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What factors influence self-efficacy in teachers using mobile digital technology within the secondary school classroom?

A thesis presented in partial fulfilment of the requirements for the degree of

Master of Education

at Massey University, Manawatu, New Zealand.

Josephine Anne Tilton
2014
Abstract
As digital technologies develop and change so do the way these tools are integrated into classrooms. In particular as mobile digital technologies develop further, there is a need to investigate how teachers engage with these both personally and in the classroom. Research has consistently indicated that a key element regarding the use and integration of digital technologies in the classroom are teachers’ underlying beliefs and attitudes, including self-efficacy theory.

In this study, changes in and factors influencing mobile digital technology self-efficacy are examined using a mixed methods research design. The study focused on the perspective of teachers in their first year of implementing a one-to-one iPad mini device programme within the context of an international school in Germany.

Over the course of the implementation, all teachers reported some increase in the use of the iPad mini in the classroom, regardless of their own personal self-efficacy concerning the device. Findings included self-efficacy influences such as enactive experiences, modeling and coaching, with enactive experience being a foremost contributor to the development of teacher mobile technology self-efficacy. A sense of classroom collective efficacy was also a key finding. This sense of collective efficacy demonstrates a shared confidence between teacher and students in the classroom context regarding the use of the iPad mini devices.

Device affordances in student organisation, differentiation (by difficulty and interest), and the encouragement of student agency were also evident as additional
findings in the data, and contributed to the teachers’ perceived value of the iPad mini device.
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The completion of this research and thesis was made possible with the support and guidance of Dr Maggie Hartnett and Dr Tracey-Lynne Cody. They have provided both encouragement and direction and I would not have been able to complete this work without their consistent guidance, care and input.

Thank you to the participants who gave up their time and thoughts to contribute to this research. It was a privilege having your participation, and the sharing of your personal experiences and perspectives. Thank you for your time, energy and openness.

To my friends and family far and wide: you helped me keep my head above water, and helped me see the light at the end of the tunnel. I could not have completed this without your encouragement.
# Table of contents

Abstract ........................................................................................................................................ ii

Acknowledgements ...................................................................................................................... iv

Table of contents .......................................................................................................................... v

List of Tables ................................................................................................................................... viii

List of Figures ............................................................................................................................... ix

Chapter One: Introduction ...........................................................................................................1

1.1 Rationale for the research project ......................................................................................... 1

1.2 Purpose of the research project ............................................................................................. 2

1.3 Context of the study ................................................................................................................ 2

1.4 Research questions ................................................................................................................ 3

1.5 Structure of the thesis ............................................................................................................. 3

Chapter Two: Literature Review ................................................................................................ 4

2.1 What is self-efficacy? ............................................................................................................. 4

2.2 How is self-efficacy formed? .................................................................................................. 8

2.4 Teaching and self-efficacy ..................................................................................................... 11

2.5 Collective efficacy ............................................................................................................... 13

2.6 Self-efficacy and technology ............................................................................................... 14

2.6.1 Technology and teaching self-efficacy .......................................................................... 15

Chapter Three - Methodology .................................................................................................. 20

3.1 Purpose of the research project ............................................................................................ 20

3.2 Research Questions .............................................................................................................. 20

3.3 Research design .................................................................................................................... 21

3.4 Selection of research site ..................................................................................................... 24

3.5 Selection of teacher participants ......................................................................................... 26
3.6 Credibility .......................................................................................................................... 28
3.7 Methods of Data Collection: ............................................................................................. 29
3.8 Data analysis – quantitative and qualitative analysis ......................................................... 32
3.9 Potential for bias .................................................................................................................. 33
3.10 Ethical considerations ....................................................................................................... 34
3.11 Conclusion .......................................................................................................................... 35

Chapter Four - Findings ............................................................................................................ 36

4.1 Online Survey findings ........................................................................................................ 37
4.2 Interviews .............................................................................................................................. 42
4.3 Research question one: how did teacher mobile technology self-efficacy change over the course of the first year of implementation? ......................................................... 42
4.3.1 Teacher One: Leslie .......................................................................................................... 43
4.3.2 Teacher Two: Arthur ........................................................................................................... 50
4.3.3 Teacher Three: Jim ............................................................................................................ 54
4.3.4 Teacher Four: Annette ...................................................................................................... 59
4.3.5 Teacher Five: Rita ............................................................................................................. 62
4.3.6 Collective analysis ............................................................................................................ 65
4.4 Research question two: What were the influences on teacher mobile technology self-efficacy? .......................................................................................................................... 68
4.5 Other findings ...................................................................................................................... 84
4.6 Conclusion: .......................................................................................................................... 85

Chapter Five: Discussion .......................................................................................................... 88

5.1 Online survey findings ......................................................................................................... 88
5.2 Longitudinal Interview data ................................................................................................ 89
5.3 Forms of personal mobile technology self-efficacy ............................................................ 90
List of Tables

Table 3.1: Data collection overview........................................................................................................31

Table 4.2: Online Survey questions ........................................................................................................37

Table 4.4: Technology self-efficacy starting points – all teachers .........................................................43

Table 4.5: Leslie’s iPad use in the classroom .........................................................................................44

Table 4.6: Leslie’s changes in self-efficacy over the investigation .......................................................48

Table 4.7: Arthur’s use of the iPad mini ...............................................................................................52

Table 4.8: Arthur’s changes in self-efficacy over the investigation .......................................................53

Table 4.9: Jim’s use of the iPad .............................................................................................................56

Table 4.10: Jim’s efficacy change over the course of the investigation ................................................57

Table 4.11: Annette’s use of the iPad mini ............................................................................................60

Table 4.12: Annette’s changes in self-efficacy over the investigation ................................................61

Table 4.13: Rita’s use of the iPad mini ................................................................................................63

Table 4.14: Rita’s changes in self-efficacy over the investigation ........................................................64

Table 4.15: Reported iPad mini learning strategies .............................................................................66

Table 4.16: Collective classroom efficacy evidence ..............................................................................71

Table 4.17 Technical Difficulty coding frequencies ............................................................................74
List of Figures

Figure 3-1: Overview of methods of data collection 29