THE USE OF CONTINUING PROFESSIONAL DEVELOPMENT PORTFOLIOS IN HEALTHCARE PROFESSIONALS AND THEIR INFLUENCE ON THE PRACTICE OF PHARMACISTS IN SECONDARY CARE

Andrzej Jerzy Kostrzewski BSc, MSc, MMedEd, MRPharmS.

A Thesis presented for the Degree of Doctor of Philosophy

Department of Practice and Policy
School of Pharmacy
University of London
July 2007
This thesis describes research conducted in the School of Pharmacy, University of London between 2001 and 2006 under supervision of Professor S Dhillon, Dr D Goodsman and Professor K Taylor. I certify that the research described is original and that any parts of the work that have been conducted by collaboration are clearly indicated. I also certify that I have written all the text herein and have clearly indicated by suitable citation any part of this dissertation that has already appeared in publication.

Signature

Date 16.7.07.
ABSTRACT

AIM: To investigate how the use of continuing professional development portfolios influences pharmacy practice and reflective writing.

METHOD: The study consisted of 2 phases. Phase 1 explored the use of CPD portfolios in a purposive, stratified sample of 7 health professions, in a teaching hospital using semi-structured interviews. The psychological characteristics of portfolio use were examined in a cohort of 172 pharmacists. A questionnaire was designed using the theoretical framework of the Theory of Planned Behaviour and the Big-Five, for personality traits. Phase 2 was an in-depth, longitudinal study to explore the influence of CPD portfolios on pharmacy practice. Phase 2 used semi-structured interviews in a purposive, stratified sample of 9 pharmacists. Data were collected at 3 time points (baseline, 6 and 12 months) and validated using focus groups. CPD records (n = 24) were analysed for the level of reflection. Ethics approval and informed consent was obtained.

DATA ANALYSIS: Questionnaires were analysed using SPSS to report descriptive statistics. Discourse analysis was used for interview and focus group data. A modified version of "Written Reflections In a Theoretical Teacher-training" course framework was used to analyse CPD accounts.

FINDINGS: Phase 1: 23 interviews were undertaken with 7 health professionals, mean age 33 ± 8.4 years. Hospital pharmacists (n = 132), with a mean age 28.8±5.4 years returned the questionnaires (response rate 78%). Interviews, revealed that: a) support mechanisms not integrated, b) the effects on practice difficult to describe, c) the effect of reflection on practice difficult to verbalise, and d) a number of barriers to recording reflection. Questionnaire data found pharmacists experience and gender were not associated with keeping a portfolio. Pharmacists' attitude and perceived behavioural control influenced the intention of keeping a portfolio. Phase 2: Three cohorts of pharmacists (n = 9), mean age 31± 8.1 years, were interviewed. The findings included that after 12 months: a) portfolios are perceived negatively, b) perceived skills improved, with minimal influence from recording, and c) the effects on practice difficult to verbalise and inconsistent. The CPD records were objective, descriptive, and with little evidence of critical writing.

CONCLUSION: The study found different beliefs and behaviours to keeping a portfolio and utilising reflection. CPD records were mainly descriptive with little evidence of criticality or effect on practice. Portfolios can be perceived as a form of professional discipline and not a learning tool.
ACKNOWLEDGEMENTS

I would like to thank my supervisors, Professor S. Dhillon (originally at the School of Pharmacy, University of London; from 2004 to Head of School of Pharmacy, University of Hertfordshire) for her encouragement, patience and reflexivity. Dr D. Goodsmann (originally at Guy’s, King’s & St. Thomas’ School of Biomedical Science; currently at City University & Queen Mary, University of London) who inspired the project, provided the epistemological balance and criticality of Jacques Derrida. I have to particularly thank Professor K. Taylor from the School of Pharmacy, University of London for taking over as internal supervisor in October 2004. He is a role model for project supervision.

In addition, my thanks go to Professor J. Weinman (Institute of Psychiatry, Guy’s Hospial, University of London) who provided support for the use of social cognition models, and to Ms. W. Taylor-Jackson who provided administrative support, transcribing the majority of the interviews in Phase two and all the focus group tapes. My thanks also to A. Safdar (Principal pharmacist lead for education, at Guy’s and St. Thomas’ NHS Foundation Trust), and K. Gordon, for helping with coding data; T. West (Chief pharmacist), and all staff in the Pharmacy Department, Education and Development Unit, Guy’s and St. Thomas’ NHS Foundation Trust, for their continual support.

I acknowledge and thank all the participants in the study for their time and contribution to making the study possible.

Finally, I would like to thank my family in particular my wife for being so understanding.
Summary

The purpose of this thesis was to investigate how the use of Continuing Professional Development (CPD) portfolios influences pharmacy practice and reflection. This is the first in-depth study in Pharmacy, with a focus on hospital pharmacists.

The process of updating professional practice has been encompassed in the term CPD. The Royal Pharmaceutical Society of Great Britain (RPSGB), along with many other professions, has adopted the use of a portfolio as a record of professional practice within the context of CPD. This use of portfolios by registered pharmacists is relatively new compared to other professions. Overall, from the studies reviewed in healthcare, using a portfolio had a number of different influences. These included the portfolio being a good tool for use in feedback, a link to academic learning and practice, plus there were preferences for different portfolio formats. In addition, the studies identified that there is a lack of understanding of reflective practice within portfolio use, and portfolios created an added workload for practitioners. The evidence for portfolios having an impact on Health Professionals practice is still limited and requires further investigation, particularly in pharmacy practice.

The thesis is divided into two phases (see Figure 1). The purpose of Phase One was to scope the use of portfolios in a number of health professions, explore the psychological characteristics of portfolio use in a cohort of pharmacists and explore a range of methods to be used for the main study in Phase Two. The aim of Phase One was to investigate how the use of CPD portfolios influences practice and the role of reflective practice in National Health Service hospital health professions. The research objectives were:

a) To investigate the use of portfolios by exploration of health professionals' views of using a portfolio.

b) To examine the meanings and roles of reflective practice within the context of CPD.
Phase One Ethics Approval

Qualitative

Multi-professional Interviews in Nurses, Pharmacists, Dietitians, Podiatrist, Physiotherapists, Occupational Therapists & Physicians

Data Collection
Interviews n = 23
Discourse analysis

Quantitative

Portfolio Engaging Behaviour + Big-Five questionnaires with hospital pharmacists in a range of roles.

Data Collection
Hospital pharmacists n = 132
Descriptive analysis

Phase One
Conclusion + Implications for Phase Two

Phase Two Ethics Approval

Purposive sample of 9 hospital sites (Within the London Workforce Confederation) n = 9 pharmacists

Qualitative

Data Collection
Interviews n = 27
At start, 6 months and 12 months Discourse analysis

Focus groups with the study participants Discourse analysis

Quantitative

Data Collection
CPD records n = 24
At start, 6 months and 12 months Content analysis

Final conclusion + recommendations

Figure 1 Flow diagram of the study process
Summary

c) To examine pharmacists’ characteristics of portfolio engaging behaviour.

A mixed methodological design using a qualitative and quantitative approach was used based on the literature. The first two research objectives used a purposive, stratified sample of seven health professions in a teaching hospital, using semi-structured face-to-face interviews. Discourse analysis was used to analyse the interview data. A total of 23 interviews were undertaken with health professionals, mean age 33 ± 8.4 years.

The characteristics of portfolio engaging behaviour were investigated using two self-completion questionnaires, in a convenience sample of hospital pharmacists. The questionnaires included the theoretical framework of the Theory of Planned Behaviour, and the Big-Five, for personality traits. Questionnaires were analysed using SPSS to report descriptive statistics and returned from 132 hospital pharmacists (response rate 78%), with a mean age 28.8 ± 5.4 years.

The key findings for Phase One included the following:

- Disclosure of portfolios is an issue but professionals are keen to share with colleagues.
- The honesty of records in the portfolio is questioned.
- A number of support mechanisms for personal development are being used but not integrated.
- There is very little data as to the effects of keeping a portfolio on practice but may encourage reflective thinking.
- Reflection improves memory recall and clarifies thinking, but it is difficult to verbalise the effect on practice.
- There are a number of barriers to recording reflection.
- Attitude and perceived behavioural control influences keeping a portfolio.
- Personality traits of pharmacists keeping a portfolio include: conscientiousness, agreeableness and emotional stability.

The findings from Phase One have shown that there is a trend for portfolios to be a portmanteau/dossier of records to document past performance, with limited effect on
future practice, and were mainly driven by the requirements of a current or future mandatory recording system. The use of the two questionnaires was not carried forward into Phase Two. The psychological processes involved in recording practice will be the basis for future research.

Phase Two was designed to explore more fully the use of CPD portfolios in pharmacy practice, as clearly there was research lacking in this area. Phase Two explored in-depth views from pharmacists about the use of a CPD portfolio over a twelve month period, with participants selected on the basis of Phase One findings. This was a unique opportunity to explore pharmacists' views while the RPSGB undergoes major political change. The principal aim of Phase Two of the study was to undertake an in-depth investigation of the influence of CPD portfolios on pharmacy practice and the characteristics of pharmacists' reflective writing in CPD portfolios. The objectives of Phase Two were:

a) To explore the views of pharmacists regarding the recording of professional practice and reflection in CPD portfolios.

b) To identify how CPD records contribute to changing professional practice.

c) To characterise the type of written reflection used by hospital pharmacists.

d) To examine the characteristics of written reflective accounts over 12 months.

e) To explore the influence of professional experience on written reflective accounts.

Phase Two of the study used a mixed-method approach. In order to explore individuals' views of recording professional practice and reflection within CPD portfolios, a qualitative methodology was used. A quantitative approach was employed to obtain demographic data and to characterise the type of written reflection used by participants. A multi-centre, longitudinal design was used to explore views and reflective accounts over twelve months. The findings were validated using participant focus groups at the end of the study. Interviews were analysed using a similar approach to Phase One and
Summary

based on the thematic framework described by Ritchie et al (2003). CPD records were analysed for the level of reflection using a modified framework based on the “Written Reflections In a Theoretical Teacher-training course.” A purposive, stratified sample of nine hospital pharmacists (mean age 31± 8.1 years) participated. Interviews were conducted using a semi-structured face-to-face technique at three time points (27 interviews), and 24 CPD records were analysed. The key findings for Phase Two over the 12 months were:

- Pharmacists had improved their perceived skills, but with minimal if any influence from recording their practice.
- Pharmacists suggested that records of practice were used as an aide-memoire and could be a trigger for further learning.
- Views of pharmacists’ effect on practice were variable and inconsistent.
- Majority of the pharmacists maintained their CPD records at a descriptive level.
- Pharmacists were more likely to objectify their accounts, and felt more at ease in verbalising the emotional aspects of a situation to colleagues than using writing.

This study has suggested that there is a Panopticon approach of control and discipline in keeping a CPD portfolio. The Panoptican model (Foucault, 1977) is centred on the isolation of individuals, with a central body overseeing their behaviour to maintain conformability. This approach has been demonstrated by the lack of critical support, and use of unknown assessors of portfolios as part of re-registration. In addition, there is confusion over the meaning of reflection and an inability of pharmacists to be able to write reflectively. In conclusion the hypothesis that CPD portfolios had limited impact on pharmacy practice in a secondary care setting over 12 months can be accepted. This research is the first to provide an in-depth evaluation of the influence of CPD portfolios on pharmacy practice. This was a unique opportunity to examine this aspect
while discussions were ongoing with the RPSGB about CPD and re-registration of pharmacists.

This thesis clearly has implications for the RPSGB. The research findings, once published will contribute to policy debate within the professional body. This is at a time when discussions are ongoing following the Government's White Paper on the regulation of health professionals, which is re-organising the RPSGB into a General Pharmaceutical Council with a new Royal College. The RPSGB needs to review, a) the use of practice records as evidence for re-registration, b) the role of local support networks, and c) development of a system for pharmacists to stop unnecessary duplication of practice records.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>4</td>
</tr>
<tr>
<td>Summary</td>
<td>5</td>
</tr>
<tr>
<td>List of Figures</td>
<td>19</td>
</tr>
<tr>
<td>List of Tables</td>
<td>20</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>22</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>23</td>
</tr>
<tr>
<td><strong>Chapter 1 - INTRODUCTION</strong></td>
<td>24</td>
</tr>
<tr>
<td><strong>1.1 Background to Continuing Professional Development</strong></td>
<td>26</td>
</tr>
<tr>
<td>1.1.1 Continuing Professional Development in professional practice</td>
<td>26</td>
</tr>
<tr>
<td>1.1.2 Continuing Professional Development in the NHS</td>
<td>27</td>
</tr>
<tr>
<td>1.1.3 Drivers for Continuing Professional Development in the NHS</td>
<td>28</td>
</tr>
<tr>
<td>1.1.4 Continuing Professional Development in pharmacy</td>
<td>30</td>
</tr>
<tr>
<td><strong>1.2 A literature review of the “meaning” of a portfolio</strong></td>
<td>32</td>
</tr>
<tr>
<td>1.2.1 Classification of portfolios</td>
<td>34</td>
</tr>
<tr>
<td>1.2.2 Portfolios in health professions</td>
<td>35</td>
</tr>
<tr>
<td>1.2.3 Portfolios in pharmacy</td>
<td>38</td>
</tr>
<tr>
<td>1.2.3.1 The Canadian pharmacy experience</td>
<td>40</td>
</tr>
<tr>
<td>1.2.4 Portfolio as a tool for assessment</td>
<td>41</td>
</tr>
<tr>
<td>1.2.4.1 Validity of portfolio assessments</td>
<td>42</td>
</tr>
<tr>
<td>1.2.4.2 Reliability of portfolio assessments</td>
<td>44</td>
</tr>
<tr>
<td>1.2.4.3 Constructivist approach to assessment of portfolios</td>
<td>45</td>
</tr>
<tr>
<td>1.2.5 Ethical issues in the disclosure of portfolios</td>
<td>47</td>
</tr>
<tr>
<td>1.2.6 A literature review of the impact of portfolios on professional practice</td>
<td>48</td>
</tr>
<tr>
<td>1.2.6.1 Portfolios in medicine</td>
<td>48</td>
</tr>
<tr>
<td>1.2.6.1.1 Medical students</td>
<td>48</td>
</tr>
<tr>
<td>1.2.6.1.2 General medical practitioners</td>
<td>49</td>
</tr>
<tr>
<td>1.2.6.1.3 Other medical contexts</td>
<td>51</td>
</tr>
<tr>
<td>1.2.6.2 Portfolios in nursing</td>
<td>52</td>
</tr>
<tr>
<td>1.2.6.3 Portfolios in pharmacy</td>
<td>53</td>
</tr>
<tr>
<td>1.2.6.4 Portfolios in education</td>
<td>55</td>
</tr>
<tr>
<td><strong>1.3 A literature review of reflection</strong></td>
<td>58</td>
</tr>
<tr>
<td>1.3.1 Reflection and learning</td>
<td>59</td>
</tr>
<tr>
<td>1.3.2 Reflection in professional practice</td>
<td>62</td>
</tr>
<tr>
<td>1.3.3 Reflective practice in health professions</td>
<td>62</td>
</tr>
</tbody>
</table>
Chapter 2 – Phase One - “The meanings of Continuing Professional Development portfolios and reflective practice for health professionals”

2. Introduction

2.1 Aim

2.2 Study questions and objectives

2.3 Background to the psychological characteristics that influence planned behaviour

2.3.1 Theory of Planned Behaviour

2.3.2 Personality Traits

2.4 Methods

2.4.1 Study Design
2.4.2 Ethics Approval 89
2.4.3 Development of the Interview guide and questionnaires 89
  2.4.3.1 The Interview guide 89
    2.4.3.1.1 Credibility 90
    2.4.3.1.2 Dependability 91
    2.4.3.1.3 Transferability 91
    2.4.3.1.4 Piloting the interview 91
  2.4.3.2 Questionnaire development 92
    2.4.3.2.1 Pharmacist Portfolio Engaging Behaviour questionnaire 92
    2.4.3.2.2 Big Five questionnaire 94

2.4.4 Sampling 96
  2.4.4.1 Interview study 96
  2.4.4.2 Questionnaire study 97

2.4.5 Data Collection 97
  2.4.5.1 Interview study 97
  2.4.5.2 Questionnaire study 98

2.5 Data Analysis 98
  2.5.1 Interview study 98
  2.5.2 Questionnaire study 100
    2.5.2.1 Pharmacist Portfolio Engaging Behaviour questionnaire 101
    2.5.2.2 Big Five Personality questionnaire 101

2.6 Findings and discussion 101
  2.6.1 Interview study 102
    2.6.1.1 Views on the use of a portfolio 103
      2.6.1.1.1 Meaning of a portfolio 103
      2.6.1.1.2 Disclosure of portfolios 109
      2.6.1.1.3 Support for portfolio use 111
      2.6.1.1.4 The effect of portfolios on practice 113
      2.6.1.1.5 Individuals without a portfolio 114
    2.6.1.2 Meanings of reflection 115
      2.6.1.2.1 Reviewing practice 116
      2.6.1.2.1.1 Triggers to reflection 117
      2.6.1.2.1.2 Clinical supervision 118
      2.6.1.2.1.3 Written reflection 119
      2.6.1.2.2 Unrecorded thinking 120
2.6.1.3 Effect of reflection on professional practice 122
  2.6.1.3.1 Improved memory recall 123
  2.6.1.3.2 Dealing with patients 123
  2.6.1.3.3 Changing explicit to tacit practice 124
  2.6.1.3.4 Motivating junior staff to change practice 125
2.6.1.4 Barriers to written reflection 125
  2.6.1.4.1 Allocating time for written reflection 126
  2.6.1.4.2 Motivation 126
  2.6.1.4.3 Imposing reflection 127
  2.6.1.4.4 Reluctance to disclose material 127
  2.6.1.4.5 Writing skills 128
2.6.1.5 Reflective accounts and emotional descriptions 129
  2.6.1.5.1 Objective approach to practice 130
  2.6.1.5.2 Difficulty in recording emotional experience 130
  2.6.1.5.3 A coping strategy 131

2.6.2 Questionnaire surveys 131
  2.6.2.1 Demographics 132
    2.6.2.1.1 The effect of age, number of years qualified and gender on portfolio use 133
  2.6.2.2 Reliability of the Pharmacist Portfolio Engaging Behaviour Questionnaire 134
    2.6.2.2.1 The effect of the PPEBQ scales on portfolio use 135
    2.6.2.2.2 The association between variables in the PPEBQ 136
  2.6.2.3 Reliability of the Big Five questionnaire 137
    2.6.2.3.1 The personality traits of pharmacists with and without a portfolio 139
  2.6.2.4 The effect of the Big-Five on the PPEBQ scales 140

2.7 Phase One discussion 141
  2.7.1 Use of portfolios and the role of reflective practice 141
    2.7.1.1 Disclosure and Honesty 142
    2.7.1.2 Support 143
    2.7.1.3 Effects on practice 143
    2.7.1.4 Reflection 144
    2.7.1.5 Barriers to recording 144
    2.7.1.6 Emotional writing 145
  2.7.2 Pharmacists' characteristics of portfolio engaging behaviour 145
    2.7.2.1 Personality Traits 146
  2.7.3 Comparison of data 149

2.8 Phase One conclusions 150

2.9 Implications for Phase Two 152
Chapter 3 - Phase Two: “The influence of Continuing Professional Development portfolios on pharmacy practice”

3. Introduction

3.1 Aim

3.2 Study questions and objectives

3.3 Methods

3.3.1 Study Design
3.3.2 Ethics approval
3.3.3 Development of interview schedule
3.3.4 Development of focus groups
3.3.5 Development and description of the reflective writing assessment framework
3.3.6 Sampling
3.3.7 Categorising Interviews and Focus groups
3.3.8 Trustworthiness of Interviews and Focus groups
3.3.8.1 Credibility
3.3.8.2 Transferability
3.3.8.3 Dependability
3.3.8.4 Confirmability
3.3.9 Categorising reflective accounts
3.3.10 Credibility and dependability of reflective writing assessment framework

3.4 Phase Two findings and analysis

3.4.1 Introduction

3.4.2 Exploring participant and written data

3.4.2.1 Semi-structured interviews

3.4.2.1.1 Role of CPD portfolios in pharmacy practice
3.4.2.1.1.1 The meaning of a portfolio
3.4.2.1.1.2 Architecture of a portfolio
3.4.2.1.1.3 Portfolio architecture in different cohorts and time
3.4.2.1.2 Support for documenting practice
3.4.2.1.2.1 Influence of colleagues
3.4.2.1.2.2 Motivation
3.4.2.1.2.3 Work versus learning
3.4.2.1.3 The mandatory nature of recording
3.4.2.1.3.1 Assessment
3.4.2.1.3.2 Utility
3.4.2.1.3.3 Views on the mandatory nature of CPD records: differences between cohorts and over time
3.4.2.1.4 Disclosure of records
3.4.2.1.4.1 Confidentiality
3.4.2.1.4.2 Emphasis on error
3.4.2.1.5 The meaning of reflection
3.4.2.1.5.1 Link to learning
3.4.2.1.5.2 Difficulties with reflection
3.4.2.1.5.3 Support for reflective writing
3.4.2.1.5.4 The meaning of reflection between cohorts and over time
3.4.2.1.6 Writerlyness
3.4.2.1.6.1 Form of writing
3.4.2.1.6.2 Utility of writing
3.4.2.1.2 Contribution of CPD records to professional practice
3.4.2.1.2.1 Lack of contribution
3.4.2.1.2.1.1 No effect
3.4.2.1.2.1.2 Doubt as to effect
3.4.2.1.2.2 Tacit contribution
3.4.2.1.2.2.1 Difficulty in vocalising
3.4.2.1.2.2.2 Episodic aide-memoir
3.4.2.1.2.2.3 Self-preservation
3.4.2.1.2.3 Mentality
3.4.2.1.2.3.1 Trigger for learning
3.4.2.1.2.3.2 Change in thinking
3.4.2.1.2.4 The effect of time on participants views of CPD records contributing to practice
3.4.2.1.2.5 Self-assessment of practice skills
3.4.2.2 Focus groups
3.4.2.2.1 Junior cohort
3.4.2.2.1.1 Experience of keeping a portfolio
3.4.2.2.1.2 Preregistration records
3.4.2.2.1.3 Mandatory records
3.4.2.2.1.4 Contribution of CPD records to professional practice
3.4.2.2.2 Intermediate cohort
3.4.2.2.2.1 Mandatory records
3.4.2.2.2.2 Selectivity
3.4.2.2.2.3 Support for recording
3.4.2.2.2.4 Contribution of CPD records to professional practice
3.4.2.2.3 Senior cohort
3.4.2.2.3.1 Mandatory records
3.4.2.2.3.2 Support for recording
3.4.2.2.3.3 Contribution of CPD records to professional practice
3.4.2.3 Integration of interviews and focus group data
3.4.2.4 Reflective accounts

3.4.2.4.1 Characterisation of the type of written reflection used

3.4.2.4.1.1 Structure of reflective records submitted

3.4.2.4.1.2 The level of written reflection

3.4.2.4.1.3 The influence of professional experience on written reflective accounts

3.4.2.4.1.3.1 Junior cohort

3.4.2.4.1.3.2 Intermediate cohort

3.4.2.4.1.3.3 Senior cohort

3.4.2.4.1.4 Reflective accounts over time

3.5 Discussion

3.5.1 The influence of CPD portfolios on pharmacy practice

3.5.1.1 Participants views of keeping a CPD portfolio

3.5.1.1.1 Meaning of a portfolio

3.5.1.1.2 Portfolio support

3.5.1.1.3 Mandatory records

3.5.1.1.4 Disclosure

3.5.1.1.5 Meaning of reflection

3.5.1.1.6 Writerlyness

3.5.1.2 Contribution of CPD records to changing practice

3.5.1.2.1 Self-perception of professional skills

3.5.2 Characteristics of written reflection in CPD portfolios

3.5.2.1 Level of written reflection

3.5.2.2 Reflective accounts over time

3.5.2.3 Effect of professional experience on written reflection

3.5.3 CPD portfolio as a form of discipline

3.5.4 Limitations of the study

3.5.4.1 Limitations of Phase One

3.5.4.1.1 Sampling

3.5.4.1.2 Methods

3.5.4.1.2.1 Interview study

3.5.4.1.2.2 Questionnaire study

3.5.4.1.3 Data analysis

3.5.4.1.3.1 Interview study

3.5.4.1.3.2 Questionnaire study

3.5.4.2 Limitations of Phase Two

3.5.4.2.1 Sampling

3.5.4.2.2 Methods

3.5.4.2.2.1 Interview study

3.5.4.2.2.2 Focus groups

3.5.4.2.2.3 Written accounts
3.5.4.2.3 Data analysis
  3.5.4.2.3.1 Interviews and focus groups 289
  3.5.4.2.3.2 Analysis of written accounts 290

