

Open Digital Badges for the Uninitiated

James Buckingham

Zayed University, Abu Dhabi, United Arab Emirates
james.buckingham@zu.ac.ae

Before Badges

A student

Ahmed enjoys learning English but does not do so well on tests because he finds them stressful. Yet he is motivated to apply what he has learned in his English class to engage in exchanges as he walks the streets of his neighbourhood. He has found the immediate feedback he gets from these experiences to be a useful measure of how successful or unsuccessful he has been in understanding concepts learned in class. The student's teacher and school principal have only just recently learned through social circles of his efforts to apply what he has learned in class to engage in these exchanges outside of class. However, as valuable as they are, and aside from words of praise from his teacher and principal, these efforts continue to go formally unrecognized.

A teacher

Anna is an accomplished career educator and has been invited to give a number of presentations to peers both within her school system and outside, typically outside of school hours. She has become the "go to" person for questions on key topics / issues that many of her peers are facing. However, increasing administrative demands have been put on her by her employer and a lack of recognition by administration for her volunteer work are discouraging her from devoting so much time to it.

A principal

Al is seeking to encourage professional development amongst his instructors, especially on the topic of technological integration but has no clear idea of who amongst his staff would be best to approach to lead or organize such in-house training. As a result, he focuses on an already overburdened ICT instructor to organize all such events, thinking that this may be the only tactful way of ensuring his staff get appropriate PD instruction on the topic.

Why badges?

The concept of badges will not be new to most readers of this article. Many of us have come across badges as a girl or boy scout, a member of the military, or an active member in a specialized community group. For years, such organizations have been encouraging and recognizing individual members for their efforts to realize specific contributions, achievements, skills, or competencies through the awarding of badges. Such organizations typically make clear in advance what criteria need to be met for a member to be awarded a given badge. Once a member produces evidence that the criteria have been met, the badge is awarded publicly, and it often does not end there. Recipients can be encouraged to display the badge to signal to others their accomplishment. This encourages others who require such expertise to seek out this community of badge earners for their support thus further reinforcing the value in earning such a badge.



Figure 1. From Boy Scout Rank and Advancement, (Boy Scout Troop 373, 2011)

Today that concept lives on in a new form – digital badges – and a new place – online. Here many of us may have already come into contact with badges but within different contexts and with varying complexity. Foursquare, Khan Academy, or Edmodo are but three examples, where anyone who might be interested is invited to “earn badges” in exchange for accomplishing a set of clearly spelled out “criteria” pre-determined by the issuer. However, not all digital badges are alike. A badge earned through such a site or domain is typically only on view via the same site it was earned on. In other words, it is not transferable. On first glance, this may not appear to be an issue and for many it never is. However, if someone does earn a badge for realizing a certain skill, aptitude or competence on such a site and then wants to share this with others beyond the site, they find it cannot be done. Open digital badges were conceived as a means to overcoming this obstacle.



Figure 2. (left to right): Verified teacher badge – (Edmodo, n.d.); Newbie badge – (FourSquare, n.d.); Black hole badge – (Khan Academy, n.d.)

Like regular digital badges, open digital badges are offered via a given web site and with details on the criteria required to earn them, but they differ in three important ways. First, the option exists to allow anyone meeting the posted criteria to engage in earning open digital badges. In other words, signing in for verification may be required to join a web site to earn a badge, but there is no attempt to make learning about or earning a badge exclusive. Second, once earned, recipients are not confined to storing their badges on the site where they were earned but rather have the freedom or “openness” to actually place their badges digitally almost anywhere they choose. That could be the earner’s blog, email signature, curriculum vitae, LinkedIn account, or Facebook account. Third, and most importantly, wherever posted, an open badge can carry a link that has been “baked” into it which connects the badge to the digital evidence used to earn the badge.

What challenges can badges address?

Many educators are attracted to using digital badges as a motivational tool – similar to how stamps and stars have been used to reward students for demonstrating a desired behaviour or attaining a certain skill level. They become another form of formative assessment. Like stars and stamps, students enjoy badges as a tangible record of favourable progress they make as they aspire to eventually earn a course credit. Perhaps the timing for using open digital badges in education could not be better when we note just how similar this is to another activity many students enjoy – gaming. Many students are motivated by the experience of earning something, e.g. powers or skills, as they progress through a course of challenges that lead to their eventually conquering a game. As badges afford a similar reward, their use in curricula could contribute significantly to a gamification approach in instructional design.

