# Reconstructing Teacher Education

Teacher Development

Edited by John Elliott





# Reconstructing Teacher Education: Teacher Development

Edited by John Elliott



(A member of the Taylor & Francis Group) London • Washington, D.C. The Falmer Press, 4 John St, London WC1N 2ET The Falmer Press, Taylor & Francis Inc., 1900 Frost Road, Suite 101, Bristol, PA 19007

© Selection and editorial material copyright John Elliott 1993

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without permission in writing from the Publisher.

First published 1993

### A catalogue record of this publication is available from the British Library

ISBN 0 75070 127 7 cased ISBN 0 75070 128 5 paperback

### Library of Congress Cataloging-in-Publication Data are available on request

Jacket design by Caroline Archer

Typeset in 9.5/11 pt Garamond by Graphicraft Typesetters Ltd., Hong Kong

Printed in Great Britain by Burgess Science Press, Basingstoke on paper which has a specified pH value on final paper manufacture of not less than 7.5 and is therefore 'acid free'.

## Reconstructing Teacher Education

#### Synopses of Chapters

#### INTRODUCTION

John Elliott

#### PART 1 COHERENCE AND CONTINUITY IN TEACHER EDUCATION: PERSPECTIVES AND ISSUES

CHAPTER 1 Three Perspectives on Coherence and Continuity in Teacher Education: John Elliott

This chapter establishes a framework which informs the organization of the book as a whole. It opens with a discussion of the problem of establishing a National Curriculum for teacher education and argues that coherence and continuity in such a curriculum will depend upon the philosophical perspective informing its construction. Three different possible perspectives, their key principles, and implications for teacher education are briefly described.

### CHAPTER 2 The Assault on Rationalism and the Emergence of the Social Market Perspectives: John Elliott

The chapter opens with an analysis of the New Right attack on higher education-based teacher education. This attack is portrayed as a conflict between a system based on rationalist assumptions and the emerging social market perspective. An account is then provided of what 'coherence' and 'continuity' mean in the context of this latter perspective, and is contrasted with what they mean from a platonic or rationalist perspective.

The chapter concludes with a detailed analysis of the Hargreaves proposals for teacher education, and locates them unambiguously in the social market perspective.

#### CHAPTER 3 Evaluation, Economics and Performance Indicators: Nigel Norris

As the previous chapter suggested, the construction and use of performance indicators as measures of quality is a central feature of educational processes when they are viewed from the social market perspective as production-consumption technologies.

vii

#### Synopses of Chapters

Norris locates the emergence of the idea of performance indicators in the 'political imperative for more effective and efficient public services' and argues that they constitute a device for constructing 'essentially an economic calculus' on which to base policy decisions. The idea is a symptom of the attempt to transform education by the importation of business and industrial values.

The rest of the chapter consists of a comprehensive and succinct review of the major methodological and political problems which confront attempts to construct and use performance indicators and concludes that the basic purpose underpinning the appeal to economics and business values is to 'reduce the influence of service professionals and subsume professional authority under managerial authority'. Such a conclusion throws light on the New Right's attack on teacher education in higher education (see chapter 2).

### CHAPTER 4 One in a Million? The Individual at the Centre of Quality Control: Saville Kushner

Drawing on data from his evaluation of an innovatory course for student musicians in a conservatoire, the author argues that attempts to discover standardized measures of benefit is a largely futile exercise. Quality, he argues, 'is a feature of professional practice that is nurtured by freedom and discretion but compromised by restraint and standardization'. There is, he claims, a tension between quality and control when control is perceived as a function of systems. Whereas judgments which serve external control render the individual accountable to the system, those which save the development of quality render the system accountable to the individual. In order to assess quality we need to portray how features of systems — projects and programmes — influence the personal development of individuals rather than assess the extent to which they succeed in adapting individuals to the requirements of the system. Projects and programmes need to be set in the context of the unfolding biographies of individual practitioners. The author suggests that emerging systems of quality control will divorce the culture of educational practice from the culture of educational politics. He is pessimistic about the possibility that we shall live to see a quality control process which is sensitive to the needs and experience of individuals, and therefore sceptical of the feasibility of what is proposed in the next chapter.