4.0 Final discussion 291
  4.1 Summary 297
  4.2 Conclusion 298
  4.3 Further research 299
  4.4 Implications 301
  4.5 Implications of the research on the researcher 301

REFERENCES 302
## LIST OF FIGURES

Summary:

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flow diagram of the study process</td>
<td>6</td>
</tr>
</tbody>
</table>

Chapter 1:

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Flow diagram of the study process</td>
<td>83</td>
</tr>
</tbody>
</table>

Chapter 2:

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Schematic diagram of the Theory of Planned Behaviour</td>
<td>88</td>
</tr>
<tr>
<td>2.2</td>
<td>Scheme of Interview Data Analysis and Verification</td>
<td>99</td>
</tr>
<tr>
<td>2.3</td>
<td>Pharmacist Portfolio Engaging Behaviour and Big Five questionnaire</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>returns from hospital pharmacists.</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 3:

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Scheme for interview and focus group data analysis</td>
<td>167</td>
</tr>
<tr>
<td>3.2</td>
<td>Diagrammatic representation of participants' description of a CPD</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>portfolio</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Participants key themes and sub-themes of CPD portfolios</td>
<td>256</td>
</tr>
<tr>
<td>3.4</td>
<td>Participant themes of CPD recording contribution to practice</td>
<td>267</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

## Chapter 1:
- 1.1 A proposed taxonomy for the development of teaching portfolios 34
- 1.2 Matrix for the elements of mixed-method research 75
- 1.3 A summary of the justification for methodologies and methods used 82

## Chapter 2:
- 2.1 Main categories of interview questions 90
- 2.2 Item distribution for each scale and subscale of the Pharmacist Portfolio Engaging Behaviour questionnaire 94
- 2.3 Big Five dimensions of personality and associated adjectives 95
- 2.4 Returns of paired questionnaires from different contexts 98
- 2.5 Characteristics of health professions interviewed 102
- 2.6 Data analysis template for the views of participants regarding the use of a portfolio 103
- 2.7 Portfolio usage by health professions 106
- 2.8 Professional background and design of portfolios used 108
- 2.9 Number of health professionals with a mentor and type of portfolio used 112
- 2.10 Mentorship and clinical supervision for health professionals 113
- 2.11 Professionals who had attended a formal programme in reflective practice 115
- 2.12 Data analysis template for the views of participants regarding the meanings and roles of reflective practice within the context of CPD 116
- 2.13 Mean age and years qualified as a pharmacist with and without a portfolio 133
- 2.14 Gender distribution with and without a portfolio 134
- 2.15 Internal reliability of the Pharmacist Portfolio Engaging Behaviour Questionnaire 134
- 2.16 Means (SD) for the scales of the Pharmacists Portfolio Engaging Behaviour Questionnaire 135
- 2.17 Mean scores and standard deviations of the PPEBQ in participants with and without a portfolio 136
- 2.18 Spearman’s Rank Order Correlation between the measures of Portfolio Engaging Behaviour and associated direct variables 137
- 2.19 Internal reliability of the Big-Five questionnaire 137
- 2.20 Characteristics associated with high scores on the Big-Five questionnaire 137
- 2.21 Mean (SD) of the Big-Five dimensions and associated subscales for hospital pharmacists 138
- 2.22 Mean total scores and standard deviations of the Big-Five dimensions in participants with and without a portfolio 139
- 2.23 Spearman’s Rank Order Correlation correlations between measures of the Big-Five and the PPEBQ scales 140
- 2.24 Comparison of the Mean (SD) scores of medical students and hospital pharmacists 146
- 2.25 Attitudes for being a reflective thinker 148
- 2.26 Integration of Portfolio Engaging Behaviour and the Big-Five of pharmacists in comparison to interview findings 149
- 2.27 Phase One findings of the use of portfolios by health professionals 150
- 2.28 Phase One findings of health professional’s meanings and roles of reflective practice 151

20
## Chapter 3:

3.1. Phase Two study methods matrix
3.2. Main topics of the interview guide for Phase Two
3.3. Hospital pharmacists sampling frame
3.4. Characteristics of participants and hospital setting
3.5. Transferability criteria used for qualitative data
3.6. Data analysis template for the views of practitioners regarding the recording of professional practice and reflection in a CPD portfolio
3.7. Type of portfolio maintained by hospital pharmacists over 12 months
3.8. Type of support available for CPD between cohorts and time
3.9. Categories of views on the mandatory nature of CPD records: differences between cohorts and time
3.10. Medicines, Ethics & Practice CPD Guidance on good practice over a three year period
3.11. Summary of categories of views on the meaning of recording reflection: differences between cohorts and time
3.12. Data analysis template on how CPD records contribute to professional practice
3.13. Data analysis template of how participants key themes of CPD records contributing to professional practice, changed over twelve months
3.14. Comparison of participants self-reported main skill change and key themes representing contribution to practice of 12 months
3.15. Interview and focus group themes for views of participants’ regarding the recording of professional practice
3.16. Interview and focus group themes for views of participants’ on how records contribute to professional practice
3.17. Structure of CPD reflective recording forms used by participants
3.18. Structure of reflective recording forms used by each participant over 12 months
3.19. Analysis of the of reflective accounts submitted by 3 cohorts of pharmacists over 12 months
3.20. Summative classification of submitted CPD accounts over 12 months
3.21. Development of “reflection” in the CPD cycle by the Royal Pharmaceutical Society over five years (RPSGB, 2001-5)
3.22. Self-perceived key skills in hospital pharmacists as found in this study compared to previous research
3.23. Limitations to using self-completion questionnaires
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFC</td>
<td>Agenda For Change</td>
</tr>
<tr>
<td>CE</td>
<td>Continuing Education</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuing professional Development</td>
</tr>
<tr>
<td>CPP</td>
<td>College of Pharmacy Practice</td>
</tr>
<tr>
<td>eP&amp;R</td>
<td>Electronic Plan &amp; Record</td>
</tr>
<tr>
<td>e-portfolio</td>
<td>Electronic portfolio</td>
</tr>
<tr>
<td>EUSCCCP</td>
<td>European project for the Use of Standards of Competence in CPD for Construction Industry Practitioners</td>
</tr>
<tr>
<td>GPR</td>
<td>General Practitioner Registrar</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HPC</td>
<td>Health Professions Council</td>
</tr>
<tr>
<td>I</td>
<td>Intermediate cohort</td>
</tr>
<tr>
<td>ICPD</td>
<td>Institute of Continuing Professional Development</td>
</tr>
<tr>
<td>IPR</td>
<td>Individual Performance Record</td>
</tr>
<tr>
<td>J</td>
<td>Junior cohort</td>
</tr>
<tr>
<td>JW</td>
<td>Professor John Weinman</td>
</tr>
<tr>
<td>KSF</td>
<td>Knowledge and Skills Framework</td>
</tr>
<tr>
<td>LEARN</td>
<td>Look back, Elaborate, Analyse, Revise, New trail</td>
</tr>
<tr>
<td>LWDC</td>
<td>London Workforce Development Confederation</td>
</tr>
<tr>
<td>MWRITTF</td>
<td>Modified Written Reflections In a Theoretical Teacher-training course framework</td>
</tr>
<tr>
<td>NHS</td>
<td>National Health Service</td>
</tr>
<tr>
<td>NHSE</td>
<td>National Health Service Executive</td>
</tr>
<tr>
<td>P&amp;R</td>
<td>Plan &amp; Record</td>
</tr>
<tr>
<td>PBC</td>
<td>Perceived Behavioural Control</td>
</tr>
<tr>
<td>PCT</td>
<td>Primary Care Trust</td>
</tr>
<tr>
<td>PDP</td>
<td>Personal Development Plan</td>
</tr>
<tr>
<td>PIANA</td>
<td>Pharmacy In A New Age strategy</td>
</tr>
<tr>
<td>PPEBQ</td>
<td>Pharmacist Portfolio Engaging Behaviour questionnaire</td>
</tr>
<tr>
<td>PREP</td>
<td>Post Registration Education and Practice</td>
</tr>
<tr>
<td>QAPR</td>
<td>Ontario College of Pharmacists’ Quality Assurance Practice Review program</td>
</tr>
<tr>
<td>RCGP</td>
<td>Royal College of General Practitioners</td>
</tr>
<tr>
<td>RPSGB</td>
<td>Royal Pharmaceutical Society of Great Britain</td>
</tr>
<tr>
<td>S</td>
<td>Senior cohort</td>
</tr>
<tr>
<td>SN</td>
<td>Subjective Norm</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td>WDC</td>
<td>Workforce Development Confederations</td>
</tr>
<tr>
<td>WRITT</td>
<td>Written Reflections In a Theoretical Teacher-training course</td>
</tr>
</tbody>
</table>
LIST OF APPENDICES

1. Stake holders with interests in CPD 330
2. Terminology used in portfolio description in different contexts 331
3. A matrix of the purpose and characteristics of a professional portfolio 332
4. A selective comparison of portfolio contents 333
5. Databases searched 335
6. Studies on the influence of portfolios on professional practice 336
7. A reflective cycle 345
8. Studies of assessing written reflective accounts from educational literature 346
9. Studies of assessing written reflective accounts from health care literature 352
10. Professions Allied To Medicine 359
11. Letter to Departmental Heads Phase One 360
12. Sampling frame for Phase One 361
13. Ethics committee submission Phase One 362
14. Consent form for participants in Phase One 368
15. Interview guide 2002 369
16. Pharmacists views about writing professional practice accounts for continuing professional development questionnaire 370
17. Big five questionnaire 374
18. Coding matrix for selected interviews in Phase One 375
19. Ethical approval for Phase Two 380
20. Participant information & Consent form for Phase Two 381
21. Interview guide 2004 384
22. Focus group topic guide 385
23. Framework for assessing reflective accounts: modified WRITT 386
24. Sampling frame for hospital sites 387
25. Sampling frame for pharmacists participation 388
26. Mapping of the theories of the level of reflection 389
27. How to use the framework for assessing written accounts 390
28. Versions of the RPSGB CPD Plan & Record trigger questions mapped against the levels of reflective writing in the MWRIITTF 393
29. a) Skills mapping against KSF Dimensions, b) Skills mapping against RPSGB competencies 394
30. RPSGB Code to competencies 395
Chapter 1

Introduction
Chapter 1

Introduction

The use of portfolios in education has been growing for many years (Zubizarrata, 2004) and they have begun to be used by the health professions as a learning and assessment tool. In teaching and healthcare education, portfolios have been claimed to promote reflection (Klenowski, 2002; Hull et al, 2005). As most studies supporting these claims relate to an undergraduate context, there is a need for a better understanding of the use of a portfolio, its association with reflection, and its outcomes on practice for qualified healthcare professionals. In pharmacy, portfolios are currently being introduced at all levels of practice from undergraduate to postgraduate, and as part of registration, but with little published evidence of their benefits to professional practice in health care. The aim of this research was to understand the “meaning” of recording practice in continuing professional development (CPD) portfolios by health care professionals, and in particular the implications to pharmacy practice within the National Health Service (NHS). The introduction will review the background to CPD, the use of portfolios, and reflection in relation to clinical practice.

The first section (section 1.1) of this chapter will consider CPD in a macro context and then focus on its development and use by professions in the NHS, with particular reference to pharmacy. The next section (section 1.2) will concentrate on the “meaning” of the portfolio as a means of recording professional practice. The educational process of reflection will then be examined in the context of recording professional practice (section 1.3). Finally, the research process and scope of the thesis will be described in section 1.5 and 1.6.
1.1 Background to Continuing Professional Development

Ongoing professional education has long been viewed in terms of updating propositional and procedural knowledge. In the past, it appears that many professional bodies have relied on the individual professional's sense of moral obligation and motivation to keep their knowledge updated. However, professionals need skills beyond updating knowledge in order to practice effectively. This process of updating practice has been encompassed in the term Continuing Professional Development (CPD). The NHS along with many other organisations has adopted the use of a portfolio as a record of professional practice for CPD.

1.1.1 Continuing professional development in professional practice

Various professional groups have recognised the need to update professional practice. The Institute of Continuing Professional Development (ICPD) founded in 1981 has a number of affiliated professional bodies. The construction industry is one of the affiliated bodies and has produced a European framework for CPD (EUSCCIP, 1998). Their definition of CPD is:

"The systematic maintenance, improvement and broadening of knowledge and skill and the development of personal qualities necessary for the execution of professional and technical duties throughout the practitioner's working life."

In order to support this framework a European consortium was established in 2001 (European Institute for E-Learning, 2005) whose objective is that by 2010 every European citizen will have an electronic portfolio (e-portfolio). In addition, other authors, from an

---

* Propositional (public or codified) knowledge is theoretical, formal, excludes the practical know-how and is explicit so that it can be assessed. Procedural knowledge is how a skill is performed, often found in manuals (Eraut, 2000).
educational background, have suggested developing a “Lifetime Personal Web Space” (Cohn and Hibbitts, 2004). In an attempt to survey what was happening in the United Kingdom, a two phase study reported the views of 436 professional associations on the barriers and drivers to participating in CPD (Friedman and Phillips, 2001). The authors found that a variety of definitions of CPD existed and several different purposes for CPD participation were expressed. One of the key recommendations was that CPD should focus on learning, and be completely separated from the requirements of audit or accountability.

It is worth noting that this desire has not been accomplished by many professions in the health sector. The introduction of the NHS Knowledge and Skills Framework (KSF) in 2004, which is directly linked to the Agenda for Change (AFC) pay review, has actually increased the focus on accountability. A number of authors have commented that there is a lack of studies evaluating the effectiveness of CPD and that mandatory CPD schemes do not guarantee a change in practice (Grant and Stanton, 1999; Bolton, 2002; Lawton and Wimpenny, 2003).

1.1.2 Continuing Professional Development in the National Health Service

One of the goals of the Government's quality strategy for the NHS is to “improve performance by learning” (Department of Health, 1998), and individuals within the NHS must be constantly improving their own personal proficiencies in order to achieve this goal (Nutley and Davies, 2001). In the NHS, CPD has been defined as:

"A process of lifelong learning for all individuals and teams which meets the needs of patients and delivers the health outcomes and healthcare priorities of the NHS and which enables professionals to expand and fulfil their potential."

(Department of Health, 1998)
Chapter 1

Background to continuing professional development

Guidance on CPD systems within the NHS have been published and one of the recommendations from this document (NHS Executive, 1999) was that:

"Work based learning should include the process of reflection... be accredited and recorded as part of every individual’s personal development portfolio."

(NHS Executive, 1999)

Guidance on how every health organisation should manage this process was also published (NHS Executive, 1999). Emphasis was placed on work-based learning, as a large proportion of CPD was also a part of every individual’s personal development. More recently, the Health Professions Council (HPC; previously called the Professions Supplementary to Medicine) also defined CPD as:

"A range of learning activities through which health professionals maintain and develop throughout their career to ensure that they retain their capacity to practise safely, effectively and legally within their evolving scope of practice."

(Health Professions Council, 2006)

It is worth noting that this definition is focused more on individual practice than the concept of teams and health outcomes found in the NHS version. This may mean the HPC has less interest in teams or they consider individual practice easier to measure.

1.1.3 Drivers for Continuing Professional Development in the NHS

In order to understand the role of CPD, it is useful to review the drivers involved.

The key parties in CPD range from the Government, employers and professional bodies to colleagues/peers. To this list has been added a number of other stakeholders by the Secretary of Health (Appendix 1, Department of Health, 2001a).
During the past four years the Government has created five new national agencies to regulate the NHS in England (Walshe, 2002). Since April 1999, all NHS bodies in England have had the statutory duty of clinical governance introduced. Clinical governance provides an “umbrella” under which all aspects of quality can be gathered and continuously monitored (Department of Health, 1998). A list of quality improvement activities within the clinical governance framework included CPD programmes. These programmes would be aimed at meeting the development needs of the individual, the service needs of the organisation, and regularly monitored.

Another major driver for professional development has been the report from the Bristol public inquiry into the children's heart surgery unit (Kennedy, 2001) which clearly stated:

"CPD, periodic appraisal and revalidation must be compulsory for all healthcare professionals. The overarching mechanism should be a new independent Council for the regulation of Healthcare Professionals."

Professional bodies within health, driven by the new NHS Reform and Health Care Professions Bill (Department of Health, 2001b) now consider CPD to be an integral part of their remit.

This led to the Health Professions Order in 2002 which sets out the statutory basis for the Health Professions Council which oversees the activities of 13 health care professions (excluding nursing, midwifery, dentistry, medicine and pharmacy). The Council has approved the keeping of a portfolio for registration renewal (Health Professions Council, 2002). Recently five standards for CPD were published and include the requirement that registrants must:
Chapter 1  Background to continuing professional development

"(Upon request) present a written profile containing evidence of their CPD"

(Health Professions Council, 2006)

Random audits of each profession, every two years, will begin from 2008.

As the focus of this thesis is CPD in the context of pharmacy practice, the following section will describe the development of CPD in pharmacy.

1.1.4 Continuing Professional Development in pharmacy

The Royal Pharmaceutical Society of Great Britain defined CPD as:

"The process by which pharmacists continuously enhance their knowledge, skills and personal qualities throughout their professional careers"

(RPSGB, 2001)

This used a model of practice called the “Good Practice Cycle” and was changed to the CPD cycle in 2003. In addition, as part of NHS clinical governance, the NHSE Controls Assurance Standard for Medicines Management stated that:

"All healthcare staff involved with medicines undertake continuing professional development."

(NHS Executive, 2001)

Globally, in 2002, the International Pharmaceutical Federation Council adopted CPD as:

"The responsibility of individual pharmacists for systematic maintenance, development and broadening of knowledge, skill and attitudes, to ensure continuing competence as a professional throughout their careers."

(International Pharmaceutical Federation, 2005)

In the same year the American Society of Health-System Pharmacists published their statement endorsing CPD as:
"Involves personal self-appraisal, educational plan, development plan, implementation, documentation, and evaluation."

(American Society of Health-System Pharmacists, 2005)

These “CPD statements” for pharmacy all endorse the notion of learning throughout the career of a professional and are concerned with a process of self-appraisal. Only the HPC statement for CPD explicitly includes safe and legal practice. This is possibly due to the direct regulatory effect the Government has on the HPC. In contrast, the Department of Health’s version (Department of Health, 1998) is more concerned with measurable dimensions of delivering health outcomes, something not mentioned in the other statements. However, keeping records of CPD is common in all these statements.

In the United Kingdom, CPD for pharmacists has been a voluntary scheme for many years and will be made mandatory by the RPSGB from spring 2007. This followed from a review of the pharmacy profession in 1996 through the Pharmacy In A New Age initiative (PIANA) and the Health Act 1999 section 60 order, which was approved in 2006, and the regulations are to be published in 2007. Currently a review of the regulation of non-medical healthcare professions is considering whether a more stringent approach to demonstration of initial and continuing fitness to practice is required, which will impact on the RPSGB (Department of Health, 2006). The RPSGB has set a suggested minimum number of CPD records to be submitted, of one per month. Pharmacists who are registered as practising are required to provide evidence of having undertaken CPD from January 2005. This mandatory control is also being introduced in other European countries, e.g. Portugal, and in New Zealand from 2006.
Chapter 1  
A literature review of the “meaning” of a portfolio

Since the RPSGB and the NHS, along with many other professions, have adopted the use of a portfolio as a record of professional practice within the context of CPD, it is important to explore from the literature what is meant by a portfolio.

1.2 A literature review of the “meaning” of a portfolio

Many organisations have used the term “portfolio” as a metaphor, without any clear definitions. This may be simply because the purposes of portfolios have not been clearly and finally established or alternatively, it might be that there are concerns about restricting creativity for the user by being too prescriptive.

For the purpose of this thesis I would like to concentrate on the personal educational aspects of the portfolio. The Oxford English dictionary describes a portfolio as:

“A set of pieces of creative work intended to demonstrate a person’s ability to a potential employer”

(Pearsall, 2001)

Other terms have been used that could be included into this description (Appendix 2). It has been suggested that the concept originated from the time of Plato (428-347BC) when the “Hypomnemata” was in vogue (Dreyfus and Rabinow, 1983), which was a type of notebook for personal and administrative use. This was a collection of things read, heard, seen or thought and could be used to overcome a difficult situation in the future, e.g. observation of another individual’s reactions to a particular situation, would be recorded for future deliberation and action.

The teaching profession has used portfolios for many years in professional development (Seldin, 1991) and the portfolio has been described as a:
Chapter 1  A literature review of the “meaning” of a portfolio

“Collection of material, made by a professional that records and reflects on, key events and processes in that professional’s career”.

(Hall, 1992)

This description includes the process of reflection, and is not merely a collection of material. Another way to define portfolios has been to list the characteristics which must be present. These have been listed as: collection, reflection, selection and often includes finished or unfinished work (Hamp-Lyons and Condon, 2000). By the fact that the collection in the portfolio is retrospective, it is reflective in nature. However, using adult learning theory (see section 1.3.1) this collection needs to undergo a certain form of reflection by the author otherwise superficial learning is likely to occur. Confusion in the meaning of the term portfolio has been raised in the field of medical education where authors have been accused of using portfolio to mean a dossier of evidence (Rees, 2005a). This stimulated an ongoing discussion in the medical press about whether a generic definition for “portfolio” should be used, and if reflection should be a mandatory component (Cole, 2005; Rees, 2005b). This thesis is founded on the notion that reflection should be part of the definition, as it is core to the process of learning (see section 1.3.1).

Portfolios have now entered the technological world with the use of electronic portfolios (e-portfolio). This has become a large industry in the United States (Heath, 2004; Barrett, 2005; Kimball, 2005) and in the United Kingdom. A new consultancy service has been established by the Centre for Recording Achievement, for advice to Higher Education Institutes (Ward, 2006) and in addition an internet site is available to all professions (www.eportfolios.ac.uk) making the transportability, categorisation and editing of data collections much easier. This Centre will be investigating e-portfolio practice in the near future.
Chapter 1  A literature review of the “meaning” of a portfolio

1.2.1 Classification of portfolios

In an attempt to classify portfolios, three types have been suggested in the context of teaching (Tomkinson, 1997):

- “Meta-portfolio” - a comprehensive collection of documents arranged such that other portfolios may be drawn from it.
- “Portfolio” - a comprehensive collection to convey information about skills, experience or development needs.
- “Proto-portfolio” - a collection of documents for the purpose of conveying information about skills or experience but without organisation.

Tomkinson (1997) also specified a taxonomy for the development of teaching portfolios.

This lists seven dimensions each having a potential dichotomy of characteristics along a continuum. Where, on this continuum, the portfolio should lie, will help determine the format of the final product (Table 1.1).

