OPEN BADGES FOR LIFEWIDE LEARNING & EDUCATION[1]

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PURPOSE

This White Paper introduces the concept of 'Open Badges' and argues that it is a significant innovation for Lifewide Education. It is in two parts: the first describes the innovation, the second outlines some initial ideas on how Open Badges might be used in the Lifewide Development Award. Members of the Lifewide Education community are invited to offer their views and ideas on this development.

OPEN BADGES

badges = visual representations of a **skill** or **achievement**

What's the core idea?

Badges are digital tokens that appear as icons or logos on a web page or other online venue. Awarded by institutions, organizations, communities, groups, or individuals, badges signify accomplishments such as completion of a project, mastery of a skill, or gaining experience and developing through the process. Proponents suggest that these credentials herald a fundamental change in the way society recognizes learning and achievement—shifting from a traditional books-and-lecture pedagogy to a model with multiple knowledge streams, including new media, collaboration, interest- and needs-based learning, and experience or project-based learning. As records of achievement, badges can recognize the completion of projects within a traditional educational programme or acknowledge experience gained through personal experience, community interaction and contribution, online learning venues, or work-related projects. The idea that badges are 'open' is the fundamental principle on which the system is built. The infrastructure is open (anyone can become an issuer) and the technology is open (open source). Users control their own data and the system permits individuals to create their own badges which an issuer can endorse.

What are the potential benefits?

According to Mozilla (2012) badges have the potential to :

- **Signal achievement:** Badges signal skills and achievements to peers, potential employers, educational institutions and others.
- **Recognize informal learning:** Learners can get credit and recognition for the learning that happens outside of school. e.g., in after-school programs, work experience or internet-based activity.

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[1] These notes are taken mainly from an EDUCAUSE (2012) leaflet published under a Creative Commons Licence, supplemented by notes from the Mozilla Open Badge Website.

- **Transfer learning across spaces and contexts:** Skills are made more portable across jobs, learning environments and places through badges.
- **Capture more specific skills than traditional degrees:** Badges allow a more granular recognition of specific skills than a traditional degree.
- **Support greater specialization and innovation:** Badges can support specialized and emerging fields that are not in traditional learning environments.
- **Allow greater diversity:** With recognition of soft skills, social habits, motivation etc. badges are able to recognize a greater diversity of skills than traditional programs measure or recognize.
- **Motivate participation and learning outcomes:** Badges provide feedback, milestones and rewards throughout a course or learning experience, encouraging engagement, retention and contribution.
- **Allow multiple pathways to learning:** Badges encourage learners to take new paths or spend more time developing specific skills.
- **Unlock privileges:** For example, students at a school computer lab might be required to earn a "Digital Safety" badge before being allowed to surf the web.
- **Enhance identity and reputation:** Badges can raise an individual's profile within a learning community and peers and allow you to aggregate identities from across other communities.
- **Build community and social capital:** Badges help learners find peers or mentors with similar interests. Community badges help formalize camaraderie, team synthesis and communities of practice.
- **Capture the learning path and history:** With degrees or cumulative grades, much of the learning path—the set of steps and milestones that led to the degree—is lost or hard to see. Badges can capture a more specific set of skills and qualities as they occur along the way, along with issue dates for each. This means we can track the set of steps the most successful learners take to gain their skills—and potentially replicate that experience for others. In other words they have the potential to illuminate learner's developmental trajectories.
- **Recognize new skills and literacies:** New literacies that are critical to success in today's digital world—like appropriating information, judging its quality, multitasking and networking—are not typically taught in schools and don't show up on a transcript. Badges can recognize these new skills and literacies.
- **Provide a more complete picture of the learner:** Badges provide a more complete picture of skills and learning history for potential employers, schools, peer groups and others.

And if learners are given the opportunities to create their own badges for endorsement by an issuing authority they can:
- **Encourage learners to recognise, make sense of and value their own learning and achievements and communicate these to others.** Badge making - designing and justifying a badge - is a useful skill and creative process in its own right.

