

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

MASSEY UNIVERSITY

AN EVALUATION OF TRADITIONAL STAFF DEVELOPMENT PRACTICES

FOR IMPLEMENTING CHANGE IN UNIVERSITY TEACHING

by

ERIC ROBERT ASHCROFT

A THESIS  
PRESENTED IN PARTIAL FULFILMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
IN EDUCATION

FACULTY OF EDUCATION

PALMERSTON NORTH, NEW ZEALAND

JANUARY, 1987.

© Eric Robert Ashcroft, 1987.

Massey University Library. Thesis Copyright Form

Title of thesis: An Evaluation of Traditional Staff Development Practices for Implementing Change in University Teaching

- (1) (a) I give permission for my thesis to be made available to readers in the Massey University Library under conditions determined by the Librarian.
- (b) I do not wish my thesis to be made available to readers without my written consent for            months.
- (2) (a) I agree that my thesis, or a copy, may be sent to another institution under conditions determined by the Librarian.
- (b) I do not wish my thesis, or a copy, to be sent to another institution without my written consent for            months.
- (3) (a) I agree that my thesis may be copied for Library use.
- (b) I do not wish my thesis to be copied for Library use for            months.

Signed

EP Ashcroft

Date

12/1/87

The copyright of this thesis belongs to the author. Readers must sign their name in the space below to show that they recognise this. They are asked to add their permanent address.

NAME AND ADDRESS

DATE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## ACKNOWLEDGEMENTS

This dissertation would not have been completed without assistance from a large number of people who contributed their time and effort. I am particularly grateful to my Chief Supervisor, Dr. Don McAlpine for his excellent supervision, support and good humour throughout this research.

My sincere appreciation is offered to Dr. James Chapman and Dr. Graham Hunt who provided discussion, advice and assistance particularly with regard to design, and the construction and testing of instruments.

I would also like to express my sincere appreciation of the assistance provided by Mr. Bob Lambourne, Dr. Ted Drawneek and Dr. Greg Arnold whose expertise in statistics and computing proved invaluable.

I am extremely grateful to the Deans of the Faculty of Agricultural and Horticultural Sciences at Massey University, Professor Alan Frampton and Professor Robert Anderson who encouraged and supported this project, and to their staff for friendly cooperation throughout a lengthy intrusion into their professional and academic privacy.

I am appreciative also of the technical assistance given by Mr. Selwyn Cathcart, Mr. Kevin Harris and Mr. Graham Slater who provided and maintained the extensive audio-visual resources required.

For continuous support over an extended period, my thanks go to my wife Vivienne who provided the assistance and encouragement necessary for overcoming the constant challenges and crises of a demanding project.

## TABLE OF CONTENTS

|                         |      |
|-------------------------|------|
| ABSTRACT .....          | I    |
| DEDICATION .....        | III  |
| ACKNOWLEDGEMENTS .....  | IV   |
| TABLE OF CONTENTS ..... | V    |
| LIST OF TABLES .....    | VIII |
| LIST OF FIGURES .....   | XI   |

| Chapter  | Page |
|--|------|
| 1. A JUSTIFICATION FOR CONCERN .....                           | 3    |
| Criticism of the Teaching Role .....                           | 7    |
| Sources of Criticism .....                                     | 8    |
| Constraints Against Simple Solutions .....                     | 11   |
| Staff Support .....  | 13   |
| Pressure for Change .....                                      | 14   |
| Multi-Functional Staff Development .....                       | 15   |
| Towards a Definition of Staff Development .....                | 20   |
| Some Key Attributes of Staff Development.....                  | 23   |
| 2. INNOVATION AND CHANGE AS A FOCUS FOR STAFF DEVELOPMENT..... | 26   |
| Ineffective Innovation and Change .....                        | 27   |
| Staff Development: Conflicting Reasons for Failure .....       | 28   |
| 3. THE LEARNING PROCESS IN IMPLEMENTATION .....                | 39   |
| The Learning Process .....                                     | 50   |
| Goals .....  | 50   |
| Effects .....  | 52   |
| Involvements .....   | 53   |
| Influencing Factors and their Criteria .....                   | 56   |
| Autonomous Small Groups as the Unit for Change .....           | 57   |
| 'Inner Directed' Staff Development .....                       | 58   |
| Self Reflection in a Critical Community .....                  | 61   |
| Summary .....  | 63   |