### CHAPTER 5 Are Performance Indicators Educational Quality Indicators?: John Elliott

This chapter opens by reiterating the conclusion drawn by Norris in chapter 3, but goes on to argue that a concern for quality has also emerged from within the teaching profession. However, it has taken a different form to the construction and use of performance indicators. It is manifested in the emergence of 'a reflective professional culture' from the destabilization of the traditional craft culture; Elliott later goes on to explain how this new culture can be understood as a quest for qualitative indicators of quality. He locates it in the process model of curriculum development implicit in the school-initiated curriculum reforms of the 60s and 70s and the spread of educational action-research as a medium of continuing professional learning for experienced teachers. However, the chapter also takes a look at the Labour Party's position on performance indicators, and identifies some

ambiguities in its quality control proposals, which stem from it taking on board certain aspects of the social market perspective.

The chapter generally develops a distinction between *quality* and *perform-ance* indicators. The former are constructed in the reflective judgments of educational practitioners rather than operating as predefined and externally imposed control devices. As such the idea of quality indicators is consistent with Kushner's contention that quality is nurtured by conditions of freedom and discretion as opposed to those of restraint and standardization (see chapter 4).

### CHAPTER 6 Professional Education and the Idea of a Practical Educational Science: John Elliott

This chapter elaborates a paradigm of educational inquiry which is derived from the hermeneutic perspective and embraces such ideas as 'teachers as researchers', 'educational action research', 'action inquiry', and 'reflective practitioners'. This practical science paradigm provides the context in which the identification and use of qualitative quality indicators, as opposed to performance indicators, is rendered intelligible. Such a paradigm of inquiry constitutes a search for situational understanding and involves a mode of reflection 'which supports wise and intelligent decisions in particular, complex, and fluid practical situations'.

The chapter draws on the work of Dreyfus on the development of situational understanding and associates of McBer and Company on generic professional competencies to formulate a developmental model of professional learning within the practical science paradigm. Although it is competency-based it employs a reconstructed account of the nature of teacher competence to the behaviourist account which has tended to dominate the development of competency-based education and training systems in the past.

Proposals are developed for an experiential learning curriculum in the area of initial teacher education, entailing close collaboration and partnership between schools and institutions of higher education.

The chapter concludes with a discussion of the role of higher education-based schools of education in reconstructing educational practice as a practical science.

#### CHAPTER 7 A Common-sense Model of Professional Development of Teachers: David Hargreaves

Hargreaves argues that his proposals for teacher training are not underpinned by a social market ideology and that my inferences to this effect are distorted, biased, and emotively expressed in a manner which is designed to render his position unattractive. He believes that his position is consistent with my practical science model, and that our respective views of teacher professional development have more in commmon than I care to admit.

In the second part of chapter 7 Hargreaves offers an account of teacher professional development which is grounded in an analysis of *what* teachers need to learn and when. He argues that the professional development model he outlines is compatible with my own, but that I have emphasized processes of professional learning and neglected the content of that learning. According to Hargreaves my 'process model' can be applied to each segment of the professional learning content he describes. Such segments can be progressively ordered. He concludes that 'a coherent model of professional development embraces both continuity and

progression and matches process to content. Elliott's practical science model falls short of this ideal'.

### PART 2 SCHOOL-BASED TEACHER EDUCATION: FOUR STUDIES OF INNOVATION

CHAPTER 8 A Case Study of School-based Training Systems in New Zealand Secondary Schools: R.G. Munro

This ethnographic study looks at two school-based initial training innovations established at the Secondary Teachers' College, Auckland: A mathematics/science programme and a history/social studies programme. Its focus was 'on identifying those influences which most affected the dispositions and behaviour of the trainees during the period of training', and it attempts to locate its findings in a broader range of theoretical and research literature about teacher training in the northern hemisphere.