What kinds of skills and accomplishments can badges represent?
Badges can represent a diverse range of skills, competencies, qualities, achievements and interests, including:
- **hard skills** like completing a course, mastering a specific programming language or math concept
- **soft skills** like critical thinking, communication or collaboration
- **community recognition** like reputation and status
- **new skills** like digital literacies
- **specific, granular accomplishments or activities** like leaving helpful comments for other learners, logging into an online learning web site for 10 consecutive days
- **complex achievements** such as are embodied in a process of active engagement with challenges, relationships and collaborative activity to achieve something of significance

How does it work?
Details vary from one granting agent to another, but one path for badges is provided by the **Mozilla Open Badge Infrastructure (OBI)** specification. Using this model, a learner fulfils the issuer- specific criteria to earn the badge by

attending classes, passing an exam or review, or completing other activities and demonstrating learning and achievements gained through these experiences. A grantor verifies that the specifications have been met and awards the badge, maintaining a record of it with attendant metadata. This metadata includes the issuer's name, the recipient's e-mail address, a link to the criteria, and a short description of the badge. It may also specify other details, such as the issue date, the expiration date, or a link to the evidence that supports the granting of the badge. The earner pushes the badge into a "backpack," a portfolio-style server account, where this award is stored alongside badges from other grantors. This badge repository might be the Mozilla-hosted Badge Backpack, or it might be a backpack hosted by any provider using the OBI specifications. Badge recipients using the Mozilla Badge Backpack can choose to keep their awards private or display some or all of them on selected websites, social media tools, platforms, or networks.

Who's involved ?

Numerous groups, organizations, communities, and web entities currently issue badges. Badges in higher education have gained currency among early adopters. One such e ort is the award-winning badge system developed at the University of California, Davis. In the interdisciplinary major of sustainable agriculture and food systems, students can complement their coursework with badges for workshops, projects, and internships. Badges also play a part in edX, an online learning effort sponsored jointly by MIT and Harvard University. Both institutions will offer online courses free via edX with "certificates" (badges) available for a modest fee to those who complete the coursework. This open-source platform will be made available to colleges and universities that want to host it. Institutions of higher education interested in a turnkey badge system can turn to companies like BadgeStack, which offers a standards-based custom badge structure that can interoperate with an LMS and is compliant with the Mozilla Open Badge standard. Mozilla offers a platform for badge creation and issuance called Open Badger[2]. Meanwhile, the annual Digital Media and Learning Competition[3] provides a forum for sharing innovative designs and public recognition of open badge innovators in multiple categories. Other world class organisations involved in Open Badge development are Purdue (Indiana University), Carnegie Mellon, Smithsonian, Intel, Microsoft and Disney-Pixar. In the UK the Open University has developed a portfolio of badges.

Why is this development significant?

Badges represent a different approach to credentials, one that places the focus on individual students and their learning accomplishments. It honours how individuals choose to develop themselves through the things they do in their day to day lives, and it provides them with a means of demonstrating and representing these forms of achievement to others. Individuals control their badges by choosing where to earn them and—depending on the privacy specifications of the backpack—they also determining who can see them. Often these badges reflect educational experiences beyond the classroom, calling attention to study abroad, student govern- ment, or community service. A collection of badges can function as a distributed portfolio that may eventually be accessible from a variety of social media sites, such as LinkedIn, Facebook, and Google Plus. When badges serve as part of a résumé or portfolio, they tell prospective employers a more detailed story about the projects and activities that define a student's learning, including both the hard and soft skills that were acquired. Badges are a symbolic and graphical representation of achievement and they can be accumulated throughout a significant learning and development process rather than only at the end. As such they provide a visual and easy to comprehend picture of a learners developmental trajectory as it emerges.

What are the challenges?

It is far too early to predict whether badges will become widely accepted as legitimate indicators of education, skill, or experience, and to predict whether employers will come to view them as trusted credentials. In a sense Open Badges and the processes that are associated with them are another potential solution to the wicked problem of how we help learners

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[2] Open Badger https://github.com/mozilla/OpenBadger/wiki
[3] DML Competition website http://hastac.org/competitions

prepare themselves for a lifetime of learning and developing in a complex, uncertain and disruptive world (Jackson, 2011). As with all such problems you have to develop and implement the solution before you can appreciate whether it will work!

