Informal Workplace Learning in Critical Care Nursing

Sally Dew

MNgSt (Deakin University), BAgSc (University of Adelaide), BA (University of Adelaide), Intensive Care Cert (TQEH), RGN (RAH)

February 2007

A thesis submitted for the degree of Doctor of Philosophy

University of New England

Certification

I certify that I am the sole author and that the substance of this thesis has not already been submitted for any degree and is not being currently submitted for any other degrees.

I certify that to the best of my knowledge that any help in preparing this thesis, and all sources used, have been acknowledged in this thesis.

Sally Dew

Acknowledgments

Firstly I must acknowledge the contribution of the Nurses whose commitment to the research and willingness to report on and explore their experiences of learning in the workplace made this research possible. Their trust and enthusiasm in presenting their stories openly and frankly contributes to understandings of critical care nursing and workplace learning.

I would like to thank my supervisors Professor Margaret Somerville and Dr Darryl Dymock who enabled me to pursue the research in a way that gave the nurses the opportunity to determine how they would participate. Their knowledge, wisdom, friendship and time, both during doctoral weeks and through telephone conferences over the years helped me to gain further insight and build on the study. I also thank Dr Helen Edwards, whose untiring support, inquiring mind, warmth and friendship, both as a peer and in the last phase as my supervisor, have been invaluable.

I am indebted to Irena Niedzwiecki and Elaine Treadgold who were generous with their time in the early stages, providing support and guidance on database searches and computing skills. I must also thank Sylvia Ransom for sharing her knowledge in sourcing health and workplace learning updates, and her EndNote sessions. I thank Jim Selwood for practical support in transcribing the audiotapes, and Jackie Connell and Andrew De-Boeck for technical support. I also thank Margaret Bowden for her excellent editing and formatting, and in particular her determination and humour.

Critical friends Trish and Debbie, and train friends Margaret and Mandy provided fruitful discussions at crucial moments. I am grateful to dear friends Merri, Susanne, Helen, Veronica, Jill, Susan, Elaine and Morgan for their advice, help, warmth and laughter. The strongest link with the PhD experience was during the Doctoral Schools when Jill, Fran, Phil, Chrissiejoy, Marie, Tom, Laura, Phoenix, Martin, Annie, Adele, Alison, Paul, Helen and I gathered to share insights and were refuelled to move forward.

I also wish to acknowledge the academic and general staff at the School of Professional Development and Leadership at UNE, who were always welcoming and supportive, especially during Doctoral School Week.

Finally, my family has encouraged and supported me throughout this journey. My parents Joan and Don, my sister and brother-in-law Cathy and Geoff, and my niece and nephew Rebecca and Jason have provided assistance, time, love and unending faith in my ability to achieve the goal.

Contents

CERTIFICATION **1**

ACKNOWLEDGMENTS ..... **I**

CONTENTS ..... **III**

ABSTRACT ..... **VIII**

CHAPTER ONE **1**

SITUATING THE STUDY **1**

BACKGROUND 2
STATEMENT OF THE PROBLEM 3
RESEARCH QUESTION 4
THEORISING LEARNING 4
CHANGE 6
SETTING THE SCENE 7
SITUATING SELF AS RESEARCHER 8
Environmental layout *9*
Unit staff *10*
Clinical Nurse Consultant 10
Clinical Nurses 10
Base Grade Nurses 11
Team Leader 11
Shifts *13*
Other Unit staff *14*
FORMAL WORK-BASED LEARNING OPPORTUNITIES 15
NEW TECHNOLOGIES AND PROCEDURES 16
INFORMAL LEARNING 17
THE RESEARCH PROCESS 20
OUTLINE OF THESIS 21

CHAPTER TWO **24**

INFORMAL LEARNING AND FACILITATING LEARNING IN THE WORKPLACE: A REVIEW OF THE LITERATURE **24**

INFORMAL LEARNING 25
Incidental learning *27*
INTERRELATION OF FORMAL AND INFORMAL LEARNING 28
VALUE OF INFORMAL LEARNING IN THE WORKPLACE 29
CHANGE IN THE WORKPLACE 31
Learning organisations *32*
FACILITATORS OF LEARNING 34
Dual roles in workplace training *34*
Communication *36*
Trainers' strategies *36*
Mentors *37*
Benefits for mentors *38*
Workplace manuals and teaching *39*
TRANSFER OF LEARNING FROM FORMAL TRAINING 39
CONCLUSION 41

