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Developing conceptual frameworks for creativity, ICT and teacher education

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Abstract

This paper presents the first phase of a study in teacher education, which explored how a conceptual framework for creativity with information and communication technology (ICT) might be developed and expressed in professional development for primary education pre-service and newly qualified teachers. The Creativity and Professional Development Project (C&PD) involved 16 education ICT specialists in the final stage of their BA in an English University. They participated in the project to investigate their classroom practice in the use of ICT to promote creativity in the making of digital video movies, and to reflect upon the development of their pedagogy with ICT in primary classrooms. The analysis focuses on the student teachers' experience of engaging in creative activities to prepare, teach and evaluate a school-based project, and identified themes of their understandings and personal experience of creativity, the contribution of ICT, and their reflections on professional development. This analysis raises the issue of designing learning experiences, which promote and support creativity with ICT in the context of teacher learning. A conceptual framework to describe creative practices with ICT in teacher education was developed from the study.
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Keywords: Creativity; ICT; Teacher education; Primary education; Professional development

1. Introduction: creativity and the context of the study

'Creativity' is currently a term used often in policy and practice of Primary education in the UK. After many years of concern about lack of creativity in the curriculum (Kimbell, 2000; NACCCE, 1999; Robinson, 2001), government agencies engaged in consultation and policy development to include national initiatives to develop materials to promote pupils' creativity (QCA, 2004), and a national primary strategy, named 'Excellence and Enjoyment', for teaching to improve standards in pupil attainment, measured in national testing arrangements (DfES, 2003). Creativity is therefore now discussed as 'a good thing', promoting both personal expression and enhancing opportunities to engage in the complexities of problem-solving in the economic and cultural landscape of the 21st century.

There are, however, concerns that both the definition of 'creativity' and the practical experience of creative processes become simplistic, unproblematic and unable to reflect the complexities and challenges of developing creativity in the curriculum and pedagogy. Prentice (2000) highlights the dangers of a complex and slippery concept leading to confusions and contradictions which do not help educators to focus on the purpose and possibilities of creative processes in the curriculum. Hartley (2003) draws attention to the ways in which government and business are attending to

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creativity and emotional literacy in education, attaching them to 'practice which remains decidedly performance-driven, standardised and monitored' (p. 16), and harnessing them for instrumental purposes in the knowledge and service-based economy. Craft also acknowledges the tensions and dilemmas which creative processes can raise within teachers' professional practice and development, such as the culturally specific nature of creativity; the desirability of perpetual innovation in a consumerist economy; the potential challenges to the status quo; the organization of the curriculum; the role of the teacher and 'professional artistry' in a centralized pedagogy; and the tensions between teaching for creativity, creative teaching and creative learning (Craft, 2003). In this study, the focus was particularly on developing approaches in teacher education to prepare for teaching for creativity.

The Creativity and Professional Development Project (C&PD) was established in the School of Education in Brighton University, supported and funded by the Teacher Training Agency for a 12 month period from March 2004. The project had three key aims: to enable primary student teachers to investigate their classroom practice in the use of information communication technology (ICT) to promote creativity in a range of curriculum subjects; to reflect upon the development of their confidence and competence in pedagogy with ICT in primary classrooms in the transition from initial teacher education (ITE) to qualified teacher status (QTS); and to share their experiences with teachers, mentors and University tutors. Phase 1 of the project focused on the student teachers' final semester in ITE. Phase 2 focused on their first term as newly qualified teachers (NQT) in school. This paper presents the analysis of the first phase which was informed by work in the areas of understandings of creativity, creative practices with ICT, and teacher learning in professional development.

2. Building on a conceptual framework

In our work with creative practitioners, teachers, children and policy makers engaged in a variety of 'creative experiences' in projects, workshops and consultations in recent years, we have been aware of the dangers of creativity being perceived as 'having good ideas' or 'making pretty things', rather than the challenging, and often painful or frustrating experience that characterizes the practices of creative people—the 'hard fun' and the 'flow' (Csikszentmihalyi, 1996; Papert, 1993). We have therefore been developing a conceptual framework which might help us to capture the more complex understandings of creativity for individuals and communities, and inform the design of teacher education courses.

2.1. A view of creativity

A useful theoretical framework for recognising and developing creativity can be described as an interaction between characteristics in people and communities, creative processes, subject domains and wider social and cultural contexts (Craft, 2000; Csikszentmihalyi, 1996). This interaction of people, processes, domains and field can be seen in a view of creativity described by the National Advisory Committee on Creative and Cultural Education (NACCCE, 1999). Personal and community characteristics can be expressed in approaches to using imagination, the fashioning process and pursuing purpose. These processes also draw upon knowledge, concepts and skills within learning domains that provide conceptual tools and ways of working in fashioning and pursuing purpose. The levels of achievement of originality for individuals, peer groups or within the domain are evaluated within the field, whilst the judgement of value can relate to critical reflection for the individual as well as recognition of a unique contribution to the domain itself. Creativity can therefore be seen in the interaction between a person's thoughts and actions as individuals and in communities, their knowledge and skills within a domain and with mediating cultural tools, and a sociocultural context which can encourage, evaluate and reward. This has important implications for thinking about creativity and learning, where the learning environment might either nurture or dismiss the development of creative individuals, groups and communities.

2.2. Creative practices with ICT

The affordances of ICT can also be part of this creative interaction as people exploit the distinctive features of ICT that enable digital technologies to act as tools in creative processes. The uses of ICT to support and promote creativity have been described, reviewed and theorised in a range of our work in recent years. These include developing understandings of ICT capability in the national curriculum (Loveless, 1995); projects in primary and secondary schools