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Embedding Reflective Practice and Creativity To Link A Modularised Curriculum.

Muireann OKeeffe
Technological University Dublin, muireann.okeeffe@tudublin.ie

Roisin Donnelly
Technological University Dublin, roisin.donnelly@tudublin.ie

EMBEDDING REFLECTIVE PRACTICE AND CREATIVITY TO LINK A MODULAR CURRICULUM

Muireann O'Keeffe, Royal College of Surgeons in Ireland, Dublin, Ireland
Roisin Donnelly, Dublin Institute of Technology, Ireland

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Providing space for students to reflect and integrate their learning is the theme of this chapter, where Muireann has researched ways of integrating ePortfolios into the curriculum to encourage students to develop and reflect on their learning through student-led communities of practice.

While modularisation of the curriculum can offer increased flexibility and choice for students, some argue that modularisation 'pigeonholes' knowledge and actively discourages the transfer of ideas and learning from one module to another. A lack of continuity between modules can prevent students from achieving personal transformation in their learning (O'Keeffe, Donnelly and O'Rourke, 2011). As a solution to this, ePortfolios can offer an opportunity for learner control and are capable of promoting deep learning, thereby enabling students to make connections between learning that occurs in different contexts: academic, workplace, and community (Quality Assurance Agency, 2009; AePP, 2009; JISC, 2008). They can highlight participants' work-based experience within their professional context and allow them to demonstrate engagement with scholarship (Gordon & Campbell, 2013). Additionally ePortfolios have been explored in the literature as a way to help nurture reflective practice, enabling learners to 'stand away' from problems arising in their studies and come to a clearer understanding (Brookfield, 1995; Fitch et al, 2008 Wakimoto & Lewis, 2014)). In this MSc programme, I aspired for the ePortfolio to enable the integration and continuation of learning across the programme. Essentially the ePortfolio would be the glue that could bind learning from discrete modules together. I believed that the ePortfolio, as a process, could allow learners to understand the connections between modules and act as a creative tool demonstrating their learning.

The MSc in Applied eLearning is a two-year part-time taught Master's programme offered in Ireland since 2007. It provides an opportunity to academic staff in further and higher

education, private sector trainers, and independent e-learning consultants to develop their skills in technology enhanced learning. During this programme, participants are required to formulate and develop an ePortfolio demonstrating their learning and reflection on learning across all modules. In 2011, in response to concerns and observations relating to ePortfolio development, and in consultation with the programme team, I (Muireann) embarked on an exploratory investigation of participants' ePortfolios. The results indicated that the ePortfolios were lacking in the depth of content, deep learner reflection, creativity, multimodal artefacts, and the peer-participation that was anticipated at this Master's level of learning. This case study arises from an initiative to address these concerns and illustrates the actions that were implemented to further embed ePortfolios into the programme curriculum and enhance participants' engagement with the ePortfolio process.

Connecting reflective practice and creativity

Jackson (2006) urges that we support students as they develop an awareness of their own creativity, and reflective practice is seen as a tool for developing creative abilities. Indeed, Craft (2010) describes creativity as a social process, dependent on participation in particular kinds of communities or environments. By integrating ePortfolios into the curriculum of this Master's programme, it was believed that they would enable engagement and participation in a community of learners, with the added benefit of nurturing creative practices in student-led communities of practice (CoP) (Churchman, 2005; Lave and Wenger, 1991; Wenger, 1998).

In order to embed the ePortfolio into the MSc curriculum, pedagogical activities were planned to engage the students in reflective and creative practices throughout the programme. I researched nurturing creativity in the classroom (Beghetto and Kaufman, 2010) and derived a set of common features which were subsequently integrated into pedagogical activities (O'Keeffe & Donnelly, 2013). Table 1 lists these features matched with pedagogical activities planned to encourage reflection and creativity in the learning environment.

