

Using Open Badges to support student engagement and evidence-based practice

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Organisation and historical context

'iChamps', as a model for engaging with students and supporting the development of digital literacies, has for some time been used at the University of Southampton (Top Universities, 2017) and has been well documented (Jisc, 2015a, 2015b, 2015c; Quality Assurance Association, 2016; Harvey, 2017). When the model was introduced, the only way for students participating in the iChamps network to be recognised for their contributions to the education development of the University of Southampton was through a paper-based award scheme called the Graduate Passportⁱ. This scheme involved the collection of points for various categories of activities around the university, the evidence for which needed to be printed off and then authorised by a dedicated member of staff for each section. As it was important that the students had a way of reflecting on their activities and capturing them more appropriately, a new record of achievement was sought.

In early 2014, the iChamps became part of the Southampton Opportunity Programme, a strategic approach to student developmental opportunities. The iChamp model was used as a template for a range of student champion activities and the author was approached to explore how a portfolio tool might capture students' participation and encourage their reflection. After researching and evaluating various options - and with the support of the Centre for Recording Achievement (CRA) - it was decided that we would trial Pathbrite (a visual, adaptive portfolio tool) with the iChamps and with students participating on the Southampton Opportunity Programme - in particular, the Opportunity at the University of Southampton (OPUS) project. The feedback from the students was very positive and this seemed offer us a way of addressing our existing challenge of how to capture the activities of the iChamps. Prior to this, in 2013, the author had been exploring Open Badges (Casilli and Hickey, 2016) and, both nationally and internationally, was participating in various cross-sector networks investigating the application of the badge scheme. At the annual CRA conference in 2013, a demonstration of Open Badges made it clear that they could be a useful addition to the tools that the iChamps could deploy as part of their own reflection. The Mozilla Open Badge Interface (OBI) was complicated and required the support of one of our technical IT team to set it up. Since it was obvious that this, for non-technical staff, would constitute a barrier to adoption, it was very much a system in 'beta'. The concept was clear, however, and, in 2014, the author presented a webinar with the CRA on the potential of Open Badges (Millsom and Harvey, 2014).

During 2015, the Pedagogic Research Institute and Observatory (PedRIO) hosted a conference with the CRA and Europortfolio. At this conference, the author facilitated a remote session on the combining of Open Badges with e-portfolios by Katy Coleman, then at Deakin University, Australia. Her approach was the inspiration for adapting the iChamps e-portfolios to include more structure and specific sets of skills by incorporating Open Badges. This combination served two purposes: 1) the badges provided a way of setting specific goals to scaffold projects, so that there was clarity over aims and objectives of their activities, for both the student and the staff; 2) they provided a quality assurance for the iChamps network. Milestone badges were created to offer a pathway for obtaining the overarching 'iChamp' badge. The final piece of the puzzle was that, through participation at the ePortfolio International Conference (ePIC), a global community of open badge advocates - including the newly-launched Open Badge Factory - became established. This system was easy to use, was based on the Mozilla OBI and featured an additional system to display the badges (Open Badge Passport).

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By 2015, everything was in place and the author initially invited a team together to establish what each badge would look like; however, this led to over-complicated criteria, more akin to a 'high stakes' assessment than a tool to support or complement assessment. By means of tools like the 'Digital Me' template, each of the Milestone badges was created and, along with some graphics (designed by students at the Winchester School of Art) and the application of Canva design softwareⁱⁱ, the iChamp Badge was born. The iChamps now have three smaller (Milestone) badges that lead them on a pathway to gaining their overall iChamp badge. This model has worked well, supporting the students to work independently in their roles and allowing the academic lead to have an idea of the scope of their contribution. This has helped us to prevent a student's being asked to do more than s/he probably should and to ensure that s/he is genuinely working in partnership. This has been the model for the last two years and it is working well.

