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Motivations in Developing Expertise

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Background

In studies that explore the quality of teachers and good practice there is an increasing body of research that offers evidence of the nature and characteristics of expert teaching. However, given the steady growth of rising student attainment and ICT use (Cox et al., 2003), there is surprisingly little attention to the place of technology as used by expert teachers. In particular, the ways that expert teachers use and adapt technology to improve both pedagogy and student performance in the classroom is under explored.

Research Questions

The aim of this paper is to explore how teachers identified by their schools as outstanding in their practice, develop their expertise as well as understanding how the use of technology contributes to this expertise.

Methods

Data was collected via telephone interview and in-depth case studies. The teachers included were first identified as outstanding teachers and then as being effective users of ICT. This categorisation is unique to this study. The study uses selected sampling based on peer identification. Whilst not unproblematic, using experienced professionals' judgement was a good strategy as it allowed for the identification of teachers who are not otherwise formally recognised by status e.g. Advanced Skills Teacher. Along side this, the original Dreyfus and Dreyfus (1986) five part model of expertise was also used to validate the nomination of 'expert'. In total, 54 teachers agreed to be included in the study and are drawn from a mixed range of attaining schools and subject specialism. 26 were teachers were from Primary and Infant schools and 28 from Secondary schools. 24 participants were males and 30 female.

Data was collected via semi-structured telephone interviews which sought teachers' views on what good teaching looks like, views of the usefulness of technology as well how teachers adapt their pedagogy to improve student attainment. Biographical information was collected via survey questionnaire. Data from interviews was analysed using a simple content analysis and was then organised in terms of similarities in patterns and themes, with a particular emphasis on teachers' motivations and attitudes to developing their practice.

From the 54 interviews, 13 teachers were then selected for an in depth follow up case study. Of these, 6 were male and 7 female. Participants were selected on the basis that they most closely resembled the characteristics of an expert teacher, as identified in the literature. Case studies incorporated a filmed classroom observation as well as two short semi-structured interviews; one before and one after the lesson observation. Data analysis of the classroom observations incorporates a similar approach to that of the interviews: a content analysis exploring emergent patterns and themes in relation to best practice.

Frame

A study by Cox et al. (2003) found a steady growth of innovative teachers using ICT to improve pupils' attainment. However, there is very little evidence available on what "expert practice" looks like in the classroom, in relation to the use of ICT in teaching. A previous study by Goodwyn and Findlay (2003) demonstrated that some attributes of good practice were misplaced, meaning simply "extensive use"

rather than "expert use". A key focus of this paper therefore, is the concept of developed practice and the motivations behind it. Dreyfus and Dreyfus (1986) five part structure has proven valuable in considering the development of teachers whose careers have long been understood in terms of experience related phases. The model is especially relevant because it stresses that someone can be expert in part of a domain, say teaching, but a relative novice in a new dimension, for example, using new technologies. However, whilst useful, the model does not explicitly explore the personal motivations of teachers' in terms of developing their practice. This study is therefore designed to provide a framework describing the personal motivational factors contributing to the development of practice from teachers identified as 'outstanding', particularly in terms of developing expertise in the use of ICT and the link with perceptions of classroom outcomes.

Research findings

Steinburg and Horvath (1995) in their work about expertise suggest that knowledge is key in developing expertise, but that knowledge only increases with years of teaching. Interestingly in this study, more than half of teachers were in the youngest age range and almost three quarters had teaching experience of between four and nine years. Whilst clearly no longer novices, 90% of these teachers also had additional responsibilities in their schools, suggesting that personal commitment and motivation were more important than 'years on the job' in developing expertise.

In developing their practice, teachers in this study point to the importance of mentoring, opportunities to observe other teachers and time to practice new skills as significant factors in developing their own expertise. Data also suggests that whilst expert teachers can be distinguished by the creative ways they respond in the classroom, this adaptation is as much about recognising their own personal and professional needs as it is about engaging learners.

Expert teachers also recognise an important link between engaging students in the classroom and the cultural and social world that young people inhabit. They recognise that technology is an integral part of young people's lives', particularly in the ways that young people interact with each other, and so see as relevant an ability to engage with students using mediums that students recognise and enjoy. Expert teachers believe that using ICT promotes inclusivity in the classroom by engaging the 'disengaged'. As a result, teachers are motivated to use ICT because it allows them to connect with their students by providing a common ground for communication.