CHAPTER THREE **43**

LEARNERS IN THE WORKPLACE AND IN CRITICAL CARE NURSING: A REVIEW OF THE LITERATURE **43**

LEARNERS 43
Continual learning *44*
Self-directed learning *45*
Talking to others 46
Watching others 47
Embodied learning *47*
ENGAGEMENT IN LEARNING 48
Subjectivity *48*
Affordances *49*
INTUITION AND EXPERTISE 51
GENDER IN THE WORKPLACE 54
Part-time workers *54*
Global pattern *55*
Power *55*
Devalued workplace skills *57*
INFORMAL LEARNING IN NURSING 59
Workplace learning in critical care units *59*
Technology and Critical Care Nurses *59*
Tasks, workloads and staffing ratios *60*
Patient outcomes *61*
Skill mix *61*
IMPACT OF OTHER FACTORS 62
Individual learning needs *62*
Geographical layout *62*
Attributes of Critical Care Nurses *63*
The nursing handover *63*
CONCLUSION 65

CHAPTER FOUR **67**

METHOD **67**

BACKGROUND 67
PARTICIPATORY ACTION RESEARCH AND RATIONALE FOR ITS USE IN THIS STUDY 68
Outcomes of participatory action research *73*
FOCUS GROUPS 74
Rationale for using focus groups in this study *74*
Avoiding exclusion 75
STUDY METHOD/PROCESS 75
Ethical considerations *79*
Criteria for sample selection *79*
Recruitment of sample through presentations *80*
Research sample *81*
Structure of the focus groups *82*
FIRST CYCLE 82
First focus group *82*
Data collection – gathering examples of informal learning *84*
Data collection and analysis *85*
Transcription and analysis of focus groups *86*
Comparison of focus group narratives and written examples *88*
SECOND CYCLE 89
First focus group of the second cycle *89*
Second focus group of the second cycle *90*

Third focus group of the second cycle 90
THIRD CYCLE 91
PROJECT COMPLETION 92
FINAL, IN-DEPTH ANALYSIS 92
LIMITATIONS OF THE RESEARCH METHOD 93
Focus group limitations 94
Limitations of focus groups consisting of acquaintances 95
CONCLUSION 96

CHAPTER FIVE **98**

SELECTED EXAMPLES OF CRITICAL CARE NURSES' LEARNING EXPERIENCES **98**
LEARNING EXPERIENCES 99
1. *Dave: 'No one tells you that'* 99
Discussion 99
2. *Jill: 'I learned by my mistakes'* 102
Discussion 103
3. *Jill: patient-centred care, embedded in technology* 105
Discussion 106
4. *Philippa: travelling story* 108
Discussion 108
5. *Karen: collaborative problem-solving* 110
Discussion 110
CONCLUSION 112

CHAPTER SIX **115**

CRITICAL CARE NURSES EXPLORE LEARNING AND TEACHING **115**
THEME 1: TYPES OF LEARNING 115
Learning from colleagues 115
Knowing it is available and knowing where to find it 116
Collaboration in learning 117
Knowing who knows 117
Gaining access to information and support 119
Identifying the knowledge gaps/inadequate skill mix/not knowing what is not known 120
Experts 122
Seeking out the expert 124
Learning from mistakes 125
Global handover 127
THEME 2: TEACHING AND LEARNING THROUGH TEACHING 128
Teaching and learning 128
Pre-planned teaching sessions in groups 129
Assessing prior knowledge and scaffolding 131
Teaching one-to-one at the bedside 132
Additional demands on the teachers 133
THEME 3: INDIVIDUAL ENGAGEMENT WITH LEARNING 134
Motivation to build expertise 137
Lack of motivation 138
CONCLUSION 141