Specifications of the project

At the beginning of the 15/16 academic year, the author became part of a project, funded through the University Enhancement Fund, to use the portfolio and badges model with other groups. The project had digital skills as its focus and the members of a team drawn from across the University were using the ePortfolio tool Pathbrite; some were also using Open Badges. The author was working with Dr Sally Hayward who leads the module called GEOG1010 and is also the Lead for the Personal Academic Tutors in the Faculty of Social, Human and Mathematical Sciences. GEOG1010 is a core module for undergraduate first-year students and, as such, one of their first at the University; it was selected for this project as it was being redesigned. Since it was about professional skills for Geographers, it was ideal for introducing the combination of technology and digital skills' development. The application of these areas to specific content and within the context of the discipline meant that Open Badges and e-portfolios fitted well. The year-long module has about 200 students and involves lectures from a range of academics. The aim of this project was to support the development of professional skills within Geography across the module, using the same process as the iChamp model. This was an opportunity to offer all students the chance to develop their online profiles as well as work within the context of their discipline. It was also the first time that this model was applied to non-self-selecting students. We were hoping to gather data on the students in terms of their progress as well as gain feedback from them on their contributions to their e-portfolios. From January 2017, an iChamp within Geography, and currently working on the module, was brought in to help support the original cohort of students (Group 1) and to support the academics on the module in identifying approaches to applications of badge use and running workshops on how to display the badges for the

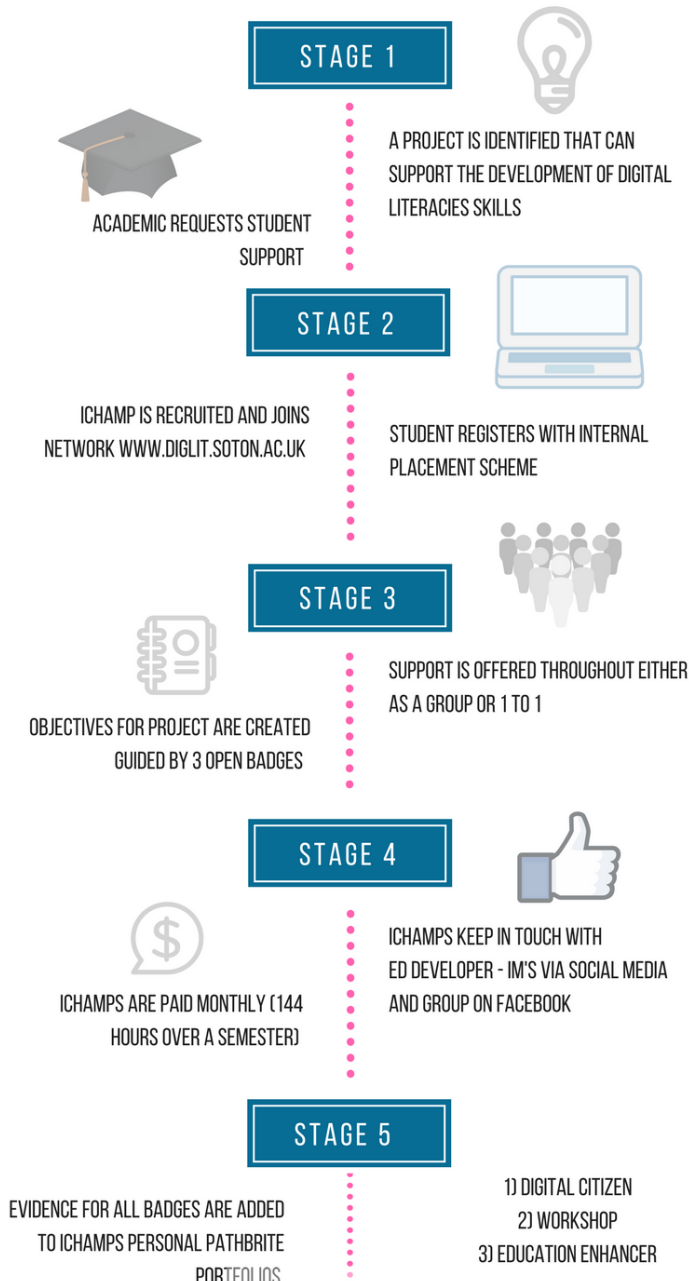


Figure 1. The iChamp process



Apply for iChamps badge

16/17 cohort (Group 2) (see Figure 1 for an outline of the process).

The project runs from 2015 – 2017 and will finish in July 2017. The author was a member of the REACT project at the University of Southampton. As such consideration about what we can learn from this and apply to ‘hard to reach’ students was something that we have been reflecting on during the life of the project.

