

# **Helping teachers surf the Information and Communication Technology *tsunami***

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## Candidate declaration

I certify that the folio entitled Helping teachers surf the Information and Communication Technology *tsunami* submitted for the degree of Doctor of Education is the result of my own research, except where otherwise acknowledged, and that this folio in whole or in part has not been submitted for an award including a higher degree to any other university or institution.

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Date: 24 May 2002

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## Abstract

A range of factors, both internal and external, is creating changes in teaching and teachers' professional lives. Information and Communication Technology (ICT) is just one of the major changes impacting on the teaching profession. As teachers face intense pressure to adapt to this *tsunami*, this study aims to investigate ways in which teachers can be helped. In South Australia, where this study is set, all teachers in Government schools are expected to be "ICT Smart", i.e. able to use appropriate forms of ICT to enhance the teaching and learning environment of their classrooms. From the researcher's involvement for over a decade in professional development for teachers, and from visits to many schools, it appears that numerous teachers have not reached this standard. The greatest need is in Reception to Year 7 schools where the average age of teachers is nearly 50. Because no state-wide data exists, this study is intended to establish if there is a problem and if there is, to identify specific needs and offer possible solutions.

The study is comprised of four parts: Part A, the Introduction gives an overview of the inter-relationships between these parts and the overall Folio. It establishes the setting and provides a rationale for the study and its focus on Professional Development in Information and Communication Technology. Part B, the Elective Research Studies, follows the writer's involvement in this field since the 1980s. It establishes the theme of 'Moving best practice in ICT from the few to the many' which underlies the whole study. Part C, the Dissertation, traces the steps taken to investigate the need for professional development in ICT. This is achieved by analysing and commenting on data collected from a state-wide survey and a series of interviews with leading figures, and by providing a review of the relevant literature and past and existing models of professional development. Part D, Final Comments, provides an overview of the whole Folio and a reflection on the research that has been conducted.

The findings are that there is widespread dissatisfaction with existing models and that there is an urgent need for professional development in this area, because nearly 20% of teachers either do not use computers or are considered to be novice users. Another 25% are considered to be below not yet "ICT Smart". Less than 10% of ICT co-ordinators have a formal qualification in the field but more than 85% of them are interested in a Masters program.

The study offers solutions in Part B where there is a discussion of a range of strategies to provide on-going professional development for teachers. Chapter 9 provides an outline of a proposed Masters level program and offers suggestions on how it could be best delivered. This program would meet the identified needs of ICT co-ordinators.

The study concludes with a series of recommendations and suggestions for further research. The Education Department must address these urgent professional development needs of teachers, particularly those in the more remote country regions. There needs to be a follow-up survey to establish to what extent teachers in South Australia are now “ICT Smart”.

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