Acceptance depends, at least in part, on the level of quality control for these types of recognition. While the OBI may improve this situation by making it easier for viewers to find out what compliant badges represent, the nature of an open system means that ultimately those granting badges are the ones who determine and verify their value. Given that many badges are awarded for such activities as completing a game sequence, some people may be inclined to discount badges as a whole because they might be perceived as superficial. Also in some activities, particularly relating to on-line development in uncontrolled settings, it can be difficult or impossible to prove that the badge was awarded to the person who completed the specified assessment. The reputation and the accreditation of colleges and universities give value to the degrees they confer and the records they hold in trust. By contrast, it can be difficult to establish the value of a badge awarded by an unknown or unaccredited source. For none-educational organisations who participate in the OBI. their credibility will depend on their reputation. Perhaps eventually accreditation agencies will be established to provide assurance that badge awarders have a effective systems of control in place. Another issue is the rate at which online entities appear, disappear, and are purchased by others creates a fragile structure upon which to build and maintain trust.

Where is this development going?

This development has been grown in the USA and there are a number of significant organisations putting resources into its development and promotion. The greatest development is in organisations and communities that are involved in internet applications, web design/programming. As badge systems become more broadly adopted, a host of issuers and endorsers will emerge. **Ongoing** work will need to be done to validate badges to ensure those who earned, issued, and endorsed them are who they claim to be. If badges are headed toward employer buy-in, people might one day be hired based in part on the badges they have earned. In the short term, badges can provide talking points for a job interview, opening a friendly dialogue between a manager and an interviewee and allowing the latter to speak about accomplishments and interests that might not otherwise arise in conversation.

What are the implications for educational practice?

Badges could represent an opportunity for educational institutions to rethink what they value in learning and development and recognize achievements that could be codified but currently are not. As an adjunct to institutionally supported learning, badges might provide a new avenue for continuing education. They support lifelong learning, not just through traditional academic or formalized learning pathways but also the kind of knowledge that comes from personal initiative and investigation. Above all they can give meaning to the idea that learning and development are lifewide in their scope, activity and intention. They occur through activity in all the places and spaces that people inhabit simultaneously everyday of their lives (Jackson 2011, Barnett 2011). Because of this they provide a means for organisations whose primary purpose is not to educate, to participate in individuals' educational enterprise. As such Open Badges are an emancipatory eduicational innovation.

If badges are able to widely establish themselves as trusted credentials, they could help people plot their own path to learning, pursuing projects and experiences they feel are worthwhile. Badges have sparked lively conversation in the academic community. Some suggest they could disrupt the monopoly of credentialing that has been the province of higher education, while others insist that institutions will embrace badges to augment the traditional curriculum and add depth to the student portfolio. Whatever the future holds for these awards, it is clear that badges provide an opportunity to re-evaluate credentials, expanding their role by making otherwise hidden accomplishments visible.

Why is this Significant for Lifewide Education?

The thinking that underpins Open Badge development offered in a White Paper[4] published by the Mozilla Foundation who are spearheading the development, is entirely consistent with the ideas and practices being developed and applied by Lifewide Education. The intention of Open Badges is to encourage and value forms of learning and development that are not normally recognised through institutional assessment. What seems to be missing from discussions of Open Badges is any sort of strategic framework within which learners can evaluate, plan for, act on their own developmental needs and retrospectively make sense of how their activities and learning connect and integrate. This is an important area where Lifewide Education can contribute its thinking and add value to the structures that are being created. This is a new an important opportunity for LWE to develop its own thinking and practice.

