

Foreward

This book on *Teaching with information and communication technology (ICT)* is published at a time when the New Media Consortium (NMC) and the Consortium for School Networking (CoSN) Horizon Report 2017 edition observe that accelerating technology adoption in K-12 education is a key trend in education globally. However, technology adoption and factors for accelerating adoption are context dependent. This book is about teaching the Curriculum Assessment Policy Statement (CAPS) with technologies in South African schools. According to the South Africa's *Action Plan to 2019 - towards the realisation of schooling 2030*, technology adoption requires continuous professional development of teachers in technological pedagogical content knowledge (TPACK). The word 'continuous' suggest a lifelong improvement in pedagogical and technological skills and this is set as one of the goals of the Action Plan. Needless to say, balancing between the acquisition of technological skills, acceleration of technology adoption and improvement in pedagogy is a delicate dance which is never easy to get right. However, the work of the Educational Technology Inquiry Lab (ETILAB¹) at the University of Cape Town has developed an innovative design thinking approach of digital sandpits where teachers discover uses of technologies for teaching through fun and play whereby accelerating adoption of teaching with technologies hence changing practice. In 2018, the Government of South Africa's Department of Basic Education (DBE) launched a professional development framework for digital learning (based on Tarling and Ng'ambi's (2016) Teaching Change Frame (TCF)). The DBE's framework provide practical guidelines for teachers on effective ways to integrate technology in teaching and improve digital teaching (i.e. technology is in the hands of a teacher) and digital learning (i.e. technology is in the hands of a learner). The ubiquitous technology among many learners in Africa in general and South Africa in particular, is undoubtedly a mobile phone. Despite its potential as a learning tool, many schools have a NO mobile phone policy which inhibits exploration of pedagogical potential of mobile phones. The irony is that schools prefer technologies such as tablets, laptops or desktops which majority of learners do not own, and where schools have the technologies, learners have limited access time, and cannot continue to practice after school. This book is structured into two parts: the first part presents the big picture view which includes an elaboration on the common frameworks used to make sense of teaching with technologies such as SAMR, TPACK, Blooms Taxonomy, Teaching Change Frame (TCF) etc. and the second part provide practical examples of how frameworks inform effective designs of e-lessons. This book contributes to the improvement in pedagogy (Part A) and acceleration of technology adoption (Part B). The strength of the book is that it uses examples that align with CAPS curriculum with a specific focus on the Foundation, Intermediate and Senior phase which is invaluable for teachers who are increasingly under pressure to integrate technologies in CAPS.

In conclusion, the book is recommended for pre-service, in-service teachers, teacher trainers and education research scholars seeking answers to questions located at an intersection of learning, teaching, content and emerging technologies or anyone asking the question, how can I teach with emerging technologies?

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¹ <http://www.education.uct.ac.za/education/etilab>