Discussion

The deployment of Open Badges was less about motivating the students with rewards for participation than about applying an authentic method of enhancing education through technology, pedagogy and content, within the context of the discipline of Geography (Jovanovic and Devedzic, 2015). This was based on the Technological Pedagogical and Content Knowledge (TPACK) model and through the models domains it is possible to ensure that technology is not disassociated from the learning. The TPACK model (see Figure 2) allows for each domain to be included, with the overall objective being the appropriate combination of each of the domains. The domains are Technological Knowledge, Pedagogical Knowledge and Content Knowledge (Koehler and Mishra, 2009).

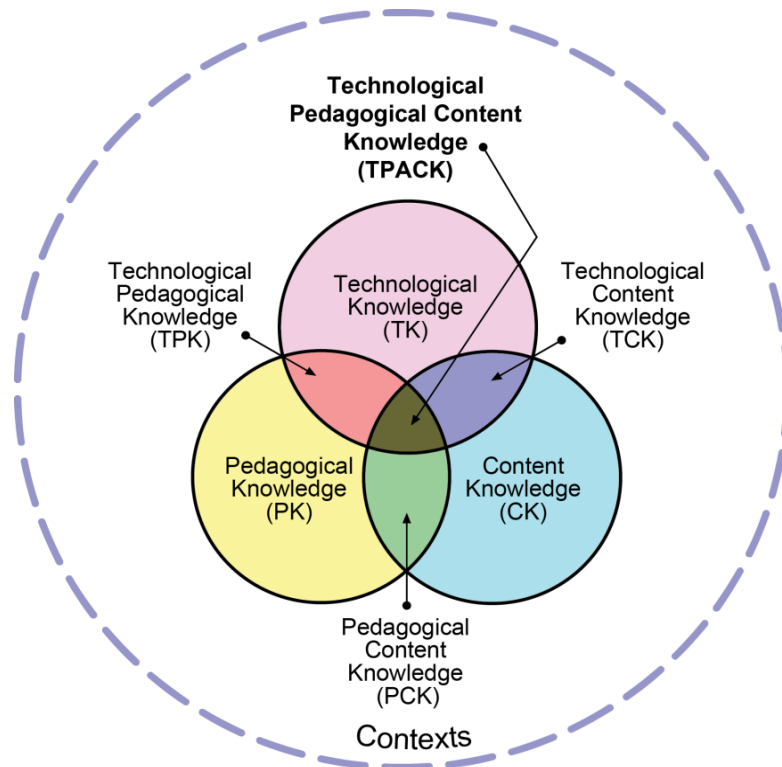


Figure 2. The TPACK Model

The activities were designed to scaffold and support self-reflection and digital skills' development through evidence-based learning. Using a similar method to Vygotsky's Zone of Proximal development, a Dynamic Assessment approach was applied (Poehner, 2012), where the students were encouraged to submit their evidence for each of the activities and then get feedback through the use of rubrics and comments on their portfolio submissions. Once they had applied the feedback, they could resubmit the portfolio and, if necessary, repeat the process until they were ready to apply for their badge. The students submitted their own reflection on their submission through the portfolio and, using the rubric, the staff submitted a 'grade' with generic feedback. The grade consisted of a points system which ranged from one to four. The students were briefed that this was a guide to how they could improve and was an informal one, rather than a final measure of their competence. This scaffolding supported engagement with students, employing methods familiar to them within personal social media systems that they use regularly. The module was split into three distinct areas: Curiosity, Creativity and Communication. Each of these areas required evidence to be submitted into the portfolio (Figure 3).