Table 1.1 A proposed taxonomy for the development of teaching portfolios

<table>
<thead>
<tr>
<th>DIMENSIONS OF PORTFOLIO DESIGN</th>
<th>Potential Dichotomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYLE</td>
<td>Descriptive --------</td>
</tr>
<tr>
<td>STRUCTURE</td>
<td>Informal ------------</td>
</tr>
<tr>
<td>SCOPE</td>
<td>Narrow(teaching)</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>Developmental(formative)</td>
</tr>
<tr>
<td>CONFIDENTIALITY</td>
<td>Personal(Closed)</td>
</tr>
<tr>
<td>CONTENT</td>
<td>Focused ------------</td>
</tr>
<tr>
<td>TIMING</td>
<td>Discrete -----------</td>
</tr>
</tbody>
</table>

This taxonomy was an attempt to categorise teaching portfolios. The results of a questionnaire survey to test these categories have not yet been published. The author notes
that the dimensions listed were not designed to be in a hierarchy, since the purpose of a portfolio would influence all the other dimensions and they in turn would be difficult to format into any priority order. This is illustrated by Smith and Tillema (2001), who have suggested there are three distinct types of portfolio in professional training, based on the purpose; i.e. the dossier-type, used for documenting work performance and in appraisal; the course-related learning portfolio, which involves collecting often pre-specified documentation in order to make meaningful assessment; and finally the reflective portfolio, which is used for professional growth by understanding work experiences. In common with taxonomy above, these three types of portfolio are not mutually exclusive and each one can have elements of each other (Appendix 3). The taxonomy has been used to describe an “academic” portfolio by Levander and Kosunen (2005), as a tool for presenting the quality of teaching for academics in Europe. Another attempt to classify portfolios has been to describe the types used at different stages of education, from school through to professional practice (Friedman Ben David et al, 2001). The main purpose for these portfolios has been to assess performance.

As CPD portfolios have been introduced (Snadden and Thomas, 1998a; Friedman Ben David et al, 2001; Bridge and Eddy, 2006) into healthcare professions for different purposes, the next section will review the use of a portfolio in medicine, nursing and pharmacy.

1.2.2 Portfolios in health professions

The Royal College of General Practitioners (RCGP) have actively promoted portfolio-based learning since 1994 (Working Group on Higher Professional Education, 1994).
However, a number have noted that they offered little published evidence of their effect (Snadden and Thomas, 1998b; Pitts et al, 1999; Mathers et al, 1999). The RCGP has moved towards a mixture of dossier and reflective content and is using an electronic portfolio system for medical general practice, through their “WISDOM” Centre. Their personal learning plans and portfolios, for accreditation and revalidation, are constructed via the internet (Anon, 2002).

Revalidation of doctors, by the General Medical Council, will also involve developing a portfolio of practice (Shaw, 2005). This use of a portfolio is also being investigated by the General Dental Council (Maidment et al, 2006a). Recently the Academy of Medical Royal Colleges introduced a similar mixed type portfolio called the Foundation Learning Portfolio (Academy of Medical Royal Colleges & Department of Health, 2005) for the purpose of assessment. The University of Dundee, School of Medicine uses a portfolio for assessment of the final undergraduate degree (Friedman Ben David et al, 2001) and the School of Medical Educational Development at Newcastle are acting as the lead site for a consortium of universities using an electronic portfolio for assessing medical and dental undergraduates (Cotteril, 2005). The use of a learning portfolio to support self-directed learning in medical students has also been described (Hays, 2004). This increase in the use of portfolios in medicine has the danger of them becoming a mechanistic tool for assessment, leading to a compartmentalised surface approach to learning (see section 1.3.1). Individuals will be faced with having to submit portfolios for assessment throughout their careers and these portfolios can become disjointed collections of practice.

Portfolios as part of professional development have been established longer in the nursing profession (Cayne, 1995) and were developed by the English National Board in 1991,
based on the term “a profile”. The “profile” was a summary of the current three years of 
practice, including plans for future development which was to be added to the individuals’ 
portfolio. In 1995 a new set of CPD requirements were introduced (United Kingdom 
Central Council for Nursing, replaced by the Nursing and Midwifery Council) which 
included maintaining a personal professional portfolio, in order to meet their Post 
Registration Education and Practice requirements, referred to as PREP. Both the “profile” 
and the “PREP” portfolio were of a similar structure. The guidelines given to practitioners 
about the “profile” resulted in confusion with profiles being simply collections of 
certificates (Jasper, 2001).

In addition to registration requirements, portfolios have also been used in assessing the 
learning of student nurses and midwives. This role of the portfolio was questioned a 
number of years ago following a literature review, which concluded from the small number 
of studies reviewed that there was disagreement about whether portfolios were useful as an 
assessment tool (Ball et al, 2000) or whether the portfolio should continue as a tool for 
professional development (Bowers and Jinks, 2004). This has led to a 2 year project to 
evaluate the use of portfolios in the assessment of learning and competence of student 
nurses (Scholes et al, 2004). Using a qualitative methodology, the authors interviewed 122 
students and 58 nurse teachers. The findings included: a) variations in mentors experience 
and feedback given to students, b) some difficulty in matching learning outcomes in the 
portfolio with practice and c) students found writing in the portfolio a technical task to be 
completed.

It has become evident from the above review that there is a wide range of structures and 
complexity of professional portfolios. This has been verified by a selective comparison of
Chapter 1 ___________________________A literature review of the “meaning” of a portfolio

the content from four health professions portfolios in different contexts. A set of common features were found: a record of continuing education, a reflective account and career plans (Appendix 4). This diversity of portfolio structure may converge into a common core for all health professions in the near future as the KSF becomes more widely adopted in the NHS. Although the diverse purposes that a portfolio is used for should allow multiple formats.

1.2.3 Portfolios in pharmacy

The use of portfolios by registered pharmacists is relatively new compared to other professions. The Steering Committee on Pharmacy Education (Hartley, 1998) proposed that a lifelong learning portfolio might be adopted by pharmacy undergraduate students and continued through their preregistration training and into practice. This has been partly successful in that preregistration pharmacists have been required to submit a portfolio of performance standards since 1992, but pharmacy undergraduates in this country are only beginning to use a portfolio system (Donyai et al, 2005), with 11 out of 16 pharmacy schools reporting using learning portfolios (Wilson et al, 2006). This correlates with a national drive for all undergraduates to document their learning in a progress file (course-related type of portfolio) by 2004/2005 (Clegg and Bradley, 2006). A progress file is defined as “an individual’s personal record of learning and achievements, progress reviews and plans” (East, 2005). Following registration, the Royal Pharmaceutical Society in 1994 recommended the use of a continuing education log book (Plan and Record) for all pharmacists; designed as a 9 x 15cm leaflet to record 30 hours of participation in an educational activity (a dossier type of portfolio). This was then developed in 2000 to an A4 Plan and Record folder (a reflective learning type of portfolio) to meet a new CPD
A literature review of the “meaning” of a portfolio framework which was rolled out in 2002. It is currently available as a hard copy, electronic or internet version. CPD will become mandatory during 2007 and CPD records from the Plan and Record system will be called for by the society as part of re-validation soon after.

Due to higher education institutions having to include student progress files into their courses, a number of University postgraduate pharmacy courses have also begun to require a portfolio of course work to be presented for assessment. There is little published data on how these are assessed or linked to lifelong professional learning. A recent study of using a portfolio for assessing learning in a prescribing module, suggested the portfolio was an acceptable method and students found that it bridged the gap between theory and practice (Ashcroft and Hall, 2006a; 2006b).

In 1981, the Council of the Pharmaceutical Society accepted the establishment of a College of Pharmacy Practice (CPP), with voluntary membership. In 1995, one method of entry to the college was through the submission of a portfolio of practice. The portfolio was designed to be a “reflective learning type” which would also be assessed. In a qualitative study of nine hospital pharmacists’ views of CPD and using the CPP portfolio over a five week period, there was a mixed response (Swallow et al, 2006). Participants had a varied understanding of what a portfolio was. The pharmacy manager was the major motivational instrument for staff to undertake CPD activity. For some participants the portfolio was useful to organise their CPD, and for others it was using precious work time unnecessarily.

Recently, the Institute of Pharmacy Management International launched its portfolio with a five yearly re-accreditation requirement (Anon, 2001) and is awaiting formal evaluation.
1.2.3.1 The Canadian pharmacy experience

The University of British Columbia, Faculty of Pharmaceutical Sciences in Canada introduced an undergraduate student learning portfolio in 1998 (Faculty of Pharmaceutical sciences, 1998). The purpose was to develop self-directed learning, critical thinking and promote lifelong learning in students. In the postgraduate context, the Ontario College of Pharmacists’ introduced a learning portfolio system in 1996 (Des Roches and Laws, 1996). This portfolio is reviewed as part of the practice review process and is modelled on the learning diary developed by the Royal College of Physicians and Surgeons of Canada. Des Roches and Laws comment that by stimulating reflection, this learning portfolio format has the potential to increase the effectiveness of a professional’s learning activities. A recent focus group study of 42 pharmacists (eight from hospital practice) undertaking the Ontario College of Pharmacists’ Quality Assurance Practice Review program (QAPR), highlighted the need for peer-support in adopting CPD (Austin et al, 2005a). The QAPR also includes sharing the contents of a learning portfolio after submission to staff members of the Ontario College of Pharmacists. Participants commented that the portfolio was used to identify learning gaps. A further study from this QAPR program focused on the learning portfolio (Austin et al, 2005b). A mixed-method survey of 1360 pharmacists was used and the written comments on the value of the portfolio were analysed using a thematic inductive approach. Participants had difficulty in initiating and maintaining the portfolio but sharing CPD experiences with colleagues was considered very useful. From reviewing this study, the method of analysis of participant’s comments was not described sufficiently to support the conclusions.
Since 2002, all practising pharmacists in Manitoba, Canada are required to submit a learning portfolio to the Manitoba Pharmaceutical Association for re-licensure. A questionnaire survey of all these pharmacists was used to review the documentation and guidance provided (Lessard-Friesen et al, 2005). No details of the method were provided and no information on the usefulness of the portfolio as a reflective tool was given.

In summary, from this review of the use of portfolios in health professions, it appears that the pharmacy profession has been attracted to using the portfolio in a number of contexts, resulting in a variety of “meanings” of the term a portfolio. The main purpose of the portfolio in pharmacy seems to be as an assessment tool for professional practice in the context of CPD. As this thesis is to provide an understanding of the role of the portfolio, it is important to explore the issues that arise from the portfolio being an assessment tool before examining the effect of keeping a portfolio on professional practice.

1.2.4 Portfolio as a tool for assessment

As an assessment tool, portfolios can be used “formatively” in which learners are assessed on a regular basis and given feedback, or, “summatively”, at the end of a period of training (Williams, 2003). As a formative tool, the portfolio approach has been steadily gaining acceptance (Crème, 2005) at all levels of education from early years to postgraduate level, particularly in the United States, but also in other countries (Gipps, 1994; Hamp-Lyons and Condon, 2000; Davis et al, 2001; Klenowski, 2002; Zubizarrata, 2004). The portfolio allows multiple sources of evidence including course work, oral assessments, and personal material, in a wide variety of formats that are specific to the individual. This can make assessment difficult because these sources often contain descriptions which cannot be
assessed by a norm referenced system. A norm referenced system involves grading an individual’s performance in relation to peers (Gipps, 1994).

If assessed in this manner it would lead to a structured portfolio that enabled the individual to feel comfortable and secure about what should be included, but has the disadvantage of reinforcing the perception of a narrow, assessor controlled account of events with little ownership by the learner. This supports the view found in Plato’s model of education as being “functionalist”, where individuals are being accredited as competent to meet the needs of the state (Noddings, 1998) and also the concept of moving towards a controlled “McDonaldised” (Ritzer, 2000) environment, with little if any freedom for creativity. The “McDonaldised” environment has been described as having the dimensions of efficiency, calculability and predictability. It is a “process by which the principles of the fast-food restaurant are coming to dominate more and more sectors of American society as well as of the rest of the world”. The quantification and control of professionals is also fuelled by the disclosure of reflective accounts from portfolios (see section 1.3.5).

As a summative tool the portfolio can be used to assess accumulated evidence over a specified time period in order to meet certain listed criteria, often in a pass or fail situation. Within the positivistic paradigm formative and summative assessments raise issues of validity and reliability, which will be discussed in the next section.

1.2.4.1 Validity of portfolio assessments

Validity is the extent to which the assessment does what it is designed to do. It is often subdivided into: content, construct and criterion-related validity. The content of a portfolio should represent the area being assessed (generally this is not a major problem with portfolios). Construct validity is the extent to which the assessment measures the
psychological construct. In the use of portfolios, broad criteria are often applied to assess constructs which can result in “under-representation” or “irrelevant variance” (Klenowski, 2002). Driessen et al (2006) have attempted to assess this “irrelevant variance”. In a study of Year 1 medical students, they examined the potential bias in assessing portfolios, due to irrelevant qualities, such as the style of writing and structure. Using a 15 item scoring inventory to assess 40 portfolios; the study suggested that portfolio ratings were mainly determined by the quality of reflection, assessed by one broad item and not other qualities. The quality of reflection was defined in a previous study by interviewing 15 student mentors (Driessen et al, 2005a).

An example of “under-representation” would be when a major section of the portfolio contained evidence of prior practice, but did not represent what the professional does currently. In addition, the assessment is also based on written evidence, which is not necessarily the professional practice itself. This has been illustrated by Eraut (2004) who describes professionals as using two types of theory in practice, these being explicit and implicit theories. Only the explicit theories are recorded and/or a narrow set of evidence is presented in the portfolio to represent practice. This concern that a portfolio would not represent good practice has recently been raised in a pilot study of 10 dental practitioners (Maidment et al, 2006b).

Gibbs (1997) recommends that for teaching portfolios, a form of peer review should have taken place before a portfolio reaches a final assessment panel. An example of this approach is the Open University course for teachers (Baume and Yorke, 2002).

From the literature reviewed it appears that generally portfolios are viewed as valid, however, there is concern about the issue of reliability.
1.2.4.2 Reliability of portfolio assessments

Reliability is the extent to which the assessment can produce the same result using different assessors, or following assessment at different times. In a summative situation, assessment reliability needs to be at a high standard, in particular when being used for decisions concerning professional practice, but there is little evidence this is occurring in the medical field (Roberts et al, 2002). In the teaching profession a study by Tillema (1998) examined the reliability of a structured dossier-type of portfolio, in a six month teaching skills course. Three raters assessed 27 portfolios at two time points during the six months and found the portfolio and peer-rating to be a better predictor of performance in the workplace than self-rating. The highly structured portfolio and its associated support and feedback was partly responsible for such a positive result. Assessment reliability is normally very good when the portfolio is graded as “excellent”, but not so when graded as “adequate”. Using multiple assessors is also questionable as increasing the number of assessors may simply increase the number of unreliable assessments (Baume and Yorke, 2002). In the study of Baume and Yorke (2002), 53 portfolios from two cohorts of students were assessed by two trained markers and the reliability of the assessment examined. It was found that although pass/fail agreement for each component of the course was 86%, the percentage agreement for the overall result was only 60%. The reliability of assessment criteria for CPD portfolios in pharmacy has also been attempted using 11 trained assessors to examine five portfolios. This produced inter-assessor agreement using a kappa statistic that was 0.84, but little information was available on the validity of the criteria used (Martin et al, 2005). In a descriptive guide on using portfolios as a method of medical student assessment, it was suggested that in cases where portfolios contain a range of complex evidence, assessors
should concentrate on the consequences of the grading rather than on the actual grade attained (Friedman Ben David et al, 2001). In a study of assessing 12 portfolios from prospective general practice trainers, eight assessors’ inter-rater reliability improved using pairs of assessors (Pitts et al 2002). The global assessment criteria for the portfolio had a kappa statistic that improved from 0.26 to 0.5. However, there was a large variation in the kappa statistic for the other seven assessment criteria used. The authors concluded that individual assessments are untrustworthy and further research is necessary.

In summary, from the literature discussed above and a recent review of the summative assessment issues of portfolios within the education field (Johnston, 2004) there seems to be common areas of agreement. These are: i) what individuals prioritise to learn is governed by the assessment method, ii) true practice can become under-represented, iii) achieving reliability may only come from assessing trivial aspects of work, iv) raters still assume there is an ideal grade to be found, v) there is little focus on the individual, and vi) professional practice is complicated. All these issues rest in the positivistic domain of assessment. Therefore it is useful to review what a constructivist approach to portfolio assessment would bring. This will be discussed in the next section.

1.2.4.3 Constructivist approach to assessment of portfolios

A constructivist approach to assessment lies in the theoretical notion of people constructing their own social world, and there is doubt about the role of objective knowledge. This interpretivistic view of assessment was expressed in the medical context a number of years ago in a commentary by Snadden (1999). He concluded that there needs to be a mental shift towards valuing the development of the individual over time using a holistic approach. Acceptance that there is no simple truth but a number of possibilities, allows learners to see
their current level of ability and progress over time as an iterative process, rather than how
they rank against other individuals. With the move to empowerment of learners, it would
be appropriate for them to be involved in the assessment process. This involvement goes
against the “McDonaldisation” of the NHS (see section 1.2.4).

In this interpretivistic approach, validity and reliability are exchanged for the concepts of
credibility and dependability (see section 1.5). This approach has been suggested after a
review of nursing student portfolios (Webb et al, 2003) and described in a study of first
year medical students (Driessen et al, 2005b). In the latter study, assessment of 233
portfolios, submitted at the end of the academic year, occurred at three phases of the
portfolio process, ending in a three point grading system using global rather than specific
criteria. This method has also been extended to teacher and lecturer assessment at the
same institution (Tigelaar et al, 2005). Within the educational field this has also been
discussed with the conclusion that each type of portfolio needs to be assessed using a
system that fits the purpose of the portfolio (Hamp-Lyons and Condon, 2000; Klenowski,
2002).

In summary the assessment of a portfolio has been historically encased in the positivistic
paradigm, resulting in problems particularly with measuring trivial work, by trying to
achieve reliability. The move towards a more holistic approach to assessment involving the
practitioner still needs to be researched.

Whatever assessment methodology is used the issue of ethics must be considered. This is
briefly discussed in the next section and in more depth in section 1.3.5.
1.2.5 Ethical issues in the disclosure of portfolios

The purpose of learning and assessment can undergo a strained relationship. Each of the purposes for the portfolio (see section 1.2.1) triggers a different cascade of events, which in an ideal world would converge but often diverge, with assessment being linked to unintended learning. In addition, for the portfolio to be a tool for learning and growth, the sharing of data for feedback is important. Data from a CPD portfolio should involve personal information; yet as soon as assessment procedures for portfolios are instigated, disclosure of contents raises the issues of superficial learning and ethics. Whether individuals are prepared to disclose all practice-related events will depend on who has access to written records and what will be the repercussions of disclosing such events. No two events will be identical or recorded the same, and therefore setting norms of behaviour are difficult. This has been attempted by the rules laid down in the Medicines, Ethics, and Practice Guide for Pharmacists (RPSGB, 2006), but individual practitioners base their judgements of events on their own beliefs and values. Therefore assessing professional practice from a portfolio is difficult.

So far the use of the portfolio has been reviewed as a means of recording and assessing professional practice, and the difficulties in assessment highlighted. The portfolio is being adopted by an increasing number of professions and requires commitment from the portfolio owner in an already busy environment. As it is the purpose of this thesis to understand the “meaning” of CPD portfolios, it is necessary to review the literature concerned with what impact a portfolio may have on professional practice.
Since 1991, the use of portfolios in health care in the United Kingdom has been led by the nursing profession. Therefore a detailed literature search was performed and this section will review health care studies identified between 1991 and 2006. A total of 24 studies were found using the keywords: portfolio, progress files, assessment, reflective practice, reflection and linking these with pharmacy. The databases included pharmaceutical, medical, nursing, allied health and educational databases (Appendix 5). The majority of these studies were from medical education (13 studies), seven from nursing and four from pharmacy (Appendix 6).

1.2.6.1 Portfolios in medicine

In the medical profession 13 studies were identified, which were grouped according to an area of practice. Four studies involved medical students, five involved general practitioners and four involved doctors in other contexts.

1.2.6.1.1 Medical students

The medical student studies involved two quantitative (Lonka et al, 2001; O’Sullivan et al, 2004) and two qualitative (Driessen et al, 2005a; Driessen et al, 2003) investigations. The first, mainly quantitative study from Finland (Lonka et al, 2001), examined the use of a portfolio in 5th year medical students (n = 91) who completed an obstetrics course. The results suggested that the more text students wrote in their portfolios, the better they succeeded in their final exam. Using content analysis of an open-ended questionnaire, 50% of the students found the portfolio useful particularly for feedback to teachers whilst 34% did not comment. The second study (O’Sullivan et al, 2004) involved 18 residents in a cross-sectional design across four years of a psychiatric program based in the USA. The
results suggested scores on portfolios improved with years of training but had no effect on clinical performance. A qualitative study from the Netherlands (Driessen et al, 2005a) examined the use of portfolios as a trigger for reflection in medical students by interviewing 13 mentors. These mentors reported that the portfolio did stimulate a reflective attitude in students on their performance. This was supported by an earlier interview based study of 38 first year students (Driessen et al, 2003) in which reflection was focused on analysing strengths and weaknesses.

In summary, studies involving medical students suggest that the portfolio is a trigger for reflective thinking but the effect on practice is difficult to demonstrate.

1.2.6.1.2 General medical practitioners

In general medical practice five studies have examined the use of portfolios. The first (Snadden, 1998b) used a qualitative approach, involving interviews and focus groups after a two year period with 44 pairs of trainers and General Practitioner Registrars (GPRs). The process of transcribing their data was not clear and the authors did not discuss the limitations of the study in any depth. However the results suggested the portfolio was: a) a tool for reflection, b) a bridge between hospital and general practice, and c) useful to facilitate feedback between student and trainer.

In a mixed-method study using a cross-over design (Mathers et al, 1999), 32 GPs spent six months using either a portfolio or undertaking continuing educational activities. Data were collected by semi-structured interviews with six participants, self-completed questionnaires, participant observation and portfolio assessment. It was not clear how the observations...
were done, or the questionnaire developed and piloted, or whether the portfolio was assessed according to previous criteria. The study conclusions were that the portfolio method of learning was flexible and a wide range of topics could be covered, however availability of time and funding were issues. In another mixed-method study (Grant et al, 2003) 22 GPs and two pharmaceutical advisors were asked to evaluate the use of an assessed learning journal in a part-time diploma course. The findings suggested that this assessed learning journal was of benefit for daily practice. However, no details of the benefit were given.

In the next study, a quantitative questionnaire was posted to 92 GPRs (Pearson and Heywood, 2004), using a mixed format of questions, 71 responses were analysed. The GPRs had been asked to keep an educational portfolio since 2001 and a logbook from 1995. The results suggested that 42% were reflective portfolio users. The category of non-reflector was defined to some extent, but it was very broad and open to misinterpretation. In addition, experienced GPRs used the portfolio less and the role of a supportive trainer was important.

In another mixed-method study, an electronic personal development portfolio was evaluated over a three month period (Dagley and Berrington, 2005). Results for five GPs, from an initial group of 23, suggested the value of an electronic format over a paper based system, but there were time and technology issues. There was also a lack of understanding of reflective practice by the GPs surveyed. A number of methods were used to collect data from users and non-users of the system. However it was not clear how this data was combined to inform the authors’ conclusions.
In summary, the GP studies reviewed indicated the portfolio to be useful for learning particularly if used with a supportive feedback system. The effect on practice was not easily identified, practice workload was an issue and there was a lack of understanding about reflective practice.

1.2.6.1.3 Other medical contexts

Four other studies were identified in which portfolios were examined in various medical contexts. The first was a quantitative study from Canada of 707 physicians who submitted records of learning over a two year period using a paper or electronic diary format (Campbell et al, 1999). The records were reviewed and categorised according to the stimulus that resulted in the record being written. Overall, the results suggested that electronic users were 41% more likely to change their practice as a result of the record, than paper users, but no evidence was provided to confirm this statement.

The second study evaluated a personal learning log used by a group of 157 senior house officers (Kelly and Murray, 1999). The log did not have a significant effect on knowledge or confidence after six months and few documented any specific learning.

The third study from Canada (Dornan et al, 2002) examined 87 speciality physicians completing an electronic portfolio for one year using a mixed-method questionnaire approach. The system was used by 34% of the participants who reported stimulation of reflective learning. The electronic format was not preferred by some, and finding time to use it, because of a heavy patient workload, was a problem. There was no information provided about the effect on practice. The fourth study from the Netherlands (Tigelaar et al, 2006a) used a qualitative approach, with semi-structured interviews of five medical teachers' views on the use of a teaching portfolio. However the analysis did not involve the
participants at any stage which questions the dependability of the data. The results suggested the portfolio structure was too prescriptive, involved a heavy additional workload and that research was needed on the long term benefits of using a portfolio.

