powerful activity of reflection and the fact that this occurred in face-to-face sessions fostered the social side of OB.

The limitations of the study derive from the brief experience and the reduced number of participants. The ICT course was a pilot design in the context of our Open Senior University, so future work will be aimed at fostering its potential and overcoming its drawbacks. Thus, the reflective activity has been carried out in an introductory level in which visualization and social interaction have been the main task. However, the most important limitation of the OB experience in the course is mainly the design based on the conception of students as earners. Since it was an initial experience in which the course content and the OB activity were explored for the very first time, the design was based on the most simple activity of teacher as designer and issuer and learner as earner instead of giving all the participants the opportunity to become a badge “issuer, earner and consumer” (Ravet, 2015d). Thus,
future implementations should explore the possibilities of co-designing and co-issuing between teachers and students and self-design and self-issuing. Nonetheless, since senior learners, as adult learners, are supposed to have developed high level skills for critical thinking and self-regulation, it seems one of the best contexts in which to pilot a further step based on collaborative design and delivering of OB, which also will mean an improvement of the social characteristic of OB. Finally, this is the beginning of research related to OB and OBP during this course so the work needs to be continued in order to achieve a complete overview of the experience and students perceptions based on the qualitative and quantitative data obtained. Also, further research is needed in order to gain an insight into their possibilities for learning and reflection in greater depth, exploring beyond perceptions and focusing on impact indicators.

References


SoftLearn: A tool to support the ePortfolios assessment

Adriana Gewerc Barujel, Ana Rodríguez Groba, Univesity of Santiago de Compostela, Spain

Background

Assessment is one of the main topics in the Higher Education. The future directions and careers depend on it (Boud & Falchikov, 2007). But in general, the focus has been on accrediting the result of the learning activities (summative assessment), obviating the analysis of what happened through the process (formative assessment) (Pachler, Daly, Mor, & Mellar, 2010).

However, in online or blended learning, it is recommended to use qualitative formative assessment, student-centered (Broadfoot, Timmis, Payton, Oldfield, & Sutherland, 2013). One of the most recognized tools for this type of assessment is ePortfolio, which records students’ learning evidences and represents an advance in relation to conventional assessment systems (Lopez-Fernández & Rodríguez Illera, 2009).

Since 2006, in the Faculty of Education at the University of Santiago have been using ELGG open source platform as a tool to build student’s ePortfolio. There, each student makes a personal quest to show the meaning they have given to the concepts addressed in class with reflections about them. The set of these elements make up one’s personal environment and it is evaluated by the teacher.

The ePortfolio goes beyond a mark; it is a collection of objects that can be shown as evidence of the learning process and the students ‘achievements (Attywell, 2007). Furthermore through the data and its analysis, it is possible to track both individual and collective progress, in order to provide an immediate feedback and review (Broadfoot et al., 2013).

Problem

Eportfolio assessment has a lot of advantages but the main difficulty to start this type of formative evaluation is the time required by teachers (Hsu, Chou, & Chang, 2011). Especially at universities with a large number of students (Strudler & Wetzel, 2008; Lopez-Fernández & Rodríguez-Illera, 2009). It is very difficult to review all the students’ publications and, then, provide to each one the adequate feedback (Hsu, Chou, & Chang, 2011). It combines formative and summative assessments, requiring a detailed reading of the set of evidence presented by the students, and may be this is one of the causes of the limited use of portfolios in formal education. As pointed out in McDonald, Boud, Francis, & Gonczi (1995), one of the negative consequences of learning assessment is that only is assessed what is easy to assess.

Aims and Methodology

In this paper we present a study about a tool (SoftLearn) designed to support the formative assessment process in online context. SoftLearn improves and solves some of the problems that teachers find when use ePortfolios (hidden processes, lack of time, difficulties to access data, etc). The tool is based on learning analytics algorithm which allows measurement, collection, analysis and presentation of data about the students and their contexts.

This study aims to analyze (i) the efficiency of SoftLearn in the evaluation process in terms of time, and (ii) its effectiveness considering that the assessments’ requirements are met with high quality levels.

We test this tool in the Educational Technology subject of the bachelor’s degree in Pedagogy at the Faculty of Education of the University of Santiago de Compostela. The ELGG platform is an environment that integrates the creation of an individual space in a social network where they can exchange their views and opinions. Every year about 75 portfolios are constructed and evaluated. We have followed both a quantitative and qualitative analysis. The quantitative analysis was designed to compare the time invested by the teachers in the students’ assessment with ELGG and SoftLearn. During this evaluation process, we measured the time undertaken since the beginning of the evaluation until the submission of the final score of each student.

After this, we have conducted the qualitative analysis based on semi-structured interview to both teachers to better understand their experience using SoftLearn. These interviews take into account the
five criteria for adopting innovations defined by Rogers (1995): relative advantage, compatibility, complexity, triability and observability.

**Results**

The study shows high improvement using SoftLearn. In total, there is a shortening of time about 53% instead of utilizing ELGG in the evaluation of the students.

The semi-structured interviews show that SoftLearn introduces new advantages not covered previously. It provides all the valuable information of the students’ assessment in a single and holistic view; it gives information not contemplated without the tool (the learning path), etc.

**Conclusions**

The data provided by SoftLearn allows the teacher to know the evolution of the learners in the subject, their continuity in the process, and the difficulties they are facing. They can readjust and design new strategies to support students with difficulties, identifying hinge points in the learning process (Pachler, Daly, Mor, & Mellar, 2010).

The construction and experimentation of this tool, which was designed to support teachers in the tracking and assessment with ePortfolios, highlights the need of this kind of resources.

**References**


Life-long "Earnings" - Closing the skill-gap with Open Badges and ePortfolio

Simone Ravaioli, CINECA

The mission of CINECA, a not-for-profit Interuniversity Consortium made up of 70 Italian Universities, the MIUR (Italian Ministry of Education, Universities and Research) and other research institutes, is innovation at the service of the Italian education system, and, therefore, the design and offer of technological tools that can contribute to solving problems, as they are identified in the education system and in its relationship with the country system.

Regarding this topic, the problem of the skills gap\textsuperscript{16} is already known, i.e. the distance or misalignment between the skills required by the production world and the skills provided to the youth by the entire education system.

Over the last few years, this problem has intensified due to two main factors:

1. the persistent economic crisis (which began in 2008) that has led to the destruction of large sectors in the production world

2. the constant and continuous acceleration of scientific and technological progress that gives rise – at an ever-increasing rate – to new requirements in terms of knowledge and skills in all sectors.

To give support to the education system and the production system that have to tackle this problem, CINECA proposes the Open Badges\textsuperscript{17} and a platform that will be created ad hoc in order to turn these objects into a meeting point among lifelong learners who are longing for hints and indications for their own professional growth, the companies that are looking for collaborators with specific and dynamic skills, and education providers (schools, university, education institutions) that can provide such skills with valuable paths.

A badge is a symbol or indicator of an achievement accomplished, a skill, quality or interest\textsuperscript{18}. An Open Badge gives value to this procedure by associating several metadata to the image: the person holding the badge, the badge issuer, a description of the skill and the mode in which it can be verified, and other information that is relevant from time to time. All these data are foreseen by an open and safe format defined by the Mozilla Foundation, a standard shared by the international community, supported by different platforms and already used for the certification of skills at all levels: schools use it both in everyday curricula and in order to give value to extracurricular activities; at levels closer to professions, with badges it is possible to identify and certify all the skills developed by individuals inside and outside learning paths, giving them value and making them spendable in the work market.

Therefore, the Bestr project (from Best-er, “that makes someone better”) foresees the construction of a platform that is able to give Open Badges to the individuals who deserve them, and which also enables all learners to:

- integrate, organise and share their own Heritage of Skills in the form of open-badges
- acquire the Digital Contents (publications, courses, certifications) that are necessary to expand their own Heritage of Skills
- minimise the gap between the skills required by the work market and their own certified skills

User companies and other issuers will be able to:

- define and publish their own skill profiles in the form of open-badges referring to all the international standards available for each specific area (for example, the eCF standard for ICT professions)
- carry out searches of individuals who have certain certified skills or professional profiles

Learning & assessment providers will have the opportunity to:

- publish their own courses and teaching materials to support the learning path that is useful to achieve the requested skills

\textsuperscript{16}http://www.mckinsey.com/client_service/public_sector/mckinsey_center_for_government/education_to_employment

\textsuperscript{17}http://openbadges.org/

\textsuperscript{18}http://www.badgealliance.org/whv-badges/
• publish their own certification paths, also in the form of Proctored, Computer-Based tests, which are necessary for the certification of the skills acquired by means of learning and individual experience.

The Bestr platform essentially intends both to digitise the credential for skills that individuals often have, but which are not valued because they have been achieved in formal or non-formal contexts, and to make such skills visible. At the same time, the platform motivates learners to increase their skills by means of learning or certification paths, which can make their own profiles more appealing in the work market.