Features	Pedagogical activities	Rationale for activity
Safe environment	Welcome induction with continual reinforcement, refreshment and opportunities for informal discussion through the programme Ice-breaker group activities	Student opinions respected, voice given to each student, openness and tolerance of peers Fosters comfort and familiarity in the group

	Brainstorming activities (face-to-face and online within ePortfolio)	Develops student-led CoP
Connectivity among learners	Group ice-breaker Learner-centred group activities Positive team-building activity Encouraging online discussions within ePortfolio	Students who are self-regulated learners collaborate with other students in exchanging ideas (CoP), eliciting assistance when needed, and providing support to their peers Students can see the connection between their efforts and learning success
Ability to think of diverse ideas	Brainstorming; improvisation activities; think-pair-share activities; pyramid discussions (face-to-face and online within ePortfolio)	Helps participants to be adaptable, innovative, to solve problems and communicate well with peers
Autonomy	Students enabled to work on small-scale e-learning projects that motivate them intrinsically	Knowledge is learnt more effectively and participants are more motivated in skill development and personal transformation, which in turn can empower them to be active and autonomous learners in the future
Courage, risk-taking	Activity encouraging students to try something new Elevator pitch Student presentations to peers Peer evaluation of ideas	Students allowed to try new ideas out and given permission to fail
Capacity to shift perspective	Activity: using De Bono's (2000) Six Thinking Hats to think about a problem from alternative positions	Reflection enables standing away and thinking from a different angle
Develop diverse ideas	Activity: using smartphones to record quick descriptive reflections Voki tool to record reflections	Reflection enables deeper thinking
Be judicious of those ideas	Activity: writing critical reflections at critical times during the project Mind maps for reflection Online decision-making via Tricider tool	Reflection enables critical thought on which decision is most suitable

Table 1   Aligning creative and reflective activities to support learning

In all modules, participants were encouraged to play with diverse technologies and to be inventive and enthusiastic about the possibilities of technology as a tool for learning. Throughout the programme a learning environment of psychological safety for participants was cultivated where students felt accepted, where empathetic understanding was present, and where they could become autonomous learners. The practices, behaviours and attitudes of the programme tutors would underpin this safe learning environment, so it was important to provide support, feedback and structure while also recognising the importance of empowering the participants to learn for themselves.

Case Study Findings

At the end of the first academic year, participants' ePortfolios were analysed using a rubric developed from a combined set of creative and reflective criteria, and findings show clear evidence of increased creativity and reflective practice in the participants' work. Focus group interviews were held with participants to explore if and how they considered the general learning environment and pedagogical activities could foster reflection and creativity in their ePortfolios. The focus group discussion highlighted that the learning environment was a safe welcoming space, where participants felt empowered to take risks and try new things out: '*in that space you could talk about your ideas and test them, that's a really positive thing*' (Participant A, focus group). The ePortfolios demonstrated evidence of students working together, asking questions of one another: '*If you get the chance could you forward on the links that you were telling me about in class last week please*' (Participant C, ePortfolio), and posting helpful feedback via the ePortfolio.

The ePortfolios also contained enhanced reflections and artefacts and showed that participants were engaging in an online CoP through their ePortfolios. Participants reported that the diversity of activities across all modules enabled them to engage in different types of reflective practice within the ePortfolio. Interestingly, the participants reported that they considered that different tools enabled them to engage in different levels of reflection. They reported that quick reflections via smartphone enabled descriptive reflection, but recognised that they engaged in deeper reflective practice by on-going writing about their learning and experiences. The participants questioned the value of some tools for reflection: '*if you save it to a phone or something, do you get the same value from it, as if you write it or type it out*' (Participant B, focus group).

Future Developments

I believe that for students to really benefit from their ePortfolios, reflective practice should be continuously encouraged by tutors and supported in activities across all modules in the curriculum. Diverse activities highlighted in Table 1, using multimodal tools such as Voki's (animated podcasts), video via smartphones and mind-mapping tools, can help the participants engage in reflective practice at different points on their learning journey. Variety in these activities helps to stimulate thinking and creativity.

In the future the programme team hope to continue to provide a variety of pedagogical activities to engage the participants with the ePortfolios and also to encourage our graduates to speak about the value of the ePortfolios to current cohorts.

As a result of this case study there has been increased engagement of students with ePortfolios , and the students in turn have recognised the benefits of using their ePortfolios for connecting learning across the programme curriculum; they now deem that ePortfolios have become a useful tool in demonstrating their skillset and competencies for career and professional purposes.

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