

Pedagogical Integration of ICTs by Teachers: A case study at five South African public schools

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ABSTRACT

This study investigates how teachers in South African public schools are incorporating information and communication technology (ICTs) into teaching. It is influenced by observations of leading educationists that while technology permeates most dimensions of society its impact on education has had mixed reviews.

The research endeavours to answer the question: *What is the pedagogical value of integrating ICT into teaching practices at South African public schools?* It focuses on two research objectives: how teachers are using ICT in their day-to-day teaching practices and whether enacted practices reflect espoused practices; to understand teachers concerns with ICT and identify areas which require the attention of all stakeholders in the education system.

The research commences with a literature review of how ICT supports theories of learning; epistemological issues for teaching with technology; teacher beliefs as enablers/inhibitors of ICT adoption in education; a change management approach for successful educational reform; and a review of the pedagogical value of ICT.

A mixed-method research methodology is applied in a multi-case study of five ICT using teachers from five public schools. The use of ICT in education is analysed by observing teaching lessons, applying Laurillard (2002) Conversational Framework to classroom interaction, and observing what media forms are used by the teacher to mediate learning. The Concerns Based Adoption Model (CBAM) survey is administered to elicit teacher views and concerns about the introduction of ICT in teaching practices including areas for improvement.

Findings indicate that teacher experience and beliefs, influence the use of ICT in teaching. Adoption concerns are also correlated to teachers' experience and beliefs.

Key Words: ICT Pedagogical Integration, the pedagogical value of ICT, Conversational Framework, media forms, ICT, CBAM, pedagogical tool.