In this virtuous loop, companies are also encouraged to make their own needs explicit by endorsing badges that meet such needs. It is through this dynamic interaction of learners and employers that Bestr identifies the possible solution to reduce the skill gap.
Digitally empowering learners’ employability

Simon Whittemore, Jisc, Scott Wilson, Cetis LLP, Shri Footring, Jisc, Simon Grant, Cetis LLP

Introduction

Our vision for this service has been shaped by three contextual factors: the current pressures on universities, colleges, learners and graduates around employability; recent findings from the CBI and others such as McKinsey that make abundantly clear the Europe-wide education to employment gap; and the national economic and social imperative for sustainable improvement in employment prospects.

A survey by CBI (2014) found that employers value attitudes and aptitudes above all in school and college leavers. Indeed attitudes, (as in character) were valued the highest, with qualifications considered half as important. Attitudes and aptitudes also emerged as vital when employers were asked about the most important factors considered when recruiting graduates.

In the same CBI report, a quarter of employers surveyed stated that they were dissatisfied with graduates’ problem-solving skills and the same proportion dissatisfied with their communication skills. More than half of employers were dissatisfied with graduates’ business and customer awareness and a similar proportion with their foreign language skills. There were also notable deficits of satisfaction in graduates’ relevant work experience, intercultural awareness and self-management/resilience.

In their Report ‘Education to employment: Getting Europe’s youth into work’ (McKinsey and Company 2014; P.45 of Report, Exhibit 22) McKinsey found that, across Europe, the deficit between skills needed and competencies apparent in entry-level employees was by and large greater for soft skills than for hard skills.

The recurring theme is that soft skills are critical for employability and vital to the economy

Discussion

A three-layer model for employability skills

Reflecting on all this, and wider context, led us to conclude that, broadly, there are three broad categories of skills and behaviours that can be identified:

Level 1 Qualities: character attitudes such as determination, empathy, resilience, versatility;

- Level 2 Capabilities: soft skills or aptitudes such as problem solving, communication skills, customer awareness;
- Level 3 Expertise: domain specific (or sub-domain) skills such as IT expertise, accountancy, illustration etc.

While Level 2 and 3 skills remain important, it is apparent that there is an acute need for the Level 1 qualities. Yet these are not currently reflected in any meaningful way in the education to employment system. Qualities can develop from a wide range of experiences outside of formal education and training, and the evidence that supports them is likewise varied and difficult to formalise.

For the most part employers tend to focus only on the high-level descriptions of these qualities and capabilities in recruitment, but for practical purposes, we need to break down these qualities further into specific identifiable skills that individuals can develop and evidence. For example, “Empathy” as a quality is difficult to self-assess. However, we can break it down as follows:
In this way, qualities that seem vague and hard to understand in aggregate can become more tangible as behaviours that can be developed through activity and evidenced in employability statements (e.g. following the STAR model of situation, task, action, result). Initial testing with students is showing this to be a promising approach.

Open Badges

Open badges have great potential so they are part of the answer, but we are adopting a hybrid approach, building an online platform that we envisage will enable:

- Employer consortia to publish and define open badges, and badge classes, which will specify and group the requisite soft skills and qualities in a form that suits their needs;
- Learners and graduates to claim, using third-party attested examples, that they have demonstrated particular soft skills and qualities in their non-formal learning and experience.
- Learners could also potentially self-assert that they qualify for a badge, and employer consortia could endorse this assertion. Evidence will need to be in a consistent and very concise format, accessible to, and co-designed with employers.

The “standard model” of open badges relies on the badge provider being responsible for defining the badge class, and then issuing badge instances to individuals. This issuer-centric model mirrors both education and training and voluntary organisations.

However, the problem with this model is that the definition of the badge, and the process of earning a badge, are then bound up with the organisation providing the training and education; however, when it comes to employability, differences between the concerns of providers of education and employers are a key part of the problem.

For employability, we therefore need to model a more complex relationship, where the badge class is defined by the employers (as the key customers of such credentials), the badge instances are for the most part self-asserted by individuals, and the key evidence supporting those assertions comes from a wide range of parties, including education and training, voluntary organisations, peers, and independent assessment centres.
**Endorsement, evidence and testimonials**

The concept of *endorsement* in an employability context can mean several things:

1. The endorsement by employers - or consortia of employers - of a *badge class* as reflecting a quality, capability or skill that they recognise and value.
2. The endorsement by an employer of a trainer, educator or other activity provider as being a trustworthy provider of endorsement of *badge instances*.
3. The endorsement by learners of their peers as being worthy of a *badge instance*.
4. We also need to consider the degree of commitment in endorsement; a written testimonial for an individual implies a greater level of commitment to endorsement than clicking a “+1” button. Likewise, a statement by an employer about how they value a quality carries more gravitas as an endorsement of a badge class than a logo on a webpage.

Taken together, endorsements form a web of trust for credentials; this is important in employability as we cannot rely on the accreditation and quality management systems of formal education when evaluating the value of a badge.

This emerging model challenges issuer-centric models of Open Badges, and makes clear the need for an Open Badge Infrastructure to support mechanisms for the endorsement of badge instances, and the co-design and co-ownership of badge classes by consortia; this is an area where we need to find agreement with others in the Open Badges community.

**Implementation approach**

Jisc is working with CINECA and a range of partners and stakeholders to pilot an innovative new service based on Open Badges to bridge the education to employment gap, focusing on soft skills and character attitudes rather than domain-specific competences.

The key features of this are:

- It values the soft skills and qualities used by learners in part-time jobs, voluntary work, placements, secondments and other non-formal settings – experience that generally is currently not captured by institutions;
- Endorsement of a badge is not dependent on a institutionally-validated accreditation process but on recognition and digitally moderated negotiation between learner and employer;
- The service is designed to increase employability and soft skills valuation rather than match candidates with opportunities, though the process may lead to opportunities;
- Badge classes will be created and defined by employer consortia rather than individual employers.

We are currently collaborating with our Italian development partners CINECA, our service design partners Live:Work, student representative groups and employer consortia, as well as expert consultants and key stakeholders to design the service, with an initial pilot in Autumn 2015.

**Conclusion**

Employability is a complex problem involving a wide range of stakeholders, however we believe that focussing on badges for qualities and capabilities rather than domain-specific skills offers an opportunity to make an effective intervention. Likewise involving employers and learners early on in a co-design approach to creating a service may help us overcome some of the problems encountered by other initiatives in this space. Crucially, it also depends on taking a very different approach to Open Badges and endorsement to rebalance the credentialling process towards the consumer (employer) rather than the producer (educator).

**References**

Abstracts
Monday, 08 June

Open Badge Passport Design

Serge Ravet Europortfolio / ADPIOS, France

The Open Badge Passport (#OpenPassport, http://www.openpassport.me https://www.openbadgepassport.com) will be launched at ePIC 2015. During three days, delegates from all over the world will have the opportunity to actively contribute to the design of what we hope could provide the foundations for the reinvention of ePortfolio technology and practice, a need elicited in the ePortfolio Green Paper. Will the Open Badge Passport be a disruptive technology? It is for you to decide!

About the Open Badge Passport

The Open Badge Passport (Open Passport, for short) is an open source, open data and open trust project. It is vital to its success that the community as a whole, not just a small groups of specialists, contributes to its design. While we will of course need technical experts when the time comes to decide which technology to choose and to write pieces of code, the initial design of the overall architecture and ecosystem will be accessible to all.

Some of the initial principles at the heart of the Open Passport are:

• The passport belongs to the individual and its content is under the full control of its owner
• The passport stores Open Badges and any other kind of data (documents, xAPI statements, etc.)
  The passport provides an interface between a data repository (badges, etc.) and external services (authoring, educational, social networking, employment, etc.)
• Adding services to the passport should be as easy as adding an app to a smartphone or tablet
  Workshop activities

The objective of the workshop is to review the initial principles and design ideas to produce a blueprint of the Open Passport architecture and ecosystem. The activities the participants will be invited to contribute to:

• Projection: imagine that everybody had an Open Passport with thousands of different Open Badges (and other data), what kind of services could be provided?
• Review: are the initial principles and design ideas valid? Are there alternatives? Are there similar developments in other sectors we could learn from / join?
• Design: what are the minimum functionalities required in the passport? How do passports interact with others and the rest of the world?
• Planning: which resources do we need? Which actors should we involve?

Trust, the revolution — or, trust the revolution!

Serge Ravet, Europortfolio / ADPIOS, France

A recent post, "OpenBadges: The Deleterious Effects of Mistaking Security for Trust" explored the relationship between trust and security, security and privacy, privacy and personal data protection. Among the conclusions of this post was: "trust and security work in reverse proportions: the more trust, the less extrinsic security measures are required, the more extrinsic security measures are taken, the less trustworthy the system becomes."

This position paper will explore the conditions for (re)building trust and how Open Badges, and the Open Badge Passport, could be the means to making individuals (learners, workers and citizens) the builders of their own, intertwined trust networks. With Open Badges we are no longer dependent on any deus ex machina, creating for us a trust infrastructure. We now have the power to do it ourselves:
we can be the makers of our trust networks in the digital world, just as we do in real life.

