http://researchspace.auckland.ac.nz

ResearchSpace@Auckland

Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right to be identified as the author of this thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from their thesis.

To request permissions please use the Feedback form on our webpage. http://researchspace.auckland.ac.nz/feedback

General copyright and disclaimer

In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the Library Thesis Consent Form.

FACILITATING LEARNING: INTEGRATING TEACHING AND RESEARCH

MARIS L O'ROURKE

A thesis submitted in fulfillment of the requirements of Doctor of Philosophy.

University of Auckland

1985

ABSTRACT

The research studies reported in this thesis extend over a 5-year period of my own growth and development as a researcher and teacher. Two themes run in parallel. The first theme was improvement in skills in implementing objective research to assess behaviour change resulting from childcare and teacher training programmes. The second theme was the clarification and explanation of my own role and behaviour as a trainer of teachers and childcare workers. The theoretical framework used for the objective research was applied behaviour analysis and the one used to explain my behaviour was Argyris and Schon's (1974) theory of action with its two different theories-in-use. Model I is where people strive to satisfy the governing variables of defining goals and trying to achieve them; winning not losing; minimising negative feelings; and being rational. This creates conditions where only single-loop learning is possible. Single-loop learning is where people adopt new actions to realise their governing variables. However double-loop learning, where we learn to change the governing variables themselves, is only possible with a Model II theory-in-use i.e. where people strive to give and get valid information, make free and informed choices and generate internal commitment to the choices.

During Study I my own behaviour as a researcher and teacher could be explained in terms of Model I. I adopted a rigorous research model for the research and a traditional authoritarian model for the teaching. However I perceived a mismatch between what I said (Model II) and what I did (Model I), also I did not like the 'behavioural world' my research activities had created. I wanted to be an effective teacher and and effective researcher yet the two seemed incompatible. The rigorous research methods I was using to evaluate my teaching were limiting the quality of learning and teaching. In Study 1 the effects of training 8 childcare students in two childcare centres using Specific Instruction, Graphic Feedback and Daily Verbal Feedback were evaluated for three caregiver behaviours: non-verbal, verbal and participation (in activities, childcare and housework). This first study showed that when the unilaterally controlling methods of rigorous research were combined with authoritarian teaching, conditions were produced which explained only how people would behave under similar circumstances of control and generalisation was limited.

In Study 2 the effects of training 8 childcare supervisors to train their staffs in eight childcare centres using a training package which included Negotiated Instruction, Practice and Feedback were evaluated for three caregiver behaviours: talking with children and adults; socio-emotional (positive and negative); and participation (in activities, childcare and housework). During Study 2 I tried to make the transition from Model I to Model II and moved to teaching where I shared control through negotiating the curriculum and research which included social validation measures. However on reflecting on the outcomes of Study 2 I realised that I was still continuing to do Model I

research (where I unilaterally controlled and master-minded the research design, goals and procedures) whereas in contrast in my teaching role I had simply adopted a role which was opposite of Model I (i.e. I had handed control over to the participants). However Study 2 showed that when rigorous research was combined with a negotiated curriculum (unilateral control and shared control) more generalisation occurred. Results indicated that childcare supervisors could effect significant changes in their own behaviour after a training package of negotiated instruction, feedback and practice. Further, they could transfer skills learned to their staffs. These changes were only achieved when: (1) A mismatch could be shown between what the supervisors and staff said and what they did and they judged the behaviour to be important and desirable; (2) Feedback on performance was provided to the supervisors by the experimenter and to the staffs by their supervisors; (3) Opportunities for comparisons of performance were provided (either within-subjects or between-subjects); and (4) Supervisors could negotiate to learn the specific skills they needed e.g. how to give positive and negative feedback to staff.

Following Study 2 I continued to try to match my espoused views with my practice in my teaching and integrate teaching and research within a Model II framework. I felt that teaching and research need not be separate activities if the data generated could be used for clients' learning and skills learned generalised to the 'real' world. I therefore taught an exploratory course involving aspects of self-control by partcipants and shared control over course goals and methods. Experience in teaching this course suggested that when socially significant goals were targeted and students collected their own baseline data, data were generated which course members could use to understand, and in some cases solve, their own problems. Creating conditions which fostered psychological ownership of goals and methods for changing behaviour (giving clients choices; working on behaviours clients judged important and desirable; creating favourable attitudes towards training; and giving clients responsibility for implementation), appeared to enhance the occurrence of generalisation.