However badges have the potential to realize much more for their earners. If badge criteria are written so that they are tied to a set of more broadly recognized standards, they can have more value or currency and thus give students even greater incentive to earn them. Their value is no longer confined to the classroom. This means designing badge criteria with an eye to allowing input from other less conventional but no less important stakeholders such as potential future employers.

The following table outlines a few common learning challenges and how digital badges could be used to help address them.

Table 1. Learning Challenges

| | Challenge | How this might be addressed with badges |
|---|---|--|
| 1 | How to encourage skills, attitudes and competencies that are deemed just as important as knowledge-based skills and competencies but which typically go unrecognized because they are not | Award badges that are designed to both recognize and encourage the presence and mastery of such soft skills so that students see that these are valued and important. More advanced students may |

| | Challenge | How this might be addressed with badges |
|---|---|--|
| | formally considered part of a course syllabus or company's key performance indicators. Examples include soft skills such as community building, negotiating, and team building, but could also include personal initiative, problem solving, and leadership. | even wish to design a badge that rewards other students for such efforts. |
| 2 | How to encourage the attainment of a minimum standard in the execution of something typically done voluntarily. The concern here is about asking volunteers who have already agreed to donate their scarce time to fulfill a responsibility with work of a certain standard. | Award badges that clearly spell out a set of criteria that meet a certain standard; inform volunteers of this recognition at the time of their recruitment. Reward badges to volunteers who have both donated time and satisfactorily performed at a desired skill level. |
| 3 | How to encourage self directed, self paced learning from students and teachers when typically most formal learning is designed to be structured and controlled to realize specific learning objectives in a prescribed period of time. How to promote accountability and credibility of assessment when self directed, self paced learning thrives outside of such traditional control. | Award badges that clearly spell out a set of criteria for realizing learning objectives produced inside or outside of class and that can serve as evidence of self directed learning. This could include a record of negotiating and contracting an assignment with a mentor in the community (perhaps in consultation with one's instructor) or directing a student to online sources that relate to their unique interests where relevant open digital badges can be earned. |

What gives badges their credibility?

There are thousands of badge examples, yet not all badges hold the same value. What factors affect a badge's value and how do they acquire credibility in the eyes of others? Credibility is perhaps the most critical issue. For our purposes here, a credible badge system is one that is dependable and that people can trust and rely upon to produce badges that are highly valued by those earning them, their peers, their professional community and perhaps by the world at large.

In general, badges increase in credibility in four basic ways. To begin with, the badge design process needs to be transparent. In other words, careful thought goes into articulating the criteria for earning the badge in a process that is transparent enough to stand up to closer scrutiny. This may involve inviting input on its design from any and all stakeholders who stand to benefit from a student earning the resulting badge. This

may mean inviting the ideas and opinions of leading educators, community leaders, future employers, even past student badge earners.

Secondly, the badge criteria need to be written so that they are clearly understood by all. This helps ensure that criteria clearly spell out what needs to be produced as evidence to earn the badge and that this evidence will stand up to scrutiny by others. Use of SMART goals can address this (specific, measurable, attainable, realistic, and timely; see <http://topachievement.com/smart.html>). However, the methods for learning how to realize the criteria need not be specified. It is the role of the student or teacher or mentor to design these.

Third, the badge candidate should produce some form of tangible digital learning product that is based on the clearly spelled out criteria. This learning product or evidence is assessed and if a badge is awarded, a link to the relevant learning product is fused or “baked” into the badge award, alongside the criteria for awarding the badge, which is important in order for badge issuing systems to thwart the copying and false awarding of badges. This ensures that the earner and the submitted evidence are clearly linked to one another at the time the badge is awarded and delivered.

Finally, the skills that the badge and evidence relate to must be apparent to not just those connected with assessing, awarding and earning the badge but to those who stand to benefit from the badge earner’s proven competencies. Thus, the credibility of the badge will be greatly enhanced if those same competencies and skills are aligned with nationally or internationally recognized standards.

How can the reader put a badge program in place?