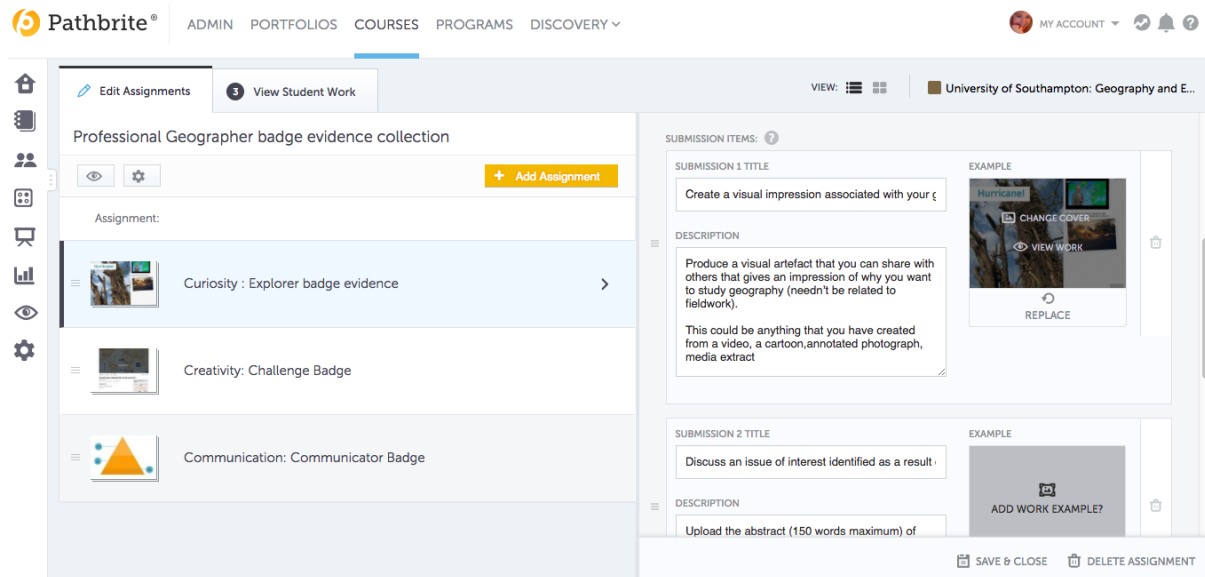


Figure 3. The Pathbrite portfolio tool, showing the template for the submission of evidence for the Curiosity badge

The badges were designed to provide structure for the module and for the students to be able to manage their online presence. The formal assessment for the module was not changed and students were still required to produce coursework and take exams, but they were encouraged through their lectures, seminars and tutorials to complete their tasks in their e-portfolios for their badges and to think about what they would be submitting into their e-portfolios from their field work. In this way, the context for the application remained within Geography and their focus was on their discipline and not the use of the technology.

Implementation

For the first run of this project with Group 1, the author was present to support the students through an introductory session during their first week at university. The aim was to focus the students on their digital literacies and to pay attention to the idea that they had the opportunity to create a managed online presence through the portfolio and badges. This session introduced Open Badges and also the Pathbrite portfolio tool. The academic lead then referred to these tools during other lectures and reminded the students to think about their online presence and their own development. Access to the Pathbrite portfolio was through a link on the Blackboard virtual learning environment (VLE). For students to gain access to the module (called 'Course' in the system) the 'Course code' gave them access to each of the assignments or activities for the module. Once all the activities were completed then the students could apply for their badge. The activities were designed to be dependent on the module so that they could not jump ahead and try to complete all the activities prematurely.

The templates within the portfolio tool described each task in detail, providing an example of what was expected. In the first session that the author ran with the students, one of the examples was shown. The activity was designed to ask for a 'digital artefact' and not just a presentation. To encourage the students to move beyond PowerPoint by her own example, the author deliberately provided an alternative approach to presentation, incorporating the Sway app for links to video and the ThingLink app for interactive images.

Via Blackboard, the students were introduced to the Open Badge Factory link, so that they could apply for the Professional Skills for Geographers Level 1 (Figure 4). The link opened a form that asked the students to submit their own link - to their portfolio evidence. There is

now a Level 2 Badge; a Level 3 badge is due to be introduced in 2017/18. Group 1 is currently working towards Level 2 and, in its final year, will have the opportunity to work towards Level 3.



PROFESSIONAL SKILLS FOR GEOGRAPHERS LEVEL 1

Part of the UG programme of Badges for supporting skills for geography as part of the GEOG1010 programme. Can be applied for once the three badges: Curiosity, Communication and Creativity have been awarded.