The structure of the paper will be:

1. **The power of trust**: exploring a series of anecdotal evidence illustrating how trust had transformative effects.
2. **Open Badges and Open Data**: exploring how many of the ideas related to Open Data could be applied to Open Personal Data.
3. **Open Badges and Open Trust**: exploring the building of open trust networks with Open Badges. There will be some technical elements, but the more technical details will be placed in an annex.
4. **Open Badges and Open Employment**: exploring how Open Badges could transform the employment market.
5. **Open Trust and Open Society**: exploring how Open Badges could contribute to building an Open Society.
6. **Scenarios for the future**: exploring a series of scenarios eliciting the kind of transformations we might expect from providing such a powerful and disruptive technology into the hands of every citizen.

### The Role of Open Badges in a Personal Learning and Performance Support System

**Helene Fournier, National Research Council Canada, Canada**

This proposal describes the Learning and Performance Support Systems (LPSS) program, a current initiative of the National Research Council Canada (NRC). At the core of the system is the personal learning record component which links to a person's credentials, such as Open Badges. LPSS shifts the focus from the classroom to personal learning, allowing users to track various learning events, actions, and pathways as well as outcomes of their learning (whether experiential, formal and/or informal) over a lifetime. The initiative is informed by research and development work conducted by researchers at the NRC since 2008 on connectivist-type Massive Open Online Courses (cMOOCs) as well as research on Personal Learning Environments (PLEs).

Various Open Badges initiatives have explored alternative ways for learners to receive recognition for skills and achievements gained outside of the school environment, such as open credentialing and accreditation for all types of learning, including informal and interest driven. The Mozilla Open Badge initiative [1] has worked to build an ecosystem wherein badges can be issued for learning regardless of where or how it happens.

MOOCs are also part of the new learning and performance ecosystem landscape, offering a wide range of open and accessible learning opportunities to learners across the world. Since 2008, Stephen Downes of the NRC has facilitated and co-facilitated several connectivist-type MOOCs. In parallel, a number of research studies around MOOCs have been conducted which have identified important gaps, especially around the types of support mechanisms required by learners to be successful in these new open and accessible learning environments [2, 3, 4].

NRC's LPSS system is currently exploring solutions for including Open Badges, in the context of MOOCs and Moodle environments for example, as part of ePortfolio contents such as Mahara, and integration as part of a person's LPSS system, in what is called the ‘personal learning record’ (PLR). A person's LPSS system will keep track of everything related to learning – exercises followed, tests taken, games and simulations attempted, work read – and stores data in a single location. In this way, unlike a learning management system, it combines data from the learning environment, the work environment and even the social environment, thus enabling adaptive learning software to close the loop between learning and performance.

NRC researchers and developers on the PLR component of LPSS will explore the data associated with Open Badges and how this information may offer highly valuable input not only to predict what may be a good fit for the next learning activity, but perhaps even what a learner is capable of in a certain timeframe. This fertile ground could have substantial implications for recommending and exposing students to a variety of formal, informal learning, and experiential pathways utilizing data sources far more nuanced than grades and achievement tests.

Beyond the technological details of ePortfolios, Open Badges, and PLEs, a short paper will provide
The Open Badge Passport as the Eportfolio of Open Badges to Reflect On Learning

Gemma Tur, Victoria I. Marín, Santos Urbina; University of the Balearic Islands, Spain

Background

At the University of the Balearic Islands, in the off-campus centre in Ibiza, eportfolio work has been carried out for some considerable time. Thus, student teachers have been documenting their learning through their Teacher Education programme since the 2009-10 academic year (Tur & Urbina, 2013; 2014). The Open Badge Passport represents a step forward in this line of eportfolio research. Open Badges have been object of increasing interest due to the possibilities they offer to recognise learning and motivate students (Glover, 2013; Jovanovic & Devedzic, 2015). Exploring beyond these topics, this study is the initial step in research based on Open Badges to enhance reflection over learning (Charleer, Klerkx, Santos & Duval, 2013). The paper will explore the possibilities of Open Badges and the Open Badge Passport implemented as eportfolio in the context of non-formal courses in ICT for senior learners. THE STUDY

The current study reports the use of Open Badges and Open Badge Passport in an ICT course for senior learners at the University of the Balearic Islands in Ibiza off-campus centre. The participants are 15 senior students between 60 and 75 years of age with a basic level in the use of Internet and social media. The Open Badges are issued and stored in the Open Badge Passport, both from the Open Badge Factory.

The course design is based on the Personal Learning Environment concept defined in three main areas of activity: accessing information, creating one’s own knowledge and sharing content (Castañeda & Adell, 2013). The design of the badges is based on a considerable granularity since each badge represents a very concrete skill or limited content. Thus, the course was aimed at initiating senior students in the use of social media for learning, communicating and eventually, for the construction of their identity.

There were are main milestone Open Badges integrating diverse skills. So, the milestone Open Badge called Treasure Hunter integrates three skills in relation to accessing information: accessing newspapers and news sites; user-generated content such as blogs; and reference sites. The Treasure Creator joins together badges representing skills in relation to the digital creation of artefacts: blogs, photos, videos and collaborative objects. The Treasure Sharer milestone Open Badge represents the ability to communicate through email, networking and microblogging sites. The three milestones badges are necessary in order to obtain the super milestone one, which represents the main aim of the course, which is to become the Digital Senior.

Figure 1. Open Badges in the ICT course for senior learners

Additionally, there are some other Open Badges originally designed to represent attitudinal aspects demonstrated by the senior students. However, since the group showed an impressive positive attitude towards the development of their digital skills, these badges were not given the initial role for which they were intended.

The milestones Open Badges were designed to be issued once students had gained two of the related Open Badges. However, half way through the course, due to the difficulties observed in the creation tasks, the Treasure Creator Open Badge was given after the successful collaborative activity based on a digital canvas.

The article will inform as to the usage of participants of the Open Badges and Open Badge Passports. Also, some data on their perceptions will be given. Students who were able to initiate their Open Badge Passport were asked to answer a very short questionnaire on their experience. Only 11 students finally answered this and a general observation from their perceptions allow us to conclude the very positive initial impression they received from the experience of constructing their passport.
Conclusions

According to the work done by students and the satisfaction expressed by senior participants the ICT course has been a great success. Likewise, the usage of the Open Badges and Open Badge Passport can also be considered as successful since students demonstrated their understanding of its aim. Furthermore, the paper will discuss the potential of the Open Badge usage with students with limited digital skills.

The limitations of the study derive from the brief experience and the reduced number of participants. The ICT course was a pilot design in the context of our Open Senior University, so future work will be aimed at fostering its potential and overcoming its drawbacks.
Digitally empowering learners’ employability

Scott Wilson, Cetis LLP UK; Simon Whittemore, Shri Footring, Jisc, UK

Jisc is working with CINECA and a range of partners and stakeholders to pilot an innovative new service based on Open Badges to bridge the education to employment gap, focusing on soft skills and character attitudes rather than domain-specific competences.

Our vision for this service has been shaped by three contextual factors: the current pressures on universities, colleges, learners and graduates around employability; recent findings from the CBI and others such as McKinsey that make abundantly clear the Europe-wide education to employment gap; and the national economic and social imperative for sustainable improvement in employment prospects.

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In the same CBI report, a quarter of employers surveyed stated that they were dissatisfied with graduates’ problem-solving skills and the same proportion dissatisfied with their communication skills. More than half of employers were dissatisfied with graduates’ business and customer awareness and a similar proportion with their foreign language skills. There were also notable deficits of satisfaction in graduates’ relevant work experience, intercultural awareness and self-management/resilience.

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The recurring theme is that soft skills are critical for employability and vital to the economy. Reflecting on all this, and wider context, led us to conclude that, broadly, there are three levels of skills and behaviours that can be defined:

- Level 1: qualities or character attitudes such as determination, empathy, resilience, versatility;
- Level 2: soft skills or aptitudes such as problem solving, communication skills, customer awareness;
- Level 3: domain specific (or sub-domain) skills such as IT expertise, accountancy, illustration etc.

While Level 2 and 3 skills remain important, it is apparent that there is an acute need for the Level 1 qualities. Yet these are not currently reflected in any meaningful way in the education to employment system.

Open badges have great potential so they are part of the answer, but we are adopting a hybrid approach, building an online platform that we envisage will enable:

Employer consortia to publish and define open badges, and badge classes, which will specify and group the requisite soft skills and qualities in a form that suits their needs;

Learners and graduates to claim, using third-party attested examples, that they have demonstrated particular soft skills and qualities in their non-formal learning and experience.

Learners could also potentially self-assert that they qualify for a badge, and employer consortia could endorse this assertion. Evidence will need to be in a consistent and very concise format, accessible to, and co-designed with employers.

The key features of this are:

It values the soft skills and qualities used by learners in part-time jobs, voluntary work, placements, secondments and other non-formal settings – experience that generally is currently not captured by institutions;
Endorsement of a badge is not dependent on an institutionally-validated accreditation process but on recognition and digitally moderated negotiation between learner and employer;

The service is designed to increase employability and soft skills valuation rather than match candidates with opportunities, though the process may lead to opportunities;

Badge classes will be created and defined by employer consortia rather than individual employers.

