Badging and Employability at the Open University

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Abstract

Awarding badges to recognise achievement is nothing new. Of late, badging has gone digital, offering new ways to recognise learning and motivate learners, providing evidence of skills and achievements both within and beyond formal learning contexts. Badging (or *soft accreditation*) has been piloted in various forms by the Open University (OU) in 2013, both in discrete projects and elsewhere on open courses and employer-led initiatives. This paper outlines what the OU has learned from its pilot projects and details how the University is subsequently developing a suite of badges for informal and formal students that align with employability and the OU's existing skills-related open educational resources (OER).

The OU's badging pilots are informed by recent research (Perryman, Law & Law, 2013; Law, Perryman & Law, 2013) into the motivations and demographic profile of learners using the free educational resources which the OU makes available through its OpenLearn and iTunes U platforms. The research findings had indicated that a substantial number of informal learners using the OU's free content do so for work and/or professional development and that learners are eager to have their informal learning achievements recognised in some way. The research also provided evidence that OpenLearn is providing a bridge to formal learning in several different respects, suggesting that the addition of badging could strengthen this bridge.

The evaluation of the 2013 pilots indicated that learners who achieved badges were highly motivated by the experience and that the badged courses attracted learners who were particularly inclined to become students. The evaluation has subsequently informed the development of a further project to deliver a suite of free, open courses of 24-hours learning, each of which are assessed through the deployment of a set of Moodle quizzes. To mitigate perceived risks to the sector and the University of providing a badged OU curriculum on a bite-sized scale,

badges are limited to employability and skills development. The badged courses will be provided free of charge to the learner and those achieving badges will be encouraged to display them through their public-facing profile on the OpenLearn website. The badged content will be evaluated for its efficacy to motivate and develop informal learners and to provide employability skills for OU students. It is hoped that this paper will stimulate academic interest in the topic and will be of interest to Higher Education Institutions (HEIs) globally and open up the discussion around developing a known currency of non-accredited learning.

Keywords: Open educational resources, open educational practices, MOOCs, OpenLearn, informal learning

Introduction

Awarding badges to recognise achievement is nothing new. In the UK and internationally, Brownies, Guides and Scouts have long used badges to drive and acknowledge the skills development of young people, who collect fabric badges to sew on their uniforms. Of late, badging has spread to the world of adults and, as with many things, has gone digital. Digital badges offer new ways to recognise learning, providing evidence of skills and achievements both within and beyond formal learning contexts. As such, they can work both in motivating formal and informal learners, and in attracting new students to paid-for study. Mozilla's Carla Casilli and Erin Knight (2012) describe digital badges as "Digital tokens that appear as icons or logos on a web page or other online venue which are awarded by institutions, organizations, groups, or individuals, to signify accomplishments..." Hickey (2012) identifies three possible functions for digital badges:

1. *Summative functions*, which are often called *assessment OF learning*.
2. *Formative functions* for individuals, which are often called *assessment FOR learning*.
3. *Transformative functions* for systems, which a few are calling *assessment AS learning*.

The concept of badging (or *soft accreditation*) has been piloted in various forms by the OU in 2013. In support of the OU priority Journeys from Informal to Formal Learning (JIFL), recognition of informal learners' achievements on the OU's OpenLearn platform currently takes the form of a user profile and a *Statement of Activity*, detailing course excerpts that have been viewed online. To enhance learner confidence and progression badges, as a visual representation of achievement or participation, have

been investigated and piloted in discrete projects at the OU and elsewhere on open courses and employer-led initiatives. As badges for free learning represent a challenge to the education sector overall, the OU's next steps beyond these first pilots must acknowledge the risk of this disruptive innovation, through a focused lens of activity.

The Mozilla Foundation, who has so far led the digital badge initiative in terms of technical infrastructure, invite learners to obtain a badge from various (mainly US) providers https://wiki.mozilla.org/Badges/Issuers. Organisations that issue badges come from a range of sectors including formal and informal educational institutions, multinational corporations, industry associations, non-profits and groups interested in professional development. Each badge displayed should link to a page that shows what the learner did to obtain the badge.