|  |     |
|--|-----|
| 4. METHOD .....                                    | 65  |
| Introduction .....                                 | 65  |
| Hypotheses .....                                   | 67  |
| Sample .....                                       | 70  |
| Group Characteristics .....                        | 71  |
| Instrumentation .....                              | 72  |
| The Measure of Attitudes to Instruction .....      | 77  |
| Categories of Staff Attitudes to Instruction ..... | 80  |
| The Measure of Instructional Knowledge .....       | 82  |
| The Measure of Instructional Behaviour .....       | 84  |
| Method .....                                       | 88  |
| Treatment .....                                    | 89  |
| Explicit and Hidden Objectives .....               | 89  |
| 5. STATISTICAL ANALYSES .....                      | 92  |
| Demographic Data .....                             | 92  |
| Analyses of Covariance .....                       | 97  |
| Attitudes by Mode .....                            | 98  |
| Knowledge by Mode .....                            | 107 |
| Behaviour by Mode .....                            | 112 |
| Summary .....                                      | 127 |
| 6. DISCUSSION .....                                | 130 |
| Introduction .....                                 | 130 |
| Attitude Change .....                              | 133 |
| Knowledge Change .....                             | 135 |
| Behaviour Change .....                             | 136 |
| Influencing Factors .....                          | 141 |
| Goals .....  | 146 |
| Effects .....                                      | 150 |
| Involvements .....                                 | 156 |
| 7. CONCLUSIONS AND IMPLICATIONS .....              | 166 |
| Overview .....                                     | 166 |
| Theoretical Implications .....                     | 169 |
| The Learning Process and Relevance .....           | 176 |
| Research Implications .....                        | 180 |
| Practical Implications .....                       | 182 |

|  |     |
|--|-----|
| APPENDICES .....                               | 186 |
| A. Critical Incidents Interview Schedule ..... | 186 |
| B. Staff Questionnaire .....                   | 187 |
| C. Group Membership Survey Form .....          | 200 |
| D. A Measure of Learning Potential .....       | 201 |
| REFERENCES .....                               | 245 |

LIST OF TABLES

Tables Page

Demographic Data

D1. Total and Types of Teacher Training: by Group.....93  
D2. Total University Teaching Service: by Group.....94  
D3. Total Teaching Service: by Group.....94  
D4. Sex: by Group.....95  
D5. Status: by Group.....95  
D6. Age: by Group.....96

Analyses of Covariance

Attitudes

1. Overall Attitude Change: Pre versus Post Comparisons.....99  
2. Change in Attitudes to Learners: Pre versus Post Comparisons.....99  
3. Change in Attitudes to Objectives: Pre versus Post Comparisons.....100  
4. Change in Attitudes to Relevance: Pre versus Post Comparisons.....100  
5. Change in Attitudes to Student Involvement: Pre versus Post  
Comparisons.....101  
6. Change in Attitudes to Personal Accountability: Pre versus Post  
Comparisons.....101  
7. Change in Attitudes to Inner Directedness : Pre versus Post  
Comparisons.....102  
8. Change in Attitudes to Motivating Students: Pre versus Post  
Comparisons.....102  
9. Overall Attitude Change: Group 1v3, Group 2v3.....104  
10. Change in Attitudes to Learners: Group 1v3, Group 2v3.....105  
11. Change in Attitudes to Objectives: Group 1v3, Group 2v3.....105  
12. Change in Attitudes to Relevance: Group 1v3, Group 2v3.....105  
13. Change in Attitudes to Student Involvement: Group 1v3, Group 2v3.....105  
14. Change in Attitudes to Personal Accountability: Group 1v3, Group 2v3..106  
15. Change in Attitudes to Inner Directedness: Group 1v3, Group 2v3.....106  
16. Change in Attitudes to Motivating Students: Group 1v3, Group 2v3.....106

Knowledge

17. Change in Overall Knowledge of Teaching: Pre versus Post Comparisons..108  
18. Change in Knowledge of Learners' Needs : Pre versus Post Comparisons..108



|   |     |
|---|-----|
| 19. Change in Knowledge of Relevance : Pre versus Post Comparisons.....           | 109 |
| 20. Change in Knowledge of Objectives : Pre versus Post Comparisons.....          | 109 |
| 21. Change in Knowledge of Student Involvement : Pre versus Post Comparisons..... | 110 |
| 22. Change in Knowledge of Motivation : Pre versus Post Comparisons.....          | 110 |
| 23. Change in Knowledge of Teaching: Group 1v3, Group 2v3.....                    | 111 |
| 24. Change in Knowledge of Learners' Needs: Group 1v3, Group 2v3.....             | 111 |
| 25. Change in Knowledge of Relevance: Group 1v3, Group 2v3.....                   | 111 |
| 26. Change in Knowledge of Objectives: Group 1v3, Group 2v3.....                  | 111 |
| 27. Change in Knowledge of Student Involvement: Group 1v3, Group 2v3.....         | 112 |
| 28. Change in Knowledge of Motiyation: Group 1v3, Group 2v3.....                  | 112 |