This emerging model challenges provider-centric models of Open Badges, and makes clear the need for an Open Badge Infrastructure to support mechanisms for the endorsement of badge instances, and co-design and co-ownership of badge classes by consortia; this is an area where we need to find agreement with others in the Open Badges community.

We are currently collaborating with our Italian development partners CINECA, our service design partners Live:Work, student representative groups and employer consortia, as well as expert consultants and key stakeholders to design the service, with an initial pilot in Autumn 2015.

References


Introducing Eportfolios in Italian employment centers: an exploratory research

Alice Baldazzi, Maria Lucia Giovannini University of Bologna, Italy

The work presented here focuses on Eportfolio as a useful tool to promote employability: in particular, we researched if Eportfolio can be applied within Italian employment centres (Centri per l’impiego), state-run employment agencies which deal with job seekers and serve as a link between them and employers.

In particular, this paper presents an exploratory research on perceptions of operators, employers and recruiters, in order to study in depth the hypothesis of creation of an Eportfolio tailored to the employment services in the Bologna area, with the purpose of including it in the offer already present and customized for users.

The interest in Eportfolio is growing internationally for the role that it seems to play in fostering the skills needed in a knowledge society, addressing not just to students but also to workers-citizens in a lifelong learning perspective. Internationally Eportfolios have been used in several contexts in order to promote employability and self-awareness. Many authors assume that the constituent elements of the Eportfolio, such as reflexivity, capitalization and transferability of skills, can effectively promote employability increasing the job seekers’ awareness about their own skills acquired in different contexts (formal, non-formal, informal) and giving the employer more information for selection purposes. Yet, in Italy the use of ePortfolio is limited to few experiences, especially for what concerns career development and transitions from unemployment to work.

The first step of our research was to conduct an investigation about local employment centers’ offer to job seekers in terms of actions, tools and resources. We also collected some operators’ points of view and contextually identified some critical aspects about the tools studied. The data suggest that users are scarcely aware of their skills and have little entrepreneurial spirit. Nevertheless the tools currently used, characterized by asymmetry between user and operator, do not contribute to increase the proactivity among users.

The second step of the research contemplated semi-structured interviews to the stakeholders (recruiters and employers), in order to gather information about their perspectives on using an Eportfolio for recruitment purposes, and on their wishes on it. Their wishes on the tool mostly concerned ease of use, exportability, completeness and possibility to choose the information actually
needed for recruitment purposes.

Afterwards, according to the emerging data, we proposed an educational project addressed to operators and users, adapted to the system of Italian employment centers, mostly made up of low-skilled or immigrants users, some of whom had acquired a high level of education that is unrecognized in the Italian labor market. The project includes the operators training to mentorship, the actions related to Eportfolio, and a model of Eportfolio. The main characteristics of the proposed Eportfolio are ease of use, mentorship by the operators, cooperation with other users, completeness of information (users can include competencies acquired in both formal and informal contexts), exportability and focus on both the process and the product. It provides a tool implemented in the software Mahara composed of several sections: a profile (including self presentation, education, work, leisure, competencies, life skills, CV, evidences, blog, groups), a continuous development plan, the world of work (news, forum).

After that, we conducted an investigation through semi-structured interviews to operators, recruiters and employers concerning usability, feasibility, relevance and validity of the instrument. The operators have mostly expressed concerns about the difficulties of introducing the tool with reference to the Italian context (such as the lack of relevance of the centers in facilitating the matching of demand and supply of labor, the difficulty to propose new tools because of lack of funding, or the technical issues experienced by the low-skilled users). However, put aside the contextual factors, even the critics have spoken positively about the potential of Eportfolio, in encouraging motivation, self-awareness and employability.

The proposal of the introduction of Eportfolios in the local employment centers, even though at his first stages, has raised so far the institutions’ attentions and could be a first step towards the target of providing such tool for every citizen.

Social Media ePortfolio for employability: a student-led approach

Barbara Anne Nicolls, Kath Dunn, Buckinghamshire New University, UK

Social media such as blogs, forums, podcasts, social bookmarking, social networking, wikis, etc. are disruptive technologies used by an increasing number of Higher Education Institutions (HEIs) to communicate with their students, staff and the wider academic community such as research colleagues acknowledging the increasing use of such technologies by the majority of the 21st century citizens. Active participation in social media environments or mass socialisation albeit unstructured is believed to increase the users’ engagement with other community members through the collaborative action of knowledge creation, dialogue and sharing. Therefore, in HE, we believe that exploiting the affordances of social media for creativity, communication, connection, creation of new ideas and products, collaboration and changing the game of competition within a community of shared interests, in formal, non formal and informal settings can contribute not only to the cognitive development of the users but also aid them to become self-directed learners, a capability that is essential in preparing lifelong learning as well as life wide learning essential to survive in the current complex world of work. Moreover, employing tools already familiar to most of the 21st century students could enhance engagement and add value to their learning experience at university. This empirical study explores the added value of student selected, social media tools used for the collection, reflection, collaboration and presentation of evidence of the employability skills developed through their engagement with informal, extra-curricular activities during their time at Bucks New University. It also aims to unleash student creativity in using digital networks/media to engage with employers and alumni and identify industrial connections.

Employability skills are defined by the UK Commission for Employment and Skills (UKCES) as 'the skills almost everyone needs to do almost any job' and therefore, numerate and literate team players with interpersonal skills and a positive attitude to life could be employable. Many of these attributes are acquired, practised and demonstrated through extra-curricular activities including 'free-time' activities and Bucks demonstrates the value it places on a student’s spare time activities and achievements just as much as from other aspects of their university experience. This record of achievements in a social media ePortfolio could be the student voice backed up with evidence which will in the future inform the Bucks Higher Education Achievement Report (HEAR) describing a rounded
This presentation reports on Phase I of the collaborative pilot study with the Bucks Careers and Employment Department, the Learning Development Unit and the Students Union occurring over a four-month period from March to June 2015. It aims to explore the following: the impact of social media ePortfolios on students’ capability to be future fit. Specifically, it will attempt to identify the factors that influenced:

1. the choice of the social media tools
2. the kind of evidences collected, reflected on and presented
3. the students’ perceptions of social media ePortfolio approach to informal learning and developing employability skills through extra curricular-activities.

The role of the research team is to provide scaffolding through structured opportunities (reflection through dialogue with peers, alumni, professionals) for the participants to create informal learning portfolios; thus, non-participant observations during the study period, pre- and post pilot study surveys, focus group interviews in mid-May triangulated with literature including Bucks Learning and Teaching Strategy will be used to gather data required for analysis and answer the queries. Learning theories such as social constructivism, self efficacy and communities of practice will underpin the study. The findings will help us to address the challenges to progress to Phase II (September 2015 to July 2016) of the study the goal of which is to collaborate with the Sports Management Course Team in developing an integrated social media ePortfolio into the course to enable students to transfer their ePortfolio development knowledge and skills to incorporate course related, work placement experiences. The study aspires to an ePortfolio which showcases an individual’s achievements through their journey at Bucks with evidence from formal, non formal and informal learning situations which informs the HEAR.

The session presents the findings from Phase I of the exploratory study and invites comments to further development of the study.

Assuring Graduate Capabilities
Beverley Oliver Deakin University, Australia

As we approach the 13th conference on ePortfolios, Open Badges and Identity it is timely to consider what the future might hold for the fruition of disruptive technologies for transformative learning that empowers graduates for success in life as engaged citizens. Some would say that we have inherited:

- a massified educational systems that use
- complex technological systems to replicate
- a largely transmissive model of knowledge transfer for
- the production of graduates for further education and professional careers. We are at a critical junction that will enable us educate and engage:
- creating personalised educational systems that use
- streamlined and elegant learning systems to
- credential achievement of key capabilities, including discipline knowledge to
- empower graduates to create and find meaningful work (paid and unpaid) for a better world.

This presentation will describe what this future vision entails, and potential paths to its realization through new models and systems. We have learning management systems, portfolios, open badges, and a trend towards unbundling – how can we ensure the rebundling of all these elements cohere around empowering learners? The focus for change must include a reimagination of assessment (beyond testing knowledge to authentic and authenticated experiences) and a reimagination of credentials (beyond marks, grades and credits to meaningful micro and macro credentials for all stakeholders).

Pouring new wine into old wineskins
Alfredo Gaitan, University of Bedfordshire, UK

In this position paper I intend to reflect on my experiences of using ePortfolios since 2007 and discuss what I think are the key conditions for the success of ePortfolios. I will try to argue that we cannot...
expect learners to fully engage with, enjoy or benefit from ePortfolios if we continue to graft them onto old curricula that operate as part of existing academic cultures. Like new wine, they will explode the old wineskins and be wasted. However, the aim is to provoke debate around this claim.