Munro pin-points the significance of students' biographical experiences as pupils in shaping their basic perspective on the teaching role which he describes as a 'preoccupation with control'. Moreover, his data suggested that college and school-based trainers were limited in their ability to address this preoccupation 'for fear they might themselves be thought to be inadequate in the classroom or, alternatively, in the hope that it will be assumed that they have no difficulties in managing classes'. Citing Van Maanen (1979) he locates discussion of control issues as a 'taboo-violating activity' which is something to be avoided.

The history/social studies programme generated skill and resource-based routines which were relatively effective in diminishing the intensity of students' preoccupation with control. Munro points out that this programme in contrast to the other one had established a strong partnership between college staff and associate tutors in the schools. In the mathemetics/science programme the absence of such partnerships resulted in students modelling their teaching 'on that of their associates and on remembrances of their own schooling'. College inputs became less and less credible and useful. The partnership context of the history/social studies programme also encouraged students to attach greater credibility to educational theory inputs.

Munro found little evidence of reflective practice developing amongst trainees in either programme, and concludes that this is 'less a function of structural deficiencies in training' than 'simple neglect'. What evidence of reflective practice was discerned appeared to be the result of personal biography. Munro argues that recent recommendations that initial teacher training should promote 'self-reflective' and 'self-analytical' approaches to teaching fail to note the 'preoccupation with the rigours of initial survival in the classroom'.

In spite of some differences between the two programmes Munro argues that students in both gave greater credibility to their school rather than their college experience. This was reinforced by students' perceptions of differential status in college and school contexts; between that of 'student' and that of being 'very nearly a real teacher'. Such a status differential enhanced rapid self-socialization into the occupational culture of teaching; a process which appeared to inhibit trainees' reflective capacities. According to Munro 'they were aware that to act in a reflective manner was often inconsistent with what was regarded as professionally acceptable in the schools . . . '

Munro reports that 'oppositional' and 'resistant' conduct on the part of trainees, which deviates from the values, assumptions and norms of the prevailing occupational culture was minimal. In spite of claims made by the programmes to link theory and practice Munro concludes that the issue 'remains unresolved'.

One interesting contrast between the two programmes was that the history/social studies one adopted a competency-based approach which enabled the college tutors to control trainees' practical learning experiences in schools. This stood in marked contrast to the maths/science programme which created an apprentice-ship learning mode characterized by dependency on teacher associates. This perhaps suggests that in the former programme students were effectively initiated into a technology of education, rather than into the traditional craft culture.

The final part of the paper looks at the implications of the study reported for 'future trends' in secondary school teacher training. Munro is sceptical that current 'proposals' for reform in the UK will do nothing more than reinforce the conservative values and power structures already evidenced in the contemporary practice of schooling. Moreover, he argues that they will do little to radically reconstruct the theory-practice relationship and the roles of school and higher education-based trainers.

Munro points out that his findings basically support MacDonald's radical proposals for research-based programmes of initial training which neither support the traditional model of higher education-based training nor the trend towards an apprenticeship model. In doing so he supports MacDonald's contention that research-based initial training can provide the basis for a new vision of continuity and coherence in teacher education as a whole. However, he is sceptical about the extent to which this option will be politically endorsed by policy-makers in either the UK or New Zealand for the forseeable future.

#### CHAPTER 9 Capital T Teaching: Les Tickle

The focus of this study is on beginning teachers involved in innovatory induction programmes designed by the author and aimed at developing them as 'reflective practitioners' (see Schon, 1983). Tickle acknowledges that he was uncertain about the applicability of Schon's ideas to new teachers because 'there is only a very limited repertoire of experiences to draw upon' in assessing the complex and unstable circumstances which confront them. Yet paradoxically the intensity with which beginning teachers experienced their practice as highly problematic suggested that the induction period 'involves extensive reflection'. So Tickle sets out to explore through his own second-order action research the relationship between the kind of reflective thought and action beginning teachers tend to engage in, and the construct of 'reflective practice' embodied in his programme aims.