Background: free learning from the Open University

The OU makes its free educational resources available on various third party platforms (such as iTunes U, YouTube, Google Play and AudioBoom) and via its web-based free educational resources platform, OpenLearn (www.open.edu/openlearn). OpenLearn was launched in 2006 and hosts hundreds of online courses and videos, many of which are openly licensed, and is accessed by over 5 million users a year. It also serves as the medium through which the OU promotes its partnership with the BBC and the related broadcasting and free open access courses and content that is created as co-productions with them. Since its launch, OpenLearn has received 40 million unique visitors (internal OU data) and has developed from being a platform that hosts units from decommissioned undergraduate and postgraduate courses, to one which hosts commissioned interactive games, videos, blogs, podcasts and which offers users the opportunity to order free printed materials. Much of the course extract content is developed using structured authoring tools which is made available to users in multiple formats such as Microsoft Word and epub (that can be opened by ebook readers).

The development of OpenLearn was initially funded by the William and Flora Hewlett Foundation in 2006. With the end of the grant, OpenLearn became mainstream activities for the OU and now form part of JIFL priority as part of the OU's commitment to widening participation. The OU aims that 5% of each of its courses should be made available as OpenLearn content and for the period August to December 2013, the OU reports a 12.9% click-through from OpenLearn to the *Study at the OU* webpage to learn more about becoming an OU student.

The Open University's informal learners

In 2013, the Open University's OER Research Hub and Open Media Unit collaborated in a large scale study profiling the demographics and motivations of its informal learners i.e. people using the OU's OpenLearn and iTunes U platforms (see Law et al., 2013). This study has informed the development of the OU's badging provision, which is designed to serve the needs of the University's informal learners, especially those who are learning for employment-related reasons. The 2013 study informed the OU's badging pilot projects in three ways:

- By providing evidence about informal learners' motivations for using OpenLearn and iTunes U content;
- By leading to a greater understanding of the typical users of the two platforms (e.g. their age, qualifications, employment status and location);
- By giving a nuanced picture of the ways in which the OU's free educational content is providing a bridge between informal and formal learning.

Table 1 shows the balance between informal and formal learners, and educators in the OpenLearn and iTunes U survey sample. Table 2 gives a comparative summary of the findings regarding user demographics.

Table 1:   Informal learners, formal learners and educators using iTunes U and OpenLearn

	iTunes U	OpenLearn
Informal learners	42%	48%
Formal learners	38%	33%
Educators	20%	16%
Both learner and educator	18%	23%

One of the initial reasons for providing free content at the OU through the William and Flora Hewlett Foundation-funded OpenLearn project was about social mission. For many over the last decade this has evolved into developing business models for open content production that still serve social mission, but also support students and teachers and bring informal learners into the formal student experience. It has also provided new insights into informal learning, adding to established ideas around the provision and motivation for work-based learning to include new methods and sources of free content and social online interaction that meet the needs of both professional and personal development. (Law et al., 2013)

Table 2:   Comparing iTunes U and OpenLearn user demographics

	iTunes U	OpenLearn
What is your age?		
0-24 yrs	577 (27%)	120 (14%)
25-44 yrs	947 (44%)	333 (38%)
45-64 yrs	495 (23%)	330 (38%)
Over 65 yrs	125 (6%)	88 (10%)
What is your gender?		
Male	1345 (62%)	364 (41%)
Female	779 (36%)	515 (58%)
Other*	35 (2%)	2 (>1%)
Where do you live?		
UK	311 (14%)	533 (61%)
US	524 (24%)	27 (3%)
RoW	1324 (62%)	308 (35%)
Is English your first spoken language?		
Yes	1138 (53%)	682 (77%)
No	1021 (47%)	207 (23%)
What is your highest educational qualification?		
School	331 (15%)	139 (16%)
Vocational	121 (6%)	78 (9%)
College	366 (17%)	199 (23%)
Undergrad	604 (28%)	227 (26%)
Postgrad	617 (28%)	178 (20%)
None	120 (6%)	52 (6%)
What is your employment status? (Tick all that apply)		
Employed	1428 (66%)	504 (58%)
Voluntary	126 (6%)	40 (5%)
Student	577 (27%)	120 (14%)
Unwaged	169 (8%)	135 (16%)
Disabled unwaged	49 (2%)	37 (4%)
Retired	156 (7%)	127 (15%)
Do you have a disability?		
Yes	281 (13%)	168 (19%)
No	1878 (87%)	741 (84%)