My journey (in four chapters)

1. I came across paper based portfolios in this context of 'extended degrees'. Similar to access courses, extended degrees allowed students who had been away from education for some time to pick up or brush up on key academic skills before they started their course. As I read these portfolios it became apparent to me that they embodied their struggles and achievements in a way that made the notion of Personal Development Planning (PDP) meaningful. For me, PDP was about encouraging learners to take stock of their values, needs, interests and abilities to formulate goals. The role of the tutor was to help the learner turn these goals into effective plans that they could use to guide their learning. Tutor and student then work jointly to implement this plan and achieve the goals. I became convinced this should not be an add-on to the curriculum, but should be the way all subject knowledge ought to be taught.

2. In 2007 after briefly piloting a Blackboard tool for building eportfolios, I was introduced to PebblePad with its funky and yet simple interface. It was a suite of reflection tools that also allowed storage of artifacts and the publication of an eportfolio that was attractive. I immediately fell in love with it and convinced the HOD to adopt it as the platform for the portfolios that students would produce at the end of each year of their undergraduate degree. A few colleagues also bought into it.

In order to provide a theoretical foundation I undertook qualitative analysis of portfolios produced at the end of the first and third years to try to disentangle the learners' development and discovered that the inputs, processes and outcomes referred to knowledge, awareness, motivation and skills. I then proposed a set of conditions or qualities of learning that would lead to such development. I called it 'realistic learning'.

The combination of PDP (a national initiative), learner development-realistic learning (our own conceptual framework) and a user-friendly ePortfolio platform seemed unbeatable, or so we thought. However, not all staff and students engaged with these ideas and practices with the same enthusiasm. A short study (Gaitan, 2012) revealed how the students' attitudes to ePortfolios were shaped by the technology, the guidance received, difficulties with disclosure, and most important, a perception of purpose (or lack of it). Each of these will be discussed in the presentation.

3. I have defended the importance of eportfolios for several years, and had to make painful concessions, such as greater prescription in terms of content and word limits. But you cannot stop the tide. Portfolios are still in place, but are now produced using Word or as blogs. In my opinion, abandoning the ePortfolio platform felt like throwing away the baby with the bathwater. These ePortfolios are no longer digital reflection tools or multi-media environments with the personal visual aesthetics that celebrate a student's development.

4. Where next? Like others in the sector, I feel ready to move on. Several digital tools have featured at the last ePic conferences: digital story-telling, patchwork text assessments (I have been using these very successfully for several years), and now, open badges.

Conclusion

I would like to argue that ePortfolios are truly a form of disruptive technology that clashes with old curricula and traditional pedagogies based on transmission of knowledge, but are not enough to change these. They irritate consciousness and are met with uneasiness because they rock the boat. They are too cumbersome and time-consuming to support or assess by academics overloaded with administration and pressurised to produce research and fulfil multiple roles. I feel that the new technologies will succeed or fail, depending on whether they can be made to fit into the existing structures without too much incongruence.

Europortfolio: A European Network of Eportfolio Experts and Practitioners
The poster session will present Europortfolio community that aims at bringing one step further the transparency of recognition and accreditation of competencies within EU countries. It stands for the community of European ePortfolio experts and practitioners with Learning Community Portal as a space to publish, share and review data and resources on ePortfolio practices and technologies. In cooperation with leading experts and practitioners in Europe and beyond (USA, Australia), all being members of Europortfolio, the project produced an inventory of ePortfolio practices, an ePortfolio Recognition & Accreditation Framework, a ePortfolio & Open Badges Maturity Framework recognized by the European Comission and Horizon 2015 report on higher education, examples of innovative practices, implementation and exploitation guidelines and Open Educational Resources (OER).

Europortfolio Learning Community Portal acts as a gateway to prompt and support further ePortfolio initiatives in Europe and share the lessons learnt to improve the outcomes of further projects. Therefore, the Europortfolio network of ePortfolio experts and practitioners ensures the most recent findings on ePortfolios in EU are shared and made accessible to all decision makers and education leaders of EU member states.

In overall, Europortfolio promotes European co-operation across actors of higher education, with partners from USA, to create a place where all the stakeholders of lifelong learning, schools, higher education, adult education and vocational education and training will be able to collaborate and learn from each other. So far the community involves over 500 members from more than 75 countries who work together to tackle state of the art issues in ePortfolio research and practice.

ePortfolios for What Purpose: The Need and Process for Developing a Conceptual Model to Guide an ePortfolio Implementation

Catherine A Buyarski, Indiana University Purdue University Indianapolis, USA.

This paper will summarize the process and outcomes of an effort to develop a conceptual model that serves as a focused depiction of how an electronic Personal Development Plan (ePDP) contributes to student learning and success through the understanding of self and others, setting of self-concordant goals, developing of hope (pathways and agency), and creating educational and career plans. Specifically, it will offer an overview of the research from which the conceptual model emerged, discuss our process for developing the model, and summarize the key components of the model which provide the foundation for integrated learning and meaning-making around the college experience. The paper will contribute to the international conversation about ePortfolios as a tool for deepening learning and increasing student success by 1) identifying the need to clearly articulate outcomes and processes for utilizing portfolios, 2) bringing a wide array of relevant literatures to the discussion, and 3) providing an example of a process by which an institution can clearly articulate their own specific outcomes and purposes for the use of ePortfolios.

Background

In the United States, the American Association of Colleges and Universities (AAC&U) Liberal Education and America's Promise (LEAP) initiative is guiding national reform in higher education by challenging post-secondary institutions to integrate liberal and practical education so that every student achieves the essential learning outcomes necessary for success in a complex global world. One of the LEAP Initiative’s guiding principles for good practice is “give students a compass” which is supported by research on student retention and student development suggesting that students who set specific goals for their education are more likely to persist and succeed than students who begin college with relatively vague ideas and goals for their higher education or who have goals that someone else has defined for them (Cabrera, Nora & Castaneda, 1993). An initiative at a four-year institution in the United States is using an ePortfolio to “give students a compass” by guiding first-year students through a reflective planning process in which they develop realistic personal educational goals and document this “Personal Development Plan” (ePDP) in an ePortfolio that they carry with them throughout their college experience with periodic revisiting and revision. Begun five years ago, the ePDP Initiative aims to empower students to take ownership of their college education by planning...
for and maximizing their postsecondary educational experience. Research on early pilots of the ePDP shows positive impact on retention to the second year and on GPA. These positive outcomes have led to an increasing number of curricular and co-curricular programs on the campus looking to adopt the ePDP for use throughout the college experience.

Objectives

With an increasingly diverse group of programs interested in using the ePDP, it became clear that the ePDP was unique in relation to other types of ePortfolios on campus, being bound by a specific purpose and outcomes related to student identity development, academic and career planning, and the integration of learning. We urgently needed a conceptual model to guide our work as we endeavored to continue improving our practices, extend the ePDP across students’ entire undergraduate education, ensure that the process is meaningful for students, and make the case for the ePDP to campus stakeholders. Ultimately, we needed a way to focus the purpose and pedagogy of the ePDP to strengthen students’ commitment to completing an undergraduate degree, enable them to navigate the demands and complexities of undergraduate learning, and help them to see the relevance and value of this learning across academic and co-curricular experiences. An interdisciplinary group of ePortfolio practitioners on the campus studied relevant literature including student development, self-authorship, reflection, meaning-making, goal attainment, lifelong and life-wide learning, hope theory, and ePortfolio pedagogy. This focused study and collaboration led to the development of a conceptual model for the ePDP.

Outcomes

The conceptual model that has emerged is a focused depiction of how the ePDP contributes to student learning and success. The model is comprised of four domains: 1) increasing awareness of self and others, 2) setting self-consistent goals, 3) developing hope (pathways and agency), and 4) shaping educational and career plans. Reflection is the primary tool used to facilitate learning and development within and among the four domains. These four domains build a foundation upon which the student begins to develop a sense of life purpose and to make meaning through the integration of the sometimes disparate components of the college experiences both in and outside of the classroom. The conceptual model illustrates the content, process, and pedagogy that moves students toward taking ownership of their college experience and mapping a meaningful, cohesive journey; students who successfully complete the ePDP will ideally build the cognitive and affective capacity to engage in lifelong, life-wide learning in the multiple contexts and roles they will inhabit as adults.

Design and implementation of ePortfolios in a Master level degree at the University of Bologna

Maria Lucia Giovannini, Alessandra Rosa, Elisa Truffelli, University of Bologna, Italy

This paper concerns an “ePortfolio use to enhance educational success and competence recognition in view of inclusion and transitions to and from workplace” research project and it focuses on the development of ePortfolios by 37 students of Master in Sciences of Adult Education and Lifelong Learning at the University of Bologna. The discussed work, a specific issue of research unit of Bologna, is part of a wider National Research Project (PRIN 2013-2016) “Educational achievements, social inclusion and cohesion”, involving several Italian Universities.