By now it should be apparent that realizing a credible badge system involves more than simply designing and distributing digital badges. Designing the digital badges themselves is perhaps the easy part. Designing the overall badge ecosystem so that it is meaningful requires a great deal more thought to ensure it is fully aligned with the aims and purposes of your instruction. Use of a badge ecosystem may be confined to the walls of your classroom or extend beyond to include those of an institution, organization, region, nation or even the world. Whatever the situation, you will need to address the following to make that ecosystem successful.

- understand the mechanics of a badge ecosystem (how it works)
- create a clear purpose for your badge ecosystem (outline the rationale for designing such a system)
- design badges so that they are clearly understood (visuals and criteria clearly define a badge’s purpose to all badge end users; the badge earner, relevant institutions, a future employer, etc.)
- market badges to your students (ensure that your students clearly understand the badge earning process and its value to them)
- administer the badge system (receive, store and award badges)

A possible path to follow

With an understanding of how a badge ecosystem works, followed by a well articulated rationale for realizing a badge ecosystem, one can confidently work on creating open digital badges. Badge graphics can be created using any picture authoring or editing tool so long as the resulting image conforms to certain badge specifications on file type, measurement, and memory size. However, the simplest way to address these and still build attractive badge graphics is by using an online digital badge making utility. Two of the most notable of these are Openbadges (<https://www.openbadges.me>), and Credly (<https://credly.com/badge-builder>). Both facilitate the creation of a badge graphic using a WYSIWIG “what you see is what you get” interface. Both provide comprehensive shape, icon, banner, colour and text libraries to choose from and the option to upload your own if these prove to not be to your liking. Each makes it possible to export the finished badge graphic to your computer before moving on to whatever you might have in mind for it next. For most of us, this will mean finding a place that allows for hosting the badge graphic, ‘baking” details into the badge graphic (i.e. authoring its title, earning criteria, testimonials and a link to evidence used to support the awarding) and awarding the now complete digital badge. Of the two mentioned, Credly affords the hosting, “baking” and issuing of open digital badges for free. It also welcomes the import of both badge graphics and completed digital badges.

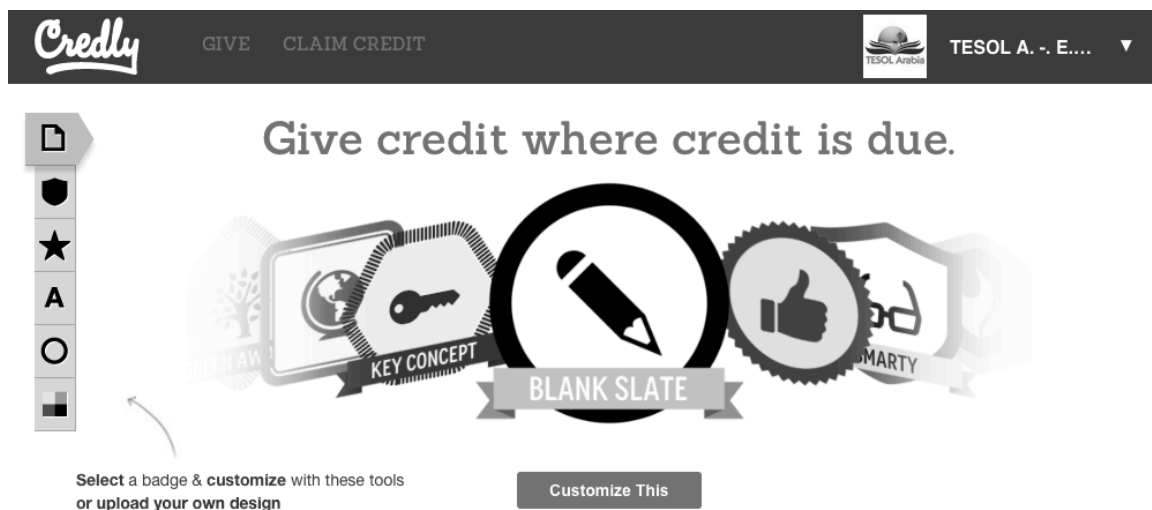


Figure 3. From Credly Badge Builder, (Credly, n.d.)

With a digital badge in place, one can now award badges. With Credly, awarding involves selecting the digital badge to “give” (a button over the selected badge), then completing details on the badge earner such as their first and last name, their email address, a testimonial about the badge earner (optional), next including a link to evidence used to support the earning of the badge (optional), and finally sending the badge.

