Changes that develop in Teachers’ Information and Communication Technology (TICT) mediated practice over time: A five year longitudinal, qualitative study

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A thesis submitted to the Faculty of Arts and Social Science, University of Technology, Sydney, Australia, to fulfil the requirements for the Doctor of Philosophy degree

March 2010
Certificate of Originality

I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the award of any other degree or diploma at the University of Technology Sydney (UTS) or any other educational institution, except where due acknowledgment is made in my thesis. Any contribution made to the research by others, with whom I have worked at UTS or elsewhere is explicitly acknowledged in the thesis. I also declare that the intellectual content of the thesis is the product of my own work, except to the extent that assistance from others in the design and conception in style of the project and the presentation and linguistic expression is acknowledged.
The journey of this PhD has been memorable in terms of the relationships I have formed and the support I have received from others. I would like firstly to thank my Principal Supervisor Associate Professor Debra Hayes, who has guided me throughout my doctorate. I have really valued your ongoing support and development of me as a researcher Deb. Thank you.

I would also like to thank Dr Liam Morgan, my Associate Supervisor, for all his help and encouragement during my doctoral process. I know I often said ‘Good idea’ to your suggestions. Thank you Liam. Your feedback has been really helpful.

Thank you Associate Professor Geoff Riordan for your support while you were my supervisor but also, importantly, for the continued support that has extended far beyond your time as supervisor. You have always made time in your busy schedule to see me and help me through my stress.

My PhD journey began with Professor Lyn Yates as my supervisor, whom I’d like to thank for her support in my PhD but also for her continued support and interest in my academic career.

Thank you to all my colleagues at the UWS School of Education, who have encouraged me over the years to complete my thesis and reinforced the value of it. In particular Professor Michael Singh, whose continued faith in me as a researcher and support for my thesis has been very important to me.

I would also like to acknowledge the many PhD students with whom I have become friends and who have supported me in my PhD. Particularly, Tony and Atef, who worked with me in the doctoral room at UTS, and Sue from the effects study. I would not have stayed sane without you.

Thank you to Clair from the UWS writing group. Your help with my writing has been invaluable. I don’t know how a PhD student would get through without you!
Finally, I would like to thank Alana, Tom and Jack. You’ve called my doctorate many things over the years—my book, my HSC. You’ve given me advice on much easier ways of finding out what happens with ICT in schools than doing your PhD. Your care and goodwill during my candidature have been amazing. Well kids, Mum has finally finished her PhD! I hope I have inspired you to see that you can achieve whatever you want if you are dedicated to it. Most importantly, I look forward to all the extra time I get to spend with you. I dedicate this thesis to my lovely children.
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Abstract

Information and Communication Technology (ICT) has been in schools for a number of years now, however little is known about what actually takes place when teachers bring ICT into their professional pedagogical practice. This study contributes to this understanding by examining the lived experiences of five teachers in their ICT mediated practice over a period of five years.

To extend current understandings of change in teachers’ ICT mediated practice this study uses a qualitative and longitudinal approach with grounded theory strategies. Assorted analysis contributed to the longitudinal component. This involved the analysis of pre-existing qualitative data of the teachers combined with primary data collection and analysis. Importantly, this study situates ICT mediated practice in order to examine the complex interrelationship between context, engagement with context, and development in individual teacher’s ICT mediated practices over time. Aspects of Professional Practice theory and Socio-cultural theory were used to examine this relationship.

A significant finding of this study is that teachers’ ICT mediated practices are changing and that the process of change is complex. Two factors were found to contribute to the complexity. One was the central role of professional identity in teachers’ ICT mediated practice. It was found that change begins in a teacher’s professional identity before it is observed as changed classroom teaching practice. A second factor contributing to complexity of change in ICT mediated practice was teachers’ consistent use of particular aspects of their context (the syllabus, teachers’ own status in school hierarchy and, non-school uses of ICT) and individual factors (teachers’ core approaches to teaching and learning and also their ability and motivation to develop themselves professionally) as resources to inform the decisions they made in their ICT mediated practice. A theoretical model of change in ICT mediated practice is presented. The model indicates the teachers’ use of contextual and individual resources was pronounced when they engaged with changes in their context they considered to be critical to their professional identity associated with their ICT mediated practice.
This study also makes a methodological contribution by showing that a qualitative longitudinal approach using grounded theory strategies and focusing on a small number of participants facilitates identifying and examining the significance of context and individual factors for change in TICT mediated practice. The use of context and individual factors supported explaining change in TICT mediated practice is more complicated than simply a change in actions a teacher performs in the classroom. This methodology also assisted in providing evidence that while on the surface, a teacher may look like their TICT mediated practice is not changing, there can be non-observable changes in their individual factors and professional identity (which sustain and influence the observable changes) which precede observable changed classroom practice.
Abbreviations

BOS: Board of Studies
DET: Department of Education and Training
ICT: Information and Communication Technology
ICT mediated practice: Information and Communication mediated practice
IPT: Information Processes and Technologies
IT: Information Technology
MP: Mediated practice
NSW: New South Wales
TICT mediated practice: Teachers’ Information and Communication mediated practice