Tickle argues that the beginning teachers in his samples reflected continuously, if not systematically, about a plethora of concerns. Amongst them the question of teaching strategies predominated. Yet this reflective activity was largely engaged in isolation from others without any forms of personal and professional support. Teachers were up to work out things for themselves as best they could.

According to Tickle the new teachers reflected to establish control over the situations they handled: to simplify the complex, to render the unpredictable

predictable, and to stabilize what is essentially unstable. Reflection was non-systematic and orientated to 'getting it right' by eliminating the problematics of practice and establishing routinized solutions for them. 'Capital T' status implied the experience of mastery and control through the 'deproblematizing' of teaching. According to Tickle this form of reflection was at best only a partial success: '... such deproblematization was hardly possible ... Security was both an interest and an illusion'. The more the beginning teachers constructed their 'capital T' identities the more their practices became non-reflective and habituated. The outcome of their reflection was non-reflection. Tickle becomes aware of a discrepancy between this form of security orientated reflection and Schon's theory which posits reflection as a means of overcoming 'selective inattention' and habitual practice through a continuous willingness to reframe problems and to test new solutions.

Tickle finds that his teachers were engaged in a kind of reflection which reduced problems to their technical aspects and ignored questions about ends and values. And he finds Schon's theory insufficient to clearly differentiate a purely technical and clinical mode of reflection from the 'broader, deeper and more rigorous use of reflection and action' he alludes to.

The chapter concludes with an attempt to define this deeper level of reflection. Tickle argues from his data that as teachers achieve technical mastery some develop a different level of concern which focusses on ways of realizing personal values in their teaching. Although they do not articulate and consciously reflect about their values, Tickle argues, they are implicit in the way these teachers begin to define their practical problems. He then develops an account of a *reflexive* practice which subordinates technical reflection to reflection which aims at the transformation of self. In the light of this account Tickle questions the extent to which his induction programmes have supported this deeper level of reflection, but is convinced that such support is essential to 'the education of new entrants'.

### CHAPTER 10 The Development of Teachers' Thinking and Practice: Does Choice Lead to Empowerment?: Christopher Day

Under the Local Management of Schools (LMS) provisions of the Education Reform Act of 1988, local education authorities in the UK are devolving financial resources for in-service education to the schools. This chapter is based on an evaluation study the author carried out for an English LEA on a pilot experiment in financial devolution of responsibility for INSET to schools. One of the claims enshrined in such experiments is that it empowers teachers at the 'chalk face', and gives them 'ownership' over their own professional development.

Day's findings are strikingly consistent with those of Munro in New Zealand (chapter 8) with respect to school-based initial training, and of Tickle with respect to the school-based induction of beginning teachers; namely, that teachers 'increased their content and pedagogical knowledge without reexamining the situational assumptions or moral and ethical contexts for their work'. In other words the dimension of critical self-reflection was missing as a mode of professional self-development.

One of the effects of school managed INSET was an increased provision for peer learning through the sharing of experience and collaborative planning. Less emphasis was placed on course attendance outside the school context, i.e. mounted by the LEA or local higher education institutions. A variety of reasons were given for this including mismatches between provision and perceived needs and the irrelevance of theory. However, some teachers felt there were problems about restricted access to external courses in terms of their potential to 'renew thinking', 'foster self-development' and enabling them to transcend to danger of parochialism.

Day argues that in spite of the value of self-generated and serviced on-site INSET evidenced in his interviews with heads and teachers there was also evidence that the lack of investment in longer externally-led courses was implicitly preventing teachers 'from moving to deeper levels of reflection' and thereby in the longer term likely to have a negative effect on 'the maintenance and enhancement of motivation, experience and knowledge' among school teachers.

In the second part of his chapter Day examines the school culture as a context for teacher development. He compares his evaluation findings with a variety of studies of the influence of school culture or ethos on the professional motivation and development of teachers. His data indicated a shift in some schools towards the development of more collaborative and less hierarchical organizational cultures which made individuals feel they had 'a voice' in determining their own professional development. In other schools teachers felt that access to, and opportunities for, professional growth were managerially manipulated to satisfy institutional needs. However, in schools with a collaborative ethos Day also discerned a tension between institution-focussed and person-focussed provision which required sensitive leadership to handle in ways which made individuals feel valued.