POSSIBLE LIFEWIDE EDUCATION OPEN BADGE SYSTEM

The emergence of Open Badges is a natural consequence of the continuous search for more and better ways of encouraging, recognising and valuing individuals' learning, development and achievement. As mentioned above, the innovation grows out of a belief that we can do much more to help people prepare themselves for a lifetime of living and working in a complex disruptive world. Open Badges and LWE's Lifewide Development Award are two different solutions being offered to this 'problem' (or opportunity if you prefer the optimistic viewpoint). This White Paper argues that there is merit in combining the two approaches. By incorporating Open Badges into our Lifewide Development Award we will add value and open up new potential. In particular, Open Badges will help us develop deeper commitment to the idea that we are supporting individual's ecosystems for leaning and development and they provide us with a new tool that can recognise the often rapid and emergent nature of learning and development. Here are some of the ways in which we might utilise Open Badges within and outside the Lifewide Development Award.

1) **As a taster :** someone who is considering undertaking the LDA might participate in an exercise to give them an idea of what its like. For example, they might complete a lifewide activity map and reflect on the ways in which they are using their life spaces to learn and develop. Or they might keep a log of their activities for a week and reflect and evaluate on what they learnt through the things they did. Both of these activities might include discussion with a mentor, and the insights gained could be recognised through a badge. Such activities could be used to introduce the idea of badges to people who are already registered on the award.

2) **As a valued freestanding developmental experience**: Following on from this reasoning, if a global OB ecology is established, people may want to involve themselves in specific elements of our LDA programme.. like the example activities outlined above, which they can incorporated into their self-determined programme of personal development activity.

3) **As a motivational force particularly in the early stages of the LDA**: for people who voluntarily participate in the LDA getting started, when there are so many competing demands, has proved to be a challenge. By creating a portfolio of badges that reflect the start up activities and awarding these when they have been completed may help participants to appreciate that they are making progress. Currently, we have no tangible means of doing this.

   As an ongoing motivational force: Similarly, if badges are designed with requirements for participating regularly in activity over a period of time - for example making a relevant weekly contribution to an on-line forum over say 10 weeks, the goal of accomplishing this task might be a helpful motivator for some people.

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[4] Open Badges for Lifelong Learning (2012) The Mozilla Foundation, Peer2Peer University and MacArthur Foundation

4) **Badge making as a learning process:** if we include the facility for learners to create and justify their own badges we have a new tool for enabling learners to make sense of their experiences and achievements and determining and representing what is meaningful and significant to them. This would honour their needs and interest driven learning and development within their personal learning ecosystem.