What awaits the badge earner is an email that displays the digital badge, congratulates the earner and then invites them to save and share their newly earned digital badge on the Credly badge system. The first time this happens, the badge earner will be required to set up a Credly account to host the badge but will then have the freedom to export the badge elsewhere and as frequently as they wish – evidence of the “openness” of the system.

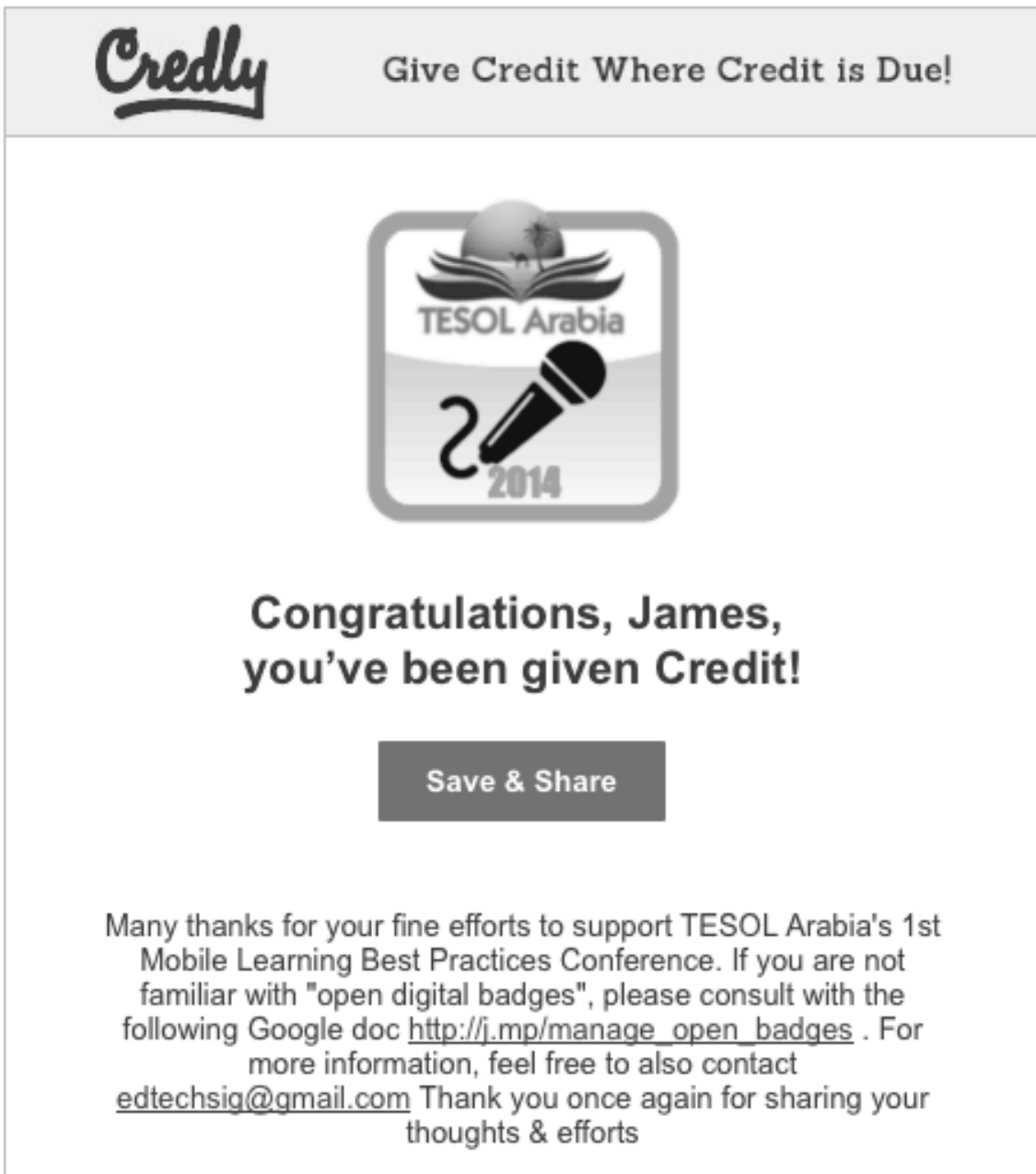


Figure 4. From (TESOL Arabia – Education Technology sig via Credly, 2014)

There are more sophisticated systems for awarding badges. In some systems it is possible to set criteria in advance and then automatically trigger the awarding of badges when the criteria have been met. For example, Badgestack, Blackboard's Open Badge integration module, and the Badge OS plugin for WordPress all facilitate this. However, discussion here is limited to the tools which I have found work most easily to award badges meeting the criteria mentioned above, and which should serve to help readers of this article get started.