Even within the collaborative cultures Day notes that developments in classroom pedagogy and teacher collegiality were largely reinforcements of ongoing work, and operating below the level of significant and radical changes in customary practice.

In summarizing the second part of this chapter Day argues that 'power of choice over the management of finance for teacher development should not be confused with teacher empowerment. This must relate to the nature of the learning processes themselves and to such factors as leadership and school culture which create conditions for teacher development . . .' But the establishment at an organizational level of a collaborative culture is, he argues, a necessary but not sufficient condition of high quality professional development. He supports Rudduck (1987) in raising doubts about 'the intellectual rigour of self-created learning opportunities'.

In the final section of his chapter Day generates an account of the 'deeper levels' of professional development which is highly consistent with those provided earlier in this book by Elliott and Tickle. In conclusion he argues that empowering teachers to take responsibility for their professional learning is not simply a matter of changing the organizational culture of schooling. It is also a matter of developing their capacities to critically self-reflect about 'the moral and ethical implications of pedagogy and of social structures and concepts', about the ends as well as the technical means of education.

### CHAPTER 11 Chronicles: Doing Action Research: The Stories of Three Teachers: Richard Davies

This chapter assembles three teachers' stories about their experience of the PALM project, which was based in CARE at the University of East Anglia and provided

xiii

support for classroom action research by teachers into promoting autonomous learning in pupils through the use of microcomputers. The project's pedagogical aim was to foster in teachers that level of self-reflection and analysis which Munro, Tickle and Day found to be a missing dimension in the school-based learning of students, beginning and experienced teachers.

Jane's story is of a teacher who wants to work in a collaborative school culture and is continuously frustrated by its apparent absence. She concluded that 'my school was not the right school physically, socially or educationally for the project'. It appears to have contributed little to whole school development. Yet in spite of this, involvement in the project appears to have contributed considerably to Jane's own professional development. What Jane found personally valuable about the experience exemplifies the very thing Tickle found absent amongst his beginning teachers. She discovered that development and change are the result of remaining open to the problematics and uncertain aspects of practice and refusing to retreat into the safety of customary ways of coping. Action research involved her breaking through into that deeper level of reflection described by Tickle and Day. It was 'psychologically useful . . . It made me reassess myself . . . It widened and deepened my understanding of the parameters of education'. Jane's story suggests that individual teachers can radically change their practices and grow professionally in spite of an unsupportive school culture, providing they have access to an alternative culture which supports and sustains a high level of reflection and self-analysis.

Daphne was a deputy head and close to retirement after thirty years of teaching and on her own admission somewhat resistant to change, in a school where it appears other teachers welcomed it. Although she cites no radical changes she testifies to a relaxed confidence which action research enabled her to achieve in the face of the uncertainties and complexities introduced by a microcomputer in her classroom. In the area of information technology she came to feel that action research had been more effective than other INSET strategies in helping teachers to cope with change.

Helen's story testifies to the power of systematically gathered data to radically change teachers' self-understanding of their practices, rather than simply to reinforce ongoing work. It made her aware of the mismatch between her practice and her educational values, and resulted in the insight that the 'only way I could encourage more independent learning in the classroom was by letting go of the reins'. But the insight depressed her because she came to feel that 'everything I had done in the past was wrong ... It was contrary to what I believed in but couldn't-find the method to let go'. At this point 'I would have done anything to get out of teaching'. But she persisted in collecting data and discovered that 'the more you look, the more you see, the more you change; round and round'. In the end she realized 'There is no success or failure' - no Capital T Teacher that Tickle's beginning teachers were trying to construct as a professional identity for themselves — but 'there is only development. You learn how to ask questions. You don't have to please anybody. The only thing you have to do is please yourself'. Through action research Helen learned more about herself as a teacher and a person, and what she learned was that 'you get more control over yourself and less control over others. You've got to create a different type of environment for that to happen. You've got to have organized chaos'.

