Chapter 12
A New Interactive Whiteboard Pedagogy through Transformative Personal Development

Maureen Haldane
Manchester Metropolitan University, UK

ABSTRACT
This chapter examines how teachers acquire proficiency in the use of interactive whiteboards for the enhancement of whole-class teaching. It suggests that teachers are unlikely to make optimal use of the affordances of the technology through preparatory training alone, and that such an expectation could adversely affect the chances of successful implementation. A phased development of teachers’ capability is described during which those with initially limited technical skills can begin to explore the pedagogic potential of the interactive whiteboard and then progressively develop their technical skills in tandem with the evolution of their pedagogy. The author proposes a process of Transformative Personal Development (TPD) within which initial expert interventions demonstrate what is ultimately achievable and set the agenda for a more sustained period of collaborative work-based learning.

INTRODUCTION
The chapter aims to identify and describe the professional development critical success factors that underpin the successful implementation of digital interactive whiteboard technologies. It draws heavily on in-depth, government-commissioned evaluations of IWB implementation in England (Somekh et al., 2007) and Scotland (Pearson et al., 2004) in which findings derived from the analysis of digitally-recorded observed lessons, and interviews with teachers and pupils. These studies reported significant embedding of the technology, at primary and secondary level respectively, and the emergence of a new pedagogy to which pupils responded positively (see also Haldane, 2005a, 2007, 2008). Others drew attention to less successful implementations (Higgins et al., 2005; Moss et al., 2007) where limited use of the affordances of the technology was made, and consequently, the introduction of IWBs resulted in a disappointing impact in the classroom.

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The relative differences in the effective use of the technology reported by different sets of researchers would appear anomalous and this chapter seeks to address this by analyzing the professional learning experiences of teachers who had acquired proficiency in the use of the technology and were making extensive use of its affordances to the apparent benefit of their pupils.

Drawing on research into sustained and collaborative Continuing Professional Development (CPD) provision, and reporting the common factors in the professional learning process from successful interactive whiteboard implementation, the chapter describes a model of provision, grounded in practice, which those currently seeking to maximize the impact of digital interactive whiteboard installations may wish to consider.

**BACKGROUND**

The value of active, experiential learning as a means of helping teachers to develop the capability to grasp opportunities for innovation that impact positively on learning, has been a live issue for some time, with contributions such as Elliot’s (1991) advocacy of action research being particularly influential. However, there is some evidence that, at an operational level, these influences are less embedded in the provision of CPD than might be expected.

For example, in her qualitative study of strategies for teachers’ CPD at the school level Cordingley (2008) observes that:

> Although heads and teachers were reported to have rated action research very highly, there is no evidence from this report, or from subsequent whole school evaluations (Ofsted, 2006), studies of teachers’ perceptions of CPD (Hustler, 2003) or meta-studies such as Bolam and Weindling (2006) that their enthusiasm has influenced CPD policies and practices at the whole school level. (p. 5)

Phillips et al. (2004), in a study undertaken on behalf of nine professional bodies (which included the General Teaching Council for England, the custodian of professional standards for teachers) commented on the frustration of the professional bodies at the preponderance of structured learning inputs as the focus for CPD activity. However, they also noted that the professionals themselves were generally happy with this situation. They valued the opportunity to meet and engage with a variety of other professionals of broadly similar backgrounds but with a different set of experiences. Their objective appeared to be the acquisition of relatively discrete inputs of new information that would broaden and update their professional knowledge.

Dissatisfaction, when expressed, related to the nature of the new information input, either because of limited relevance to their practice or because much of it was not new to them. Although such a model of provision was open to the criticism that it provides only surface learning, participants described the impact of the inputs they received in terms of a deeper level of learning that accrued when theory was put into practice at some subsequent date and in the context of their own working environment. The personalization of learning occurred through a process of internalization as newly acquired knowledge was synthesized with their practice.

The scenarios articulated by participants in the study carried out by Phillips et al. suggest that the CPD to which they were exposed was motivated by an objective of continuous and incremental improvement. Knowledge updating, which involved some sharing of experiences and individual and shared reflection, was usually provided via a specific expert-facilitated event that was typically undertaken away from the workplace.

One problem when attempting to evaluate such an approach is that it can be very difficult to identify any audit trail that would demonstrate impact by clearly linking new knowledge inputs to a measurable change in performance, since the
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