Figure 4. The Professional Skills for Geographers Level 1 badge

Activity	Group 1 completions (N=190)
Curiosity	177
Creativity	112
Communication	104
Professional Skills for Geographers badge	46

Table 1. Number of students completing activities and applying for their Professional Skills for Geography Badge Level 1

Student engagement and hard-to-reach students

Although we had been using open badges and e-portfolios with the iChamp network for some time, we had never used this model on all students. Certainly, providing evidence in a portfolio combined with the use of Open Badges was not a familiar concept to any of the GEOG1010 students. The iChamps are students in a select group, looking to engage with the university and actively seeking experiences to enhance their online presence and skills. The GEOG1010 students were a large cohort with a range of abilities. Through using these tools, we were able to monitor all students' contributions throughout the module. In particular, through the portfolio, we noticed who had not participated in the tasks and could tally this information with other data we had on the students' engagement across other modules in the programme.

The use of badges was also interesting as it created an element of competition between students and, towards the end of the module, more students were claiming their milestones and engaging with the education developer. By including the milestone badges, we gained a better level of engagement than we did last year with the original cohort (Table 1). This was unexpected, as we had expected that they would feel that the smaller badges were insignificant compared to the overall prize; however, they seemed to be keen to gain as much as they could through participation in these activities.

To ensure that there was consistency of messages and practical inspirations, from October 2016 the author was timetabled to attend the Group 2 sessions every week. In the first semester, a new activity - 'practice sessions' - was introduced: students were encouraged to explore the tools and have essentially, a 'safe space to fail' (Bryant, Coombs and Pazio, 2014); they were able to submit into the portfolio tool and use a range of apps and tools to

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create videos and graphics on a range of personal topics.

In terms of 'hard-to-reach' students, although the university does not have a specific definition, it was clear that international students, as well as students who were not very confident, were actively participating and contacting the Education Developer, for clarification and advice, through email and the Pathbrite portfolio tools. In general, students who were not part of co-curricular activities (in non-student union contexts) were also participating, communicating and, as part of these activities, developing digital literacies skills relevant to their profession. This was an unusual level of engagement, as the tool that the institution provides for the students is the virtual learning environment (VLE), which is not used for social learning or student engagement in the main, but as a repository for resources of the module. If there is engagement at all, the VLE is a way of discussing coursework queries and not an avenue for student development.

Within the portfolio tools, it was clear where the activity was tailing off and so the e-portfolios were used to prompt students to complete the work, by messages left in the private comment areas. The lead academic also commented in face-to-face sessions as well as creating announcements on the VLE as reminders. It was this blended approach to engagement that meant so many of the students completed their e-portfolios.

Conclusion

About a quarter of the students applied for their badges, despite three quarters' having completed and submitted evidence into their e-portfolios. Possible explanations for this include a combination of limited time for the academic staff and the fact that other staff on the Geography programme were unfamiliar with the concept of digital literacies or with the use of Open Badges or even e-portfolios. We feel that more work with teams across the University, such as careers advisers and mentors, as well as more opportunities for badges to be added to e-portfolios, would encourage greater and more relevant participation, as the students would see this as a holistic activity and not a specialist addition to an individual module.

As a measure felt to be needed, an iChamp, to work within the first- and second-year programmes, has been introduced, both to 'inspire' the students and so that they can see one of their peers with the badges; s/he could also run a workshop on how to display the badges. There has now been closer collaboration with the Employability lead for the academic unit.

Professional Skills for Geographers Level 1



Figure 5. The Professional Skills for Geographers Badge with associated 'milestone' badges

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We have been most pleased with the response of the students, in particular in Group 2. Although a formal evaluation will take place at the end of the project, we already have anecdotal evidence that the students are increasingly aware of the need to develop digital skills and that those students who would not normally be confident in talking to their academic leads are now able to communicate through the portfolio tool.

The e-portfolio, with its functionality to offer feedback and for the students to offer some reflection with their submission, is unique and has never been used in a digital format at the University. Through the connections with the Personal Tutor Network within the Faculty of Social, Human and Mathematical Sciences, this tool could provide a valuable asset in communication with students, for both their students and for pastoral care. Having systems to provide feedback and for students to be able to offer comments about their work in a very social way is a huge step forward for the university in terms of engaging with all students and not just those who have chosen to engage with co-curricular activities.

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ⁱ The Graduate Passport is no longer in use at the University of Southampton and was phased out in 2014.

ⁱⁱ <https://www.canva.com/>