

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.

Exploring quality in a University: a critical systems approach

A thesis presented in partial fulfilment of the requirements
for the degree of
Doctor of Philosophy
in
Educational Studies
at Massey University,
Palmerston North,
New Zealand.

Donald James Houston

2007

Abstract

Since the 1990s quality management has been translocated from industry into higher education. However, there is little evidence that improvement in the core functions of universities has resulted. This study adopts a critical systems approach that is grounded in a critique of prevailing models of quality management to explore quality in a university. It examines the potential of Critical Systems Thinking enacted through Total Systems Intervention (TSI) to promote improvement. A case is made for local intervention towards improvement. The thesis is structured around the three modes of TSI, namely Critical Review, Problem Solving and Critical Reflection.

A Critical Review of Quality Management suggests that the opposition of academics to quality initiatives in general, and to Quality Management in particular, is rooted in its language and underlying image of organization. This proposition is explored through an analysis of key Quality Management definitions and concepts in relation to the university. The importance of language, metaphors and images of organization are explored. The fitness for purpose of industrial models of quality for universities is challenged.

TSI is employed in its Problem Solving mode to describe the quality problem for an academic unit within a university in New Zealand initially from the perspective of its staff and students. For them, the quality problem mainly related to better promoting learning. Analysis and reflection on the problem and context drawing on systems methodologies shaped interventions for improvement. Critical Reflection on a cycle of participative creativity, choice and implementation identified cultural, structural and environmental factors that present threats not only to quality improvement but also to the viability of the unit.

The main findings and conclusions question the appropriateness of current models of QM in the university. The thesis demonstrates key systemic problems in higher education; provides a rationale for systemic interventions; identifies pressures that make resistance to systems thinking almost inevitable; and illustrates that TSI is more appropriately used by external researchers than insider researchers. Nevertheless, critical systems approaches, in particular boundary critique, help to structure the problem of improving quality in locally meaningful ways. The challenges of using systems ideas and systems methodologies in the university context, however, are substantial.

Acknowledgements

I would like to thank my supervisors, Professor Tom Prebble, Tom Robertson and Dr. Jeff Foote for their input, support and encouragement. Thanks also to Associate Professor Cliff Studman, who helped to get me started.

I am indebted to the participants who gave their time and energy to enrich this work with their perspectives on the challenging problem of quality in higher education. I particularly wish to acknowledge the contributions of critical friends, Garth Atkinson, Dr. Rory Flemmer and Shelley Paewai, who helped ensure the reliability of recognisability of the work through critical reading and comment. Dr. Nigel Grigg also provided useful comments.

Finally, I must especially thank my wife, Vanessa North, who endured this work from the very start and helped me see it through to the end.

Table of Contents

ABSTRACT.....	I
ACKNOWLEDGEMENTS	II
TABLE OF CONTENTS.....	III
TABLE OF FIGURES	VII
TABLE OF TABLES.....	VIII
CHAPTER 1 INTRODUCTION.....	1
BACKGROUND TO THE PRESENT STUDY	1
<i>What is Quality Management?</i>	2
<i>The idea of the University</i>	2
THE RESEARCH PROBLEM.....	3
PURPOSES OF THE RESEARCH.....	4
THE RESEARCH APPROACH: CRITICAL SYSTEMS THINKING AND TSI.....	5
STRUCTURE OF THE THESIS.....	5
CHAPTER 2 THE RESEARCH APPROACH: CRITICAL SYSTEMS THINKING AND TOTAL SYSTEMS INTERVENTION	8
INTRODUCTION.....	8
POSITIONING THE RESEARCH: CONTRASTING PARADIGMS	9
<i>Metaphors and images of organization</i>	10
CRITICAL SYSTEMS THINKING AND TOTAL SYSTEMS INTERVENTION.....	11
<i>The systems idea and systems thinking</i>	11
<i>Critical Systems Thinking</i>	12
<i>Total Systems Intervention: Critical Systems Thinking in action</i>	14
THE PRESENT RESEARCH: APPLYING TSI WITHIN A UNIVERSITY	17
<i>Critical Review</i>	18
<i>Problem Solving in action</i>	18
<i>Critical Reflection: Research on quality in a University</i>	19
CHAPTER 3 QUALITY MANAGEMENT: A CRITICAL REVIEW.....	21
CHANGING TIMES AND PLACES AND PEOPLE	21
<i>America and Product Quality Control: the first wave</i>	21
<i>Japan and organizational quality: the second wave</i>	22
<i>America and TQM: reinventing quality</i>	23
<i>The rest of the west: quality ripples</i>	23
DEVELOPING THEORY: CHANGING FOCUS, MEANS, FRAMEWORKS AND PURPOSE	24
<i>Changing means</i>	25
<i>Changing frameworks: concepts and principles</i>	25
<i>Changes of boundaries</i>	26
<i>Changes in purpose</i>	28
LITERATURE WITHIN AND AROUND QUALITY MANAGEMENT: ANALYSIS AND CRITIQUE.....	31