In summary, overall these studies indicate that a portfolio could have some effect on practice in the long term and that an electronic format of the portfolio was not necessarily useful to all. The workload of keeping a portfolio needs to be considered carefully when trying to incorporate it into practice.

1.2.6.2 Portfolios in nursing

In the nursing profession seven relevant studies have been identified. In a qualitative study, Cayne (1995) examined the use of the portfolio by six nurses based in an orthopaedic/trauma unit. At the end of a two month period, the findings suggested the process of using a portfolio triggered reflection on experience. The second study was a mixed-method study of 59 experienced nurses and 15 school teachers (Smith and Tillema, 2001). The study attempted to examine the long term effects of portfolios. All participants had used a portfolio for two to three years. A semi-structured questionnaire using a 10-point scale was administered to all participants and semi-structured interviews conducted with 12 senior nurses. Reliability of the questionnaire was not stated and the conduct of the interviews not discussed. The authors suggested that the portfolio was mainly useful for documentation of evidence, reflection, self-awareness, and opportunity for dialogue. The long-term benefits mainly involved changes in behaviour towards people in the workplace; which was through a self-checking process. However the evidence supporting this view was not discussed in any depth. The third study (Coffey, 2005) used a postal questionnaire returned by 22 qualified nurses who had completed a diploma. The results suggested a link
between the diploma and practice, in addition to the portfolio being a trigger to continued learning. The fourth study also used a mixed-method and examined the value of a non-compulsory portfolio (Dolan et al, 2004), using a self-completion questionnaire survey in a group of 219 preregistration nurses. Over two thirds of the nurses felt the portfolio had a minor influence upon their skills and 9% believed that the portfolio had a major impact on their reflective skills. The fifth study of 122 nursing students and 58 teachers, Scholes et al (2004) found that writing in a portfolio was mainly a task to complete and not a reflective tool as originally thought. In the sixth study, also using a quantitative postal questionnaire, McMullan (2006) surveyed 174 nursing students. The author found 42% of students felt that portfolios promoted critical thinking and 31% felt portfolios improved self-esteem. In the last study, Nairn et al (2006) used a questionnaire in 413 preregistration nurses and found that a portfolio was useful to explore the “art” of nursing. However, some nurses were confused about the purpose of a portfolio.

In summary, three of the above studies were short term; two were concerned with using a portfolio in the context of a formal course with a fixed finishing time. Only one study has attempted to examine the long term use of a portfolio, but the lack of information about the methods used, made interpretation of the findings difficult.

1.2.6.3 Portfolios in pharmacy

In the pharmacy profession, four studies of relevance were identified. The first using a quantitative questionnaire was designed to explore 154 final year pharmacy students’ attitudes to using a portfolio in a prescribing module (Ashcroft and Hall, 2006a). The questionnaire used multiple statements but without assessment of reliability. The results indicated that most of the students (82%) felt the portfolio was a good means of assessment.
and 53% felt the portfolio would be a good tool for re-validation of pharmacists in the future. In a follow up qualitative study the same authors analysed the content of 204 portfolios submitted as part of the same course (Ashcroft and Hall, 2006b). The data suggested that in the context of a prescribing course, portfolios encouraged critical self-reflection, but this was poorly defined. In addition, the portfolio bridged the theory and practice of prescribing. The third study was in the context of using a learning portfolio as part of competency requirements. In this study a group of 1,360 pharmacists in Ontario, Canada were surveyed (Austin et al, 2005b) using a mixed-method approach. Invited comments from participants were categorised and the findings suggested that the portfolio had limited effect in promoting self-reflection. This view changed when the portfolio was used in a peer review session. The quantitative part of the survey was mandatory and indicated a wide variation in the number of activities reported which resulted in a change in practice. How the data from this questionnaire was checked for reliability is not discussed, even though respondents commented on how easy it was to submit dishonest information.

The fourth study examined the use of a CPD portfolio in nine hospital pharmacists (Swallow et al, 2006). A semi-structured interview approach was used and repeated after five weeks using a telephone. This data was not reported to have undergone any verification. The results suggested the importance of learning with colleagues and the use of a portfolio to be motivational for learning. However the authors were not clear about the difference between CPD as a process and the portfolio as a tool in the process.

Overall in healthcare, from the 18 studies reviewed in which quantitative, qualitative and mixed-methods were used, the results suggest that using portfolios had a number of different characteristics. These included the portfolio being:
Chapter 1

A literature review of the “meaning” of a portfolio

- a good tool for use in feedback
- useful to trigger reflection
- a link to academic learning and practice

In addition, the studies identified that there is a lack of understanding of reflective practice within portfolio use, that portfolios created an added workload for practitioners, and the use of different portfolio formats can be beneficial to some practitioners. The majority of these studies suffered problems in not providing sufficient information about the methods used, or more importantly the conclusions were not justified by the data presented e.g. Campbell et al, (1999); Swallow et al, (2006). In addition, the evidence for portfolios having an impact on practice is still limited and requires further investigation. Since the teaching profession have used portfolios for many years, a review of the educational literature was undertaken to gain a wider perspective on the impact of portfolios on practice.

1.2.6.4 Portfolios in education

A literature search using the same strategy as above (section 1.2.6) identified seven studies (Appendix 6). The first study examined the use of portfolios in a group of 15 school principals in Israel, after an initial training period, when the portfolio was used voluntarily (Smith and Tillema, 2001). The authors used a mixed-method approach of questionnaires and interviews. Four principals continued to compile the portfolio after five years. The continued use was to indicate personal and professional development. The long-term benefits included learning systematic reflection which led to changes in behaviour towards others in the workplace. There was agreement that long-term use of a portfolio should be mandatory. However, there was no consensus about what should be disclosed to outside authorities.
The second was a study of adult learners on an 18 month computer course (Langer, 2002) using a qualitative approach which categorised learning journals from 20 students and interviewed 10 students six months after completing the course. The objective was to understand how adults would respond to keeping a learning journal. The themes identified were: a) some felt insulted in being required to keep a journal, b) adults preferred a set format rather than their own design, c) discipline to record weekly was difficult, and d) students may not understand reflection.

The third study determined the use of portfolios in teacher professional development, in the context of an American school system (Tucker et al, 2003). Twenty-four portfolios were examined using a mixed-method approach with a questionnaire and focus groups. The results indicated that a portfolio was useful for identifying strengths and weakness and encouraging self-reflection, but was less likely to promote good teaching and change instructional practice. However, there was no reliability data given from the questionnaire and no details of how the focus groups were conducted or data analysed.

The fourth study (Johnston and Thomas, 2005) investigated whether a portfolio was of any benefit for a set of 26 school principals in Ohio. Using a qualitative methodology, data were analysed from interviews and focus groups. The data suggested three levels of benefits: level 1 where the portfolio had little impact (7 principals), level 2 the benefit was at the end of the process (7 principals) and level 3 the portfolio was valuable (12 principals). At level 3 it was still difficult to describe explicit connections between work and the portfolio process. The fifth study used an action-research approach and data were collected from three case studies (Klenowski et al, 2006). Course participants in all the cases spoke about changing their practice, but with no detail about the long term effects
Chapter 1 — A literature review of the “meaning” of a portfolio

Portfolios had on practice. The sixth study used a quantitative survey of 117 teachers based in a University or higher vocational education school (De Rijdt et al., 2006). Although a large proportion (84%) agreed that portfolios are useful to reflect on practice, only a small proportion (22.1%) actually used a portfolio. The main effect for those who were using a portfolio was that it did stimulate reflection to improve teaching. Others suggested using a portfolio resulted in more respect from colleagues and students, because of a better realisation of efforts made in the teaching. These findings were confirmed by Mansvelder-Longayroux et al. (2007), who examined 25 student teachers.

Summarising the impact of portfolios on practice from the educational field is limited by the small number of published studies. All the studies reviewed used either qualitative or mixed-method approaches. The findings indicate that the use of a portfolio:

- requires motivation to record
- can change behaviour towards colleagues
- can encourage reflection

However, there is a lack of understanding of reflection and it is difficult to demonstrate an explicit effect on practice.

These effects are similar to what has been reported in the medical literature and also highlight the need for longitudinal studies to be undertaken.

The expansion of “portfolioism” in assessment as described above has become established in CPD. However, this may also be interpreted as a form of calculable control of health professionals and not a tool for learning as being promoted by professional bodies. From the literature described, portfolios seem to have some sort of positive impact on
professional practice mainly in the context of a formal course. The results of these studies still place doubt as to the value of keeping a portfolio. Added to this lack of information, if used in isolation by different professions, the portfolio can become a tacit instrument of self-regulation which may promote professional boundaries.

Portfolios are also said to enhance (Walker, 1985; Langer, 2002) and foster (Wade and Yarbrough, 1996) the skills of reflection particularly in teacher, nurse and medical education. It is therefore important to examine the role of reflection as a concept. In the next section the role of reflection in learning, professional practice and the recording of professional practice accounts will be reviewed.

1.3 A literature review of reflection

The word "reflection" (noun) originates from the word reflect (verb). This is traced back to old French "reflecter" or Latin "reflectere", which is from "re-" meaning back and "flectere" to bend (Pearsall, 2001). This is used to describe the reflection of light, heat or sound against a shiny surface. The meaning of reflection has also been used in human contexts as a metaphorical term (not just to describe a physical mirror image) to describe an "inward" view of one-self. Even "to reflect" has been under philosophical debate for many years using different meanings; i.e. to duplicate or to view an object from a distance in order to see or imagine a different image (Swindal, 1999).

Reflection in this thesis will be used to describe a deeper understanding of some phenomenon in terms of thinking. The object of reflection in this context has been described from within the teaching profession as being of three kinds: a) one’s own activity, b) one’s own profession or professional activity and c) any other object
Chapter 1  A literature review of reflection

(Bengtsson, 1995). Each of these objects are not distinct, but overlap to some extent. For example, one’s own practice of pharmacy is part of a wider pharmaceutical field. The reflective thinking can also be about other colleagues, i.e. any other object.

Using reflective thinking, the professional can distance themselves and provide useful information for professional development. Therefore the following sections will review the role of reflection in learning, the role of reflection in health care and the issues surrounding the recording of reflective practice.

1.3.1 Reflection and learning

Although many authors have recognised that reflection is essential for learning, the term “reflection” is very difficult to define. In the context of a form of thinking it has been traced back to Aristotle’s discussions of practical judgement and moral action (Boud et al, 1985a). This was followed by the empirical philosopher John Locke who argued that all understanding is based on experience and experience is made up of sensation and reflection, although he did not consider that the way we think is influenced by social factors (Mautner, 2005).

Studies on reflective thinking (Dewey, 1933; Kolb and Fry, 1975; Mezirow, 1981; Schön, 1983; Boud et al, 1985a; Van Manen, 1995) have been mainly associated with the field of education. Dewey (1933) defined reflective thinking as a process that tries to resolve doubt:

“Reflective thinking, in distinction from other operations to which we apply the name of thought, involves (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity.”
In addition he outlined three attitudes that are important for an individual to reflect; open-mindedness, whole-heartedness and responsibility. At no time did he mention the notion of beliefs as being important in influencing reflective behaviour. These attitudes were demonstrated in a study of nineteen student-teachers’ journals (Loughran, 1996) but have not been investigated in a professional health context. Dewey also characterised reflection as comprising five phases of thought: suggestions of a possible solution, formation of a problem, hypothesis to guide data collection, reasoning, and testing the hypothesis. These need not be in any order and may overlap one another but should fit together to form the process of reflective thinking. Boud et al (1985a) developed this notion of reflective thinking as a process linked to how individuals learn from experience:

"Reflection is an important human activity in which people recapture their experience, think about it, mull it over and evaluate it. It is this working with experience that is important in learning. The capacity to reflect is developed to different stages in different people and it may be this ability which characterises those who learn effectively from experience."

Reflective thinking is central to critical thinking for which there are numerous frameworks and definitions (Moseley et al, 2003). However, the focus of this thesis is reflection in learning and critical thinking will not be reviewed.

A number of learning theories incorporate reflection as one stage of a multi-stage process (Brockbank and McGill, 1998). One such theory uses the term “single-loop” learning, developed by Argyris and Schön (1974), which has been used by Kolb (1975) to describe the process of experiential learning. This model has been adopted by the RPSGB for the CPD process and named the “good practice cycle”. However, the “single-loop” model does not involve challenging values or underlying theory and therefore has been describe as “instrumental” learning (Argyris and Schön, 1974). In order to overcome this issue, the
authors developed the "single-loop" model into a "double-loop" concept, in which the learner begins to question values and assumptions of the workplace, in a connected loop. Reflection is the point at which the learner can move into this second loop of learning, where challenge and new understanding from experience becomes key.

Learning from experience is also influenced by the way in which the learner approaches their learning. The approach to learning is a concept of how the learner organises and experiences the subject matter of a learning task. It is an individual feature that is partly determined by learning style and is significantly influenced by the context. These two influences produce certain characteristic approaches to learning, named the deep and surface approach. The notions of deep and surface learning were originally developed by Marton and Säljö (1976). Surface approaches are characterised by the rote learning of facts for regurgitation. Deep approaches involve individuals attempting to understand underlying principles, ideas and concepts. It has been suggested that reflection only occurs in deep learning by facilitating the reorganisation of ideas (Moon, 1999a; Moon, 2004a). Moon (2004a) goes on to suggest that deepening also occurs when learners reflect upon material that they have learned through a surface approach. Recently in the higher educational sector a comprehensive review of reflective practice in the context of new academic staff programmes has been published (Kahn et al, 2006). The conclusions included the claim that reflective processes in the programme can change practice.

From the review of reflection in learning above, this thesis will conceptualise reflection as the core process of any form of learning; a view that has been suggested in the past (Al-Shehri et al, 1993).
1.3.2 Reflection in professional practice

The use of reflection in professional practice has been adopted widely and needs to be reviewed in order to gain a fuller understanding of its role in a CPD portfolio.

In an analysis of the way professionals undertake their day-to-day practice Schön (1983) described two processes. The work of the professional depends on a large number of judgements based on knowledge, which cannot be described. This has been termed as "knowing in action" and during the act of doing, thoughts are generated which turn back on the action. This Schön has called "reflection-in-action" and "reflection-on-action". The distinction between the two processes is that reflection-on-action is not directly related to current action and occurs after the action. There is however some debate as to whether these could be part of a continuum of action rather than discrete time points (Eraut, 1994; Moon, 1999a; Moon, 1999b). The use of reflection by professionals in certain oppressive environments, e.g. heavy workload, uncertain employment or a dysfunctional team, can create more problems. In these situations professionals may only see their weaknesses and reflection can become harmful (Yip, 2006).

1.3.3 Reflective practice by health professionals

Reflective practice has been endorsed by the Kennedy report (2001) in which it was listed as one of six key areas in the notion of professional competence. For the health professions, most of the literature on reflective practice derives from nursing, medicine, radiography, physiotherapy, and occupational therapy (Tate and Sills, 2004). The next section will review each of these in turn.
1.3.3.1 Reflection in nursing

In nursing practice, reflection has also been claimed to improve health care (Ghaye, 1996) but with little if any evidence published to support this claim (Burnard, 2005; Rolfe, 2005; Burnard, 2006). The definitions from the education field have been reformulated to describe reflective practice in nursing (Fish, 1999; Maich et al, 2000; Burton, 2001). The two frequently cited definitions of reflection in the nursing literature are similar (Boyd and Fales, 1983; Jarvis, 1992). However, where Boyd and Fayes concentrate on reflection changing practice, Jarvis is focused on any outcome being linked to theory and previous experience:

"Reflective practice is the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and which results in a changed conceptual perspective."

(Boyd and Fales, 1983)

"...the process of turning thoughtful practice into a potential learning situation.... The reflective practitioner is always trying to ensure that the outcome of any action is close to what is anticipated by the theory and the previous experience combined."

(Jarvis, 1992)

In order to operationalise these definitions, a reflective cycle (Gibbs, 1988) has been adopted as a method for nursing students to identify where they are in terms of their reflection (Appendix 7). Missing stages of the reflective cycle has been suggested to inhibit learning and not allow students to transfer the process to other situations (Reid 2000). In addition, Johns (2000) suggests ten elements of reflection which support the value of becoming a reflective practitioner. Evaluations of these elements have not yet been reported by other researchers.
1.3.3.2 Reflection in medicine

In medicine, the view that reflection is central to learning has been highlighted (Al-Shehri et al, 1993) and described in a reflective model of CPD (Brigley et al, 1997). This model has been adopted by the Faculty of Public Health Medicine (Friedman Ben David et al, 2001) which listed a number of educational benefits to the use of portfolios. One benefit included the statement that portfolios “stimulate the use of reflective skills in order to analyse and synthesise experience”, but no evidence was provided to support this claim. In a study of five medical school teachers, Tigelaar et al (2006b) provided examples of reflective assignments from a portfolio, on various aspects of their teaching roles. The authors suggested that these reflections would be useful for professional development.

1.3.3.3 Reflection in Allied Health Professions

The Charted Society of Physiotherapy has documented the importance of reflective practice since 1995 and a framework to assist reflective practice has been reported (Donaghy and Morss, 2000); but an in-depth evaluation of the framework has still to be published. A recent questionnaire survey of 33 physiotherapy Professional Practice Coordinators reported no consensus on models of reflection or assessment (Ward and Gracey, 2006), but they believed that reflective practice be central to teaching physiotherapy. A similar situation was found in occupational therapy, in which reflective practice has been described as part of a medical humanities course but with no detailed evaluation (Murray et al, 2000). Other authors (Rosie and Murray, 1998) have commented that reflection is generally well established in the health professions and that health professions emphasise the development of reflective skills to enhance the quality of practice. However from their study of 31
radiography students undertaking clinical placements there was little evidence that
reflection was promoted or that reflective learning occurred.

1.3.3.4 Reflection in pharmacy

The importance of reflective practice in pharmaceutical care has been discussed to a limited
extent in the literature (Robinson et al, 2001; Purkiss, 2002; Droege, 2003) but without any
supporting evidence. An attempt to investigate this led to one study published in abstract
form. This study (Black and Plowright, 2005) aimed to explore the views of 13
pharmacists undertaking a distance learning programme in prescribing, using a qualitative
approach. The subjects were mainly from primary care and three focus groups were used.
Preliminary findings suggested a portfolio imbedded reflective learning into practice.
Other published studies have tried to evaluate written reflection, as discussed in section
1.3.7.

1.3.4 Recording reflection in portfolios

The utility of recording reflection in a portfolio has been described by a number of authors
in different contexts and these are briefly reviewed in this section. A study by Walker
(1985) discussed a one-year full-time programme providing leadership development to
people within religious communities. Writing in the portfolio provided an objectivity,
which helped participants deal more effectively with experiences in their lives. In the
context of education (Wade and Yarbrough, 1996) suggested that there were four core
elements in the terms used to describe reflection, i.e. deliberate thinking, taking time, new
understanding and informing future actions. These authors examined 212 undergraduate
elementary teachers’ education views on portfolios and the role of reflection. The results
showed that 38% of the students thought the portfolio helped them to reflect. However, a
similar number (36%) of students suggested they would not use their portfolio for professional purposes. Whether the students would transfer their reflective thinking skills to the teaching environment was not addressed.

1.3.4.1 Recording reflection in health care

In healthcare, a study of 24 fourth year baccalaureate nursing students in Canada (Maich et al, 2000), used five focus groups and seven individual interviews. Using a set of guidelines ("LEARN") to represent five steps of the reflective process listed as: Look back, Elaborate, Analyse, Revise, and New trail. The results suggested that reflection was highly valued by students and perceived as a critical thread to the portfolio process. However, the participants had to undertake a two hour orientation session before the study which may have influenced the outcomes and there were no details of which students were interviewed. A further study (Pee, 2000) explored the views of 56 student dental therapists and 20 tutors to keeping a Progress file using a qualitative approach. All students gave the impression that they found reflection a difficult concept to understand and discuss. Students were divided on the value of reflection and most tutors (only one doubted) thought that reflection had some value. The transcripts of interviews were not seen by the participants and details of how some participants examined emergent themes was not given.

In an earlier qualitative study of 90 first year medical students in Finland (Niemi, 1997), learning logs were classified under four types. These were: committed reflection, emotional exploration, objective reporting and scant and avoidant reporting. The distribution of students amongst these four types was similar. The least common type was “committed reflection” which involved critical thinking.
1.3.4.2 Recording reflection in pharmacy

In the context of pharmacy three abstracts and one full paper have been published to examine the role of reflection. In the first abstract a quantitative approach was described in which 67 final year pharmacy students completed an evaluation questionnaire (Rees et al, 2003). There were no details of the piloting or reliability of their instrument but descriptive data suggested that reflective practice was a good idea but tedious to accomplish. In the second abstract, (Swart et al, 2003) used a mixed-method approach to report the initial findings of a two year longitudinal study of 40 pharmacists. They investigated the relationship between reflection and changes in professional practice. At this stage only the descriptors of professional practice have been reported. In the third abstract, (Edwards et al, 2004) describe a content analysis of reflective portfolios of 17 pharmacists undertaking a prescribing course. The background of this cohort was not reported. Two academic pharmacists analysed the content for common themes, but no data were presented on the role of reflection in practice. The only full paper published to-date, examined reflection in a patient counselling context (Kansanaho et al, 2005).

Free-form essays written by 40 pharmacists in Finland, prior to starting a patient counselling course were analysed using a coding frame of three categories based on Mezirow’s eight levels of reflectivity. It is not clear from the study whether the unit of analysis for each level of reflection was the whole essay. The majority of the cohort (75%) demonstrated reflectivity. As writing an essay is itself a reflective task, it was unclear why the rest of the cohort was classified as being non-reflective.
1.3.4.3 Emotion in reflective accounts

An important dimension of reflection and reflective writing that is often overlooked is the role of emotion. Strong emotion is thought to stimulate the move from single to double-loop learning (see section 1.3.1) and therefore it has been argued that reflective accounts should also contain emotion (Brookfield, 1987). If emotion is very strong, it may inhibit reflection, but could lead to a better understanding of the situation. In a review of the role of human memory in reflection (Newell, 1992), anxiety was listed as an emotion that would result in omitting key incidents which are threatening but these same incidents offer the potential for learning. Recall of stressful incidents is also often inaccurate because of impaired encoding of information and often the recall setting is different from the original. Counselling skills may need to be available when reflection leads to unearthing personal issues in the learner. Anger and guilt are often made out to be inappropriate professional emotions and could be explored using reflective writing.

A qualitative report from a pilot study of five medical students and 24 academics explored the feasibility of using creative writing to encourage self-exploration. Using content analysis both groups felt the method was good for recalling feelings and allowing emotional experiences to be reviewed (Howe et al, 2001). This area of emotional accounting has not been addressed in the context of pharmacy.

1.3.5 Disclosure of reflective accounts and ethics

As portfolios of practice become mandatory, individuals will have to disclose their contents. A significant portion of the contents will involve information about changes in practice, which will include how learning has occurred, which could be from errors.
Errors in healthcare may have significant clinical implications but a reflective account that includes poor clinical practice or harm to others raises the ethical issue of disclosure. The pharmacy profession's code of ethics states that information is disclosed without the patient's consent only:

"Where necessary to prevent serious injury or damage to the health of the patient."

(RPSGB, 2006)

There is nothing mentioned in the code of ethics about disclosure of retrospective data in which the harm had already occurred. In the NHS, under the clinical governance agenda, error reporting is encouraged and is a criterion of medicines management by which hospitals are compared (NHS Executive, 2001). In addition the NHS CPD framework, states that:

"Work based learning should include the process of reflection within a team about untoward incidents and how to learn from these. Crucial ability of work based CPD is the ability to reflect on and learn from relevant experiences, including failures."

(NHS Executive, 1999)

This method of using reflection in a predominantly positivist culture of the NHS can lose its ability to improve practice. The review above (section 1.3.1) suggests reflective practice looks at wider issues than just local knowledge from error reporting. The process of reporting failure is similar to "truth-telling" named parrhesia from a Graeco-Roman tradition. The parrhesiast tries to question routine patterns of thought and action especially in situations of danger when established action would be reviewed (Bleakley, 2000). Writing in this parrhesiast way can therefore develop into representing a personal-confessional account, making the writer the confessor. This way of writing has been
highlighted by Foucault (1981) in the context of “personal development” to be a personal confession. Although the purpose of writing in this form is to know ourselves, it also becomes a form of self-discipline/self-regulation. This then becomes a form of surveillance which has also been described by Foucault (1977) in the metaphor of the “Panopticon”.