The thesis, then, arrives at two fundamental propositions. The first is that the process of conducting rigorous applied research (e.g. research-determined and specified hypotheses, predetermined measures, research design etc.) reinforces the discovery and invention of single-loop solutions only. The second is that research and training programmes that attempt to embody Argyris' (1974) Model II theory-in-use will be more effective for developing conditions where a new set of skills can be produced as well (double-loop learning).

ACKNOWLEDGEMENTS

No-one can do a work like this alone and I have been fortunate to have the help and support of many intelligent and caring people over the last 6 years.

I would like to acknowledge:

My three supervisors;
1984-85 Dr Viviane Robinson, University of Auckland
1980-84 Professor Ted Glynn, University of Otago
1979-80 Professor Todd R. Risley, University of Kansas
each of whom has contributed in their own special and unique way both to my development and this work, and I thank them for it.

My family and friends:
Greg Mace and my two sons Dominic and Patrick.

Liz Connelly, Brigid Barrer, Rose Scott, Maggie Rogers, Judith May, Dee Twiss, Maureen Wilson, Di Hatch, Anne Smith and Val Gould.

Taru Rankin, Toby Curtis and Duncan McGhie.

The Connelly family, especially Ray, Jan and Gjeis.

The O'Rourke family, especially Gwen, Colleen and Philip.

Rosalie King and Ian Mitchell.

David Webber and Mike Absolum.

Without the strength, love, fun, understanding and support of all these people I could not have continued, or completed this thesis.

The financial assistance I have had as a:
Fulbright Scholar
American Association of University Women Fellow
Shirtcliffe Fellow
Post-graduate Scholar, University of Auckland
and from the
New Zealand Childcare Association
Committee on Women
Department of Education
Department of Labour.

The many others who have contributed to this thesis,
Justine Tennant, Sandhya Pal, Robyn MacDonald, Julie Mason, Irene Morris, Lois Neunz, Wendy Vaigre, Jacquie Leckie and Edmund Kay for the hours they put in as observers, reliability checkers and analysts.

Dr Keri Wilton for the time spent helping me with the statistics.

Education and Vocations Ltd for typing the thesis.

My colleagues at Auckland Teachers College for help freely given when I needed it.

And, last but not least, all the people who have attended my courses and without those help, co-operation and participation this study could not have been done.

CONTENTS

ACKNOWLEDGEMENTS

ABSTRACT

CHAPTER 1 - INTRODUCTION 1
Background to the Research 1
Auckland Teachers College (ATC) 1
University of Auckland 3
Childcare 3
Applied Behaviour Analysis 4
Study 1 6
University of Kansas (KU) 7
Auckland Technical Institute 7
Study 2 8
Auckland Teachers College (ATC) 8

CHAPTER 2 - STUDY 1 13
Introduction 13
Instruction 15
Conclusions about Instruction 16
Feedback 17
How Feedback is Given and Who By 17
When Feedback is Given and How Often 19
What Feedback is Given 21
Conclusions About Feedback 23
Generalisation 24
Conclusions 25
Study 1 26
Method 27
Setting 27
Subjects 27
Observation Procedure 28
Observer Training 28
Sampling Procedure 28
Target Behaviours 29
Non-Verbal Behaviour 29
Verbal Behaviour 31
Participation 31
Posture 31
Inter-Observer Agreement and Reliability 32
Inter-Observer Agreement 32
Inter-Observer Coding Agreement 34
Reliability 34
Procedure 35
Experimental Design 37
Preliminary Meetings 37
Phase A - Baseline 37
Phase B - Specific Instruction 37
Phase C - Graphic Feedback 38
Phase D - Daily Verbal Feedback 40
Dissemination and Interviews 39
Results 40
Inter-Observer Agreement and Reliability 40
Inter-Observer Agreement 40
Inter-Observer Coding Agreement 41
Reliability 41
Caregiver Behaviour 41
Non-Verbal Behaviour (NV+/NV-) 41
Verbal Behaviour 44