<i>The literature within Quality Management</i>	32
<i>The literature around Quality Management</i>	34
QUALITY MANAGEMENT AS A SYSTEM OF THOUGHT AND PRACTICE.....	41
CHAPTER 4 QUALITY AND HIGHER EDUCATION.....	44
INTRODUCTION	44
QUALITY AND HIGHER EDUCATION	45
DEFINING QUALITY OF HIGHER EDUCATION.....	46
<i>Customers? What customers?</i>	47
<i>Fitness for purpose</i>	51
<i>Exploring 'local' definitions</i>	51
REGULATING QUALITY	52
<i>Using industry frameworks</i>	53
<i>Using industry methods of regulation: Audit</i>	56
USING QUALITY TOOLS FOR IMPROVEMENT.....	59
CRITICAL REFLECTION ON QM IN HIGHER EDUCATION.....	60
<i>Business as a system</i>	60
<i>The university as a system</i>	61
TOWARDS AUTHENTIC ACADEMIC QUALITY	62
CHAPTER 5 LOCAL INTERVENTION: APPROACH AND ISSUES OF PROBLEM SOLVING	
MODE	64
INTRODUCTION	64
<i>Selecting the research site</i>	64
<i>Gaining access and formalising my role</i>	65
<i>Selecting participants from stakeholders</i>	66
LOCAL ACTION.....	68
<i>Creativity: Generating ideas</i>	68
<i>Analysis and representation: linking creativity to choice</i>	69
<i>Identifying potential interventions: the choice phase</i>	70
MOVING TOWARDS POSSIBLE INTERVENTIONS: LINKING THE INSTITUTE, CHOICE AND IMPLEMENTATION	71
IMPLEMENTING INTERVENTIONS: FACILITATION	71
<i>A note on interactions: other paths to intervention</i>	71
ISSUES AROUND METHODOLOGY	72
<i>Credibility</i>	72
<i>Ethical issues</i>	73
<i>Ethical issues specific to the study</i>	73
THE ROLE OF THE RESEARCHER	74
SUMMARY	74
CHAPTER 6 THE INSTITUTE AND QUALITY – ENVIRONMENTS AND IMAGES.....	75
INTRODUCTION	75

THE NEW ZEALAND UNIVERSITY	76
MASSEY UNIVERSITY AND QUALITY	78
THE COLLEGE	80
THE INSTITUTE IS.....	80
<i>Parts thrown together</i>	80
<i>Resource constrained</i>	82
IS THE INSTITUTE DOING THE RIGHT THINGS RIGHT?	84
FOR STAFF, THE INSTITUTE	84
<i>is about people</i>	84
<i>does the important work of</i>	87
<i>lacks direction</i>	88
FOR STAFF, QUALITY IN THE INSTITUTE MEANS... ..	89
<i>in relation to teaching</i>	90
<i>in relation to research</i>	90
<i>in relation to other aspects</i>	91
TENSIONS AND CHALLENGES AROUND MEANINGS	91
FOR STUDENTS, THE INSTITUTE IS.....	95
<i>Quality is about the most important work - learning</i>	96
IS THE INSTITUTE A WELL-OILED MACHINE?	97
TO IMPROVE QUALITY	97
CHAPTER 7 THE INSTITUTE DOES	99
INTRODUCTION.....	99
<i>Diagnosing process, structure and viability</i>	99
DIAGNOSING IMPLEMENTATION: TEACHING, RESEARCH AND SERVICE	101
<i>Teaching</i>	102
<i>Research</i>	110
<i>Linking implementation functions: information, interactions and interdependence</i>	114
DIAGNOSING COORDINATION: SMOOTHING AND BALANCING SHORT TERM DEMANDS	117
DIAGNOSING CONTROL: WHO GETS WHAT AND HOW ARE THEY ACCOUNTABLE?	120
DIAGNOSING INTELLIGENCE [DEVELOPMENT AND MARKETING]: UNDERSTANDING THE ENVIRONMENT – ASSISTING IT TO UNDERSTAND US	122
DIAGNOSING POLICY: IDENTITY? DIRECTION?... WHAT DIRECTION?.....	123
DIAGNOSING COMMUNICATION CHANNELS.....	124
COMMENTS ON THREATS TO VIABILITY	125
<i>What should be done?</i>	127
CHAPTER 8 IMPLEMENTING INTERVENTIONS	129
STRUCTURING THE STUDENT RECRUITMENT PROBLEM	130
IMPROVING THE FIRST YEAR EXPERIENCE	133
INFLUENCING CURRICULUM.....	136
FORMULATING VISION, FUTURE AND DIRECTIONS	143