The Panopticon was originally described by the philosopher Jeremy Bentham (1843), as a tower placed in the centre of a ring. The tower has windows which allow complete view of the peripheral ring. The ring is a building divided into discrete cells, with one window on the inside corresponding to windows of the tower; the other, to the outside. Foucault developed Bentham’s Panopticon to explain self-regulatory behaviour. Placing a supervisor in the central tower allows subjects in the cells to be put under surveillance, with the subjects never knowing when they are being watched. This leads to subjects having to regulate themselves in case the supervisor intervenes with some disciplinary action. This Panopticon model of self-regulation can be applied to the use of portfolios and in particular reflective accounts. A central organisation, e.g. a professional body would represent the tower and individual practitioners would be completing records of practice and personal reflective accounts which were only disclosed to the central organisation when requested (e.g. as part of re-registration). This situation is currently in place, in the form of CPD portfolios.

This issue of control at the organisational level in the NHS has been raised recently in the context of clinical governance. Two issues arise: a) governmental control of professionals and b) quality assurance of professional performance. Both have been implemented with no discussion of the effect on practitioners who are having to keep practice records (Miles et al, 2001).
As part of maintaining a portfolio, professionals are being requested to submit personal reflective accounts, it is therefore important to examine the issues surrounding assessment of these reflective records.

1.3.6 Levels of reflection

As portfolios are being assessed, particularly in the context of learning through CPD and revalidation, it is also necessary to examine how evidence of reflection in the portfolio can be assessed. From the review of the literature so far, portfolios seem to trigger reflective thinking. A general view in professional practice has been that written reflections provide the easiest evidence of reflection, although other methods such as video, audio-tape and action research are used. The educational literature suggests numerous models of reflection (McHardy and Brown, 2003) and a common theme that emerges is that there appears to be different levels of reflection. These have been described as a hierarchy of reflection, based on the early work of Van Manen (1977) from an educational context. These levels have been further developed into a framework describing four levels of reflection (Hatton and Smith, 1995) and include the work of Van Manen and Schön. These levels are categorised as: i) technical, ii) descriptive, iii) dialogic, and iv) critical reflection. Interestingly, these authors have not mentioned the work of Mezirow (1991a) who suggested reflection as a “process of critically assessing the content, process or premise to interpret and give meaning to an experience”. He suggested it was important to distinguish between reflective and non-reflective action. Non-reflective action could be either, habitual, e.g. riding a bicycle; or thoughtful, e.g. a selective review of past learning, but without any assessment of the learning (Mezirow, 1991b). Mezirow’s levels of reflection can be compared directly to the levels proposed by other authors and are discussed in chapter 3, section 3.3.10.
Chapter 1  A literature review of reflection

This concept of levels of reflection is useful as a method of interpreting and reporting on written reflective accounts produced for portfolios.

1.3.7 Assessing reflective accounts

Assessing reflective accounts has been debated in the literature by a number of authors. Ixer (1999), in the context of social work education, argued that we do not have the tools to measure students' reflections and more work was required to understand this process, though he did not discuss the issue of reflective writing. Stewart and Richardson (2000) from the School of Occupational Therapy and Physiotherapy, University of East Anglia, set out to examine students' perceptions of keeping a reflective portfolio, using three focus groups and faculty member interviews. The conclusion was that because of many concerns over the assessment procedure and since students who developed a good writing style were more likely to get higher grades, the process of reflection is better left unassessed. In a study of portfolio assessment, the second highest discrepancy rate among assessors was found for the reflection section (Baume and Yorke, 2002). The authors acknowledged that there was debate about whether reflection should simply look back or include evidence of how practice would change. Reviews of the literature by other authors (Bolton, 2001a; Moon, 2004b) have suggested that assessment may inhibit individuals from involving themselves in the writing process and impose unethical disclosure of accounts. The issue of what exactly is being assessed is also important, i.e. the content, the writing, the process or the final outcome.

Therefore as reflective writing is being used as a method of demonstrating professional development as part of portfolio design; more information is required about the way written reflection can be assessed. Attempts at assessing the level of reflection from writing have
been published in the educational, social care and health fields, both as a separate task within a formal course and in conjunction with keeping a portfolio.

1.3.7.1 Assessing reflective accounts in education

In a search of the educational literature since 1990 a total of 17 studies were identified (Appendix 8). Thirteen studies have involved students undertaking a teacher training course, three studies with social care students and one study using undergraduates from an unknown course. In summary, all these studies examined the level of reflective writing using the levels proposed by Mezirow (1981) and Hatton and Smith (1995). Overall, students would describe their confidence in practice had improved, although they would commonly write at a descriptive level. This level of written reflection would fluctuate over time, with no consistent pattern. The use of guiding questions, allowed students to raise their reflective level. However, it is not clear whether students using this method were engaged in a surface approach to their learning, rather than a deep approach which is found with critical reflection. A more in-depth discussion of these studies will be used in chapter 3, sections 3.5.2.1 and 3.5.2.2.

1.3.7.2 Assessing reflective accounts in healthcare

In the health care field a detailed search identified 22 relevant studies (Appendix 9) in which written reflection was evaluated and 13 of these studies attempted to assess the level of reflection using Mezirow, Boud, or Hatton and Smith concepts; two medical studies defined their own framework for reflective levels (Boenink et al, 2004; Carr and Carmody, 2006). A range of professional groups were used, six studies involved the nursing profession (Powell, 1989; Wong et al, 1995; Richardson and Maltby, 1995; Thorpe, 2004; Jensen and Joy, 2005; Chirema, 2006), two studies involved medical students (Calbraith,
Chapter 1

The gap in literature

2002; Pee et al, 2002;), four studies involved physical therapy students (Williams et al, 2000; Williams et al, 2002; Plack et al, 2005; Wessel and Larin, 2006), and only one study involved pharmacists (Kansanaho et al, 2005). The authors used a mixed-method approach to analyse 40 essays submitted from pharmacists who had attended a formal course. Ten pharmacists were categorised as being non-reflective and eight as critical reflectors. They concluded that more support is required for a reflective learning process. In summary, these studies found a descriptive level of writing was common; experience in a profession did not affect the level of reflection; higher levels of reflection decreased over time; support was needed for the writing process and reflective writing improved at different times, with different individuals. These studies will be discussed in more depth in chapter 3, sections 3.5.2.1 and 3.5.2.2.

1.4 The gap in literature

Health professions have adopted reflection as part of professional practice. However from the literature review, there is a lack of data and a knowledge gap in the use of portfolios and reflective writing in health professions and particularly in pharmacy practice. As part of this research project, assessment of written accounts will provide a deeper insight into the use of a portfolio to encourage reflection and the effects, if any, on pharmacy practice.

1.5 The research process

In order for the thesis to develop it is necessary set out the theoretical framework on which
Chapter 1  Scope of the thesis

the research is based. The terminology used in research will be described as it applies to this thesis. The relationship of theory to research needs to be examined. Theory has a number of meanings in different contexts. Commonly it is an explanation of something, based on general principles independent of the thing to be explained. In general, there are two sorts of theory. In inductive theory the researcher uses data to generate theory. This is the outcome of the research and is associated mainly with a qualitative research design. Deductive theory is when the researcher, using what is known about a domain and its theoretical elements, generates a hypothesis. This then leads to data collection and a hypothesis is accepted or rejected. This is associated with quantitative research. The major part of this thesis uses inductive theory but will also involve deductive theory.

In order to compare the terms associated with the quality of each research methodology, a matrix has been constructed (Table 1.2). This matrix illustrates the four main goals of both quantitative and qualitative research, these being: truth value, applicability, consistency and neutrality.

<table>
<thead>
<tr>
<th>Goals of research methodology</th>
<th>Quantitative Methods</th>
<th>Qualitative Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truth value</td>
<td>Internal validity</td>
<td>Credibility</td>
</tr>
<tr>
<td>Applicability</td>
<td>External validity (generalisability)</td>
<td>Transferability or fittingness.</td>
</tr>
<tr>
<td>Consistency</td>
<td>Reliability</td>
<td>Dependability</td>
</tr>
<tr>
<td>Neutrality</td>
<td>Objectivity</td>
<td>Confirmability</td>
</tr>
</tbody>
</table>
1.6 Scope of the thesis

In any busy organisation there is always a tension between “doing” and “learning about doing” (Nutley and Davies, 2001). The paradox may be that if the purpose of the portfolio is assessment of performance and grading, then very little reflection is necessary to collect evidence of practice and it is the outcome that counts not the process. The review of the literature has shown a gap in the understanding of health professionals' use of CPD portfolios, in particular in the pharmacy profession. In the review of studies concerned with the use of professional portfolios in health care professions post-registration, it emerged that there were few studies; four pharmacy, 13 medical and seven nursing studies over the past 10 years. In the field of higher education seven studies were identified. In addition a systematic review of the literature in further and higher education on the evidence that Personal Development Planning using a Progress File (i.e. a form of portfolio) improved student learning was undertaken (Gough et al, 2003). The majority of studies were in the context of a formal course of study. An in-depth review of 25 studies which included an objective outcome measure of student learning found a positive result, but there was insufficient evidence on student “personal” outcomes. This review is difficult to translate into a professional development context in which support and culture for learning is different.

If the NHS is to adopt the features of a learning organisation (Department of Health, 2001a; Sparrow et al, 2005) and hospital Trusts develop a culture of learning, then more information is required on different aspects of CPD, especially the role of portfolios. This would inform strategic and managerial planning to improve the quality of learning experiences and lead to improved patient care, in line with the Trust and NHS objectives.
In the context of CPD, in this thesis the portfolio is considered as a textual tool for learning and reflection. In order to gain a better understanding of the role of a portfolio post-registration this thesis was structured into two phases. In phase one, a wide set of views from different professional groups was sought and research methods tested in order to inform phase two, which focused on the views of pharmacists based in hospital NHS Trusts and their use of a CPD portfolio.

1.6.1 Research questions

Based on the literature survey the aim of the thesis was to investigate how the use of CPD portfolios influences practice and the role of reflective writing in portfolios. The main focus of the study was with pharmacists working in a hospital setting. The research questions arising from this aim were divided into the two phases.

In Phase One the research questions were:

a) What are the views of health professionals about using a CPD portfolio?

b) What are the meanings and roles of reflective practice within the context of CPD for health professionals in the NHS?

c) What are the psychological characteristics of pharmacists' who keep a CPD portfolio?

In Phase Two the research questions were:

a) What is the role of a CPD portfolio and its effect on pharmacy practice?

b) What are the characteristics of written reflection in CPD portfolios?
1.6.2 Structure of the thesis

The aims of the research were to answer the study questions using different perspectives, rather than being fixed in one paradigm of inquiry. The research questions in this thesis were concerned with understanding individuals' views in their social surroundings which requires both an inductive and deductive theoretical approach. The study therefore used both positivism and constructionism as the epistemological foundation. This was driven partly by the research questions but also influenced by the supervisors’ own split epistemological foundations. The use of combined qualitative and quantitative approaches has been advocated by a number of authors (Brannen, 2005; Onwuegbuzie and Leach, 2005; Love et al, 2005; Moran-Ellis et al, 2006). Integration of this type of data should provide a deeper understanding of the research questions. The two phases of the study each contributed to the overall understanding of the meaning of portfolios and reflection in pharmacy practice.

The justification for the methodology and methods used will be described for each phase in the next section.

1.6.2.1 Phase One - “The meaning of Continuing Professional Development portfolios and reflective practice for health professionals”

This phase was designed to understand health professionals’ views of CPD portfolios and reflection. The research questions were concerned with a) understanding individual views on the use of CPD portfolios and reflection in a range of health professions and b) examining pharmacists’ characteristics of portfolio engaging behaviour.

In order to explore health professionals’ views of using and documenting practice within portfolios, a mixed-method approach was used, incorporating a survey with face-to-face
interviews and questionnaires. The qualitative interview is linked to ethnographic fieldwork and this sets out to describe a culture, which can be characterised as a set of behavioural patterns within a particular group of individuals (Spradley, 1979). The setting of this phase of the thesis is not of prime concern although there may be cultural inferences made between separate professional groups and within the pharmacy profession itself.

Qualitative research uses non-probability samples. The characteristics of the study population are used to deliberately select samples, which are not statistically representative. These methods have been described generically into three approaches, single case, collective (or number of cases) and the multiple instances of a process exhibited in different cases (Denzin, 2000). This has been further classified into four main approaches (Ritchie et al, 2003) as: purposive, theoretical, opportunistic and convenience sampling. Purposive samples will have certain features chosen by the researcher because it will allow an in-depth study. This type of sampling has been further categorised depending on the studies aims and coverage. Theoretical sampling is iterative, continues until no new insights are obtained and selects on the basis of contribution to testing a theoretical construct. Opportunistic sampling uses an advantage of opportunities during the course of the fieldwork, and convenience sampling is mainly due to ease of access. In order to gain an in-depth understanding of practitioners views this phase of the thesis used a stratified purposive approach.

Since the use of portfolios by pharmacists was voluntary in 2002 it was appropriate to examine the psychological reasons for keeping a portfolio. This was achieved by using a quantitative survey methodology to examine pharmacists’ characteristics of portfolio engaging behaviour. A survey is difficult to define as a wide range of different types of
studies are labelled as surveys. However, common features include; a fixed quantitative
design, collection of data in standardised form from a large number of individuals and
selection of a sample from a known population (Robson, 2003a).

A sample is considered to be a part of a population, which will be the basis for estimating
the characteristics of the whole population. This sample may be an individual, an
organisation or a geographical location and within the quantitative paradigm is usually
concerned with probability or non-probability approach. A probability sample can involve
a number of types, e.g. simple random, systematic, stratified random and multi-stage cluster
(Bryman, 2004a). The outcome of this type of sampling is supposed to be representative of
the population concerned and keeps sampling error to a minimum. Probability sampling
allows statistical judgments about the larger population to be made from the responses
obtained. The size of a sample depends on many factors. Minimum numbers are needed
for statistical tests but within social research time and cost are also major factors. One rule
of thumb has proposed a minimum of 15 participants per variable (Robson, 2003b). The
absolute size of a sample is more important than its relative size and in general increasing
the sample size decreases sampling error. In survey research it is often not possible to
specify a desired level of precision in order to calculate sample size using formulae
developed to limit errors (Robson, 2003b). In order to generalise findings to a population
then issues of homogeneity of the population are important.

In order to survey pharmacists’ use of portfolios, an analytic survey questionnaire method
was used. Developing a questionnaire involves consideration of a number of factors
(McColl et al, 2001) such as: is there an existing instrument, validity and reliability, how
should questions be worded and sequenced, what the final questionnaire should look like
Chapter 1  Scope of the thesis

and response rates. In this phase, two questionnaires were used; one a descriptive design to describe the personality traits of pharmacists, and the second was an analytical design to explore pharmacists’ intention for keeping a portfolio using the theory of planned behaviour.

1.6.2.2 Phase Two - “The influence of Continuing Professional Development portfolios on pharmacy practice”

Findings from Phase One generated the hypothesis that CPD portfolios had no impact on pharmacy practice in a secondary care setting. Therefore, Phase Two was designed to understand what impact CPD portfolios had on pharmacists of different experience, and their use of reflective writing. The research questions were concerned with: a) what is the role of a CPD portfolio and its effect on pharmacy practice? and b) what are the characteristics of written reflection in CPD portfolios?

The results and methods used in Phase One determined the selection of methods for Phase Two. Using a qualitative approach, a stratified purposive sample was employed to obtain views from pharmacists with three different levels of experience, i.e. junior, intermediate and senior. For the purposive nature of the study, the London area and secondary care Trusts were chosen because it is often assumed that secondary care in London has a particularly supportive network for pharmacists with good resources and would therefore allow an in-depth examination of portfolio use. In order to examine changes in pharmacists’ views that may occur over time, a longitudinal design over 12 months was used. Data were collected on three occasions (start, 6 and 12 months) which included face-to-face interviews, and written reflective accounts. After 12 months, three focus groups were convened to explore the consistency of the interview findings.
Chapter 1  

Scope of the thesis

A summary of the research questions, methodology, justification and the methods used in the thesis are shown in Table 1.3.

Table 1.3 A summary of the justification for methodologies and methods used.

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Exploratory</th>
<th>Phase 2</th>
<th>Descriptive and Explanatory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>METHODOLOGY</td>
<td>JUSTIFICATION</td>
<td>METHOD</td>
</tr>
<tr>
<td>a) What are the views of health professionals' about using a CPD portfolio?</td>
<td>Qualitative</td>
<td>Looking for meaning that occurs when we engage with the pharmacy world.</td>
<td>Semi-structured, face-to-face interviews.</td>
</tr>
<tr>
<td>b) What are the meanings and roles of reflective practice within the context of CPD for health professionals in the NHS?</td>
<td>Qualitative</td>
<td>Looking for meaning that occurs when we engage with the pharmacy world.</td>
<td>Semi-structured, face-to-face interviews.</td>
</tr>
<tr>
<td>c) What are the psychological characteristics of pharmacists' who keep a CPD portfolio?</td>
<td>Quantitative</td>
<td>Measurement of personality characteristics that influence using a portfolio.</td>
<td>Self-completion questionnaire.</td>
</tr>
<tr>
<td>d) What is the role of a CPD portfolio and its effect on pharmacy practice?</td>
<td>Qualitative</td>
<td>Looking for meaning that occurs when we engage with the pharmacy world and consistency in data.</td>
<td>Semi-structured, face-to-face interviews. Plus Focus groups</td>
</tr>
<tr>
<td>e) What are the characteristics of written reflection in CPD portfolios?</td>
<td>Qualitative</td>
<td>Looking for the type of written reflection used.</td>
<td>Discourse analysis, using a theoretical framework.</td>
</tr>
</tbody>
</table>

An overview of the study process is displayed in Figure 1.1.
Chapter 1 Scope of the thesis

Phase One Ethics Approval

**Qualitative**
- Multi-professional Interviews in Nurses, Pharmacists, Dietitians, Podiatrist, Physiotherapists, Occupational Therapists & Physicians
- Data Collection
  - Interviews n = 23
  - Discourse analysis

**Quantitative**
- Portfolio Engaging Behaviour + Big-Five questionnaires with hospital pharmacists in a range of roles.
- Data Collection
  - Hospital pharmacists n = 132
  - Descriptive analysis

Phase One
Conclusion + Implications for Phase Two

Phase Two Ethics Approval

**Qualitative**
- Purposive sample of 9 hospital sites (Within the London Workforce Confederation)
  - n = 9 pharmacists
  - Data Collection
    - Interviews n = 27
    - At start, 6 months and 12 months
    - Discourse analysis
    - Focus groups with the study participants
    - Discourse analysis

**Quantitative**
- Data Collection
  - CPD records n = 24
  - At start, 6 months and 12 months
  - Content analysis

Final conclusion + recommendations

Figure 1.1 Flow diagram of the study process
Chapter 2

Phase One:

"The meanings of Continuing Professional Development portfolios and reflective practice for health professionals"
2 Introduction

This thesis is divided into two phases. The first phase of the research was to scope the use of portfolios in a number of health professions and pilot the instruments to be used for the main study in Phase Two. This section will introduce the aims and objectives of Phase One, provide background on psychological characteristics that influence planned behaviour, then describe the methods used, the findings and analysis, limitations and conclusions. The final section of this chapter will discuss how the findings of Phase One informed the design of Phase Two.

2.1 Aim

The aim of the first phase of the study was to investigate how the use of CPD portfolios influences practice and the role of reflective practice for health professions, in an NHS hospital setting.

2.2 Study questions and objectives

The aim was developed into the following research questions:

a) What are the views of health professionals about using a CPD portfolio?

b) What are the meanings and roles of reflective practice within the context of CPD for health professionals in the NHS?

c) What are the psychological characteristics of pharmacists who keep a CPD portfolio?

The research questions were transformed into three objectives for the study:

a) To investigate the use of portfolios by exploration of health professionals’ views of using a portfolio.

b) To examine the meanings and roles of reflective practice within the context of CPD.

c) To examine pharmacists’ characteristics of portfolio engaging behaviour.
2.3 Background to the psychological characteristics that influence planned behaviour

In order to examine the psychological characteristics that influence whether pharmacists would keep a CPD portfolio, it is necessary to review the theoretical basis of this concept.

In social-psychology of health behaviour, factors that concern beliefs about the consequences of a given behaviour are considered to be of prime importance. Attitudes and behaviour are related and the former is a major influence on the latter (De Wit and Stroebe, 2004). These factors have been applied to understand people’s adherence to various health activities using social cognition models. Social cognition is how people reason about social life, behaviour and experience. Social cognition models can be applied to the behaviour of pharmacists in undertaking the recording of professional practice in a portfolio, although this has not yet been reported in the literature.

All social cognitive behaviour models assume that decisions between different courses of action are associated with a) a given action that will lead to a set of expected outcomes and b) the evaluation of the action outcome (De Wit and Stroebe, 2004). These models can be useful to help explain behaviour and form the basis for development of interventions, aimed at the most typical members of the target population, to change behaviour. As a general model of social behaviour, the Theory of Planned Behaviour (TPB) has been used extensively. Other models have been used but with limited success (De Wit and Stroebe, 2004). The TPB is the focus of this investigation and is an extension of the Theory of Reasoned Action (Ajzen and Fishbein, 1977).
2.3.1 Theory of Planned Behaviour

The TPB was used to gain an understanding of the psychological processes involved in pharmacists recording professional practice in a portfolio. The model suggests that external variables including demographics and personality traits impact on three kinds of beliefs: a) behavioural - the likely outcomes of the behaviour and evaluation of these outcomes, b) normative - expectations of others and motivation to comply with these expectations, c) control – factors which may inhibit or facilitate and perceived likelihood of the performance. Each of these in turn affects the attitude towards the behaviour, subjective norm (social pressure to perform the behaviour) and perceived behavioural control. The combination of attitude, subjective norm and perceived behavioural control leads to a behavioural intention. It has been suggested that any behaviour is determined by the individual’s intention to undertake that behaviour. Intentions are indicators of the extent to which people are willing to try to undertake a behaviour (Ajzen, 1991). Each of these components of behaviour is illustrated in Figure 2.1

2.3.2 Personality Traits

The concept of a trait as the fundamental unit of personality has been adopted, although other theories have been suggested which include motives and cognitive processes. Based on the work of a number of psychologists, (e.g. Pervin, 2002) the majority of personality researchers have adopted a general taxonomy of personality traits called the “Big-Five” personality dimensions (Pervin, 2002).
Characteristics of the five dimensions include: a) people vary between the extremes of each dimension, b) are stable over a 45 year period, c) they are found consistently in analysis of peer and self-ratings and d) the factors have been found in languages other than English (Acton, 2005). There are two ways of obtaining the five dimensions. The first is called the “Big-Five” and derived from the factor analysis of language that people use to describe themselves and others (Goldberg, 1992). The second is a trait-rating measure (Five-Factor Model) obtained using a questionnaire (McCrae and Costa, 1999). The scores on the two measures show good agreement and for ease of use, the Big-Five was chosen for this study. The five trait dimensions are: Surgency (extraversion), Agreeableness, Conscientiousness, Emotional Stability (neuroticism) and Intellect (openness).
2.4 Methods

2.4.1 Study Design

A mixed methodological design using a qualitative and quantitative approach was used. Descriptive and analytical survey methods were adopted, using semi-structured interviews to answer the first two research questions and two structured self-completion questionnaires, for the final question. The surveys were conducted at one time point.

2.4.2 Ethics Approval

This investigation was conducted in accordance with the ethical guidelines set by the British Educational Research Association 1992 and the Guidelines on the use of audio/video tapes, at the Hospital Research Ethics Committee 2002. Ethical approval was obtained from the Local Ethics Committee (Appendix 13). Written ethical consent was sought for Phase One using a standard consent form (Appendix 14) for the interviews. Participants were free to withdraw at any time without giving a reason.