Our project distinguishes from the majority of international academic experiences in ePortfolio implementation for the strong connection between three ePortfolio types (an ePortfolio for learning, a product ePortfolio and a showcase ePortfolio) and also because the discussed tools are not intended for assessment by university teachers. Indeed are emphasized the tool construction process and its potential in terms of self-regulation and self-evaluation of learning and personal and professional development. Furthermore, it is assumed that through these paths students can be helped to build a product ePortfolio concerning final reflection on academic learning experience with reference to each curricular activity and to key competencies. As a consequence, the students are enabled to build more consciously tailored showcase ePortfolio to present their achievements and their knowledge and skills to different prospective employers, along with relevant evidence.
During the entire degree program, the ePortfolio for learning takes into account each curricular activity and their possible connections and its added value can be found in the reflection processes solicited, without which it would be seen as a simple electronic repository for information and multimedia artifacts storage. The focus was therefore centred on the role of ePortfolio in enhancing student reflection – also in interaction with others (peers, teachers, tutors) – on their own learning processes, ongoing skills acquisition (even in non-formal and informal context) and on their strengths and weaknesses. So students are encouraged to take control of their own learning, to develop an integrated and coherent representation of their learning experiences, to better identify short and long-term objectives and gradually build their professional identity.

The Mahara platform used in this project has been customized not only through a translation into Italian of the main content and commands, but especially by the design of a particular structure consistent with the project objectives and easy to understand in order to allow for an independent and self-managed use. For the same aim, a technical and a pedagogical guide have been prepared for students both on paper and in an electronic format. Special work sessions were also organized to present the project and to provide an initial training to the online platform use with a hands-on approach in the computer lab, allowing students to make direct experience.

The first results show that new technologies could promote the expression of students’ different learning styles, their creativity and motivation to learn, but do not lead automatically to innovation of educational contexts and processes: it is necessary that they be integrated in a pedagogical framework that promotes a student centred approach. The exclusive importance that is often attributed by students to passing exams and their lack of learning management skills, have led to a comprehensive support and mentoring (initial and ongoing) addressed to bringing out students’ expectations, points of view and resistances. This allowed not only to help them overcome any technical difficulties, but above all to understand the relevance and usefulness – for themselves and for personal and professional project development – of the reflection on their learning processes and on the involved cognitive, metacognitive, affective and social components.

The main findings expected at the conclusion of the research project will lead to analysis and critical reflection about the validity, usefulness and applicability of the ePortfolios (for learning, product and showcase) in a degree program, highlighting the potential benefits not only for students involved but also for the instructional and curriculum redesign within the course itself. In addition, it is expected to outline ePortfolio models for learning and presentation that can be extended, with the necessary adaptations, to other application contexts, such as other degree programs or agencies and services for employment and continuing education path.

Adopting ePortfolios on a large university campus: program assessment and beyond

Amod Jayant Lele, Gillian Pierce, Boston University, USA

In the wake of studies and cases demonstrating poor student learning (e.g. Arum and Roksa 2010), higher- education programs have seen a need to conduct assessments of their academic programs and their learning outcomes, beyond trusting the individual professor's assessments in the form of course grades. Because ePortfolios assemble the qualitative artifacts of learning from students' actual coursework, they provide a way to demonstrate and assess learning that goes beyond the purely quantitative measures associated with standardized tests. We propose a presentation explaining how the experience of Boston University with ePortfolios can inform others' attempts to introduce humanistic, qualitative and multidisciplinary assessment in a higher-education setting.

Since 2008, Boston University's College of General Studies (CGS) has successfully implemented a systemic assessment process focused on student ePortfolios. CGS offers a two-year interdisciplinary general-education core curriculum, taught in a team structure, within a large and diverse urban research university. In response to the need for assessment and with the help of two external grants, CGS moved its curriculum to an ePortfolio-based assessment model beginning in 2008. CGS's systemic assessment process is based on the collection of a single ePortfolio for each student, covering all CGS courses, and a rubric of learning outcomes to assess these portfolios. The results of CGS's assessment project are encouraging: they have confirmed that student improvement at CGS is above the national average.
The change introduced by the ePortfolio project has gone beyond the level of assessment. The use of ePortfolios has facilitated students' ability to share work and faculty's ability to track individual contributions to an interdisciplinary capstone project. It also facilitates a self-reflection assignment asking students to use CGS's own rubric to assess their own freshman work as archived in their ePortfolios.

CGS's portfolio assessment has facilitated external accountability while respecting the multidisciplinary and humanistic values of the existing program. Now that the New England Association of Schools and Colleges (NEASC) has increased its assessment requirements for accreditation, other programs at Boston University (BU) and beyond are looking to CGS's approach as a model.

ePortfolio adoption at CGS initially faced significant faculty resistance, apparent in the earliest set of student evaluations of ePortfolios at CGS. Numerical evaluations of the effectiveness of ePortfolios were initially low, and students' narrative evaluations often claimed they did not see the point of using them. The process suggested that faculty themselves had not been convinced of the value of ePortfolios, and were passing their skepticism on to students. Faculty skepticism had been aroused in part because ePortfolios were presented as requiring pedagogical change despite being mandatory.

BU academic staff drew a number of lessons from this experience. Most notably, it is important to be upfront about the need for program assessment and the value of ePortfolios. As other BU programs such as Religion and Middle Eastern and North African studies (MENA) have considered the adoption of portfolios, we have aimed to help faculty understand the importance of assessment by talking about studies like Arum and Roksa 2011 and the scandal of irregular classes at University of North Carolina-Chapel Hill (see Wainstein et al. 2014), and explaining how portfolios serve that necessary purpose without disrupting traditional humanistic learning. We have found that, with such reassurance, such programs can embrace the benefits of portfolios beyond program assessment; the MENA program, for example, is also using them to showcase student learning for potential employers.

Our learning objective for the presentation is that program administrators will be able to apply the lessons of BU's experience to their own attempts to implement portfolio assessment. These include: the value of beginning an ePortfolio program with a small academic unit whose experience can then be scaled up; the importance of stressing the assessment purpose in making the case to faculty; and the ability of an ePortfolio assessment to nevertheless provide pedagogical benefits beyond assessment.

Works Cited


Wainstein, Kenneth L.; Jay, Joseph A., III; and Kukowski, Colleen Depman. 2014. Investigation of irregular classes in the Department of African and Afro-American Studies at the University of North Carolina at Chapel Hill.


SoftLearn: A tool to support the ePortfolios assessment

Ana Rodríguez-Groba, Adriana Gewerc Barujel, Borja Vázquez Barreiros, Manuel Lama Penin, University of Santiago de Compostela, Spain

Background

Assessment is one of the main topics in the Higher Education. The future directions and careers depend on it (Boud & Falchikov, 2007). But in general, the focus has been on accrediting the result of the learning activities (summative assessment), obviating the analysis of what happened through the process (formative assessment) (Pachler, Daly, Mor, & Mellar, 2010).

However, in online or blended learning, it is recommended to use qualitative formative assessment,
student-centered (Broadfoot, Timmis, Payton, Oldfield, & Sutherland, 2013). One of the most recognized tools for this type of assessment is ePortfolio, which records students’ learning evidences and represents an advance in relation to conventional assessment systems (Lopez-Fernández & Rodríguez Illera, 2009).

Since 2006, in the Faculty of Education at the University of Santiago have been using ELGG open source platform as a tool to build student’s ePortfolio. There, each student makes a personal quest to show the meaning they have given to the concepts addressed in class with reflections about them. The set of these elements make up one’s personal environment and it is evaluated by the teacher.

The ePortfolio goes beyond a mark; it is a collection of objects that can be shown as evidence of the learning process and the students’ achievements (Attwell, 2007). Furthermore through the data and its analysis, it is possible to track both individual and collective progress, in order to provide an immediate feedback and review (Broadfoot et al., 2013).

Problem

Eportfolio assessment has a lot of advantages but the main difficulty to start this type of formative evaluation is the time required by teachers (Hsu, Chou, & Chang, 2011). Especially at universities with a large number of students (Strudler & Wetzel, 2008; Lopez-Fernández & Rodríguez-Illera, 2009). It is very difficult to review all the students’ publications and, then, provide to each one the adequate feedback (Hsu, Chou, & Chang, 2011). It combines formative and summative assessments, requiring a detailed reading of the set of evidence presented by the students, and may be this is one of the causes of the limited use of portfolios in formal education. As pointed out in McDonald, Boud, Francis, & Gonczi (1995), one of the negative consequences of learning assessment is that only is assessed what is easy to assess.

Aims and Methodology

In this paper we present a study about a tool (SoftLearn) designed to support the formative assessment process in online context. SoftLearn improves and solves some of the problems that teachers find when use ePortfolios (hidden processes, lack of time, difficulties to access data, etc). The tool is based on learning analytics algorithm which allows measurement, collection, analysis and presentation of data about the students and their contexts.

This study aims to analyze (i) the efficiency of SoftLearn in the evaluation process in terms of time, and (ii) its effectiveness considering that the assessments’ requirements are met with high quality levels.

