## **ABSTRACT**

The purpose of this research is to develop a better understanding to why South African educators embrace or resist Information and Communication Technologies (ICTs) in teaching and learning by exploring the complex interplay between teachers' pedagogical beliefs, their efficacy beliefs, their context beliefs and their use of computers in the classroom. The study hypothesises that teachers' behavioural intention, whether and how to use ICTs in the classroom, is determined by a set of teacher-related variables, which include, their pedagogical beliefs, selfefficacy beliefs and context beliefs. The specific teacher-related variables that are of significance for this study include: teachers' pedagogical beliefs, self-efficacy beliefs, computer self-efficacy beliefs and computer anxiety. A correlational analysis was performed to determine the complex relationships amongst these thinking processes and their effect on the utilisation of ICTs. In addition, teachers' perception of their principals' technology leadership was investigated. Four interrelated dimensions were investigated, that is: (a) vision, planning and management; (b) staff development and training; (c) technology and infrastructure support; and (d) interpersonal and communication skills.

A mixed method of quantitative and qualitative research was employed to collect data at a secondary and primary ex-model C school in the Southern Suburbs of Cape Town. Convenience sampling was applied in this study. A total of 23 teachers participated voluntarily in the research project. The results of the study suggest that teachers' self-efficacy beliefs, computer self-efficacy beliefs and computer anxiety directly affect their computer use, while the principal's technology leadership only has an indirect effect on their computer use via the mediating variables: self-efficacy beliefs and pedagogical beliefs.