2.4.3 Development of the interview guide and questionnaires

There are many different ways the interview process can be organised. This may vary from the individual survey interview, life history interview and therapeutic interview, to group interviews (Gubrium and Holstein, 2002). The method chosen for data collection was the face-to-face semi-structured interview. In this type of interview, predetermined questions are used (the interview guide), but the question wording and order can be changed during the interview. The TPB was used to construct the first questionnaire, and the Big-Five questionnaire was used to assess pharmacists' personality traits.

2.4.3.1 The Interview Guide

An interview guide was constructed from the literature review to record field notes and suggested questions (Appendix 15). It was arranged to contain:
a) main questions focused on the area of study

d) probe questions to clarify an answer or request further information

e) follow-up questions that pursue implications of answers to the main questions

The list was used flexibly according to the interviewees' responses. The interview guide was not supplied to the interviewees, but the ethics consent form described the focus of the study. The researcher acted as the interviewer. The main interview questions are listed in Table 2.1.

Table 2.1 Main categories of interview questions

| a) | What does a portfolio mean to you? |
| b) | Does disclosing the information within a portfolio cause any problems? |
| c) | What support is there for maintaining portfolios? |
| d) | What effect has the portfolio had on practice? |
| e) | What does reflective practice mean? |
| f) | What affect has written reflection had on practice? |
| g) | What were the perceived barriers to reflection? |
| h) | What extent have emotions been recorded? |

2.4.3.1.1 Credibility

Credibility in this study involves issues of truth and correctness of a statement made by the participants. No method can deliver on ultimate truth, but some methods are more appropriate than others for research on participants’ views of a particular topic (Lincoln and Guba, 2000). A less structured approach was used at this stage of the study and is commonly agreed to have higher credibility but this may be traded against lower dependability. In the interview setting all stages of the process must be verified and not seen as a separate stage (Kvale, 1996a).

All interview transcripts were checked against the original tape by the researcher. Each transcript was returned to the participant for verification.
The researcher had no managerial power with respect to the participants, so it is unlikely participants would try to give a favourable response.

2.4.3.1.2 Dependability

This involves interviewer dependability in relation to asking leading questions, transcribing and categorising answers. The interview guide was used to minimise leading questions. Categorisation of the interview data was done by asking two colleagues to independently code the first three interviews. However answers to interview questions on one occasion cannot be replicated on another because they come from different circumstances of production.

2.4.3.1.3 Transferability

In qualitative enquiry the individual is of prime importance and the focus is on description and explanation. A humanistic view and the view taken in this study is that every situation is unique and each has its own structure. The emphasis is on contextuality.

2.4.3.1.4 Piloting the Interview

The face-to-face interview was piloted with a group of four hospital pharmacists in order to gain experience and not to directly influence the response of participants. This pilot was undertaken as an action research project for the Diploma in Teacher Education for Medicine and Dentistry during January 2001. As a result, modifications were introduced, which included, planning the time for interview transcription was increased, and making use of field notes to recall issues raised during the interview.
2.4.3.2 Questionnaire development

Two questionnaires were used to examine pharmacists' characteristics of portfolio engaging behaviour. The first was based on the TPB and the second was to examine the personality traits of pharmacists and would inform the interpretation of the first questionnaire.

2.4.3.2.1 Pharmacist Portfolio Engaging Behaviour questionnaire

The questionnaire was developed in accordance with the guidance of Conner and Sparks (1996). The specification of the behaviour requires action, target, context and time-frame for the behaviour. This was constructed as:

"Portfolio engaging behaviour is to produce written records of my professional practice, at regular intervals (approximately monthly) over a year."

Multi-item measures were used to assess each component of the TPB. Items were devised using unipolar, and bipolar semantic differential scales. The items were initially generated from the theoretical background proposed by Conner and Sparks (1996) and the number of items for each component was driven by the operationalisation of their model. Participants were asked to respond on a 7-point Likert-type scale for all items.

Behavioural intentions to produce written records were assessed using six items divided into three subscales of a) Intention, b) Desire, and c) Expectation.

Attitude towards producing written records was assessed using five items. Participants were asked to evaluate their behaviour using a series of semantic differentials on a seven point scale. Two subscales concerning belief and evaluation of outcomes were added. The product of these subscales should give an indirect measure of attitude.

Subjective norm is described as the participant's judgment as to whether significant others, such as role models or close friends, would want them to perform the behaviour. This was measured using five items. Two subscales concerning normative belief and
motivation to comply were added. The product of these subscales should give an indirect measure of subjective norm.

Perceived behavioural control was assessed using four items and represents the overall control the participant perceives they have over undertaking the behaviour of recording accounts. Two subscales concerning perceived likelihood of occurrence and facilitating/inhibitory power were added. The product of these subscales should give an indirect measure of perceived behavioural control.

The questionnaire was then named the Pharmacist Portfolio Engaging Behaviour questionnaire (PPEBQ). The questionnaire was discussed with the Professor of Psychology (JW), Institute of Psychiatry, Guy's Hospital, and then revised. After being reviewed by four senior pharmacists and a dietitian through five iterations, the sixth version was again reviewed by JW and no changes made. This final version (Appendix 16) consisted of 27 items arranged in random order and five items representing demographic details.

The distribution of items for each scale and subscale is given in Table 2.2. The order of items in a questionnaire has been found to affect the response in certain contexts but this is inconsistent and other studies have suggested that mean scale scores do not differ significantly when items are arranged in random order or not (Goldberg, 1992; McColl et al, 2001).
Table 2.2 Item distribution for each scale and subscale of the Pharmacist Portfolio Engaging Behaviour questionnaire

<table>
<thead>
<tr>
<th>Main scale</th>
<th>Subscale</th>
<th>Questionnaire item number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioural intentions</td>
<td>Intention</td>
<td>8, 5</td>
</tr>
<tr>
<td></td>
<td>Desire</td>
<td>14, 11</td>
</tr>
<tr>
<td></td>
<td>Expectation</td>
<td>1, 23</td>
</tr>
<tr>
<td>Attitudes</td>
<td>Belief about outcomes</td>
<td>20 a), b), c), d), e)</td>
</tr>
<tr>
<td></td>
<td>Evaluation of outcomes</td>
<td>18, 4</td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>Normative beliefs</td>
<td>21, 25, 3, 13, 17</td>
</tr>
<tr>
<td></td>
<td>Motivation to comply</td>
<td>2</td>
</tr>
<tr>
<td>Perceived Behavioural control</td>
<td>Perceived likelihood of occurrence</td>
<td>19, 15, 24, 6</td>
</tr>
<tr>
<td></td>
<td>Perceived facilitating/inhibiting power</td>
<td>9, 10</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td>28, 29, 30, 31, 32</td>
</tr>
</tbody>
</table>

2.4.3.2.2 Big-Five questionnaire

The Big-Five instrument is a self-report questionnaire containing 35 bipolar adjectives arranged into a semantic differential scale. Each scale is scored on a 1-9 scale (e.g. introverted, 1-2 = very, 3-4 = moderately, 5 = neither, 6-7 = moderately, 8-9 = very, extraverted). Each of the five dimensions has seven associated bipolar adjectives (Table 2.3). Participants were asked to circle the number which would describe them at the present time (Appendix 17) for all the 35 adjectives. The Big-Five questionnaire was piloted with twenty CPD facilitators, comprising ten pharmacists and ten pharmacy technicians using the version published by Goldberg (1992), no changes were made as a result.
Table 2.3  Big-Five dimensions of Personality and associated adjectives from a single pole

<table>
<thead>
<tr>
<th>PERSONALITY TRAITS</th>
<th>SINGLE POLE OF ASSOCIATED ADJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SURGENCE (EXTROVERSION)</strong></td>
<td>Extroverted Energetic Talkative Bold</td>
</tr>
<tr>
<td></td>
<td>Active Assertive Adventurous</td>
</tr>
<tr>
<td><strong>AGREEABLENESS</strong></td>
<td>Warm Kind Cooperative Unselfish Agreeable Trustful Generous</td>
</tr>
<tr>
<td><strong>EMOTIONAL STABILITY(NEUROTICISM)</strong></td>
<td>Calm Relaxed At ease Not envious Stable Contented Unemotional</td>
</tr>
<tr>
<td><strong>CONSCIENTIOUSNESS</strong></td>
<td>Organised Responsible Conscientious Practical Thorough Hardworking Thrify</td>
</tr>
<tr>
<td><strong>INTELLECT(OPENNESS)</strong></td>
<td>Intelligent Analytical Reflective Curious Imaginative Creative Sophicated</td>
</tr>
</tbody>
</table>

() represent the terms used by Goldberg (1992).
2.4.4 Sampling

Different sampling strategies were used for the qualitative interviews and the quantitative questionnaire part of the study.

2.4.4.1 Interview study

In order to study health professionals within a secondary health care setting a subset of professionals was chosen. An existing sampling frame was not available for this part of the study. Therefore, a purposive (non-probability) sample based at Guy’s and St. Thomas’ NHS Foundation Trust was used. The Trust is made up of two hospitals which merged in 1993 and gained Foundation status in July 2004. A wide range of services operates from the two sites with approximately 1,250 beds.

From published governmental and professional documents it was known that the process of keeping a portfolio was likely to have been started in this group of health professionals. In order to use a manageable cohort, nurses, pharmacists, doctors and four Allied Health professions: physiotherapy, dietetics, occupational therapy and podiatry (from the twelve Allied Health Professions, Appendix 10) were selected.

Heads of service were asked to submit names of four possible volunteers in each profession (Appendix 11), giving a total of 28 professionals.

A stratified sample of volunteers was chosen to represent both genders from two distinct levels of experience making a total of 28 professionals. Two grades of staff (registered 1-2 years and registered > 8 years) were chosen (Appendix 12). Individuals registered for eight years or more need not have continual practice throughout that period. If a particular gender was not found in any professional group, then the same gender at both grades was sought. The interviews were carried out between August and December 2002. All participants signed the consent form (Appendix 14).
2.4.4.2 Questionnaire study

The two self-completion questionnaires were distributed together by three different methods to hospital pharmacists during the month of December 2004. Keeping professional practice records became obligatory in January 2005 (RPSGB, 2005). A convenience sample was obtained from: a) the pharmacists working in nine hospital sites in the London Workforce Development Confederation (LWDC), to obtain study participants, b) pharmacists attending a Diploma in Pharmacy Practice course at the University of London and c) pharmacists at the researchers’ employing hospital.

In the NHS, Workforce Development Confederations (WDC) are a network of organisations with the responsibility of developing the workforce needs of the health and social care sector. Twenty eight such confederations were established in April 2001, with a key role to change the way in which staff are educated (Grout, 2003). The LWDC comprises of five separate WDCs, with 31 hospital sites.

2.4.5 Data Collection

2.4.5.1 Interview study

Individuals were approached by email or telephone and asked if they would participate in the study. Subjects were allowed to choose the time and place of the interview. Each interview was taped using a portable cassette recorder (Sony TCM-453V with an ECM-F8 microphone) and field notes taken to support the transcription. At the conclusion of the interview the main points were summarised for verification by the subject. The interviews lasted between 40 – 50 minutes each. Each tape was transcribed and the transcription checked for errors, the interviewee was given the transcription for confirmation of content.
2.4.5.2 Questionnaire study

The two questionnaires were distributed together by hand through the three different routes (section 2.4.4.2). The nine hospital sites relied on the participant involved in Phase Two to distribute and collect the paired questionnaires. The researcher distributed and collected the questionnaires from the Pharmacy Department at Guy’s Hospital and from the group of diploma pharmacists attending a study day at the University of London, School of Pharmacy. The questionnaire returns from each site is detailed in Table 2.4. The mean response rate was 78%.

Table 2.4 Returns of paired questionnaires from different contexts

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>TOTALS</th>
<th>% RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OUT</td>
<td>IN</td>
</tr>
<tr>
<td>School of Pharmacy</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Guy’s Hospital</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>LWDC</td>
<td>89</td>
<td>61</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>172</strong></td>
<td><strong>134</strong></td>
</tr>
</tbody>
</table>

2.5 Data Analysis

2.5.1 Interview study

Discourse analysis was used to interpret the interviews. Discourse analysis uses the work of Michel Foucault who explained discourse as the way in which words that categorise an object, frame the way we understand that object (Bryman, 2004b). For example the way we discourse about pharmacy practice becomes a framework of how pharmacists function in the social world of health and in particular the world of pharmacy. The discourse becomes a framework to justify the power the government has in controlling pharmacists’ actions. The procedure for data analysis and verification is illustrated in Figure 2.2.
Chapter 2

Data Analysis

1. Study design
   Field notes taken to verify tape

2. Taped interview
   Interview summarised and confirmed by participant

3. Transcription of tapes
   Transcription verified by participant
   Checking of transcription by researcher

4. Highlighted substantive statements, ignoring repetitions and digressions

5. Using the questions relevant to the study aims a descriptive category was assigned to each highlighted statement in each transcript
   Transcripts 1-3 given to two colleagues to categorise and check against researcher category

6. Categories combined to generate sub-themes in each

7. Interpretation of the participants’ sub-themes relevant to study questions
   Interpretation checked by supervisor

= Stages of verification

Figure 2.2 Scheme of interview data analysis and verification
Chapter 2

Data Analysis

The transcripts returned from the participants were examined for substantive statements (those which were making a point) in relation to the first two aims of the study. These were highlighted using a marker pen and for the first three interviews this procedure was repeated in order to check the researcher's initial judgement (an iterative process). One colleague was then asked to complete this process with the first interview, to check the researcher's judgement of highlighted statements. Next the highlighted statements were combined under each question relevant to the study aims to generate a descriptive category. The highlighted statements from the first three interviews were also categorised by two other colleagues (Appendix 18). The categories were compared and a final set agreed through discussion. The researcher finally categorised all the interviews using the eight questions (Table 2.1) taken from the interview guide, into key themes.

2.5.2 Questionnaire study

Both questionnaires were analysed using the SPSS v12.01 for Windows to report descriptive and inferential statistics. Two main factors are used to measure the reliability of a questionnaire, the stability over time and the internal reliability. Internal reliability was tested using Cronbach’s alpha coefficient. The stability over time was not tested as participants in Phase One were not traceable. As a non-probability sample was used in this study, effect sizes were used to decide the significance of the findings, rather than to generalise from this sample to a larger population. The Spearman’s Rank Order correlation coefficient was used to measure the strength of the linear relationship between variables in both questionnaires. Parametric (t-test) and non-parametric (Chi-square and Mann-Whitney tests) techniques were used to examine differences between groups.
2.5.2.1 Pharmacist Portfolio Engaging Behaviour questionnaire

The wordings of some items were reversed to help prevent response bias. Therefore these need to be reversed before a total score can be calculated. The researcher and two colleagues separately analysed each of the 31 items to make sure high scores were associated with a positive outcome and thirteen item scores were reversed prior to final analysis. All items were summed in order to form a measure of the corresponding scale.

2.5.2.2 Big-Five Personality questionnaire

Each scale was added and each dimension was the sum of the seven associated scales.

2.6 Findings and discussion

In qualitative research whether the findings should be recorded separately to the discussion or together is open to debate, with no set standards (Wolcott, 1990). In this study these have been combined for a number of reasons:

a) it is easy to lose track of the context in the analysis,

b) the combination will allow verification by the reader as to whether the responses by individuals fit the interpretation,

c) absence of discussion raises suspicion that the analysis interrupts rather than enhances the narrative of the findings, but the responses from the interviews were not a continuing descriptive narrative.

There were two areas of interest in Phase One that were explored using an interview method. The first was to explore the views of health professionals on the use of CPD portfolios and the second was the meaning and roles of reflective practice. The questionnaire study examined the psychological characteristics of pharmacists using portfolios. The findings of the interview study will be discussed first.
2.6.1 Interview study

In 2002, a total of 23 professionals were recruited to take part in the study. This included seven professional groups within Guy’s & St. Thomas’ NHS Foundation Trust (Table 2.5). Two of the individuals were unable to attend because of work commitments and replacements were found. The planned 28 participants were not achieved because the podiatry department did not have any junior grades therefore only two were interviewed. There were no male occupational therapists qualified between 1-2 years, therefore only three were interviewed. Only one male Registrar was available for interview. Of all the participants, the researcher was acquainted with all the pharmacists, podiatrists and the specialist registrar. Interviews were undertaken with all 23 recruited. The interviews were transcribed, verified by interviewees and analysed. Due to technical recording problems one interview had to be repeated in 2003. Unrestricted access to the pharmacy department allowed one extra junior pharmacist to be interviewed.

The age of the participants ranged from 22 to 56 years, with a mean of 33 (± 8.4) years. The group included equal numbers of males and females, however an extra male pharmacist was included and there was only one male specialist Registrar (Table 2.5).

Table 2.5 Characteristics of health professions interviewed (n = 23)

<table>
<thead>
<tr>
<th>Health Profession</th>
<th>Registered 1-2yrs</th>
<th>Registered &gt;8yrs</th>
<th>Total Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist</td>
<td>3 Male, 1 Female</td>
<td>2 Male, 1 Female</td>
<td>5</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>2 Male, 1 Female</td>
<td>2 Male, 1 Female</td>
<td>4</td>
</tr>
<tr>
<td>Dietitian</td>
<td>2 Male, 1 Female</td>
<td>2 Male, 1 Female</td>
<td>4</td>
</tr>
<tr>
<td>Nurse</td>
<td>2 Male, 1 Female</td>
<td>2 Male, 1 Female</td>
<td>4</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>0 Male, 0 Female</td>
<td>2 Male, 1 Female</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>1 Male, 1 Female</td>
<td>2 Male, 1 Female</td>
<td>3</td>
</tr>
<tr>
<td>Specialist Registrar</td>
<td>N/A</td>
<td>1 Male, 1 Female</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>13</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>
The aim of the interviews was to gain an in-depth view of participants’ use of portfolios and the meanings and roles of reflective practice within the context of CPD.

The views on the use of portfolios were focused on five key themes (Table 2.6), each of these will be discussed with their associated sub-themes.

<table>
<thead>
<tr>
<th>Key themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaning of a portfolio</strong></td>
<td>Awareness of portfolio being mandatory</td>
</tr>
<tr>
<td></td>
<td>Undergraduate portfolio</td>
</tr>
<tr>
<td></td>
<td>A portmanteau of data for career progression</td>
</tr>
<tr>
<td></td>
<td>Portfolio design</td>
</tr>
<tr>
<td></td>
<td>Personal/professional collection</td>
</tr>
<tr>
<td><strong>Disclosure of portfolio</strong></td>
<td>Honesty in portfolio records</td>
</tr>
<tr>
<td></td>
<td>Disclosure motivates portfolio construction</td>
</tr>
<tr>
<td><strong>Support for portfolio maintenance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The effect on practice</strong></td>
<td>Increased confidence</td>
</tr>
<tr>
<td></td>
<td>Change in thinking pattern</td>
</tr>
<tr>
<td><strong>Individuals without a portfolio</strong></td>
<td></td>
</tr>
</tbody>
</table>

2.6.1.1 Views on the use of a portfolio

2.6.1.1.1 Meaning of a portfolio

From the interview data the meaning of a portfolio suggested a number of sub-themes. The first of these was the range of views about the mandatory nature of a portfolio. The group interviewed had a mixture of views about the mandatory nature of portfolios. From the 23 participants, the portfolio was currently thought to be mandatory for six practitioners in their area of practice (nursing, dietetics, occupational therapy and medicine), however three other practitioners (all male, 1 junior nurse, 2 senior dietitians) were not aware of this and of these three, one senior practitioner (dietitian) did not have a portfolio. For the remaining 14 participants portfolios were not mandatory currently but they thought this would be the case in the near future. All the health professions in England will, in the next few years, have to submit mandatory evidence of practice.
using some kind of portfolio system. In 2002 only nurses and specialist registrars had a mandatory system in place.

Four professionals were given various formats of portfolios during their undergraduate studies, but only three received them. For one this was due to an administrative error. The three that did receive the portfolio were from different professions (pharmacist, physiotherapist and nurse) and all were designed to enable the individual to reflect on practice. Both the physiotherapist and nurse received them at graduation, but the pharmacist was given the portfolio in the first year of her course and told it would help with obtaining a preregistration place. The motivation for the pharmacy student to keep records was directly linked to career progression and the indication of a competitive nature of obtaining a preregistration placement. There is no reported evidence that either of these have occurred in practice.

Some health courses use the portfolio as a method of assessment, as seen in the School of Medicine, Dundee (Davis et al, 2001), but it is not known how many health courses have instituted such an approach. The educational sector has used this method of assessment for many years (Seldin, 1991). This is supported by the Quality Assurance Agency (QAA for Higher Education, 2001) with the introduction of the "progress file" a form of portfolio, into higher education. A Progress file is a document charting the progress of an individual. It contains an institutional record of learning and achievement; and an individual’s personal records of learning and achievements.

The common view of a portfolio was a collection of evidence for job progression. This was similar to keeping a “portmanteau”, which would be opened when changing jobs (see section 2.6.1.1.1). This would also fit with the term "proto-portfolio" used in the teaching profession (Tomkinson, 1997) and has been described as a collection of documents without any organisation or narrative. A record of course attendance and study completion certificates were common among participants. In some cases, this
would also include copies of the Individual Performance Review performed by their line manager. One physiotherapist used this approach to motivate junior staff to maintain their portfolios:

“So we put the appraisals in the file, but we do try and get all of the staff that we are appraising to bring their file to the appraisal, so that we can actually, see how they’re getting on with it and it’s a little bit of an incentive to make people use it and put things in it.”  (15-165 senior physiotherapist)

For other participants, the portfolio was described as a reference source for career development. There was concern about keeping the portfolio updated and relevant, as individuals were concerned with its use for job selection. Records of learning from student placement experience were only valid for the first job interviews and thereafter were of little if any use.

“All of our placements that we did, all the experiences that we did as students at the beginning, middle and end, sort of Individual Performance Review, talking about what you want to get from it and what you’re going to get, how you’re doing and than at the end how you’ve done and so we were encouraged to put those in there and any courses that we went on as students, which again are going to be limited and all of our learning experiences, so we wrote those down in there, which was done, as I say was very useful for interviews and now they aren’t.”  (11-95 junior physiotherapist)

This very selective way of keeping learning records without adding experiential records suggests a compartmentalising approach to learning, using each stage of career development as a time to close the lid of their portmanteau. This type of collecting activity suggests a surface approach to learning using the portfolio. The notion of having a collection of evidence over the professional’s lifetime was not common among this group of individuals.

A large proportion of the cohort had a portfolio of some description (20/23). Three individuals had no portfolio of any kind and were from different professional groups (dietitian, occupational therapist and pharmacist). All were senior male practitioners.

* Each quotation is coded by the interview number followed by the line number of the text.
The majority (16/23) were using their own format of portfolio (Table 2.7) and the remaining four individuals were using a portfolio supplied by their profession (2 occupational therapists, a podiatrist and a physician). Senior females were found to have their own portfolio design compared to senior males.

Table 2.7 Portfolio usage by health professions (n = 23)

<table>
<thead>
<tr>
<th>Total</th>
<th>%</th>
<th>Senior</th>
<th></th>
<th>Junior</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>No Portfolio</td>
<td>3 (13)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own portfolio design</td>
<td>16 (70)</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Professional Body portfolio</td>
<td>4 (17)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The design of the portfolio ranged from a collection of continuing education certificates obtained during their career, the so called "Portmanteau" type of portfolio (n=12), to a structured collection of professional and personal data with evidence of integration of practice directed by learning needs, termed a "Reflective" portfolio (n=8, Table 2.8). The portmanteau format compares favourably with the "dossier" described by Smith and Tillema, (2001) or the "Proto-portfolio" used in the teaching profession (Tomkinson, 1997). These authors suggested that the reflective type of portfolio had to be voluntary. This was not the case here, as two of the nurses in this study had a reflective portfolio that was mandatory for their profession.

Equal numbers of women and men had a portmanteau design (Table 2.8). It was more common to find females with a reflective design. From the group of individuals who used their own portfolio, five participants altered the official format to suit their own taste in design. This varied from discarding the official one completely, to altering various sections of the portfolio.