We test this tool in the Educational Technology subject of the bachelor’s degree in Pedagogy at the Faculty of Education of the University of Santiago de Compostela. The ELGG platform is an environment that integrates the creation of an individual space in a social network where they can exchange their views and opinions. Every year about 75 portfolios are constructed and evaluated. We have followed both a quantitative and qualitative analysis. The quantitative analysis was designed to compare the time invested by the teachers in the students’ assessment with ELGG and SoftLearn. During this evaluation process, we measured the time undertaken since the beginning of the evaluation until the submission of the final score of each student.

After this, we have conducted the qualitative analysis based on semi-structured interview to both teachers to better understand their experience using SoftLearn. These interviews take into account the five criteria for adopting innovations defined by Rogers (1995): relative advantage, compatibility, complexity, triability and observability.

Results

The study shows high improvement using SoftLearn. In total, there is a shortening of time about 53% instead of utilizing ELGG in the evaluation of the students.

The semi-structured interviews show that SoftLearn introduces new advantages not covered previously. It provides all the valuable information of the students’ assessment in a single and holistic view; it gives information not contemplated without the tool (the learning path), etc

Conclusions
The data provided by SoftLearn allows the teacher to know the evolution of the learners in the subject, their continuity in the process, and the difficulties they are facing. They can readjust and design new strategies to support students with difficulties, identifying hinge points in the learning process (Pachler, Daly, Mor, & Mellar, 2010).

The construction and experimentation of this tool, which was designed to support teachers in the tracking and assessment with ePortfolios, highlights the need of this kind of resources.

**ODB for Documenting Continuous Teachers Development Towards a LLL Evaluation Culture: a Proposal**

Loredana Camizzi, Maria Elisabetta Cigognini, Margherita Di Stasio, Alessandro Ferrini, Elettra Morini, Maria Chiara Pettenati, INDIRE, Italy

Approaching the teacher evaluation subject in Italian context, seems that teachers are struggling between the fear of judgment and the need of professional feedback.

In 2012 OCSE report recommended to Italian Ministries of Education to start an evaluation process in order to develop teacher’s professional profile, defined as a specific set of professional characteristics; indicators needed to be reliable, effective, fair, sustainable and sharable.

TALIS 2013 confirms that there is not a formal appraisal system and Italy result among the countries were “more than 30% of teachers report that they did not receive feedback on their teaching in their school from any of the five sources identified in the TALIS survey”; furthermore, participation in professional development activities is lower in 2013, but emerges also that the shortage of incentives for participating in professional development is “a substantial issue for teachers in Italy (83%)”.

The Bill 2994/2015 La Buona Scuola recognizes focal points of teacher professional development through the following keywords : qualified teachers, innovation, open data, professional development schemes, compulsory in-service training, evaluation and merit to advance in teacher career.

How to support teachers in widening an evaluation culture in this fast-changing scenario? how to engage teachers in evaluation processes? how to account for the reflective dimension? which are the key-competencies and skills for teacher professional development?


Currently INDIRE is developing a research on the evolution of teacher training models towards a possible integration with training evaluation systems. With this aim, we carried out a study on the projects developed in the last 10 years of in-service teachers training in order to identify the quantitative and qualitative tools to monitor and validate the trainings.

Common elements of the various training projects accounted in this research were conducted in a “blended” way with face-to-face lessons and online activities in a virtual learning environment. In this model a key role was played by the “tutor” supporting teachers throughout the different training phases.

The quantitative tools consist of a monitoring system which tracks users activities in the learning environment. This system has evolved from an early model, which provided a “local” and platform-driven tracking, towards a more “global” one, following web 2.0 guidelines, with informations stored in the cloud. This evolution, implementing specific tools as ePortfolio and register, allowed to monitor users’ cross-platforms activities.

The evolution of training models required the application of qualitative tools for process and product documentation. The training goals have changed from a knowledge acquisition process towards a professional skills development. For instance, the reflection “in action” and “on action” (Schön, 1987), is one of the crucial skills for teachers profession (Mezirow 1990, 2011; Striano & Melacarne 2008) and the main goal of INDIRE training courses.

Mainly, the training courses provided evaluation tools for this skill along three different steps of the training path: self-evaluation of learning needs, documentation and narration of educational practices,
Similar tools have been used in a specular way to monitor training programs for teachers and tutors and to evaluate tutoring activities.

The result of this preliminary study is a classification of the validation and monitoring tools in relation to fundamental knowledge and skills necessary to the definition of teacher and tutor profile, following the goals of INDIRE training and research activities. In the following step we will analyze and discuss how to adapt and integrate those tools to achieve even formal evaluation of training courses.

On the basis of these analysis we will design our future learning programs aimed at supporting teachers professional growth and at developing tutors professional skills and competences.

Giving an evidence of the complexity of teachers learning path is important from a motivational point of view and in order to create an evaluation culture in a framework of professional reflection. Open Digital Badges are a possible solution.

Open Badges is a Mozilla Foundation initiative to help, recognize and support LLL through a badge ecosystem (Mozilla Foundation OpenBadges, 2012). Badges are images augmented with “assertions”, metadata about name and description, issuer, date, criteria URL, evidence URL, badge image URL etc. For our aims, badges are interesting because can be integrated in a portfolio view, were portfolio is understood not only as a tool but also as a reflective practice (Rossi & Giannandrea, 2006; Beck et al., 2005).

In the full paper we argue that badges, “transparent and information-reach” (Grant 2014) can be the technological holder of all kind of quantitative or qualitative evidences and data of the learning path. Badges could thus provide teachers either an evidence of a formal evaluation or a tool to share the peculiar phases of the professional growing within their community.

ePortfolio self-development study module

Lourdes Guardia Open University of Catalonia, Spain; Igor Balaban, University of Zagreb, Croatia

The paper showcases a MOOC focused on learners, teachers, practitioners, educational institutions, employers, organizations and/or policy makers interested in starting to implement an ePortfolio for the first time or who are interested in enhancing their current practices is presented. This MOOC provides an entry point to the topic for non-expert users, providing the conceptual and instrumental knowledge for the creation of an ePortfolio strategy, regarding individual or organizational objectives.

The MOOC on ePortfolios is one of the products of the Europortfolio community which was presented as a draft at Online Educa in Berlin. In that first round researchers and practitioners had an opportunity to set the main framework and determine the needs to which the MOOC on ePortfolios should respond. After that the final MOOC structure was defined and it underwent several rounds of refinements involving practitioners and experts/researchers to adress the concerns of the target audience and to deal with the content itself.

As a result, throughout seven modules, MOOC addresses ePortfolios in many different aspects, starting with the basic understanding of the concept, moving through it’s purpose, strategy, designing an ePortfolio ecosystem, evaluating solutions, leading the integrated implementation, and using ePortfolios to implement systemic change in an organization. It is offered as a text only version on the Europortfolio portal and as a course hosted at EMMA platform. During the next couple of months it will be translated to French, German, Polish, Spanish, Danish and Croatian language.

Why doesn't everyone have an ePortfolio?: The ePortfolio Trial

Serge Ravet, Europortfolio / ADPIOS, France; Igor Balaban, University of Zagreb, Croatia

You have been invited today to judge whether the hope we invested 12 years ago in the ePortfolio as
an instrument of change in the learning landscape has been fulfilled. Which journeys have been most affected: the learning journeys or the conference circuit journeys?

**Guilty or not Guilty?**

The Charges are as follows:

ePortfolios have failed to be the Authentic Voice of the Empowered Learner and Citizen. They have not contributed to overcoming the Institutional and Social Demands for Compliance, if not Subservience. The Power Asymmetry has not been reduced.

ePortfolio Platforms have failed to produce any valuable technical innovation over the last 10 years.

**The trial:**

Introduction

Presentation of the Prosecutor, Judge and Lawyers
Selection of the Jury Members
Reading of the Accusation Act
Response from the Lawyers
Calling of the Witnesses
Jury Deliberation
Personal Learning Environments for Humanitarian Workers

Don Presant, Learning Agents, MSF Canada

MSF is one of the world's leading independent international medical relief organizations, working in close to 70 countries worldwide and with operational centres and national offices in 19 countries.

This case study in progress outlines the current state of a project initiated by the MSF Barcelona operational centre to improve learning and development outcomes for staff.

The objective is to develop a vision and road map for 21st Century learning and development centred on Personal Learning Environments (PLEs). This vision is based on the assumption of a "70:20:10" model of informal, non-formal and formal learning, taking place inside MSF and in wider contexts, such as in open education.

The strategy seeks to balance the management needs of the organization with the learning needs of the individual, using a flexible combination of learning and development technologies such as Learning Management Systems, Talent Management Systems, ePortfolios, Open Badges and social media.

The presentation will briefly frame the vision for a Humanitarian PLE, then provide detail on how MSF Barcelona, in collaboration with other MSF operational centres, is working to achieve that vision from the perspectives of technology, staff development and organizational change.

