

# **The Role of Shared Creation of E-Portfolios in the Formation of a Community of Practice**

Research by Margaret Deegan (2009/10 Bursary Scheme)

## **Research Overview**

The research begins with the contention that twenty-first century learning requires new and innovative ways in which to engage the teacher and learner, and the recognition that Information and Communication Technology (ICT) may offer the possibility to enhance the learning experience. Specifically, the research considers whether the introduction and integration of ICT in a particular school has made a difference to the teaching and learning there, and if so, the nature of that learning.

As the study proceeds, the researcher extends the theme of collaboration using ICT by looking at the development of 'communities of practice' through the shared creation of e-portfolios. In essence, the work here intends to demonstrate how collaborative knowledge sharing through ICTs (in this case e-portfolios) supports the growth of communities of practice, understood to be social activity in which learning occurs.

## **Design and Methodology**

The research was carried out in two distinct phases. The initial work required teachers to co-create WebQuests (lessons using information from the web) with students aged 15 and 16 years, leaving a resource which could be used for teaching Irish at second level. The researcher's interest was focused on the learning interactions and relationships of participants, how learning evolved in the process, and the role of reflective practice through the use of a communal website or Wiki. A case study approach was taken which utilized both qualitative and quantitative methods regarding the evaluation of learning experiences. A questionnaire was used and data was collected from the Wiki regarding feedback of experiences in building WebQuests.

The second stage of the research focused on the learning experiences of two fifth-year geography class groups, ranging in age from 15 to 17 years. Participants were required to develop shared e-portfolios, collecting artefacts that would be used to build an educational website relevant to the curriculum. In doing so, they used the OneNote software which in turn linked to the school's online Virtual Learning Environment (VLE). While the researcher mainly used a case study methodology, a more extensive data set was used and this included questionnaires, observations, interviews, sample portfolios and log data analysis.

Ethical considerations were taken into account throughout the research and required consent from principal, learner and parent.

## **Findings and Recommendations**

In the initial research work, the author hoped to demonstrate that collaborative ICTs, in particular the use of WebQuests, would support and develop learning environments where learners could build on existing knowledge and work to co-create learning objects meeting the very specific needs of the Irish language class. The author suggests that this can be positively demonstrated by the following:

- ICT skills were used, improved and integrated in the creation of WebQuests

- the learners expanded on their own learning through engaging in reflective practice
- the traditional teacher/student roles have been transcended in collaborative practice
- communal constructivist learning occurred through involvement in their own learning

In particular, the author suggests that new learning strategies have been gathered through involvement in the process and that learners have changed their habits of mind and are actively constructing their own deep and meaningful knowledge.

The findings of the second stage of the research indicate that collaboration had occurred, and that through a structured approach to shared e-portfolios, a community of practice was developed. Such student engagement with communities of practice enables:

- dialogue and co-operation between participants
- the development of multimedia technology skills
- enhanced communication and problem solving skills
- learners to direct their own learning

The author makes a recommendation regarding further research into the incorporation of the e-portfolio into assessment methodologies at second level.

## **Conclusion**

This research suggests that there are beneficial outcomes for teaching and learning using technologies such as WebQuests and Wikis. As such it is of interest to the wider teaching profession so as to further the discussion about the continuing integration of ICTs into classroom practice for teaching and learning.