Talking with children/Talking with adults (TAC/TAT) 44
Positive/Negative (V+/V-) 49
Participation (PARA/PARHH/PARCC) 51
Activities (PARA) 52
Household (PARHH) 55
Childcare (PARCC) 57
Posture 59
Discussion 59

CHAPTER 3 - REVIEW OF STUDY 1 65
Incompleteness of Study 1 65
Dealing with the "Real" Issues 65
Telling the "Whole Story" 66
Social Validation 67
. Conclusions 72
Negotiation 72
Selection of Goals 73
Method 74
Content 74
Satisfaction with Procedures 74
Method 75
Content 75
Evaluation of Course 75
Method 75
Content 76
Conclusions 76
Inflexibility of Study 1 77
Lack of Adaptability 77
Baseline 78
Verbal and Non-Verbal Behaviour (positive and negative) 78
Childcare 78
Housework 78
Activities 79
Specific Instruction 79
Graphic Feedback 79
Daily Verbal Feedback 80
Conclusions 81
Controlling Behaviour of the Experimenter 81
Theories of Action 82
Model I - Governing Variables 84
Define goals and try to achieve them 84
Maximise winning and minimise losing 84
Minimise generating or expressing negative feelings 84
Be rational 85
Model I - Action Strategies 85
Design and manage environment unilaterally 85
Own and control task 85
Unilaterally protect self 85
Unilaterally protect others 86
Consequences of Model I 86
For behavioural world 86
For learning and effectiveness 86
Model II 88
Research 90
Paradigm of professional practice 90
Conclusions 91
Overall Conclusions 91

CHAPTER 4 - STUDY 2: INTRODUCTION AND METHOD 93
Introduction 93
Teacher Training Packages 95
Generalisation 97
Conclusions 100
Method 101
Participants 101
Settings 102
Training Condition 102
Generalisation Condition 103
No-Treatment Control 103
Observation Procedure 104
Observer Training 104
Sampling Procedure 104
Behaviour Definitions 105
Staff Behaviours 105
Child Behaviours 108
Inter-Observer Agreement and Reliability 108
Inter-Observer Agreement 108
Reliability 109
Procedure 110
Experimental Design 110
Pre-Course Communications 112
Phase A - Baseline 113
Phase B - Negotiated Instruction 113
Phase C - Feedback 115
Phase BC - Negotiated Instruction Plus Feedback 116
Post-Course Communications 117
Measures 117
Staff Behaviour 117
Child Behaviour 117
Social Validity 118
Results 119

CHAPTER 5 - STUDY 2: EFFECTS OF THE TRAINING PACKAGE ON SUPERVISOR AND STAFF BEHAVIOUR 120
Introduction 120
Results 120
Language Behaviour 120
Talking with children 120
Talking with staff 121
Socio-Emotional Behaviour 123
Positive 124
Negative 126
Participation in Activities and Childcare 127
Supervisors and staff 127
Children 128
Caregiving with the Environment (Housework) 129
Summary 131
Discussion 133
Language Behaviour 133
Housework 134
Socio-Emotional Behaviour 135
Conclusions 135

CHAPTER 6 - STUDY 2: SOCIAL VALIDATION RESULTS 139
Social Validation 139
Social Significance of Goals 139
Social Significance of Procedures 140
Negotiated instruction 140
Feedback 143
Social Importance of Results 144
Consumer satisfaction 144
Social comparison 146
Conclusions 149
Overall Conclusions 149

CHAPTER 7 - REVIEW OF STUDY 2 150
Introduction 150
Research 150
Research Design 150
Research Data 154
Teaching 156
Conclusions 160
Overall Conclusions 161

CHAPTER 8 - SEARCH FOR AN ALTERNATIVE APPROACH 162
Introduction 162
Teaching 162
Research 164
Plan 168
Step 1 - Negotiation of the Curriculum 169
Step 2 - Data Collection, Self-Report and Analogues 169
Step 3 - Data Collection, Baselines 171
Step 4 - Going Public 172
Step 5 - Making Changes 172
Measures 173
Generating Usable Data 174
Generating Usable Concepts 178
Generalisation 178
Example of a baseline cure 180
Example of an AB study (1) 181
Example of an AB study (2) 182
Discussion 183

CHAPTER 9 - CONCLUSIONS 186

BIBLIOGRAPHY 193

APPENDICES ..... A-V