After Badges – a return to our three profiles

The student (Ahmed)

Because his teacher offers a badge with a clear set of criteria on how to evidence and submit self directed language practice, Ahmed is encouraged to record and document his various informal English exchanges, reflect on his efforts, and share these with his instructor and peers for additional feedback. As a result, he is now being rewarded for realizing self directed practice, modeling such practice to his peers, and documenting his learning. Being recognized for this informal learning encourages Ahmed to continue these efforts and also serves as a model to others on the importance of doing the same. It also invites his instructor to discuss with Ahmed how the practice may help him overcome his concerns / lack of confidence in completing staged competency tests. There may even be an opportunity to explore how such methods might better serve summative assessment purposes than those staged in class.

The teacher (Anna)

With the help of a community of peers, Anna could be nominated for a badge that recognizes her expertise and contribution to the community on a given topic, for x number of presentations over y period of time. The badge could be included in her annual performance evaluation portfolio and thus have her contributions to the professional community become more salient to her employer both at the school and head office. This presents an opportunity for her employer to recognize such community involvement/leadership that promotes best practices with the desired effect of encouraging others to do the same. With such recognition from her peers presented in the form of a badge, Anna may earn sponsored release time from her employer so that she can share her work with similar educators in more distant areas of the district or beyond.

The principal (Al)

Al, the principal, learns through an online search, that there are certain badges that are based on international standards and are focused on tech integration. He then discovers that some of his staff and key staff members on other staff lists within the board have earned such badges. All of them have achieved such work independently of the limited professional development opportunities formally provided in house via the school and its board. Al now has the ability to identify staff members who are best suited to leading in house training on the topic of tech integration and because he has access to the criteria used by each candidate to earn such badges, he is confident that the standards used to earn their badges are compatible with those of the school board

Conclusion

In conclusion, I have attempted to provide an introduction to open digital badges; a means to defining open digital badges, a look at the opportunities they present, the qualities required to be a successful badge ecosystem, and a route to take in realizing the creation and awarding of open digital badges. For more information on how to manage badges earned, please visit <http://j.mp/manageopenbadges>. To learn more about how to address the other elements that are required to realize a successful ecosystem, please consult the following.

To understand the basic mechanics of a badge ecosystem (how it works)

- What is a badge? MacArthur Foundation – video – <http://www.macfound.org/videos/395/>
- Open Badges – Mozilla – <http://openbadges.org/faq/>
- Concordia Badges – webpage – <http://badges.concordiashanghai.org>
- Penn State – Badge system overview – graphic – http://j.mp/Pennstate_badgesystemoverview

For information on defining the rationale for a badge ecosystem

- Badges: New Currency for Professional Credentials – MOOC – <http://j.mp/badgesMOOC>

Administering a badge ecosystem (creating and awarding badges)

- OpenBadges.me – <https://www.openbadges.me/help.html#.U4D4fl5EP7I>
- Credly – knowledge base – <http://support.credly.com/knowledgebase/articles/all>
- Credly – knowledge base – <http://support.credly.com/knowledgebase/topics/25242-giving-credit>

References

BadgeMOOC: Badges: New Currency for Professional Credentials. (n.d.). *CourseSites*. Available:https://www.coursesites.com/s/_BadgeMOOC.

Bixler, B. (2012, July 5). Badges at Penn State. *portfolio*. Available: http://www.personal.psu.edu/bxb11/blogs/brett_bixler_e-portfolio/2012/07/badges-at-penn-state.html.

Boll, M. (2013, February 1). Getting Started. *Concordia Badges | Badges! I LOVE Badges*. Available: <http://badges.concordiashanghai.org/>.