### PART 3 RESEARCHERS AND TEACHERS: CHANGING ROLES AND RELATIONSHIPS

CHAPTER 12 Through the Looking Glass: The Use of Associative Methods to Enhance Teacher Thinking: Michael Schratz

Schratz opens his chapter with a review of change strategies aimed at reforming teaching and learning in schools. Drawing on a range of literature from the USA and Europe he concludes that little progress has been made. What has been neglected he argues is the problem of creating a learning culture amongst teachers which enables them to articulate and reconstruct the implicit practical theories that underpin their practices. 'Changing teaching', he argues, 'always means changing one's "practical theory" of teaching'.

The rest of the chapter describes a number of 'associative methods' which that author has successfully used as a teacher educator to help teachers develop their insights into the practical theories which structure their practice. Each method requires teachers to represent their experience in an imaginative form and to use such representations as a basis for reflective dialogue with peers.

The chapter provides practical illustrations of collaborative research into teachers' thinking which cannot be separated from the process of teacher development. It is therefore very consistent with the position Elliott argues in an earlier chapter.

#### CHAPTER 13 Academics and Action-Research: The Training Workshop as an Exercise in Ideological Deconstruction: John Elliott

Support for a practical science paradigm of professional learning in higher education requires the reconstruction of the professional culture of academic educationalists. This chapter describes in detail the way the rationalist and objectivist assumptions which underpin this culture were challenged through a training workshop mounted for Venezuelan educational researchers and teacher educators. The account contained in this chapter is an illustration of what the author calls 'second-order' action research, i.e. a reflective inquiry into his own practice as a facilitator of action research. He shows how such 'second order' reflection based on data contributes to the development of his own theorizing about the nature of action research as a mode of professional learning.

#### CHAPTER 14 The Relationship Between 'Understanding' and 'Developing' Teachers' Thinking: John Elliott

The chapter begins with two teachers' accounts of their professional learning through a research-based MA course operating within the practical science paradigm. They are compared and contrasted with theories of reflection developed by Schon, Carr and Kemmis, and Louden, and used to critique them as a basis for constructing a more comprehensive account of the reflective dimensions of professional learning. Issues surrounding the validity of this account are then discussed and their implications for research into teachers' thinking generally. Finally, it is argued that such research itself constitutes a form of practical science and that a separation of processes, aimed at 'understanding' and the 'development' of teachers' thinking respectively is methodologically undesirable.

#### PART 4 PORTRAYING TEACHERS' DEVELOPMENT

### CHAPTER 15 The Development of Primary School Teachers' Thinking about the Teaching and Learning of Science: Peter Ovens

This detailed study of the development of two teachers' thinking about their practice was carried out in the context of an award-bearing in-service course in primary science. The course involved teachers undertaking action research into their own teaching of science. The author had been running the course for ten years and as he points out at the beginning his research was not motivated by 'the desire to know about teachers' thinking . . . to gain knowledge for its own sake, but to understand teachers' professional development in order to foster it more wisely'. In other words the research constitutes a piece of second-order action research aimed at improving the course tutor's own pedagogical practice.

The study maps out in some detail, in relation to each teacher, the ways in which their reflections interact with their practices, so that the reader is able to see how reflection leads to the development of practice, and how the latter influences the quality of reflection. The author also examines his own role as the course tutor and the impact of his interventions on the learning experiences of teachers.

#### CHAPTER 16 Thinking and Being in Teacher Action Research: Marion Dadds

Through a case study of the professional development of a single, but not untypical, teacher (undertaking an MA course in Applied Research in Education), the author shows how action research-based professional learning implies a distinctive paradigm of educational inquiry in which the identities of teacher and researcher are inextricably fused. She demonstrates the significance of the teacher's personal values, attitudes and biographical formation in the development of insight and understanding, and argues that these aspects of self cannot be dissociated from cognition as tends to be assumed in more objectivist paradigms of research.

Dadds also shows how the action research-based learning of an individual can influence whole school development, and provides evidence of the process by which this influence is exerted, not simply through the persuasive logic of arguments and evidence but through insights that are mediated by certain personal qualities manifested in relationships with peers.

