An examination of the role of computer-based technologies in the learning and teaching of writing in a Stage 2 classroom

Jessica Mantei
University of Wollongong, jessicam@uow.edu.au

Follow this and additional works at: https://ro.uow.edu.au/theses
NOTE

This online version of the thesis may have different page formatting and pagination from the paper copy held in the University of Wollongong Library.

UNIVERSITY OF WOLLONGONG

COPYRIGHT WARNING

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
An examination of the role of computer-based technologies in the learning and teaching of writing in a Stage 2 classroom.

A thesis submitted in partial fulfilment of the requirements for the award or degree of

Masters of Education (Research)
From the
University of Wollongong

By
Jessica Mantei
Bachelor of Education, 1996, Australian Catholic University, Brisbane

Faculty of Education
2006
Thesis certification

I, Jessica Mantei, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Masters of Education (Research), in the Faculty of Education, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Jessica Mantei
17 July 2006
There are important people to thank for the support and encouragement I received while conducting this research.

To my supervisor, Dr Jan Turbill, I thank you for your support of my efforts to become a researcher. Your patient listening and practical advice allowed the ‘bigger picture’ to emerge from the somewhat chaotic ideas that I brought to your table.

To my supervisor, Dr Lisa Kervin, you graciously and patiently allowed me to plague you with my many ideas and uncertainties throughout this entire process. Your unshakable belief that I was capable of independent and critical thought gave me the determination to prove you right. Thank you.

Thank you to my principal, Cheryle Brennan, for sharing your insights and for encouraging me to reach beyond the classroom. Thank you, too, ‘Mr Aloisi’ for allowing me to investigate and analyse your classroom in such depth and then kindly continuing to answer my questions long after you had moved on from the PIP. Thank you to the students at the focus of this study – your willingness to have me watch over your shoulder and ask questions allowed me a better understanding of the ways you use computers in your learning and teaching.

To my friends and family for bravely asking ‘How’s the thesis going?’ and staying to hear the answer.

To Veronica, Eleanor and Oscar, thank you for being patient and understanding as you shared your home with ‘mummy’s book’.

To Michael – without you, I would still be wondering where to park the car and buy the textbook. You have taught me to persevere and to maintain perspective on the things that are important. Thank you.
Abstract

The expectation that teachers use computer-based technologies in literacy learning in primary school classrooms has heightened in recent years as schools attempt to prepare students for the literacy demands of the highly digitised workplace. Teachers have responded to this challenge with varying degrees of enthusiasm and success as they meet the challenge of rethinking their understanding of what it is to be literate and therefore their approach to providing literacy learning opportunities in classrooms.

This study aims to examine the role of computer-based technologies in the learning and teaching of writing in one Year 4 classroom. Observations, interviews, the teacher’s program and student work samples collected during this study revealed that the skills and strategies required for traditional literacies are still relevant in the construction of texts using computer-based technologies. The study also demonstrated that these traditional skills are combined with other skills and strategies for the creation of new literacies emerging from computer-based technologies.

The findings of this study indicate that computer-based technologies force teachers to broaden their notion of what text is and how students best learn about writing.
# Table of Contents

Acknowledgments ........................................................................ iii
Abstract ......................................................................................... iv
List of Figures ...................................................................................... viii
List of Tables ......................................................................................... viii

CHAPTER 1: **Introduction** ........................................ 1
  - Purpose of the Study .............. 2
  - Research Question ................. 2
    - Sub Questions ..................... 2
  - The context of the study ........... 3
    - Background ......................... 3
  - Significance of the study ........... 6
    - The Diocesan story ................ 7
    - My professional story ............. 11
  - The changing learning environment 12
  - Theoretical Location .............. 14
  - Locus of the Study ................ 15
    - School Site .......................... 15
    - Participants ....................... 16
  - Presuppositions surrounding this study 17
  - Definition of Terms ............... 18
    - Literacy .............................. 18
    - Computer-based technologies .... 18
    - Personal Interest Project (PIP) .. 18
    - CASTnet ............................. 19
    - Shared Folder ....................... 19
    - KWL ................................ 19
  - Thesis Overview ................... 20
  - Chapter 2 - Literature Review ... 20
  - Chapter 3 - Methodology ......... 20
  - Chapter 4 - Results/findings .... 21
  - Chapter 5 - Conclusions and Implications ........................................ 21

CHAPTER 2: **Literature Review** ............................... 22
  - What is literacy? .................... 24
  - Traditional Literacy Experiences . 25
    - Education reflects a community’s needs 25
    - The community demands more .... 26
    - Literacy - authentic and critical 28
  - The Technology Explosion ........ 30
  - Changing the classroom environment30
  - Examining new literacies ........ 30
  - Current expectations for literacy experiences ........................................ 35
    - A paradigm shift .................. 35
    - Barriers to change ................. 35
  - Classroom teachers integrate
    - computer-based technologies .... 37
  - Building on traditional practice 37
  - Changing teacher attitudes ....... 39
  - Authentic learning experiences .. 41
Conclusion .................................. 44

CHAPTER 3: Methodology ...................... 46
Study Design ................................ 48
Interpretivist (or Naturalistic) Design 49
   Ethnography ................................ 53
   Case Study ............................. 55
Locus of the Study ...................... 58
   Ethical procedures ................... 58
   School Site ............................. 59
   Participants ........................... 60
Study Procedure ......................... 64
Data Collection Methods ............. 65
Data Analysis ............................ 69
Credibility Issues ...................... 75
   Limitations of the Study .......... 75
Delimitations of the Study ........ 77
Conclusion ............................... 79

