Digital Badges for Accreditation: Exploring the challenges

John Clayton
Waikato Institute of Technology
"Let me guess, you joined Alpha Delta Dogma."
"Just one old school tie would have done."
Badges

A *badge* is a *validated indicator* of an accomplishment, skill, quality or interest that is linked to an individual.
Curriculum as Competence

Curriculum is concerned with the interaction and progression of learners against identified standards.
Competency-Based Curriculum Orientation

• Experientially based with input from industry, government, and educational providers

• Typically based on identified “core” skills with explicit outcomes (standards) separately assessed/certificated

• Emphasis on learner-centred experience
Ecosystem

• An ecosystem provides the infrastructure for individual learners to provide a complete picture of all their achievements through the display of a collection(s) of artefacts.

• These collections signal achievement to a variety of stakeholders including potential employers, educational organisations, professional and social groups
Course Overview

Delivery

This course is a blended course incorporating self-paced study, asynchronous (nominal time) support and, when required, synchronous (real-time) elements.

- **Self-Paced Study**: All participants will be provided with access to firstly, an e-portfolio in which they will slowly build evidence of their competency, secondly, a generic online training site to help facilitate the construction of this evidence.

- **Asynchronous Support**: A facilitator/mentor will be appointed to answer participants general queries and provide guidance on specific aspects of the course. To effectively track and monitor support provided all requests for support will be e-mail based. The facilitator/mentor will respond to requests within two working days.

- **Just-In-Time Synchronous Workshops**: During the self-paced study, participants will be able to use an online forum to request further training in specific aspects of the course being undertaken. A trained facilitator will use these requests to design “just-in-time” synchronous workshops. These workshops will be scheduled weekly and will use web-conferencing technologies.

- **Industry Scheduled Workshops**: Course co-ordinators will work closely with industry representatives and will inform participants of scheduled workshops in their area that will help them complete course requirements.
Nursing Skills: Dispensing Medication

The Process

A Registered Nurse completes a training course on dispensing prescriptions within a validated environment.

The nurse meets all the performance criteria identified.

They are awarded a badge in recognition of their skill.
Details of Registered Nurse training record on dispensing medication is sent to a centralised Record of Learning System (RLS).

Meta-data includes date of issue, performance criteria measured and date of expiry.

RLS makes available the details of registered nurse training record on dispensing medication to appropriate institutional system, the learner and other learner authorised displayers.
Nursing CV: Dispensing Medication

The individual /institution is able to display “Registered Nurses” training record in a visual way.

As the badge reaches expiry date interaction with the record of learning system will alter color to alert stakeholders of individuals current status to perform.
# Digital Dashboard

<table>
<thead>
<tr>
<th>Nurse</th>
<th>skillA</th>
<th>skillW</th>
<th>skillR</th>
<th>skillD</th>
<th>skillG</th>
<th>skillX</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td><img src="image1" alt="Skill Icon" /></td>
<td><img src="image2" alt="Skill Icon" /></td>
<td><img src="image3" alt="Skill Icon" /></td>
<td><img src="image4" alt="Skill Icon" /></td>
<td><img src="image5" alt="Skill Icon" /></td>
<td><img src="image6" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Jane</td>
<td><img src="image7" alt="Skill Icon" /></td>
<td><img src="image8" alt="Skill Icon" /></td>
<td><img src="image9" alt="Skill Icon" /></td>
<td><img src="image10" alt="Skill Icon" /></td>
<td><img src="image11" alt="Skill Icon" /></td>
<td><img src="image12" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Fred</td>
<td><img src="image13" alt="Skill Icon" /></td>
<td><img src="image14" alt="Skill Icon" /></td>
<td><img src="image15" alt="Skill Icon" /></td>
<td><img src="image16" alt="Skill Icon" /></td>
<td><img src="image17" alt="Skill Icon" /></td>
<td><img src="image18" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Mrtyle</td>
<td><img src="image19" alt="Skill Icon" /></td>
<td><img src="image20" alt="Skill Icon" /></td>
<td><img src="image21" alt="Skill Icon" /></td>
<td><img src="image22" alt="Skill Icon" /></td>
<td><img src="image23" alt="Skill Icon" /></td>
<td><img src="image24" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Brenda</td>
<td><img src="image25" alt="Skill Icon" /></td>
<td><img src="image26" alt="Skill Icon" /></td>
<td><img src="image27" alt="Skill Icon" /></td>
<td><img src="image28" alt="Skill Icon" /></td>
<td><img src="image29" alt="Skill Icon" /></td>
<td><img src="image30" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Colin</td>
<td><img src="image31" alt="Skill Icon" /></td>
<td><img src="image32" alt="Skill Icon" /></td>
<td><img src="image33" alt="Skill Icon" /></td>
<td><img src="image34" alt="Skill Icon" /></td>
<td><img src="image35" alt="Skill Icon" /></td>
<td><img src="image36" alt="Skill Icon" /></td>
</tr>
<tr>
<td>Nola</td>
<td><img src="image37" alt="Skill Icon" /></td>
<td><img src="image38" alt="Skill Icon" /></td>
<td><img src="image39" alt="Skill Icon" /></td>
<td><img src="image40" alt="Skill Icon" /></td>
<td><img src="image41" alt="Skill Icon" /></td>
<td><img src="image42" alt="Skill Icon" /></td>
</tr>
</tbody>
</table>
Validity

• The extent to which the criteria of the badge issued aligns with established industry standards
• The extent to which the badge displayed is an accurate representation of the achievements of the employee.
  
  *For example, the validity of a badge would be challenged if the criteria established for a recognised practical procedure was measured solely by written activities.*
Reliability

• There is the expectation that the criteria used to define and award a badge in one environment and/or to one cohort of employees, if used under consistent conditions, would produce comparable results in all similar environments and cohorts of employees.
Credibility

• Badges issued must be recognised as a robust, reliable and accurate source of information on employee achievements by a range of stakeholders.

• Credibility is based on two fundamental components, trustworthiness and expertise.

• For example, credibility is enhanced if the badge criteria are designed by acknowledged experts (expertise) and are endorsed by professional bodies within the industry (trustworthiness).
Badges are not “static” pictures they contain dynamic metadata that

• Reduces the risk of fakes (e.g., illegitimately copying and pasting pictorial badges)
• Builds in an a validation system (i.e. viewers can review actual learning undertaken).
• Adds credibility to badges awarded
Badge Metadata

The information “baked” in each badge includes:

– who issued the badge
– the issue date
– how the badge was earned
– hyperlinks back to artefacts, documents, or testimonials demonstrating the work that lead to earning the badge.
– authentication back to the issuer
John Clayton

I am a New Zealand e-learning educator with extensive knowledge of deploying, using and evaluating e-learning technologies. I am currently a member of the New Zealand Ministry of Education e-Learning Reference Group 2005 - 2010. Currently a member of the Kiwi Advisor Network New Zealand (REANNZ).

I have been the project leader of a number of government funded e-learning deployment projects including the Open Source Courseware Initiative.

I have led a number of New Zealand Ministry of Education research funded projects investigating The Role of e-Learning in Building Workforce Activities in Aotearoa / New Zealand Industry Training Organisations (2008), and the ICT PD Cluster Programme Research Review Project (2009).

I was also the technical team leader of the Ministry of Health, Utilisation of evidence to inform clinical practice, funded project.

John has 5 badges

https://www.openpassport.org/Login