   There is also the potential for such a process would also enable learners to reveal their development in multiple ways. For example, someone who participates and achieves in a range of activities like - sport, part-time work, community service, backpacking and playing in a band could represent learning and development is several or all of these areas but create, if they chose, a thematic badge that drew out their personal creativity.
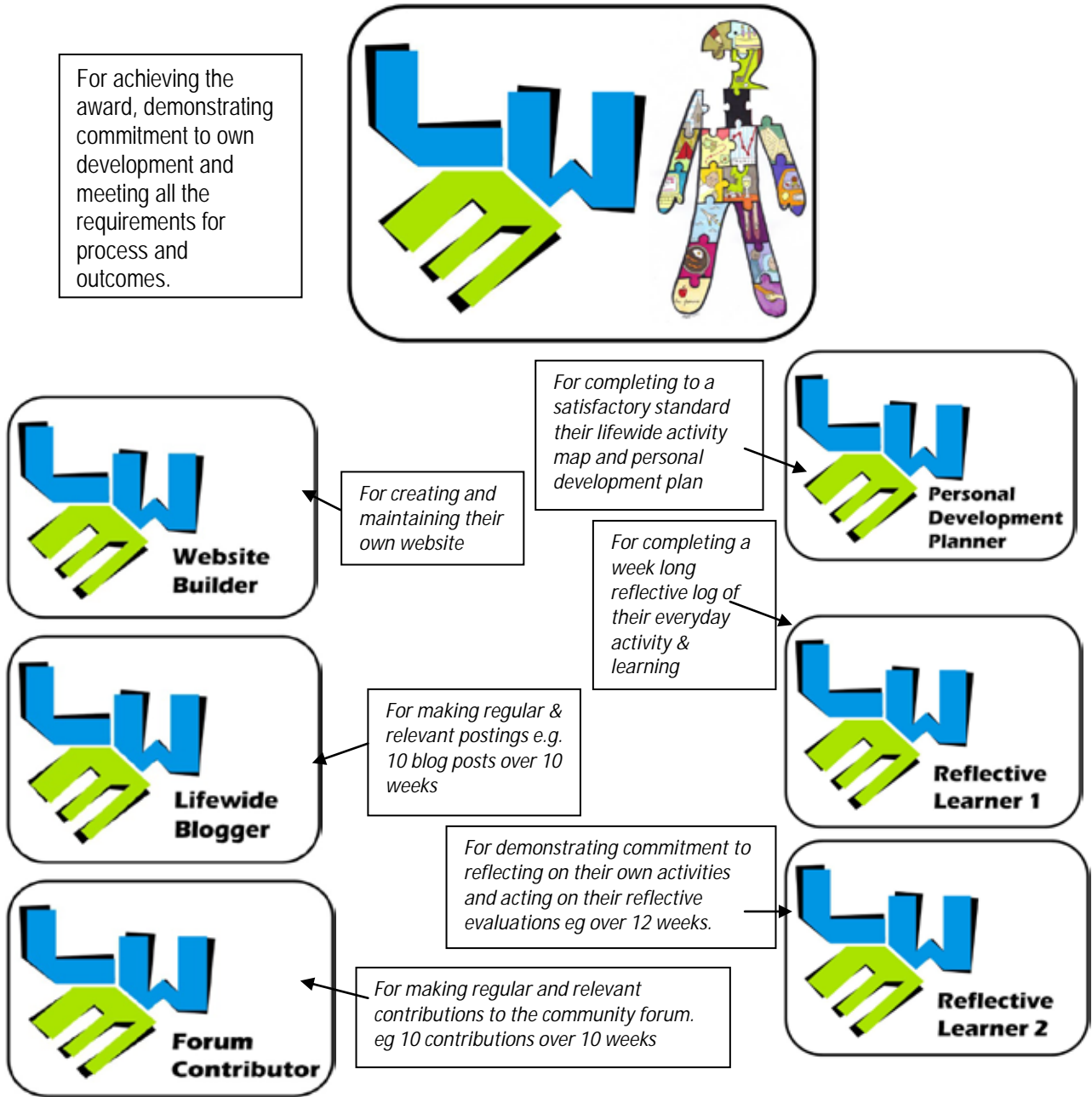
5) **A unique expression of personal learning, development and achievement**: while all learners completing the Lifewide Development Award would gain recognition through the award, the way they had achieved the award through their unique pathways would not be revealed. A portfolio of LWE badges could help learners demonstrate their unique pathways, experiences and capabilities that they had developed through the LDA.

6) **A means of recognising achievements if a learner does not complete the LDA**: A learner who does not complete the LDA does not receive any recognition for what they have achieved. A badge system would allow learners to gain recognition for key elements of the LDA process that a learner might still find useful. Particularly if a large OBI ecology is eventually established.
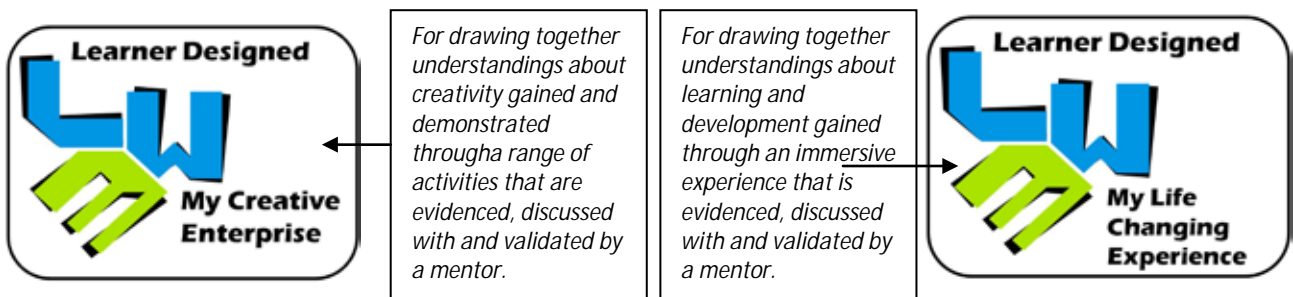
Initial Ideas for an LWE Badge System