CHAPTER 4: Results .......................... 81
Part One Socio-cultural context of the
classroom ..................................... 83
   The Learning Environment .... 83
   The Teacher .......................... 86
   Literacy Episodes .................. 89
Part Two The learning experiences 93
   Interview with teacher and
collection of teaching program .. 93
   Periods of classroom observation 96
Part Three Analysis of the children108

CASE STUDY ONE - SHANNON ............ 108
   Background .......................... 108
   Emerging Themes ................... 109
   Interpretative Summary .......... 120

CASE STUDY TWO - SETH ............... 123
   Background Information .......... 123
   Emerging Themes ................... 123
   Interpretative Summary .......... 138

CASE STUDY THREE - MARK AND PHIL . 141
   Background information ........... 141
   Emerging Themes ................... 142
   Interpretative Summary .......... 157

CASE STUDY FOUR
   - JILLIAN, ANDREA AND SUZY
   ............................................. 160
   Background information .......... 160
   Emerging themes ................... 161
   Interpretative Summary .......... 176

CHAPTER 5: Conclusions and Implications .. 179
Responding to the Research Questions180
   What is the role of computer-based
technologies in the learning and teaching
   of writing in a Stage 2 classroom?180
Contents

What does the teacher believe about using computer-based technologies in literacy learning? .......... 181

What literacy skills do children use with computer-based technologies? ... 183

What relationship exists between the teacher’s beliefs and what the children do?193

Towards a Grounded Theory of the role of computer-based technologies in the teaching of writing....... 201

Task ........................... 203
The Process .................... 205
Managing the process ........... 207
Conclusions ...................... 209

REFERENCES ................................. 212

APPENDICES ................................. 226
Appendix A – Audit Trail ........... 227
Appendix B – Semi structured interview 230
Appendix C – Personal Interest Project 231
Appendix D – Citations Worksheet . 233
Appendix F – Interview with the Diocesan Director 237
Appendix G – Good First Teaching Overview 244
Appendix H – TEACHnology Overview 251
Appendix I – Sample of Interview Transcript
Appendix J – Sample of data analysis procedures ................................. 258
List of Figures

Figure 1.1 - myclasses Personal Interest Project web page .................................... 11
Figure 1.2 - Know/Want to know/Learned (KWL) ............................................ 20
Figure 3.1 - Research methodologies ...................................................... 49
Figure 3.2 - The Relationship Between Core and Support Data ........................................... 66
Figure 3.3 - Using the ‘zigzag’ method to analyse data ............................................... 72
Figure 3.4 - Triangulation of the data .............................................................. 79
Figure 4.1 - A school map locating the Year 4 classroom ........................................... 84
Figure 4.2 - Layout of the Year 4 Classroom ..................................................... 85
Figure 4.3 - Teaching cycle observed during PIP time ............................................. 90
Figure 4.4 - Personal Interest Project myclasses Page .............................................. 91
Figure 4.5 - KWL chart ............................................................................. 92
Figure 4.6 - Publishing options for students ..................................................... 92
Figure 4.7 - Excerpt from literacy timetable ...................................................... 96
Figure 4.8 - PIP Help .................................................................................. 101
Figure 4.9 - Enablers and inhibitors to Shannon’s work ........................................... 122
Figure 4.10 - Background slide .............................................................. 129
Figure 4.11 - Seth’s acknowledgement of his teacher .............................................. 131
Figure 4.12 - Technical difficulties ..................................................................... 137
Figure 4.13 - Inhibitors and enablers to Seth’s work .............................................. 140
Figure 4.14 - KWL Planning ......................................................................... 143
Figure 4.15 - A single strategy approach to proofreading ..................................... 147
Figure 4.16 - Slide background ...................................................................... 156
Figure 4.17 - Enablers and inhibitors to Mark and Phil’s work .................................. 159
Figure 4.18 - Selected animation sites ........................................................... 162
Figure 4.19 - Animation Home Page ............................................................... 167
Figure 4.20 - Analysis of published work .......................................................... 171
Figure 4.21 - Analysis of text structure and content ............................................. 172
Figure 4.22 - Enablers and inhibitors to Jillian, Andrea and Suzy’s work ............ 178
Figure 5.1 - The relationship between emerging themes ............................................. 184
Figure 5.2 - Extract from a child’s work sample .................................................. 191
Figure 5.3 - Grounded theory of the role of computer-based technologies in the teaching of writing ................................................................. 202

List of Tables

Table 1.1 - Writing outcomes and indicators from NSW English K-6 Syllabus .... 4
Table 2.1 - The four resources model for literacy learning ........................................ 24
Table 3.1 - Purpose and methods of data collection ................................. 66
Table 3.2 - Purpose and methods of data collection ................................. 67
Table 4.1 - An overview of the Literacy Block ............................................. 88
Table 4.2 - Summary of a spontaneous interview with Mr Aloisi ........................................97
Table 4.3 - Interaction between children ........115
Table 4.4 - Interaction between children ........132
Table 4.5 - Interaction between Jeff, Mark and Phil 150