From iTE to NQT:
Evaluating Newly Qualified Teachers’ Use of Mobile Technology in Their First Two Years of Teaching

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ABSTRACT

This article outlines a study to examine if newly qualified teachers (NQTs) who had incorporated iPad within pedagogical practice during initial teacher education, continued to do so in their first two years of teaching, and also to identify the challenges to integration that emerged. Findings show that use of iPad in teaching, learning and assessment by NQTs during induction year was followed by a significant fall in Year 2. Deeply embedded external barriers at both system and individual school context level are shown to exert significant influence on the use of iPad within pedagogical practice. It is concluded that NQTs require ongoing support to maintain and develop their practice with technology, and also that significant reform is required at senior cycle in Irish secondary schools to enable technology integration.

KEYWORDS

Initial Teacher Education, iPad, Mobile Technology, Technology Integration

INTRODUCTION

The first years of teaching can be challenging for newly qualified teachers (NQTs) as they attune to school contexts that may support or contradict pedagogical approaches advocated within their initial teacher education (ITE) programmes (Clausen, 2007). Campus-based preparation may be “washed-out” (Tabachnick & Zeichner, 1984, p. 29) and NQTs become susceptible to a form of “strategic compliance” (Flores 2005, p.396) or adjustment to the values and practices prevailing within the “particular ecology” of the school (Slouiti & Barton, 2007, p.418). In her investigation of new teachers’ development over the first two years of teaching, Flores (2005) highlights “…a shift from a more progressive and constructivist view of teaching towards a more traditional and teacher-centred way of organising classroom activities…” (p. 393). This was accompanied by a greater focus on output rather than process, driven in the main by concerns over classroom management, “long syllabi, time pressure to complete them and national requirements in terms of curriculum delivery and assessment” (p. 394).

A strong contextual influence on practice is evident at pre-service level also. Investigating the impact of school placement on student teachers’ beliefs in relation to curriculum, pedagogy and assessment, Gleeson, O’Flaherty, Galvin, and Hennessy (2013) found a dissonance between university-based teacher education programmes and the socialisation experiences of student teachers during practicum. “When the professional values of the school placement setting are not consistent

DOI: 10.4018/IJMBL.2018040102

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with those of the on-campus ITE programme”, they conclude, “...the values and beliefs experienced during placement are likely to prevail...” (p. 452).

This paper details findings from a research study that followed NQTs in their first two years of teaching. All had previously incorporated iPad within teaching, learning and assessment while student teachers on an ITE programme. The aim of the study was to investigate if they continued to integrate mobile technology within pedagogical practice and to examine also the challenges they might face in doing so.

**Newly Qualified Teachers and Technology**

Viewed as a period of “survival, discovery, adaptation, and learning” (Clausen, 2007, p.246), the first years of teaching may prove difficult for new teachers to explore ways of integrating technology into teaching, learning and assessment. This challenge is not confined to NQTs, however. While all teachers, regardless of experience, now have unprecedented access to technology, there still persists “a surprising shortfall in its far-reaching impact envisaged by some on classroom practice” (Haßler et al., 2016, p.9). Explanations highlighting external factors such as school practices and resource access, have more recently focused on factors internal to the teacher. Ertmer (2005) distinguishes between external or first-order barriers and internal second-order barriers that embrace teachers’ fundamental beliefs about teaching and learning and the perceived value of integrating technology into the process. Close alignment is evident between teachers’ use of technology and their beliefs about the nature of knowledge, learning and effective ways of teaching (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur & Sendurur, 2012; Kim, Kim, Lee, Spector & DeMeester, 2013). Haßler et al. (2016, p. 9) maintain therefore that “it is critical that pedagogy is carefully considered from the outset” in order to realize the full potential of technology in improving student learning.

With specific reference to the use of mobile technology by classroom teachers, Christensen and Knezek (2017) identify many of the same internal and external challenges that exist for technology integration in general. Likewise, it is argued that successful integration of mobile learning into pedagogical practices “requires an instructional paradigm shift that promises to fundamentally change the way students learn” (UNESCO, 2012, p. 7) and ITE is increasingly viewed as a central means for promoting this (Mishra & Koehler, 2006; Hammond et al., 2009; Haßler et al., 2016; Admiraal et al., 2017). Research on mobile technology within the context of ITE is limited however, and as Røkenes and Krumsvik (2016, p.2) point out, “there seems to be a situation in teacher education internationally...where it is challenging to promote ways of teaching with ICT that move beyond basic digital skills”.

**Irish Context**

In Ireland, the current Digital Strategy for Schools 2015-2020 (Department of Education and Skills, 2015) provides an “action plan for integrating ICT into teaching, learning and assessment practices in schools” (p. 5) and across “the continuum of teacher education from initial education through induction and continuing professional development” (p. 4). ICT is to be embedded in the planning, design and delivery of all teacher education programmes to ensure that “pre-service teachers acquire the skills, knowledge and confidence to use digital technologies to support learning and teaching” (p.33). Likewise, it is to be an element in the induction programme for NQTs to ensure they “…receive appropriate guidance and support to integrate ICT...” (p. 33). Currently, all NQTs in Ireland are inducted into the profession by way of systematic support in their first year of teaching.

Underpinning all aspects of the strategy is a “constructivist pedagogical orientation” requiring teachers to use technology in ways that enable learners to become “actively involved in a process of determining meaning and knowledge for themselves” (p.16). However, a survey by Cosgrove et al. (2014) on the use of ICT in Irish schools prior to the Strategy notes that while the majority of teachers claimed to hold constructivist views, traditional teacher-directed practices were nevertheless the dominant pedagogical orientation in most schools. When asked, for example, how often they used
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