* Other = 'transgender' and 'prefer not to say'

Whilst the demographic analysis of the 2013 study shows that the OU, through OpenLearn and the OU's iTunes U channel, is serving a largely educated group who have a keen awareness of the range of free educational resources available online, it is clear that the OU is also reaching groups of users that fall into the widening participation agenda in equal or larger proportions than the population in general (demonstrable for the UK).

Table 3 shows the motivations of iTunes U and OpenLearn users as revealed in the 2013 survey results, which indicated that a substantial number of informal learners using the OU's free content do so for work and/or professional development reasons – a factor that has greatly influenced the employability-related aspects of the university's badging pilots.

Table 3:   Motivations of iTunes U and OpenLearn users

	iTunes U	OpenLearn
Personal interest	81.58%	81.74%
My professional development	40.28%	39.73%
Relevant to my studies	27.86%	19.63%
Relevant to my work	22.47%	30.59%
For the purpose of sharing with others	12.88%	17.35%
For the purpose of teaching others	11.85%	14.61%
Family interest	5.95%	8.22%
Relevant to voluntary work	4.82%	10.05%
Commercial interest	4.05%	1.83%

The 2013 study showed that learners are eager to have their informal learning achievements recognised in some way and also provided evidence that OpenLearn is providing a bridge to formal learning in several respects (Perryman et al., 2013):

- In leading informal learners to formal study with the OU and with other providers;
- In working as a showcase for the OU and increasing awareness of the learning opportunities and quality of provision offered by the university;
- In providing 'taster' materials that inform the paid-for module choice process;
- In allowing learners to test out university-level study prior to registering on a paid-for module;
- In broadening the range of subjects about which informal and formal learners are interested;
- In increasing users' study skills and confidence (thereby helping to increase existing OU students' performance and retention and potential students' readiness for study);
- In improving non-native English speaking students' language skills (and thereby helping with study preparation and retention).

Why develop badges for OpenLearn?

Through the development of a curriculum of assessed, badged courses aimed at employability and skills, the OU will augment its employability offering for both informal and formal (OU) learners via the OpenLearn platform. Pilot projects around badging at the University undertaken in 2013 were developed using the Mozilla Open Badge Infrastructure (OBI) (see http://openbadges.org/) and included recognition for learners' participation in a community activity, submission of a piece of work and completion of a particular task. In addition badges were awarded via three entry-level *Openings* courses on OpenLearn: *Learning to Learn* and *Succeed with Maths Parts 1* and *2*.

The evaluation of these pilots has informed the development of a further project to deliver a suite of free, open courses of 24-hours learning, each of which are assessed through the deployment of a set of Moodle quizzes. The project aligns with the University's priorities and core values in that it:

- Aligns with the Journeys from Informal to Formal Learning strategy;
- Helps to provide accessible routes into the University for students who might not otherwise have the opportunity to participate in HE;
- Supports the OU Charter: … "to promote the educational well-being of the community generally";
- Aims to deliver a high quality student experience in relation to careers services and employability skills development.

The evaluation of these badged *Openings* courses was performed through online surveys to participants at the enrolment stage and at the end of each course. The evaluation results demonstrated that (a) the IT infrastructure and the user experience of providing badges needs further development; (b) learners who achieved badges were highly motivated by the experience; and (c) the reworked *Openings* courses attracted learners who were more inclined to become students and were key to meeting the OU's widening participation agenda. Indeed, there were significant variations in relation to prior education, numbers of retired learners and numbers of learners reporting a disability compared to OpenLearn users overall:

- Only 36% of learners on the badged *Openings* courses already hold an undergraduate qualification or higher compared with 56% of the general OpenLearn learner population;

- 12% are retired compared with 20% of the general OpenLearn user population;
- 31% consider themselves to have a disability compared to 19% of the general OpenLearn learner population; 40% of *Learning to Learn* learners who completed the enrolment survey declared a disability;
- Of these learners, 38% report a mental health problem and 38% report an illness or chronic condition; 83% of *Learning to Learn* learners who say they have a disability, report a mental health problem.