The presentation of the portfolio was important to one newly qualified occupational therapist, who believed a typed format of the portfolio, was a more professional approach to presenting data.
An alternative view of the portfolio was a global view of self, and these individuals saw the portfolio as having two sections: the professional and the personal part:

"There is also a component that has a personal side to it which doesn’t necessarily have to be shown to the person, but it’s also in some recommendations that you have a personal portfolio, which is like your life, which kind of ties in with your professional career in some way. Which is you know quite interesting, so there’s two schools of thought, some people just keep it professional, only some have a personal element to it as well. So my belief is it’s almost like a directory of my professional life and it tells your story."

(8 - 125 senior nurse)

This participant suggested that there is a dichotomy of views in the nursing profession. Those that include a personal account linked to their professional activities and those that do not.

Some practitioners used a formal written guide for recording reflective accounts, which are part of the portfolio (section 2.6.1.2.1.3). These accounts were then felt to be too personal to disclose to a manager (section 2.6.1.1.2).

"You actually have certain sheets that you can write things in that can just remain personal, that you don’t have to take to your manager, but it’s just to help you reflect a little bit."

(15 - 187 senior physiotherapist)

The personal/professional issue has been raised by other authors e.g. Richardson, (2002) who have suggested that practitioners are deemed to be unprofessional if they are not objective and should therefore separate out the personal and professional. This division between personal and professional has been questioned by Moon (1999a) who suggested that professional development runs alongside personal development.

The idea of an external person making a judgement on personal written accounts in a portfolio was greeted with suspicion, as illustrated by a junior occupational therapist:

"I mean if my file gets taken off I’d like to think that they’re just checking up on the fact that we are reflecting on our practice, I would not like to think that they are analysing on what I’ve reflected on."

(3 - 638 junior occupational therapist)
Table 2.8 Professional background and design of portfolios used

<table>
<thead>
<tr>
<th>Health Profession</th>
<th>PORTMANTEAU Portfolio</th>
<th>REFL ECTIVE* Portfolio</th>
<th>Total interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n Male</td>
<td>Female</td>
<td>n Male</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dietitian</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nurse</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>0</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Specialist Registrar</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>12</strong></td>
<td><strong>3</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

*Based on the categories described by Smith and Tillema (2001; Appendix 3)

N.B. Three senior male participants did not have a portfolio (dietitian, occupational therapist and pharmacist)
2.6.1.1.2 Disclosure of portfolios

When participants were asked if they would disclose their portfolio to others, two sub-themes emerged:

- honesty in portfolio records
- disclosure motivating portfolio construction

Overall most individuals were happy to share their portfolio with others. What was clear from a number of participants' responses was that parts of the portfolio would be removed if they had to disclose the contents, and guidelines were required to produce the correct entries for disclosure. A junior dietitian was concerned with disclosure as it seemed to be showing others a very personal side to her activities (see section 2.6.1.1.1). The worry concerned disclosing areas of learning, which could be interpreted by others (e.g. managers or colleagues) as deficiencies in her abilities as a professional. When asked about sharing the contents of her portfolio this participant replied:

"No...people can be quite protective of their portfolios. Possibly because they might have written things in there about I don't know learning or reflecting on something they've been on and didn't want to show other people what they have learnt, that they didn't know before or I'm not too sure, but it almost seems like its your own personal diary or something. It's almost I feel a little bit like that, you don't say oh can I have a look through your portfolio? because that would actually be very helpful." (20 - 168 junior dietitian)

The paradox was that she felt it would be helpful to view other colleagues' portfolios in order to conform to a standard.

There was diverse opinion in this cohort as to whether disclosing portfolio data should be in a group setting, or in a one-to-one situation:

"I wouldn't pass it around the staff room but if somebody asked me to go through it one-to-one I wouldn't mind, because you know I if I felt that it would benefit them from telling them, because they might learn from it." (11 - 350 junior physiotherapist)
One individual also gave an example of the paradox in the meaning of honesty, in which she explained she was an open person and yet would not disclose certain documents within the portfolio. What these documents might be was not discussed at this stage.

"Disclosing information that's in there and other people seeing it? No, because I think I'm quite an open sort of person anyway, so I can talk about things easily and I suppose I would take out what I wouldn't want anyone to see."

(3-225 junior occupational therapist)

Disclosing portfolio data for others to view can be seen as providing evidence of practice and therefore demonstrating accountability for actions. Accountability is central to clinical governance in the NHS. The term accountability has been divided into two meanings (Fish and Coles, 2002). One is for professionals to account for their actions and the second is being held to account, a judgement of what has been done. The latter is a form of regulation, whether by oneself or another agency, a form of disciplinary control. The notion of being controlled was not directly articulated by these participants. Participants were keen to have some sharing of learning and believed that portfolio data would act as a catalyst for discussion. The role of the peer group was seen as determining what is "worth" learning and even as an adjudicator of ideas, as there is no guidance regarding what should be recorded within a portfolio. This role of peers is similar to the group socialisation theory, where the claim is made that modelling is an important human characteristic and major mode of learning (Austin, 2002).

With the focus on using mandatory portfolios, there were a number of individuals who suggested that the fabrication of records may become an issue. The comments were from four senior practitioners (a pharmacist, 2 dietitians and a physiotherapist) and included the following:
"I suppose that you might think, I should have understood all that immunology so therefore I could say how good it was, I'd be less inclined to say well, actually I didn't understand most of what they'd been saying, oh yeah it's been a really good study day and it was worth the day out, a lot of it was worth it but a lot of it was over my head but you might be less inclined to actually tell the truth I suppose."

A senior practitioner suggested two ways of changing records for assessment. One was removal of material and the other was addition of false data which may include copying other colleagues' data, i.e. plagiarism. The Royal Pharmaceutical Society of Great Britain has said it will be checking for plagiarism by monitoring a number of records submitted each year (RPSGB, 2003), but plagiarism was not defined. Recently Johnston (2003) illustrated the confusion of not only trying to define plagiarism, but also trying to distinguish between cheating, plagiarising and collusion in the context of higher education. Eventually he suggested clarifying and identifying different kinds of plagiarism as a starting point. The disclosure of the portfolio was suggested by a number of participants to be what would motivate them into actually starting one. One senior pharmacy practitioner remarked:

"I think that's really the kick-start I might need yes. I mean to be honest; you can always find an excuse not to do a portfolio. A number of tasks are seen more pressing, at the time may force you either in work time and outside work time to dedicate some time to it, so that's good I suppose."

This external motivation may lead to a superficial approach to the learning purpose of the portfolio.

2.6.1.1.3 Support for portfolio use

Support for maintaining and developing portfolios was given in the form of protected time and/or mentorship. Only a minority had any form of protected time; three occupational therapists and one physiotherapist, and mentorship was not applied to all individuals in a professional group. All participants with a mentor had a portfolio of some description, but demonstrated variation in the type used (Table 2.9).
Table 2.9 Number of health professionals with a mentor and type of portfolio used

<table>
<thead>
<tr>
<th>Health Profession</th>
<th>Number of individuals with a mentor</th>
<th>Type of portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist</td>
<td>2</td>
<td>1 Reflective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Portmanteau</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>1</td>
<td>Reflective</td>
</tr>
<tr>
<td>Dietitian</td>
<td>1</td>
<td>Portmanteau</td>
</tr>
<tr>
<td>Nurse</td>
<td>3</td>
<td>2 Reflective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Portmanteau</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>0</td>
<td>2 Portmanteau</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>3</td>
<td>2 Reflective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Portmanteau</td>
</tr>
<tr>
<td>Specialist Registrar</td>
<td>1</td>
<td>Portmanteau</td>
</tr>
</tbody>
</table>

As the occupational therapy Department promoted the use of portfolios due to impending mandatory requirements, all therapists were provided with an initial period of time to start developing portfolios but there was no identified facilitator or mentor to continue with this. The physiotherapy Department holds in-service training events, which is protected time. This can be used for maintaining a portfolio, however individuals could not always do this because of pressure from patient work:

"I don't often have the chance to sit down and say this is what I've learnt and this is what I've to progress, which I should do."

(11-137 junior physiotherapist)

Portfolio development has been included in the pharmacy Department in-service training programme. In addition, the department has a number of CPD facilitators available for individuals to discuss their portfolio. No protected time is given for maintaining records, but time is made available for one-to-one facilitation, when necessary. Even with this support, not all pharmacists have used this facilitation option. The nursing profession has developed a more formal clinical supervisor system and this does give indirect verbal support for the use of the portfolio, although it is unknown how this is accomplished. The use of a clinical supervisory system in this group of health professions was inconsistent (Table 2.10) and was seen by participants to be separate to a mentor for portfolio development. Half of the participants were aware of
clinical supervision (see section 2.6.1.2.1.2) as a concept but very few actually had a supervisor (Table 2.10).

Table 2.10 Mentorship and clinical supervision for health professionals

<table>
<thead>
<tr>
<th>Health Profession</th>
<th>Individuals with a mentor</th>
<th>Individuals aware of clinical supervision</th>
<th>Individuals with a clinical supervisor</th>
<th>Total number of individuals with a Portfolio</th>
<th>Total interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Dietitian</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Nurse</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Specialist Registrar</td>
<td>1*</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>11</strong></td>
<td><strong>10</strong></td>
<td><strong>5</strong></td>
<td><strong>21</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

*Mentor was also the supervisor

2.6.1.1.4 The effect of portfolios on practice

When asked to describe what effect their portfolio had on practice, there was a limited response from this group, despite eight participants having described their portfolio as a reflective type. The two main themes that emerged were that portfolios:

- increased confidence
- produced a change in thinking pattern

The change in confidence was achieved through updating knowledge, skills and identifying areas of weakness:

"It's encouraged me, yeah maybe it's made me more confident in my practice it hasn't yet as you changed the way I've done things. Maybe it will in time, but it's when I've looked back on what I've done, I've sort of thought yeah I forgot about that, that was quite good, so it's made me sort of more confident about what I do in future maybe." (3 -266 junior occupational therapist)

Along with the more confident approach it was clear that it was premature to look for any change in practice. For this participant the portfolio is becoming a confidence device by recalling positive past experience (see section 2.6.1.2.1.1).
A change in thinking was attributed to a change in how often reflective thinking was accomplished consciously. In the more experienced practitioner this was often not written down. It was thought by some that it was more important for students to consciously reflect, as they were perceived as not able to have insight into the process of reflection (see also section 2.6.1.2.1.3). This was illustrated by a senior physiotherapist who acknowledged that a portfolio was useful for something but had not changed his practice:

“No not really, I think it does make me reflect more and in a way you could say then it makes me learn from experiences more, but I think the level I’m at now I probably do that anyway mentally even if I don’t actually put it into any written form. With the juniors, I think probably it’s that sort of thing is more useful. I think they do it because they have to, I don’t think they like doing it, and they certainly do it when they’re coming up for interview but I do actually think its quite a useful experience for them because they don’t necessarily have the insight into how to reflect on things or how things are going or how to do things differently or learn from experiences, and sometimes they need a little bit more guidance and writing things down can pull some of those things out.”

(15 - 472 senior physiotherapist)

2.6.1.5 Individuals without a portfolio

Three senior practitioners did not use a portfolio of any description. One practitioner (dietitian) had obtained two portfolios in the past without making any use of them. The first portfolio he bought from his professional body. The second was provided free of charge from his line manager. The same practitioner indicated that this recording process needs to become routine practice before it would be done at all.

The second practitioner (pharmacist) was settled and comfortable is his present practice. He believed new learning experiences in his field of practice were very few and so there was no need to record them. Using a portfolio for career progression was also not required because he had not made any plans for the future.

The third practitioner (occupational therapist) was aware of his profession's portfolio but claimed he could not put one together within the work place, without giving any specific reason why; although time was implicated.
2.6.1.2 Meanings of reflective practice

In order to gain an understanding of participants' background with respect to reflective practice, the group were asked about any formal training they had received. In addition, the meaning of reflective practice was explored by the following four questions:

- What does reflective practice mean?
- What effect has reflection had on individual practice?
- What are the barriers to recording reflection?
- What emotional elements are recorded in reflective accounts?

Formal training in reflective practice is currently available to dietitians, pharmacists, nurses, physiotherapists and occupational therapists. A small number of practitioners (9/23) from this cohort had attended such training. It was more common for the junior grades and females to have attended such a programme (Table 2.11), with no senior males attending such training. There was a trend for participants who had attended a formal course to use a reflective type of portfolio. Seven participants had not encountered the term reflective practice (3 pharmacists, a podiatrist, nurse, dietitian and physician) all were senior except for one junior pharmacist.

Table 2.11 Professionals who had attended a formal programme in reflective practice

<table>
<thead>
<tr>
<th>Health Profession</th>
<th>Total interviewed</th>
<th>Number attending a formal course in reflection</th>
<th>Type of portfolio used</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist</td>
<td>5</td>
<td>2</td>
<td>Reflective</td>
<td>Junior(f)</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>4</td>
<td>1</td>
<td>Reflective</td>
<td>Junior(f)</td>
</tr>
<tr>
<td>Dietitian</td>
<td>4</td>
<td>1</td>
<td>Portmanteau</td>
<td>Junior(f)</td>
</tr>
<tr>
<td>Nurse</td>
<td>4</td>
<td>2</td>
<td>Portmanteau Reflective</td>
<td>Junior(m) Senior(f)</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>2</td>
<td>1</td>
<td>Portmanteau</td>
<td>Senior(f)</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>3</td>
<td>2</td>
<td>Reflective</td>
<td>Junior(f) Senior(f)</td>
</tr>
<tr>
<td>Specialist Registrar</td>
<td>1</td>
<td>0</td>
<td>Portmanteau</td>
<td>Senior(m)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>23</strong></td>
<td><strong>9</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The second aim of using interviews was to gain an in-depth view of participants' meanings and roles regarding reflective practice within the context of CPD. From the interview data the key themes, sub-themes and categories are displayed in Table 2.12.
The key theme of the "meaning" of reflective practice was associated with five sub-themes (Table 2.12), and which are discussed in the next section.

**Table 2.12 Data analysis template for the views of participants regarding the meanings and roles of reflective practice within the context of CPD**

<table>
<thead>
<tr>
<th>Key themes</th>
<th>Sub-themes</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meanings of reflective practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewing practice</td>
<td></td>
<td>Altruistic practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Triggers to reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical supervision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Written reflection</td>
</tr>
<tr>
<td>Unrecorded thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td>Process as cyclical, linear or hierarchical</td>
</tr>
<tr>
<td>Labelling practitioners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping with work</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effect of reflection on professional practice</strong></td>
<td>Improved memory recall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dealing with patients</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changing explicit to tacit practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motivating junior staff to change practice</td>
<td></td>
</tr>
<tr>
<td><strong>Barriers to written reflection</strong></td>
<td>Allocation of time for written accounts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imposing reflection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reluctance to disclose material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing skills</td>
<td></td>
</tr>
<tr>
<td><strong>Emotional descriptions in reflective accounts</strong></td>
<td>Objective approach to practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Difficult to record emotion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A coping strategy</td>
<td></td>
</tr>
</tbody>
</table>

2.6.1.2.1 Reviewing practice

Reviewing practice was the most persistent theme emerging from participants' accounts. Reflective practice was seen as a way of mentally questioning and making judgements about one's own practice. In the case of a nurse manager this was also linked to everyday life events outside of the work environment (see also section 2.6.1.1.1) as she remarked:
"You can reflect on life if you like, but it's looking back on something that's happened to you and looking at what happened in that particular incident, how it affected you and what the outcome of that reflection is. To say could I or should I have done something differently in this situation, that could have benefited, if we're talking about patients." (8-332 senior nurse)

Other participants did not mention using reflection in other aspects of life. Commonly, junior participants reported that reflection was a process of reviewing practice with the aim of changing some aspect of it. A number of participants felt that this was routine practice for all health workers, as illustrated by this junior pharmacist:

"I would probably call anyone who works in the health service a reflective practitioner because you know you're doing that all the time." (7-327 junior pharmacist)

This regularity of analysing practice was confirmed by a junior nurse who felt it would be irresponsible not to do so. In addition she attributed an altruistic feeling to this improvement in practice; something that was not mentioned by any other participant. This was in contrast to a senior practitioner who suggested that reflective practice was a good idea, but it was not a routine exercise when it should be:

"It's like most things it's (reflective practice) a very nice idea... as a profession we should be analysing what we do on a regular basis." (14-374 senior physiotherapist)

In describing this sub-theme of reviewing practice, three categories emerged, i.e. triggers, supervision and written reflection. These are discussed in the next sections.

2.6.1.2.1.1 Triggers to reflection

The triggers to reflection were often described as a negative event. The negativity was often the outcome of some action by the practitioner, and a way to understand the sequence of events that occurred in order to improve on future performance, rather than reflecting on any negative feelings the practitioner may be having in practice. Although there would be occasions when both occurred and one could be the result of the other.

Positive events were thought to be automatically put into regular practice. There did not
seem to be a need for the same conscious activity of analysis that goes with negative
triggers, as illustrated by this comment:

"I don’t think I reflect on those (positive events) as much. I think if something
goes really well I will incorporate it into my practice and do it a lot more but
I’m not sure that I would reflect on it as much as say if something went really
badly."

(12-364 junior physiotherapist)

Positive triggers were also more likely to be recorded when discussed with senior
colleagues, who would encourage a balance of events to be recorded:

"I’ve been encouraged to write down what has gone well as well, because then
you could get very negative about what you do, so yeah I’m quite good I
distinguish between my strengths and weaknesses in my reflective logs yeah
definitely."

(3-34 junior occupational therapist)

Other descriptions of triggers to reflection have been events considered significant by
the individual, and linked to a set of feelings which participants would not divulge.
The current focus on clinical governance was also raised by a senior occupational
therapist and a registrar as being a trigger for reflection. The notion that the reviewing
process could lead to a change in practice (see section 2.6.1.3) was mentioned by a
number of participants without specific details being given.

2.6.1.2.1.2 Clinical supervision

The questioning of practice was linked to other forms of reviewing performance, such
as clinical supervision, critical appraisal and clinical reasoning. The notion of clinical
supervision being practised by health professionals was variable in this cohort. Five
participants said they had this structure in place, although it was assumed to be common
practice in all professions.

"I think for us it ties in a little bit with clinical supervision which again is in
nursing and it runs in other professions. It is a kind of a formal meeting, that
you might have with someone more senior where you do reflect. It’s quite useful
then to write up some of those sessions, you know, if you have a dilemma with a
member of staff or with your boss for example."

(8-211 senior nurse)
Clinical supervision has many definitions depending on the profession asked. The essential aspects are that it should ensure patient/client safety and promote professional development (Kilminster and Jolly, 2000).

Clinical reasoning as part of reflection can be seen as a technical-rationalist approach to professional judgement. Professional judgement has been investigated in the past (Fish and Coles, 2002) and in addition to clinical supervision has been defined in many ways, including clinical decision making or diagnostic clinical reasoning, as illustrated by a senior participant:

“So that will make people reflect, it’s part of looking at obviously what we call clinical reasoning and our notes, our written notes hopefully reflect clinical reasoning so that all the time you can justify why you’re doing what you’re doing and why you’re modifying treatments.” (15-393 senior physiotherapist)

The term evidenced-based practice was linked to reviewing practice by some participants.

“Well as I understand it, it’s just analysing what you do in terms of its effectiveness basically, I guess analysing, I think. Well in terms of whether what you’re doing is backed up by any evidence”. (14-357 senior physiotherapist)

2.6.1.2.1.3 Written reflection

Documentation of the reflective events was formalised in some cases. A reflective proforma was used to direct an individual’s thoughts into recording particular aspects of their reflective process. This also allowed one senior practitioner to learn how the reflective accounts were structured, even though he did not record his own events. Why this participant did not formally record his reflective events was not clear. However it may represent a shift from reflecting-on-action (common for junior practitioners to do) to reflecting-in-action. The latter situation being dependent on the experience of the practitioner. The junior practitioners suggested that reflective practice was mainly used in clinical work.

“You don’t need to reflect as much on managerial stuff as you do ... when you’re dealing with practical work.” (3-692 junior occupational therapist)
Findings and discussion

Not a view shared by the senior practitioners as illustrated by a dietitian:

"This year I've gone back to diabetes with a business plan and said this is how things work, this is how things are and this is what I need in order to maintain what I've got. So I'm used to that sort that style of writing, which I suppose is reflective." (1-287 senior dietitian)

2.6.1.2.2 Unrecorded thinking

The second sub-theme (Table 2.12) that emerged was that the act of reflection involved thinking over a situation or incident, but rarely involved writing anything down. For some it was a new method of thinking which needed to become habituated into practice.

"Appreciating that intuitively I have done it in my head or have done it in the past, I just haven’t written it down. I have a constant repertoire of thoughts about an issue or I have to see the consultant, that sort of thing or think through what are the issues and go round and round in my head, may be write down key things". (4-452 senior occupational therapist)

The need to formally record these events was questioned by one of the juniors even though using a structure was felt to be a good idea.

"Basically they sort of give you a template of the forms, so was there an incident or a treatment or you know an adverse incident or whatever.

And then what you did, how you reacted to it, what you think you did right, what you did think you did wrong and then all sort of in one section. Then how that has changed or improved or impacted on your practice really. I think it’s a good idea but I also think you do that anyway. I don’t really see why you have to put that down on paper." (12-279 junior physiotherapist)

This personal thinking process, that is often difficult to record, illustrates Schön's view of reflection-in-practice (Schön, 1987).

2.6.1.2.3 Reflection as learning

The third sub-theme was the notion that reflection is involved in learning and in particular that it was a way of experiential learning. This was raised by a small number of practitioners. One example of this also illustrated that some practitioners prefer to reflect after the event has finished, and do not like to reflect during the event:
"To me it means sitting back and thinking about what you've done and how you could learn from it, like do it better or why did it go wrong or could it have gone better? It's getting yourself away from the situation and thinking about it afterwards. I tend to do that, ... I find it very hard to think on my feet."
(16-147 senior dietitian)

In one case, a practitioner recorded the learning from a particular event but then decided it would only be reflective if the record included details of how he would apply this to other situations:

"I made a copy of the charts and you know, wrote on what I learnt from the intervention itself. But of course I haven't written reflection to see if what I learnt, how I am going to apply it to other situations as well; to see if I am to be consistent, if it would improve my practice."
(10-103 junior pharmacist)

The issue of undergraduate students learning by reflection was commented on by a number of practitioners. A junior nurse remarked that she was left to her own devices at university when told to record events. The assumption at her institution was that all students knew what reflection was about:

"And I think they just took it for granted that we were kind of intelligent and sensible enough to reflect on our practice. And we certainly did that a lot through our assignments. They certainly involved your personal experiences on the wards, you were very much reflecting. Sometimes in a very directive way, you were told this is what you're going to reflect on."
(17-176 junior nurse)

Each of the three participants' quoted above seem to have described a different model of the reflective learning process which can be postulated as: a) linear, having to come away from an experience to think about it; b) cyclical, a process of description, what was learnt, how it could be useful in other situations and c) hierarchical, being told what to reflect on and how.

Opposing views about the ability of undergraduates to undertake reflection were given by one senior practitioner, for whom a lack of experience was seen as the stumbling block for undergraduates to reflect fully.
"I do actually think it's quite a useful experience for them (students) because they don't necessarily have the insight into how to reflect on things, ... or how things are going or how to do things differently or learn from experiences and sometimes they need a little bit more guidance. And writing things down can pull some of those things out."

(15-480 senior physiotherapist)

2.6.1.2.4 Labelling practitioners

The fourth sub-theme concerned the act of attaching specific labels to how practitioners learn. Three practitioners from Dietetics commentated that they had undertaken a Learning Styles questionnaire (Honey and Mumford, 1986) assessment in order to identify their particular way of learning. This was then used to suggest that from the four labels attached to learning styles, reflective learning was the preferred way to improve practice.

2.6.1.2.5 Coping with work

The last sub-theme for this section on the meanings of reflective practice was the notion that reflection may help with the pressures of work, as well as trying to improve practice.

"Just with the main aim of improving practice or sometimes just you know eliminate your distress because of the situation was really worse or really bad."