CHAPTER SEVEN **143**

CHALLENGES TO LEARNING **143**
THEME 4: POSITION AND GENDER 143
Establishing credibility 146
Avoiding confrontation 147
THEME 5: POSITION, POWER AND WORKFLOW 148

Coping with geographical distance ... 149
Dealing with conflict ... 151
THEME 6: THREAT TO PATIENT SAFETY/PATIENT CARE ... 153
Urgency and time pressures ... 154
Reflection and problem solving ... 155
Critical incidents ... 157
THEME 7: CHANGING AND COMPLEX TECHNOLOGIES AND PROCEDURES ... 159
Time pressures and lack of practice ... 160
Infrequent use of equipment ... 160
Complexity of patients and technologies ... 161
Complexity of work and conflict ... 162
Power, technology, complexity and keeping patients safe ... 163
CONCLUSION ... 165

CHAPTER EIGHT ... **167**

DISCUSSION ... **167**
PREDOMINANT FEATURES ... 168
Learning by asking ... 168
Accuracy of asking ... 168
Complexity and rate of change ... 169
Making complexity explicit ... 169
Workloads and education on new technology ... 171
Inadequate cover of knowledge across all shifts ... 172
ENGAGEMENT WITH LEARNING ... 173
Learner/teacher identity in ongoing learning ... 174
Maintaining standards ... 177
Critical thinking ... 179
Building expertise ... 180
Affordances in the workplace ... 180
Teaching others ... 181
Team work ... 181
Handover ... 182
Relational interdependence and co-participation ... 182
Guided learning ... 183
Power relationships ... 184
Negotiating the obstacles ... 184
Gender and communication ... 185
Coping with abuse ... 186
Affordances and women's work ... 186
Part-time workers ... 187
CONCLUSION ... 187

CHAPTER NINE ... **189**

COMPLEXITY OF THE WHOLE ... **189**
Outcomes ... 192
Effects on learning in the Unit ... 193
Contributions ... 194
CONCLUSION ... 198

REFERENCES ... **199**

APPENDIX ONE: APPROVALS FOR RESEARCH ... **209**

APPENDIX TWO: INFORMATION SHEET AND STAFF CONSENT FORM ... **211**

APPENDIX THREE: GUIDELINES FOR FOCUS GROUPS ... **214**

APPENDIX FOUR: PROMPTS ON NOTE PADS 215
APPENDIX FIVE: MORE DETAILED PROMPT SHEET 216
APPENDIX SIX: CHECKLIST 217
APPENDIX SEVEN: PHRASES FROM FOCUS GROUP ONE 218
APPENDIX EIGHT: FURTHER GUIDELINES FOR EXPLORING STRATEGIES 223
APPENDIX NINE: SUMMARY FOR SPECIALIST GROUPS 224
APPENDIX TEN: SUMMARY FOR PARTICIPANTS 225

List of figures

FIGURE 1: MODEL OF CRITICAL CARE PARTICIPATORY ACTION RESEARCH CYCLES 77

FIGURE 2: GARDEN OF LEARNING 190

Abstract

Rapidly changing developments in treatments and procedures in health care and advances in technologies increased the complexity of managing patients in intensive care units. This environment created challenges for the Nurses to acquire knowledge and skills continuously. The demand for this awareness was often urgent, with minimal time for familiarisation of new procedures or equipment.

This research explores how Critical Care Nurses' understanding of their informal workplace learning can enhance their professional practice. The study was undertaken in an intensive care unit of a large metropolitan hospital. A participatory action research approach with focus groups was used.

The use of focus groups in participatory action research enabled the nurses to discuss and decide the ways in which they would explore their own informal learning. It also provided opportunities for them to reflect on the many ways they gained knowledge and the strategies they used to learn informally.

Data were collected through the Critical Care Nurses' written narratives of learning experiences, as well as audio-taped focus groups and open-ended interviews. Thematic analysis was used to identify and group phrases into categories. These categories represented the Nurses' effective learning as well as challenges to learning.

During the participatory action research cycles the difficulties that Nurses faced in undertaking practice research became apparent and reflected the challenges of continuously building new knowledge.