

An Chomhairle
Mhúinteoireachta

The Teaching Council



Title of Research Project: The 4D Model of Teacher CPD: Growing Teachers' Pedagogy Beliefs about their Educational use of Technology

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Relevant key words: 21st Century Teaching and Learning; 21st Century Teacher CPD; Teachers Pedagogy Beliefs; Teachers' Educational Use of Technology

Summary:

The study aims to support teachers to grow their existing beliefs about constructivist and socio-cultural approaches to the educational use of technology at school by introducing a new model of teacher CPD (The 4D Model). The 4D model is inspired by existing models of CPD (Lesson Study, Bridge21 and Design Thinking) and tasks teachers to reflect on their beliefs and to work as part of a team who co-create teaching and learning activities with technology from different pedagogical orientations. To achieve this, teachers progress through six steps, a pre-cycle reflection, a design phase, a deliver phase, a debug phase and a post-cycle reflection and engage in multiple iterations of the 4D model across one school year. Taking a constructionist worldview and an interpretivist theoretical perspective, this Design Based Research uses a multiple case study approach to report on the social and cultural interactions which underly changes in teachers' pedagogy beliefs and their educational uses of technology as they engage with the model. A pilot study was carried out in 2018/19 in which four female primary school teachers participated in two iterations of the 4D model across one school year. Qualitative data was collected from reflections, lessons and transcribed interviews. Initial analysis, where the data was coded and then set against the Interconnected Model of Professional Growth, suggests that teachers who participated in the 4D Model of Teacher CPD

demonstrate growth in their constructivist and socio-cultural pedagogy beliefs and their educational uses of technology as a desirable precursor to changes in their practice.

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