The Mozilla OBI talks of Large and Small badges. Large badges create significant achievements/experiences while smaller badges depict the steps on the way or discrete elements of larger accomplishments. For illustrative purposes we might envisage a LWE Badge structure comprising an overarching badge eg LIFEWIDE LEARNER
and a multitude of smaller badges covering many different aspects of the process, experience and outcomes of lifewide learning and personal development. Badges may be created and endorsed by the LWE community or be
created by a learner and endorsed by the LWE community. A simple illustration of what a LWE system of badges might look like is provided in Figure 1.

Figure 1 Illustration of what a Lifewide Education Open Badge System might look like.

A) LWE Community Badges

For achieving the award, demonstrating commitment to own development and meeting all the requirements for process and outcomes.

For completing to a satisfactory standard their lifewide activity map and personal development plan

Personal Development Planner

For creating and maintaining their own website

Website Builder

For completing a week long reflective log of their everyday activity & learning

For making regular & relevant postings e.g. 10 blog posts over 10 weeks

Lifewide Blogger

Reflective Learner 1

For demonstrating commitment to reflecting on their own activities and acting on their reflective evaluations eg over 12 weeks.

For making regular and relevant contributions to the community forum. eg 10 contributions over 10 weeks

Forum Contributor

Reflective Learner 2

B) LWE Learner Badges endorsed/validated by the LWE Community

Learner Designed

My Creative Enterprise

For drawing together understandings about creativity gained and demonstrated througha range of activities that are evidenced, discussed with and validated by a mentor.

For drawing together understandings about learning and development gained through an immersive experience that is evidenced, discussed with and validated by a mentor.

Learner Designed

My Life Changing Experience
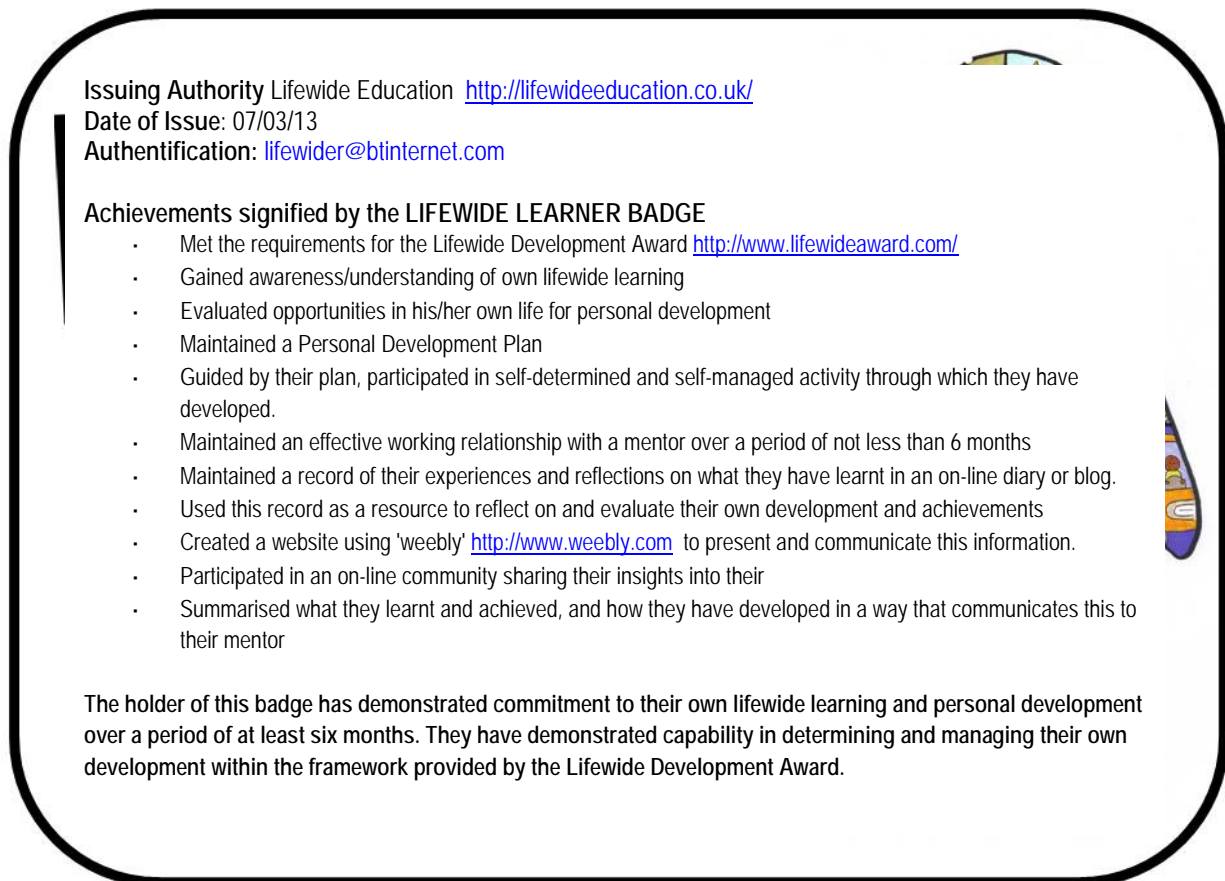
Metadata Tagging