What badges are being offered?

To mitigate perceived risks to the sector and the University of providing a badged OU curriculum on a bite-sized scale, badges are limited to employability and skills development. The following badges are proposed for development during 2014 using existing OU content and will be hosted on the OpenLearn platform:

1. First Steps in HE;
2. Succeed with Maths;
3. Succeed with Learning;
4. Succeed with English;
5. Skills for Work;
6. Career Development and Employability;
7. Digital Literacy;
8. Sport in Society.

A badge will be provided for successful completion of 24 hours of study (notionally eight weeks of learning at three hours per week, taken at the learners' own pace. This fits with current, recognised open course design used by the OU as part of its programme of MOOC delivery for the FutureLearn platform and will allow portability between platforms should any content developed as part of this project be deemed feasible for release as a MOOC on FutureLearn, OpenLearn or as an iTunes U course.

Content identified for these badges is a mixture of:

- Open content that has already been reworked for soft accreditation/assessment;
- Open content that exists as standalone text on OpenLearn (this forms the majority of badged content);

- Module content currently available to OU students.

Technical infrastructure

The badged courses will be provided free of charge to the learner and as such, this *class* of badge will remain free. Those achieving badges will be encouraged to display them through their public-facing profile on the OpenLearn website. In addition, registered students will be able to display both their informal learning and formal learning achievements together. To expand, learners who have logged into OpenLearn and have registered on a badged course will be able to earn badges by correctly completing a series of Moodle quizzes. The technical implementation proposed will allow users to display badges in the following ways:

- Their My OpenLearn profile, which will enable them to provide a public version via a shareable URL. The My OpenLearn profile will allow them to automatically share their achievements on Facebook (as a status update on their timeline), Twitter (as a Tweet) and LinkedIn (as an update);
- By the end of 2015, the OU Student Record (for registered OU students);
- By the end of 2016, in the Higher Education Achievement Record (for registered OU students);
- Their Mozilla Backpack should they wish to link to set one up http://openbadges.org/display/;
- Any WordPress blog.

Measuring impact

In order to monitor impact, badged open content will be evaluated for its efficacy to motivate and develop informal learners and to provide employability skills for formal OU students. This will form part of a longer term impact study. Key elements to be evaluated include:

- Users' experience of the process;
- Users' motivation for pursuing a badge;
- Users' ongoing motivation for formal study, informal study and/or further soft accreditation;
- Users' demographic profile;
- Users' reasons for engaging with the material but not the badging elements of it;
- How users have used their badges (a longer term evaluation).

Conclusion

Evaluation of the OU's pilot badging projects suggests that badging offers a way of reconciling informal learning and the demands of employers, and that badging content for university students and informal learners alike may become a key widening participation activity for HEIs. It has also become clear that the provision of a public-facing profile that acknowledges both formal and informal learning and can be shared through social media networks, is both achievable and desirable. While machine-based assessment may be perceived as "dumbing down" the achievement of gaining a badge, there is much to be developed and understood around peer assessment in the open and the use of graduate 'mentors' to help raise the bar. Further research in this area is needed and it is hoped that this paper will stimulate academic interest in the topic and will be of interest to HEIs globally, raising awareness of the opportunity to provide badges in HE and opening up the discussion around developing a known currency of non-accredited learning. In turn, it is hope that this will contribute to a broader ongoing collective assessment of the impact of MOOCs and soft certification internationally, for example the impact on students' confidence and success in employability. The subject of the session is innovative in that there is little published research on the impact of badging globally, and even less research on the impact of badges in UK higher education/informal learning contexts.

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