

Digital badges in health: A position paper for New Zealand educational providers

Background

Increasingly the benefits of networked communities, interactive media, online tutorials, and e-learning applications are being investigated for the provision of health education in New Zealand. In monitoring individual performance, a range of measures can be used, such as allocated grades, credits earned, and activities completed. However, these specific measures are institutionally controlled, have limited reach and, in isolation, do not truly represent a learner's progress, indicate a learner's proficiency or acknowledge a learner's achievement. Digital badges are used as valid indicators of accomplishment, skill, knowledge, or interest. In formal educational environments endorsed badges, with defined assessments, can be used for certification purposes. Indeed, it can be argued a badge ecosystem could create a broader picture of educational achievement by providing the infrastructure for individual learners to demonstrate their knowledge, skills and achievements through the display of endorsed badge collections.

Badge Ecosystem: Challenges

For badge ecosystems to be accepted by formal educational providers three challenges, validity, reliability, and credibility, need to be resolved.

- *Validity*: This refers to, firstly, the extent to which the criteria of the badge issued aligns with established standards and secondly, the extent to which the badge displayed is an accurate representation of the achievements of the learner. 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 at one institution and/or to one cohort of learners, if used under consistent conditions, would produce comparable results at all similar institutions and cohorts of learners.
- *Credibility*: To be credible, individual badges issued must be recognised as a robust, reliable and accurate source of information on learner achievements by a range of health stakeholders. Credibility is based on two fundamental components, trustworthiness and expertise. For example, credibility can be enhanced if the badge criteria are designed by acknowledged experts (expertise) and are endorsed by professional bodies within the discipline (trustworthiness).

Badge Ecosystem: A Potential Framework

An economical way to describe a potential badge ecosystem framework is to follow a representational pathway through the badge creation, awarding and display process.

- *Step One*: A discipline expert establishes the learning outcome(s) and performance criteria for a competency and creates an appropriate badge. The badge is peer-reviewed by colleagues and endorsed by an established professional body and/or institution.
- *Step Two*: The badge is presented to learners who complete all the requirements and submit evidence for verification. Evidence is reviewed and, if proven satisfactory, badge specific details (such as place issued, performance criteria met, i.e. meta-data) are permanently embedded, (referred to as *baked*), within the awarded badge.
- *Step Three*: The badge, with meta-data, is issued to the learner who stores this within an individually controlled digital space referred to as a *backpack*.
- *Step Four*: The recipient uses the functionalities of their personal digital communication environments, for example, e-portfolio, blog, social media tool or wiki, to request the details of the badge from their backpack. The information is received within the personal space and the badge is displayed.

Summary

The use of information and communication technologies (ICT's) in the provision of health education has seen a fundamental shift in how, when and where learning occurs. Digital badges are a response to this emerging educational landscape. They provide a framework that facilitates learning in new contexts and provides opportunities for learners to celebrate their achievements. The challenge for health educationalists is to rigorously review, debate and advocate badge ecosystems to ensure they meet the requirements of multiple health stakeholders.

Keywords

e-learning, digital badges, badge ecosystems, credibility, reliability, validity

How this contributes to knowledge development in the e-learning/blended learning theme:

- Describes the issues and challenges in the emerging field of digital badges.
- Provides an insight into a potential system providing a visual display of individual compliance against identified skill maps.
- Empowers learners to control and fully utilise the outputs of learning undertaken.

References

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