### Behaviour

|   |     |
|---|-----|
| 29. Overall Change in Teaching Behaviour: Pre versus Post Comparisons....                     | 113 |
| 30. Change in Focussing Student Attention : Pre versus Post Comparisons..                     | 113 |
| 31. Change in Degree of Student Participation : Pre versus Post Comparisons.....              | 114 |
| 32. Change in Reinforcement of Learners : Pre versus Post Comparisons....                     | 114 |
| 33. Change in Feedback to Students : Pre versus Post Comparisons.....                         | 115 |
| 34. Change in Provision of Multiple Examples of Concepts : Pre versus Post Comparisons.....   | 115 |
| 35. Change in Use of Neutral Informing : Pre versus Post Comparisons....                      | 116 |
| 36. Change in Use of "Optimal Arousal" Strategies : Pre versus Post Comparisons.....          | 116 |
| 37. Change in Ensuring Relevance Understood : Pre versus Post Comparisons.....                | 117 |
| 38. Change in Ensuring Student Understanding of Objectives : Pre versus Post Comparisons..... | 117 |
| 39. Change in Maintaining a Positive Learning Climate : Pre versus Post Comparisons.....      | 118 |
| 40. Change in Use of Multi-Sensory Resources : Pre versus Post Comparisons.....               | 118 |
| 41. Change in Total Orienting Behaviour : Pre versus Post Comparisons....                     | 119 |
| 42. Change in Total Instructional Behaviour: Pre versus Post Comparisons.                     | 119 |
| 43. Change in Total "Involving Students" Behaviour : Pre versus Post Comparisons.....         | 120 |
| 44. Overall Change in Teaching Behaviours: Group 1v3, Group 2v3.....                          | 121 |
| 45. Change in Focussing Student Attention: Group 1v3, Group 2v3.....                          | 121 |

|   |     |
|---|-----|
| 46. Change in Degree of Student Participation: Group 1v3, Group 2v3.....                | 121 |
| 47. Change in Reinforcement of Learners: Group 1v3, Group 2v3.....                      | 121 |
| 48. Change in Feedback to Students: Group 1v3, Group 2v3.....                           | 122 |
| 49. Change in Provision of Multiple Examples of Concepts: Group 1v3,<br>Group 2v3.....  | 122 |
| 50. Change in Use of Neutral Informing: Group 1v3, Group 2v3.....                       | 122 |
| 51. Change in Use of "Optimal Arousal" Strategies: Group 1v3, Group 2v3..               | 122 |
| 52. Change in Ensuring Relevance Understood: Group 1v3, Group 2v3.....                  | 123 |
| 53 Change in Ensuring Student Understanding of Objectives: Group 1v3,<br>Group 2v3..... | 123 |
| 54. Change in Maintaining a Positive Learning Climate: Group 1v3,<br>Group 2v3.....     | 123 |
| 55. Change in Use of Multi-Sensory Resources: Group 1v3, Group 2v3.....                 | 123 |
| 56. Change in Total Orienting Behaviour: Group 1v3, Group 2v3.....                      | 124 |
| 57. Change in Total Instructional Behaviour: Group 1v3, Group 2v3.....                  | 124 |
| 58. Change in Total "Involving Students" Behaviour: Group 1v3, Group 2v3.               | 124 |
| 59. Mean Percentages of Teaching Time for each Behaviour Category.....                  | 126 |

## LIST OF FIGURES

| Figure   | Page |
|--|------|
| 1. Variables of Implementation.<br>(Based on Gross et al.).  | 41   |
| 2. A Three Variable Model of Implementation.<br>(With examples derived from Fullan & Pomfret, 1977). | 42   |
| 3. A Four Variable Model of Implementation.<br>(With examples derived from Berg & Ostergren, 1977).  | 44   |
| 4. A Four Variable Model of Implementation.<br>(With examples derived from Dalin, 1978).             | 46   |
| 5. A four Variable Model of Implementation Incorporating the<br>Learning Process.                    | 49   |
| 6. Triangulation Scores - Staff Development Participations.  | 73   |
| 7. Essential Performances - Instructor Criterion Competencies.                                       | 75   |
| 8. Categories of Staff Attitudes to Instruction.   | 80   |
| 9. Formal Staff-Development Courses.   | 91   |