

## Chapter 4.29

# How ePortfolios Support Development in Early Teacher Education

**Victor McNair**

*University of Ulster, Northern Ireland*

**Kevin Marshall**

*Trinity College Dublin, Ireland*

### **ABSTRACT**

This chapter reports on a pilot study which examined how student teachers of a one-year Post Graduate Certificate in Education course in Northern Ireland developed reflective ePortfolios and then used them to embed ICT in their first (Induction) year as qualified teachers. Two central themes emerged. First, the process of constructing the ePortfolio developed confidence among the beginning teachers which supported them when faced with the challenges of starting teaching. Second, the ePortfolio was used to ease the transition from Initial Teacher Education to

Induction, but where there is a lack of critical reflection, barriers to professional development can emerge. These issues are discussed within the context of technology policy, teacher training, and emerging technology in Northern Ireland.

### **INTRODUCTION**

Our society is undergoing profound changes, with a resulting increase in the demands placed upon our education system. At the same time, technology is opening up new possibilities regarding when and how learning can take place.

Educating teachers in the effective use of information and communications technology (ICT) in the classroom is a key requirement to ensure that the learning potential of new technologies is fully exploited. But ICT can also extend beyond how it can be used to improve children's learning (Wishart & Blease, 1999) to create more effective teaching resources (Barron, 1998) and to generate new learning models (Somekh, 2000). Increasing the ICT literacy of teachers, particularly at the early stages of their teacher education, can enhance how and when they themselves learn about teaching.

This chapter reports on a pilot study which examined how 36 of the 125 student teachers of a one-year Post Graduate Certificate in Education (PGCE) course at the University of Ulster in Northern Ireland developed reflective electronic or ePortfolios, and then used them to embed ICT in their first (Induction) year as qualified teachers. Their practices and concerns are highlighted through an analysis of how they used the ePortfolio as a tool for critical reflective practice, and as a catalyst for initiating professional dialogue with their school-based colleagues in order to improve their teaching. Teacher tutors in schools were also interviewed to determine the use they made of the information and structure of the ePortfolio.

Central to the chapter is how they articulated their professional competence, how they identified appropriate professional development trajectories, and how, when qualified, they continued to develop those trajectories. The support roles of their Induction tutors are also examined to determine how they identified specific needs and how they provided accurate and appropriate support pathways. The study discusses the implications for Northern Ireland's eLearning policy framework, and also comments on how ePortfolios have the potential to enhance the professional development of beginning teachers by providing access to a range of data that can support more targeted progression pathways.

## **BACKGROUND TO THE STUDY**

In Northern Ireland, the Education Technology (ET) Strategy (DENI, 1998), derived from the United Kingdom "National Grid for Learning" (DfEE, 1997), laid the policy foundation that gave rise to a development program called Classroom 2000 (C2K). The program provided a comprehensive computing infrastructure for Northern Ireland's 1,245 schools, and mandatory ICT training for its 20,700 full-time teachers. It also procured high-speed connectivity with 40,000 networked computers. A managed learning environment (MLE) now supports this infrastructure with administration and professional development services (Department of Education, 2004), with ICT strongly integrated into teaching through the provision of a wide range of curriculum-based and specialist software. More recently, the ET strategy has been replaced by "*emPowering Schools*" (Department of Education, 2004) which further centralizes eLearning, online collaboration, and the widespread use of digital technologies to support lifelong learning for all teachers and children (Anderson & Stewart, 2004). Where the ET strategy was characterized by varying rates of development and different ICT practices in schools (Clarke, 2000; Anderson & Stewart, 2004), "*emPowering Schools*" has set targets for individualized learning, greater coherence across schools in the use of ICT, and better access by teachers and children to rich multimedia resources.

For higher education institutions (HEIs) responsible for initial teacher education (ITE), *emPowering schools* offers the possibility of more focused professional support for student teachers through greater online collaboration, and more reliable and faster connectivity. Primarily, however, the continuously converging and improving ICT practices of schools mean that professional support dialogue with student teachers can focus more on effective teaching and learning and on reflections about that teaching. These can be better

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