The information behind each badge provides justification and validation, including:

1. who issued the badge
2. the issue date
3. how the badge was earned/*what achievements it signifies*
4. hyperlinks back to artefacts, documents, or testimonials demonstrating the work that lead to earning the badge.
5. authentication back to the issuer

This supporting data is intended to reduce the risk of badges being illegitimately copied and builds a level of quality assurance into the system.

With the exception of item 4 it would be a relatively simple matter to tag a badge in this way. Item 4 represents a potential stumbling block because participants in the Lifewide Development Award may not want to provide access to some or even many of the artefacts that demonstrate their learning and development. For example, they may not want to provide access to their reflective blogs to a potential employer. Figure 2 illustrates how a badge might be tagged.

Figure 2 illustrative example of tagging for a LIfewide Learner Badge

Issuing Authority Lifewide Education http://lifewideeducation.co.uk/
Date of Issue: 07/03/13
Authentification: lifewider@btinternet.com

Achievements signified by the LIFEWIDE LEARNER BADGE
- Met the requirements for the Lifewide Development Award http://www.lifewideaward.com/
- Gained awareness/understanding of own lifewide learning
- Evaluated opportunities in his/her own life for personal development
- Maintained a Personal Development Plan
- Guided by their plan, participated in self-determined and self-managed activity through which they have developed.
- Maintained an effective working relationship with a mentor over a period of not less than 6 months
- Maintained a record of their experiences and reflections on what they have learnt in an on-line diary or blog.
- Used this record as a resource to reflect on and evaluate their own development and achievements
- Created a website using 'weebly' http://www.weebly.com to present and communicate this information.
- Participated in an on-line community sharing their insights into their
- Summarised what they learnt and achieved, and how they have developed in a way that communicates this to their mentor

The holder of this badge has demonstrated commitment to their own lifewide learning and personal development over a period of at least six months. They have demonstrated capability in determining and managing their own development within the framework provided by the Lifewide Development Award.

Invitation to Comment

Open Badges are an interesting innovation with the potential to change educational practice and learner behaviours and generally disrupt the status quo. Members of the Lifewide Education Community are invited to contribute their own understandings of Open Badges to our initial understandings and comment on the value of the idea of Open Badges for Lifewide Education.

Prompts

Q1   What is the value of an Open Badge system to Lifewide Education? Do you generally endorse the ideas expressed in this White Paper or do you have serious reservations?

Q2   From the perspective of lifewide learning and personal development, what additional opportunities do Open Badges afford?

Q3   What are the challenges in designing and implementing a system for the Lifewide Development Award?

Q4   What ideas do you have for badges that would be useful additions to our award framework?

Q5   What other questions need to be asked?

Please email your comments to the author at lifewider1@btinternet.com

thank you

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