Assessing the value of a digital badge credentialing system to improve student awareness when developing key skills in post-primary education.

Aideen Reddy BSc (DIT)
Supervised by: Dr Richard Millwood

A Meta project/dissertation submitted to the University of Dublin, in partial fulfilment of the requirements for the degree of Master of Science in Technology & Learning

ABSTRACT

Can a Digital Badge Credentialing System improve student awareness when developing Key Skills in Post Primary education?

Soft skills, the intra- and inter-personal skills essential for personal development, social participation and workplace success are proven to predict meaningful life outcomes. A version of these skills, referred to as Key Skills, have recently been embedded within the new Junior Cycle Post Primary curriculum in Ireland.

Unfortunately, there is a clear struggle in the area of assessment and accreditation of these vital skills. Standard achievement tests miss or, more accurately, are not capable of adequately capturing the relevant information.

This project proposes the use of Digital Badge Credentialing System (DBCS) in answer to the clear need outlined above. In general, digital badges will act as online credentials representing an individual's skills, interests, and achievements and backing this up with embedded meta-data as proof of the students work towards the award.

Digital badges have the capability and flexibility to be an alternative or supplement to traditional credentials such as diplomas, certificates and degrees etc. Considering the digital badges ability to recognise alternative learning formats, or situations i.e. non-formal or informal contexts they can reflect a finer-grained and nuanced reflection of a person's skills, experiences and dispositions.

The ongoing segmentation and ever-changing society of the 21st century makes great use of the humanistic approach and constructivist approach. The humanistic approach to education understands the self as constantly changing. It establishes reliable support mechanisms within the learner avoiding the ever shifting environment. By doing so the learner has personal power (autonomy) to create better meaning and establish connections with others in this constantly changing modern life. Similarly, constructivist learning theory sees the learner responding to their sensory experiences and constructing in their own minds, schemes or cognitive structures which constitute the meaning and understanding of their world, as they understand it. Again making the experience very personal and individual. Both pedagogical approaches tied with student-centred learning are perfect underpinnings for this study

Key words: micro-credentialing, digital badges, open badges, learning pathways, soft skills, 21st century skills, student-centred, humanistic, constructivist