Dadds' chapter provides data which empirically and comprehensively grounds the hermeneutic perspective on teacher education and the practical science paradigm of educational practice, as these are elaborated in the early chapters of the book.

If some previous chapters tend to treat professional learning as largely a matter of changing teachers' cognitions this contribution reminds us that cognitions arise from historically conditioned and socially situated selves, and that the development of understanding implies the transformation of self.

### CHAPTER 17 Importance of an Articulated Personal Theory of Professional Development: Christine O'Hanlon

This chapter again arises from a study of teacher professional development in the context of an action research-based award-bearing course for experienced teachers on which the author served as a tutor for many years. She argues that action research enables teachers to develop an articulated personal theory of their professional development by reflecting about the relationship between their personal values and the professional practices which are shaped by institutional roles. Her case study of Jo demonstrated how personal values and theories about how to realize them within the teacher's professional role, are reintegrated through reflection on practice, and about how professional roles are in turn reintegrated in the light of these developing personal theories.

O'Hanlon's study draws out the implications of this reflexive interaction between persons and roles, for the form of reports teachers produce on their professional learning. She demonstrates how teachers' public accounts of learning tend to focus on content rather than process and therefore mask and hide the personal theories of professional change and development which tacitly informed their construction. However, she also shows that the journal and diary entries in which the data was originally represented actually depict the personal processes of learning. Such 'private' records therefore constitute personal theories of professional development.

O'Hanlon's conclusion is that in order to achieve the status of a fully functioning occupant of their professional role teachers must be helped to reflexively develop through action research an explicit personal theory of their own professional development.

#### **Contents**

Synopses of (	Chapters	vii	
Introduction  John Elliott		1	
PART 1 COHERENCE AND CONTINUITY IN TEACHER EDUCATION: PERSPECTIVES AND ISSUES			
Chapter 1	Three Perspectives on Coherence and Continuity in Teacher Education  John Elliott	15	
Chapter 2	The Assault on Rationalism and the Emergence of the Social Market Perspectives  John Elliott	20	
Chapter 3	Evaluation, Economics and Performance Indicators Nigel Norris	31	
Chapter 4	One in a Million? The Individual at the Centre of Quality Control Saville Kushner	39	
Chapter 5	Are Performance Indicators Educational Quality Indicators?  John Elliott	51	
Chapter 6	Professional Education and the Idea of a Practical Educational Science  John Elliott	65	
Chapter 7	A Common-sense Model of the Professional Development of Teachers  David H. Hargreaves	86	
	CHOOL-BASED TEACHER EDUCATION: DUR STUDIES OF INNOVATION		
Chapter 8	A Case Study of School-based Training Systems in New Zealand Secondary Schools R.G. Munro	95	

#### Contents

Chapter 9	Capital T Teaching Les Tickle	110
Chapter 10	The Development of Teachers' Thinking and Practice: Does Choice Lead to Empowerment? Christopher Day	125
Chapter 11	Chronicles: Doing Action Research: The Stories of Three Teachers Richard Davies	145
	ESEARCHERS AND TEACHERS: CHANGING DLES AND RELATIONSHIPS	
Chapter 12	Through the Looking Glass: The Use of Associative Methods to Enhance Teacher Thinking <i>Michael Schratz</i>	157
Chapter 13	Academics and Action-Research: The Training Workshop as an Exercise in Ideological Deconstruction John Elliott	176
Chapter 14	The Relationship Between 'Understanding' and 'Developing' Teachers' Thinking John Elliott	193
PART 4 PC	DRTRAYING TEACHERS' DEVELOPMENT	
Chapter 15	The Development of Primary School Teachers' Thinking about the Teaching and Learning of Science <i>Peter Ovens</i>	211
Chapter 16	Thinking and Being in Teacher Action Research Marion Dadds	229
Chapter 17	The Importance of an Articulated Personal Theory of Professional Development <i>Christine O'Hanlon</i>	243
Notes on Contributors		257
Index		260