<i>Mapping our preferred future</i>	146
<i>Means planning</i>	149
<i>Arrested planning</i>	152
SUMMARY	152
CHAPTER 9 REFLECTIONS ON RESEARCH	154
INTRODUCTION	154
QUESTIONS ASKED AND CHOICES MADE	156
<i>Fundamental questions and motivation towards the research</i>	156
<i>Questions of participation</i>	157
<i>Questions and choices about ethics and politics of process</i>	160
<i>Boundary setting and boundary critique</i>	163
IS A SYSTEMS APPROACH RIGHT FOR THE PROBLEM SITUATION?	166
<i>The potential of systems approaches for Higher Education</i>	167
<i>Systems approaches and the Institute</i>	169
CONCLUSIONS	172
<i>About quality ideas and quality practices</i>	173
<i>Quality, systems and higher education</i>	174
<i>Implications for research and practice</i>	175
REFERENCES	177
APPENDICES	196
APPENDIX 1: PARTICIPANT INTERVIEW PROTOCOLS	197
<i>Appendix 1a: Staff participant information sheet and consent form</i>	197
<i>Appendix 1b: Schedule of questions for staff interviews</i>	200
APPENDIX 2: RESEARCH SEMINAR PRESENTATION	201
APPENDIX 3: IMPROVING THE FIRST YEAR EXPERIENCE	208
<i>Appendix 3.1: A response to the First Year Experience Task Force Report and Recommendations.</i>	208
<i>Appendix 3.2: Presentation to introduce the FYE problem in context</i>	211
<i>Appendix 3.3: Some thoughts for the Manufacturing Majors review process</i>	223
APPENDIX 4: STRATEGIC PLANNING INTERVENTION	227

Table of Figures

Figure 1: Thesis structure.....	6
Figure 2: The three modes in TSI	15
Figure 3: Phases within Problem Solving mode.....	17
Figure 4: The widening focus of QM development	24
Figure 5: QM approaches and waves of management theory	28
Figure 6: The University, its environments and those it serves	48
Figure 7: Agreed roles in the research	65
Figure 8: The functions of the Institute.....	66
Figure 9: Key participants and stakeholders.....	67
Figure 10: The Institute and university of teaching (and research).....	81
Figure 11: The Institute and university of research (and teaching).....	82
Figure 12: Intersecting interests - an alternative focus point.....	94
Figure 13: An ideal Viable Systems Model (VSM)	101
Figure 14: The broad environment of teaching	103
Figure 15: Others' first year papers – a key environmental barrier.....	110
Figure 16: The environment of research.....	112
Figure 17: Scholarship, curriculum and student motivation - the mediating elements.....	117
Figure 18: Misplaced boundaries on teaching	125
Figure 19: The Institute - an unviable system?	126
Figure 20: An ideal systems perspective on teaching: curriculum development as planning/intelligence	128
Figure 21: "Why don't we have enough students?" - a rich picture	131
Figure 22: Our current future (Group 1).....	144
Figure 23: Our current future (Group 2).....	145
Figure 24: Our current future (Group 3).....	146
Figure 25: Our preferred future (Group 1).....	147
Figure 26: Our preferred future (Group 2).....	148
Figure 27: Our preferred future (Group 3).....	149

Table of Tables

Table 1: Contrasting research paradigms	9
Table 2: Core concepts of Quality Management.....	26
Table 3: Changes in focus and boundaries of QM	29
Table 4: The University and business as systems	61
Table 5: EFTS and paper offerings.....	83
Table 6: Research projects and revenue.....	83
Table 7: Academics' orientations to teaching and learning.....	105
Table 8: Indicative Research Outputs 1999-2004.....	111