Boll, M. (n.d.). TripAdvisor, Digital Badges, Micro Credentialing and Me. *Innovative Professional Development*. Available:<http://www.innovativepd.com/trip-advisor-verified-digital-badges-micro-credentialing-will-successful/>.

Bowen, K. (n.d.). Five Ways Digital Badges Can Influence Learning. *The evollution*. Available:http://www.evollution.com/media_resources/ways-digital-badges-influence-learning/.

Boy Scout Troop 373. (2011). Rank and Advancement. Boy Scout Troop 373 (Lafayette, Indiana).
Available: <http://www.scoutlander.com/publicsite/unitcustom.aspx?UID=1603&CUSTOMID=10849>.

Buckingham, J. (2014). TAEDTECH – Managing Open Badges.
Available: <http://j.mp/manageopenbadges>.

Creating S.M.A.R.T. Goals. (n.d.). *Top Achievement*.
Available: <http://topachievement.com/smart.html>.

Credly. (n.d.). Badge Builder. Credly. Available: <https://credly.com/badge-builder>

Credly Support. (n.d.). Giving Credit. *Credly*.
Available: <http://support.credly.com/knowledgebase/topics/25242-giving-credit>.

Cross, J. (n.d.). Where did the 80% come from? *Informal Learning Blog*.
Available: <http://www.informl.com/where-did-the-80-come-from/>.

Edmodo. (n.d.). First Edmodo User at School badge.
Available: <https://www.edmodo.com/images/badges/140/school-user.png>.

FourSquare. (n.d.). Newbie Badge.
Available: <http://lalawag.com/2009/09/22/foursquare-badge-roundup/>.

Henning, S. (n.d.). Merit Badges, Past and Present, And Their Evolution. *Welcome to Henning's Scouters' Pages – Merit Badges – 1910 – 2010*.
Available: <http://www.scouters.us/mb.php#anchorTOP>.

Hickey, D. (n.d.). Recognizing, Supporting, and Attracting Adult Learners with Digital Badges. *The evolution*.
Available: http://www.evolution.com/program_planning/recognizing-supporting-and-attracting-adult-learners-with-digital-badges/.

Khan Academy. (n.d.). Badges. *Khan Academy*.
Available: <https://www.khanacademy.org/badges>.

Khan Academy. (n.d.-b). BlackHole badge.
Available: http://img1.wikia.nocookie.net/_cb20131122112043/khanacademy/images/8/84/Blahblah.png.

LearningTimes. (n.d.). BadgeStack Add-On to BadgeOS. *BadgeOS*.
Available: <http://badgeos.org/badgestack/>.

MacArthur Foundation. (2013a). Digital Badges. *MacArthur Foundation*.
Available: <http://www.macfound.org/programs/digital-badges/>.

MacArthur Foundation. (2013b). *What is a Badge?*
Available: <http://www.macfound.org/videos/395/>.

OpenBadges.Me. (n.d.). Creating creative creations. *Open Badges Me – Getting Started*.
Available: <https://www.openbadges.me/help.html#.U4D8F15EP7J>.

queen313. (2011, June 11). TripAdvisor Support Forum: Earning a badge. *TripAdvisor*. Available: http://www.tripadvisor.ca/ShowTopic-g1-i12105-k4551861-Earning_a_badge-TripAdvisor_Support.html.

Richardson, W. (2014, April 12). What Counts? How Informal Learning is Challenging Formal Education. *Educating Modern Learners*.

Available: <http://modernlearners.com/what-counts-how-informal-learning-is-challenging-formal-education/>.

Scoutmaster. (n.d.). Boy Scout Merit Badges. *Boy Scout Trail*.

Available: <http://www.boyscouttrail.com/boy-scouts/merit-badges.asp>.

Stubbs, P. (n.d.). Digital Badges – Badge System Overview. *Penn State – Educational Gaming Commons*. Available: <http://gaming.psu.edu/gamification/digital-badges/>.

TESOL Arabia – Education Technology sig via Credly. (2014, May 17). TESOL Arabia – Presenter (2014). Available:

<https://drive.google.com/file/d/0B8r1jrc3n6aiU2VjZVZCSEZrMTQ/edit?usp=sharing>.

Copyright © 1994 - 2014 TESL-EJ, ISSN 1072-4303

Copyright rests with the authors.