Implementing Open Badges for humanitarians through an open online platform

Atish Gonsalves, DisasterReady.org, USA

DisasterReady.org, a collaborative effort between some of the leading aid agencies and supported by the Cornerstone on Demand Foundation, can help meet some of these challenges, especially as they relate to capacity building of disaster responders. A free, easily accessible online training resource, DisasterReady.org has been designed by experts in staff development and humanitarian assistance to prepare humanitarians for the demands they face in the field. DisasterReady.org offers a library of cutting-edge eLearning courses and live webinars on critical topics such as Humanitarianism, Program/Operations, Protection, Management & Leadership, Staff Safety & Security, Staff Welfare, and Soft Skills.

The presentation will trace the development of the initiative and how it is aiming to use Cornerstone OnDemand's learning platform and OpenBadgeFactory.com to provide humanitarian certification.

The pivotal role of educational technologies in human capital development

Atish Gonsalves DisasterReady.org, USA; Don Presant, Dominique Giguère, MSF Canada

The humanitarian workforce numbers over a quarter of a million people from all over the world working in a wide variety of occupations.

In recent years, there has been a growing move toward professionalisation of the sector for improved quality of outcomes. Along with the identified need for improved system quality is the growing
realisation that better methods must be found to develop, recognize and share the professional skills of a highly mobile humanitarian workforce.

These professional skills are often developed outside the classroom, while the people acquiring them are solving complex problems and saving lives. Yet there is a lack of effective methods to assess and recognize these skills for the purposes of professional learning, navigating career pathways, workforce planning and knowledge management.

MSF and DisasterReady.org will outline a vision to capture learning and share the recognition of learning across the humanitarian sector. This vision will highlight the pivotal role that learner-centred technologies can play in human capital development. These technologies include Personal Learning Environments, ePortfolios and competency credentials using Open Badges.

Big Journeys to Small Steps
Patrick Craven, City & Guilds, UK

Awarding Organisations define and measure progress on long journeys - those that have a beginning, a middle, and (hopefully) an end. The value in this scenario is almost always at the end of the journey, with the qualification earned by the learner. In this keynote, we'll discuss a vision City & Guilds has for a 'messier' collection of short steps to paint a more personalised picture of the learner. We'll examine ways in which the Open Badges Infrastructure allows this to happen - particularly in light of v1.1!

Disruptions in academe: moving from the margins to the center through ePortfolios.
Lori L. Hager University of Oregon, USA

In 2012, Randall Bass forecast changes in higher education now taking place, and “disruption” as the mechanism of these changes. He wrote: “...disruption in higher education is coming not from the outside but from our own practices, from the growing body of experiential modes of learning, moving from margin to center .... As a result, at colleges and universities we are running headlong into our own structures, into the way we do business”


This paper will begin with exploring the “disruptions” that occurred as a result of a faculty-led multidisciplinary ePortfolio project that took place over the course of a decade. It will examine the transformative moments and structures we “ran headlong into,” and how the resulting “disruptions” challenged institutional approaches to learning and technology. It will then explore the lessons learned and implications of these disruptions for ePortfolios and learning in higher education. [Objectives/Problem]

The trajectory of the ePortfolio Project at the University of Oregon, and its challenges, reflected changes in higher education as academia began to recognize the relevance and importance of using open technologies to engage learners. The institutional culture was highly resistant to change at the speed of innovation that the ePortfolios required, and fearful of making public the learning spaces that had always been private. Now, blogs and other social medias in learning are commonplace. However, throughout the ePortfolio project’s ten-year trajectory, it was through the risks and the challenges in opening up learning and teaching through pioneering ePortfolios, that the experimental commons necessary for risk and innovation was created.

[Summary of Results]

The ePortfolio project at the University of Oregon was conceived and started at the beginning of the “eportfolio revolution,” maturing as the field matured. Moving from showcase ePortfolios to learning ePortfolios, the project leveraged social media and a robust open source eportfolio platform developed, benefiting from the growing expertise and emerging research in the eportfolio field. The ePortfolio Project was the brainchild of faculty, researchers, administrators, and students, including those in the UO School of Architecture and Allied Arts, and the Lundquist College of Business, and many members of the global eportfolio community. Funded through an Educational Technology grant.
and the Vice Provost for Academic Affairs, the ePortfolio Project was a member of the fifth cohort of the Inter/National Coalition for Electronic Portfolio Research (INCEPR).

Students learned “habits of mind” fostering interdisciplinary thinking, learning to demonstrate and document transformations in thinking and learning, and to make explicit and visible connections between curricular and co-curricular learning. Faculty explored the power of student self-assessment and reflection, and interdisciplinary connectedness. ePortfolios opened up the curriculum and made learning and co-curricular connections visible.

[Summary and Implications]

So, what happened? Using data from student and faculty eportfolios, and program evaluations, this paper asks: What did we learn from the “disruptive moments” that took place, and that guided the course of the project? How has our thinking changed as a result, especially concerning the implications of such learning opportunities for exploring the frontiers of higher education? A summary and reflection on these questions will be presented, and reflective questions regarding the future of eportfolios and learning will be posed.

The Digital Media and Learning Living and Learning with New Media: Summary of Findings from the Digital Youth Project (2008), was the largest study of its kind to date examining how young adults engaged online. In the summary of the research, the authors pose the following question about the future of learning: What would it mean to really exploit the potential of the learning opportunities available through online resources and networks? They further suggest that the role of student and the community as collaborators in learning needs to shift from the margins to the center. As eportfolio practice and research continues to engage with such issues as Privacy; Digital identity/Digital Citizenship, Institutional support/opportunity cost, and Risk and Productive Failure (innovation), what are the “next steps” for eportfolios? How can the “power of the portfolio” in combination with blended learning structures, badges and micro-credentialing, help to continue to push the boundaries of learning in the global age?

ePortfolios and Life Stories in a Senior Capstone Seminar

Susan Kahn, Karen Ramsay Johnson, Indiana University-Purdue University Indianapolis, USA

Introductory and capstone courses are ideal settings for university students to reflect on their goals and identities because such courses are focused on beginnings and endings, as well as on content. For the last eight years, we have explored various approaches to ePortfolios and reflective thinking and writing in our team-taught senior English Capstone Seminar. In the past year, we have noted increasing receptiveness to and engagement in developing ePortfolios among our students. Our proposed session will explore the causes of this change: new platforms (Canvas and Taskstream) are playing a role, but so is students’ growing ability to perceive both the usefulness of the ePortfolio as a gateway to employment and further education and its potential for supporting self-definition and growth.

Last year at ePIC, we discussed our use of a range of readings to spark reflective thinking and writing. Inspired by the comments and suggestions we received in Greenwich, this year we have refined our approach. Multiple readings, online discussion forums, and in-class discussions strengthen students’ understandings of their own histories and futures as open to interpretation and deliberate construction. Our largely first-generation students have often been too busy focusing on what the identity “college student” really means to have realized that they have any control over how they define themselves. In learning how other readers and writers have reconsidered and “rewritten” their life stories, they are developing a heightened sense of agency over their lives and choices and forming a basis for future decisions and goals.

Based on our single most successful reading assignment, Mary Catherine Bateson’s essay “Composing a Life Story,” we asked students in this year’s class to write a reflective essay in which they discussed some significant sequence of events in their lives from two different perspectives. This assignment was easier for students who were older or whose families exposed them to more diverse experiences early on, but even the students who struggled to form a second coherent full narrative found the experience empowering.
Partly as a result of this assignment, which came early in the semester, we have seen increased sophistication in students' portfolio revisions. In this proposed session, we will look at students' comments about their life story narratives and offer examples of portfolios in progress to see how students' life narratives helped them to shape their portfolios. We will focus particularly on techniques for translating traditional revision approaches into strategies that improve not only students' ePortfolios, but also their reconceptions of themselves in new contexts.

Having found our last ePIC experience to be transformative for our thinking about our use of ePortfolios in our English capstone, we are, most of all, hoping to engage participants in a conversation about how our practices can be expanded and our findings tested in other contexts and venues. In a U.S. urban university School of Liberal Arts, our highest priority is to find ways to make education transformative for students beyond social mobility, while simultaneously validating our students' desire to improve their own and their children's status and security. ePortfolios bridge an important gap between the dual functions of education for working class students: As ePortfolios become more pervasive in hiring and performance reviews, students can see their growing practicality. Less visible but no less important, is the potential of ePortfolios for showing their creators where they began and where they can aspire to go. In a society and an economy that privilege adaptiveness and self-transformation, ePortfolios can bridge students’ past, present, and future selves.

**Life-long "Earnings" - Closing the skill-gap with Open Badges and ePortfolio**

_Simone Ravaoli, CINECA, Italy_

The session will unveil "Bestr", a digital platform matching employers’ requirements with learners’ aspirations and learning opportunities, based on Open Badges.

Bestr allows:

**Citizens to:**
- aggregate, organize and share their competences in the form of Open-Skills badges
- access Digital Content necessary to extend their skills
- bridging gap between certified skills and market required skills

**Companies, users and issuers to:**
- define and publish competence profiles as open-badges, complying with international standards for specific areas
- select people by skills or certified professional profiles

**Learning & assessment providers to:**
- Publish courses and teaching materials to support training
- Publish certification paths, including Proctored-Computer-Based examinations, for the certification of skills acquired through individual training and experience