(21-226 junior nurse)

This was the only participant to suggest that reflection may affect pressures of work. The reason for this is unclear and may be that other practitioners who undertook this process did have a feeling of release but found it difficult to verbalise in an interview.

This therapeutic value of recording events has been reviewed (Bolton, 2001b; Pennebaker, 2002) and recently there has been evidence published that wound healing times are reduced in patients writing reflective narratives (Banbury, 2003).

2.6.1.3 Effect of reflection on professional practice

The second key theme was what effect written reflection has had on practice (Table 2.12). Half the participants were able to describe a variety of effects. These were general in nature and it was difficult to obtain specific examples. It was common to
report that all areas of practice had been affected. Occupational therapists, physiotherapists and pharmacists were more commonly able to describe practice changes than the other professions. General comments about changes in practice from junior members of the cohort were more common than from senior members. Overall four sub-themes emerged which are discussed in the next section (Table 2.12).

2.6.1.3.1 Improved memory recall

A written reflective account was a recall tool particularly for junior staff. This became important when attending job interviews, as interviewers would ask for evidence of practice and in particular how an individual managed a particularly difficult situation and learnt from it (see section 2.6.1.1.1). Linked with this process of memory recall was the notion of reflection as a method of allowing thinking to become clearer. The clarity of thinking was associated with having to make a written record of the event.

"The actual act of it (writing) no. My thinking process has made me change. The fact that I've written it down just helped me to get it clear in my head, but I wouldn't say the actually act of writing it down has made me change. It's been my thought process."

(3-422 junior occupational therapist)

2.6.1.3.2 Dealing with patients

A limited number of participants mentioned that their ability to deal with patients had specifically improved as a result of documenting reflective accounts. All the participants so responding were of a junior grade, but one individual said this improvement in practice was done without any formal record:

"I think with particularly aggressive patients'. It's helped me learn a) not to make presumptions about people before you meet them and b) that you have got a very supportive team out there and they help you out with some of the critical incidences."

(11-265 junior physiotherapist)

In contrast, the issue of losing a humanitarian approach to patient care was raised even with reflecting on practice. A junior and senior participant explained that the health
system was in danger of dehumanising patient care and a conscious effort had to be made not to regard patients as a commodity, because of the fast throughput of patients:

"It's quite difficult to write about your own practice most of the time when I am thinking of even having written sometimes about my practice, working in a hospital, because you lost your sincerity with the persons. You just become like a, I'm on duty, have to do this and that and you forget that in front of you is a person in a new place in an environment without anything."

(21-451 junior nurse)

This dehumanising approach was also suggested by a senior practitioner who saw other individuals in health care becoming too mechanistic in their approach to practice.

"Because you can follow a check list approach which some ... quite like doing nihilistic things. I think many ... are fairly unimaginative and like to think black and white and not grey."

(9-191 senior pharmacist)

2.6.1.3.3 Changing explicit to tacit practice

The third sub-theme was that recording reflective accounts allowed a student to move from an explicit to a tacit method of practice (see sections 2.6.1.1.4, 2.6.1.2.1.3 and 2.6.1.2.2). Juniors were saying that having to record numerous events as a student had allowed them to practice more instinctively without the need to formally record events.

"I do it a lot, I did it as a student I did a lot of reflection, had a diary, a reflective diary on a daily basis. So I suppose that's got me into the habit of thinking about things and how I'd improve it, and I think it's very important. I strongly agree with reflective practice and you know none of us get it right the first time do we? So for me, I do it regularly and do make changes to what I do. I put those into practice."

(20-215 junior dietitian)

This illustrated the concept of reflection on-action moving to reflection in-action. The view that experienced professionals do not have to record reflective accounts was also endorsed by a senior nurse who had undergone very strict recording practice in a military hospital prior to entering the NHS and this had now transformed into the tacit approach to his practice, as he remarked:

"Well that's the reason why maybe I don't worry about that any more. We did enough of that in the air force. We logged everything, it was like a lot of military that's where some of these things came from the military..."
Chapter 2

Findings and discussion

Researcher: Do you think your RAF training has influenced you to think like that?
Yeah, yeah I automatically think like that. (18-419 senior nurse)

2.6.1.3.4 Motivating junior staff to change practice

The last theme to emerge was the process of recording reflective events as a motivational tool to change practice. This was particularly the case for junior staff, because senior members felt that juniors lacked the experience to suggest alternative ways of practice.

"It's another stage in the process really of reflecting but I suppose it's just getting more ideas about ...they've (students) got so far then if they write it down then I think it adds to their motivation remembering that issue again and then changing their practice." (4-747 senior occupational therapist)

This view of lacking experience was not shared by juniors from other professions (e.g. nurses and dietitians, see section 2.6.1.2.3) who had undertaken numerous reflective pieces of work.

In terms of changing junior's practice, one senior therapist thought written reflection was a good motivational tool, using memory recall as a reinforcement to change practice, a form of behaviourist teaching:

"I think it does make me reflect more..... With the juniors I think probably that sort of thing is more useful. I think they do it because they have to. I don't think they like doing it. And they certainly do it when they're coming up for interview." (15-473 senior physiotherapist)

The notion that juniors do not like the process of reflection has been found previously by other authors (Richardson, 2002). This may be a discipline-specific view as the juniors from some professions enjoyed the reflective elements of practice. This may be due to the non-compulsory nature of this activity (see section 2.6.1.4.3).

2.6.1.4 Barriers to written reflection

The third key theme was concerned with what are the barriers for written reflection (Table 2.12). This produced five sub-themes described in the next section.
2.6.1.4.1 Allocating time for written reflection

A common barrier to written reflection was the ability to allocate time during daily work for such an activity. The majority of the cohort did not have protected time for writing reflective records. One junior physiotherapist reported having protected time but this was not confirmed by other colleagues. All occupational therapists interviewed reported they were allocated time, but none of the other professional groups were allocated any protected time. Even though protected time was given to all occupational therapists it was rarely used. The reason given for this related to service delivery. Patient workload was always prioritised over recording reflective entries, as illustrated by the following:

"We are allowed to have the time but I think the barrier of actually setting aside that time, you're busy with your patients and your clinical case load. So I think that is the main barrier, is actually time." (5-151 senior occupational therapist)

This was confirmed by a junior practitioner who also indicated feelings of guilt associated with the problem of time, when she said:

"I don't always use it I must admit if I'm really busy. I won't use it, but when I do use it, I do feel guilty about using it in clinical time, when that time could be spent with patients you are given." (3-478 junior occupational therapist)

2.6.1.4.2 Motivation

The second sub-theme was concerned with motivational issues. Self-motivation was raised by some of the participants who blamed the pressure of work as being a negative influence for any written work. Other motivational issues included the need to be relaxed when recording events, and those practitioners who felt too tired to undertake recording of reflective events after work.

"Sometimes it was quite difficult when you were shattered and be asked how do you think that went and go and write about it." (20-508 junior diettian)
One explanation for this lack of self-motivation given by the participants was that recording reflection was not a habitual event and was seen as something different to routine practice (see section 2.6.1.2.2).

The use of experienced colleagues to discuss events was reported by some participants to help motivation. This would allow the junior practitioner to see the event recorded in more than just a negative aspect.

"But then as long as you reflect in the positive way and that's why I think discuss it before you write it all down. If you discuss it with your peers or your seniors they can drag out other things from the experience. If it had been a negative experience you might have ignored because you're just thinking no it all went wrong. Where as with talking it over again they're going to get some positive feedback." (11-486 junior physiotherapist)

2.6.1.4.3 Imposing reflection

The compulsory nature of reflective recording was raised. Some participants felt that there was too much emphasis on reflection, and some individuals did not like having this imposed on them. This emphasis on reflection could also have a negative impact on the time available to gain experience from clinical practice.

"The BDA (British Dietetic Association) are really pushing for new students, and for any dietitians to become reflectors. All the training is reflecting ... the students have got to complete various targets and it's all about reflecting. Reflect on what we did and the last thing, we'll ask them how did you feel that went and could you have done better and so they're really wanting us all to be reflectors which, ok for some people, that's fine but for 50% of people it may not be fine because they're not reflectors. They prefer just to get on with it as opposed to always having to think back and I think so sometimes it can be a disadvantage to making people become reflectors." (20-495 junior dietitian)

2.6.1.4.4 Reluctance to disclose material

The fourth sub-theme was the reluctance to disclose reflective accounts. Reasons given for this were focused on who had access to the records, as there were worries about the interpretation that may be made from the records provided and confidentiality of personal accounts.
"It depends on who was reading it. If it was a similar professional, if it was an OT I hope I wouldn't have a problem. If it was confidential with a lay representative it's the interpretation, it's the context they might think. You've got one person on the panel balanced by other people also reading it so this is what happened or can happen. Think I would be more reassured."

(4-655 senior occupational therapist)

Some participants felt that the environment for disclosure had to be a "no blame culture" and a balance of positive as well as negative events, should be disclosed. This reluctance to share, in particular the self with others, is linked very closely to the issues raised under disclosure of portfolios (section 2.6.1.1.2). The regulatory issue of professionals has been added to by this recent notion of a "no blame culture" in the NHS (Department of Health, 2000a). It can also be seen as another means of disciplining/controlling the writer, rather than an attempt to share practice. This is not empowering professionals, but control using a practice of self confession (Bleakley, 2000).

In allowing reflective accounts to be shared (Bolton, 2001c) a number of principles for sharing should be applied. Whether these principles were in operation in each of the professions was not explicitly articulated by any of the participants. Bleakley (2000) also pointed out that this fits Maslow's (1970) hierarchy of needs, in which a safe environment is required before higher needs, e.g. intellectual autonomy, transpire from an individual.

2.6.1.4.5 Writing skills

The issue of writing skills was raised by the junior professionals. Writing they felt had to be carried out on a regular basis and not just a summary of the actual event. One professional suggested that her experience of writing in childhood had contributed to reflective thinking, as illustrated in the following:

"I mean as a child, I always enjoyed reading. I'm quite imaginative, I like writing stories, so I think if your imaginative, and quite broad minded then reflection probably comes easier to you."

(3-524 junior occupational therapist)
Chapter 2

Findings and discussion

Writing was also raised as a possible barrier.

"It is time consuming (keeping a portfolio) and it involves writing and keeping records which, well to me, I mean if I don't make an effort, I'm not good at it."

(10-224 junior pharmacist)

It had to be regular and was associated with a creative personality. This is supported by the numerous guides published on writing (Wolcott, 1990).

2.6.1.5 Reflective accounts and emotional descriptions

The fourth key theme was concerned with the role of emotion in reflective accounts (Table 2.12). Emotions are interpretations of the meaning of feeling. Feelings become transferred into emotions as we learn how to interpret what they mean. Remembering involves an event that usually has been associated with an emotion influential in our learning (Mezirow, 1991a). How well an event is remembered depends upon the strength of the emotion. Emotional expression is associated with mental and physical health benefits and not expressing emotions is seen as a sign of strength, maturity or even virtue. Emotional expression is the means by which people communicate experience and influence relationships (Kennedy-Moore and Watson, 1999). There are different varieties of non-expression. A number of models of reflection suggest recording feelings (Johns, 2002) as they become the triggers of reflection and accounts are always influenced by feelings. The awareness of feelings can help learners appreciate the way they experience events and this can lead to a deeper appreciation of the learning process (Walker, 1985). Feelings may also obstruct work on an account and this need has to be accepted as valid before going onto the reflection process. Negative feelings about oneself can be a barrier to learning, distort perceptions and interpretations, and these need to be harnessed into taking positive action. For these reasons it was of interest to investigate whether feelings expressed as emotions were
recorded. In response to the question: "to what extent had emotional descriptions been included in reflective accounts?" three sub-themes emerged i.e.

- objective approach to practice
- difficult to record emotion
- a coping strategy

The participants in this study were not very forthcoming in this area. Of the three sub-themes that were identified the strongest was the objective approach to practice. This notion was similar to that expressed in the described personal issues (section 2.6.1.1.1). This has been described as a technical-rationalist approach to practice (Schön, 1987), and occurs when practitioners are considered to be instrumental problem solvers, using rigorous scientific methods.

2.6.1.5.1 Objective approach to practice

Recording of personal emotion from practice was not something that was routinely undertaken by this group of health professionals. Practice was viewed to have an objective approach, with most records being concise and factual.

"I always deliberately just try and keep things matter of fact. Especially, let's say a patient gets angry or whatever. Let's say you try and record these things in as a neutral a tone as possible. I never really monitor what my emotional response to a situation is. I don't record it anyway, never thought about it."

(14 - 646 senior physiotherapist)

One practitioner, who did not deal with patients directly, but gives advice on patient treatments, reported emotional isolation.

"Emotionally I think I feel a little isolated I think I am a detached person sitting at a computer."

(9-233 senior pharmacist)

2.6.1.5.2 Difficulty in recording emotional experience

Some participants found the act of recording emotions difficult. The explanation for this varied. A lack of experience in what should be written was one view, while others used a filtering system of what would appear in the final document. The first draft
would contain a larger proportion of emotional text, moving towards a minimal amount if any, in the final document, as illustrated by this comment:

"And then when I wrote it up much later on. So probably less emotion, although initially obviously quite a considerable amount, in a way it was quite nice to then step away from the situation and write it up a few weeks later when I could probably look more objectively on how we had both behaved."

(15 - 240 senior physiotherapist)

This difficulty in writing was overcome for some individuals by first verbalising their emotions to a senior colleague or by just thinking through the emotional impact of a situation without sharing with others. One participant suggested that recording using a computer keyboard would result in less emotion being written compared to a hand written account.

2.6.1.5.3 A coping strategy

Written accounts of emotion were viewed as a coping strategy by some participants as a way of being able to deal with difficult situations (section 2.6.1.2.5).

"It's quite hard for people I think, and the more of course the more experiences you have, the more you learn in your own way. I think to cope with that so I think its learning, so what I mean is acknowledging that you have a feeling but are trying to maybe channel it in a different way and trying to... learn the best way of coping with it."

(8-390 senior nurse)

This coping notion may be due to the feeling of failure which has no other route of being expressed and so is being hidden. Support in this area was also not mentioned by the participants, but is necessary for reflection to occur (Boud et al, 1985b; section 2.6.1.1.3).

2.6.2 Questionnaire surveys

This section will describe the analysis of the questionnaire survey. It will be subdivided into three sub-sections to explore the use of the Theory of Planned Behaviour (TPB) and personality traits of hospital pharmacists. The first sub-section will address the effect of demographic data on using a portfolio, followed by the effect of behavioural variables
and the Big-Five dimensions on using a portfolio. Lastly, the combination of the behavioural variables with the Big-Five will be explored.

Two questionnaires were used to explore pharmacists’ characteristics of portfolio engaging behaviour (the Pharmacist Portfolio Engaging Behaviour and the Big-Five). These were distributed together before recording of CPD was made obligatory by RPSGB.

Pairs of questionnaires were distributed to 172 pharmacists. Overall 134 pharmacists (78%) returned the questionnaires, two pairs of questionnaires were spoiled and data were not able to be entered, leaving 132 questionnaire pairs for analysis. Over half of the pharmacists (61%) stated they had a portfolio and nine were undecided (Figure 2.3).

![Figure 2.3](image_url)

Figure 2.3 Pharmacist Portfolio Engaging Behaviour and Big-Five questionnaire returns from hospital pharmacists.

2.6.2.1 Demographics

The cohort of hospital pharmacists comprised 103 females and 29 males. The mean age was 28.8 (± 5.4) years, with a range of 23 to 52 years. One female who had been
qualified for 40 years and did not have a portfolio, did not disclose her age, but provided all other data. The nine undecided participants were placed into the no portfolio group for analysis.

2.6.2.1.1 The effect of age, number of years qualified and gender on portfolio use

Non-parametric techniques were used to analyse age, number of years qualified and gender on portfolio use, because the data were measured using categorical scales and the number of participants was small.

There was no significant difference in the age (Mann-Witney U = 1967, p = 0.73) or the number of years qualified (Mann-Witney U = 1909, p = 0.43) between those pharmacists that have a portfolio and those with no portfolio (Table 2.13).

<table>
<thead>
<tr>
<th></th>
<th>With portfolio n = 80</th>
<th>No portfolio n = 52</th>
<th>Probability (Mann-Whitney 2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td>Mean 28.5 SD 5.1 Median 27.0 Range 23-52</td>
<td>Mean 29.2* SD 5.8 Median 27.0 Range 23-47</td>
<td>0.73</td>
</tr>
<tr>
<td><strong>Years qualified</strong></td>
<td>Mean 4.9 SD 5.1 Median 3.5 Range 0.5-30</td>
<td>Mean 5.1 SD 7.1 Median 3.0 Range 0.5-40</td>
<td>0.43</td>
</tr>
</tbody>
</table>

* n = 51

The chi-square test was used to determine if the proportion of males with and without a portfolio differed to the proportion of females, from a 2x2 table (Table 2.14). None of the cells in the table had an expected count of less than five. The minimum expected cell count was 11.42. The Continuity Correction value was 0.001, with an associated significance level of 0.974. The significance value needs to be 0.05 or less; therefore there was no significant difference in the gender effect on having or not having a portfolio (Table 2.14).
Table 2.14 Gender distribution with and without a portfolio.

<table>
<thead>
<tr>
<th></th>
<th>With portfolio n = 80 (%)</th>
<th>No portfolio n = 52 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>17 (21)</td>
<td>12 (23)</td>
</tr>
<tr>
<td>Females</td>
<td>63 (79)</td>
<td>40 (77)</td>
</tr>
</tbody>
</table>

2.6.2.2 Reliability of the Pharmacist Portfolio Engaging Behaviour Questionnaire

In order to check the degree to which items that are grouped together, and are measuring the same construct, Cronbach’s alpha coefficient was calculated (Pallant, 2001). The Cronbach’s alpha coefficient for a scale should be above 0.7, but this depends on the number on items in the scale.

The reliability coefficient alpha for the subscales of the Pharmacist Portfolio Engaging Behaviour questionnaire (PPEGQ) ranged from 0.28 for perceived likelihood of occurrence and facilitating/inhibiting power to 0.89 for the intention to engage in producing professional records (Table 2.15).

Table 2.15 Internal reliability of the Pharmacist Portfolio Engaging Behaviour questionnaire

<table>
<thead>
<tr>
<th>SCALES</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha if Item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Attitudes towards behaviour</td>
<td>5</td>
<td>0.807</td>
<td></td>
</tr>
<tr>
<td>Belief about outcomes</td>
<td>2</td>
<td>0.652</td>
<td></td>
</tr>
<tr>
<td>Evaluation of outcomes</td>
<td>2</td>
<td>0.594</td>
<td></td>
</tr>
<tr>
<td>*Subjective norm</td>
<td>5</td>
<td>0.430</td>
<td>0.505 (17)</td>
</tr>
<tr>
<td>Motivation to comply</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative beliefs</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Perceived Behavioural control</td>
<td>4</td>
<td>0.295</td>
<td>0.486 (19)</td>
</tr>
<tr>
<td>Perceived likelihood of occurrence</td>
<td>3</td>
<td>0.275</td>
<td></td>
</tr>
<tr>
<td>Perceived facilitating/inhibiting power</td>
<td>2</td>
<td>0.276</td>
<td></td>
</tr>
<tr>
<td>*Behavioural Intentions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>2</td>
<td>0.889</td>
<td></td>
</tr>
<tr>
<td>Desire</td>
<td>2</td>
<td>0.654</td>
<td></td>
</tr>
<tr>
<td>Expectation</td>
<td>2</td>
<td>0.741</td>
<td></td>
</tr>
<tr>
<td>*Main scales</td>
<td></td>
<td></td>
<td>() questionnaire item deleted</td>
</tr>
</tbody>
</table>
Removal of two items allowed higher internal reliability and all correlations and independent t-tests were carried out on the revised data set. Items for each scale were summed.

The means and standard deviations for each scale of the PPEBQ are illustrated in Table 2.16.

Table 2.16 Means (SD) for the scales of the Pharmacists Portfolio Engaging Behaviour questionnaire

<table>
<thead>
<tr>
<th>SCALES</th>
<th>No of Items</th>
<th>Mean</th>
<th>Range</th>
<th>Max score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Attitudes towards behaviour</td>
<td>5</td>
<td>19.2</td>
<td>28</td>
<td>35</td>
<td>5.4</td>
</tr>
<tr>
<td>Belief about outcomes</td>
<td>2</td>
<td>8.4</td>
<td>12</td>
<td>14</td>
<td>3.0</td>
</tr>
<tr>
<td>Evaluation of outcomes</td>
<td>2</td>
<td>12.8</td>
<td>6</td>
<td>14</td>
<td>1.5</td>
</tr>
<tr>
<td>*Subjective norm</td>
<td>4</td>
<td>18.0</td>
<td>19</td>
<td>28</td>
<td>3.1</td>
</tr>
<tr>
<td>Motivation to comply</td>
<td>1</td>
<td>4.3</td>
<td>6</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Normative beliefs</td>
<td>1</td>
<td>4.9</td>
<td>6</td>
<td>7</td>
<td>1.6</td>
</tr>
<tr>
<td>*Perceived Behavioural control</td>
<td>3</td>
<td>11.5</td>
<td>13</td>
<td>21</td>
<td>2.9</td>
</tr>
<tr>
<td>Perceived likelihood of occurrence</td>
<td>3</td>
<td>12.4</td>
<td>17</td>
<td>21</td>
<td>3.1</td>
</tr>
<tr>
<td>Perceived facilitating/inhibiting power</td>
<td>2</td>
<td>6.8</td>
<td>12</td>
<td>14</td>
<td>2.0</td>
</tr>
<tr>
<td>*Behavioural Intentions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>2</td>
<td>10.1</td>
<td>12</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td>Desire</td>
<td>2</td>
<td>9.3</td>
<td>12</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td>Expectation</td>
<td>2</td>
<td>9.0</td>
<td>12</td>
<td>14</td>
<td>2.9</td>
</tr>
</tbody>
</table>

*Main scales

2.6.2.2.1 The effect of the PPEBQ scales on portfolio use

The aim of using the PPEBQ was to investigate which scale was associated with keeping a portfolio, in order to predict future behaviour, using independent-samples t-test. From the 12 scales involved in the PPEBQ, there was a significant difference in the mean scores for pharmacists who kept a portfolio with the following: expectations,
intentions, normative belief, perceived likelihood of occurrence and perceived behavioural control (Table 2.17).

Table 2.17 Mean scores and standard deviations of the PPEBQ scales in participants with and without a portfolio

<table>
<thead>
<tr>
<th>SCALES</th>
<th>With portfolio n = 80</th>
<th>No portfolio n = 52</th>
<th>Probability (2-tailed t-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN</td>
<td>SD</td>
<td>MEAN</td>
</tr>
<tr>
<td>Attitudes towards behaviour</td>
<td>19.5</td>
<td>5.3</td>
<td>18.7</td>
</tr>
<tr>
<td>Belief about outcomes</td>
<td>8.6</td>
<td>3.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Evaluation of outcomes</td>
<td>12.9</td>
<td>1.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>20.6</td>
<td>3.7</td>
<td>19.9</td>
</tr>
<tr>
<td>Motivation to comply</td>
<td>4.3</td>
<td>1.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Normative belief</td>
<td>5.2</td>
<td>1.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Perceived Behavioural control</td>
<td>13.4</td>
<td>3.2</td>
<td>12.1</td>
</tr>
<tr>
<td>Perceived likelihood of occurrence</td>
<td>12.9</td>
<td>3.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Perceived facilitating/inhibiting power</td>
<td>7.0</td>
<td>2.1</td>
<td>6.7</td>
</tr>
<tr>
<td>Behavioural Intentions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>10.7</td>
<td>2.4</td>
<td>9.2</td>
</tr>
<tr>
<td>Desire</td>
<td>9.3</td>
<td>3.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Expectation</td>
<td>9.7</td>
<td>2.8</td>
<td>8.0</td>
</tr>
</tbody>
</table>

*p < 0.05

2.6.2.2.2 The association between variables in the PPEBQ

The strength and direction of association between the direct variables of the Pharmacist Portfolio Engaging Behaviour questionnaire was checked using the Spearman’s Rank Order correlation coefficient so as not to assume a normal distribution. All the variables tested had a positive association as indicated in Table 2.18. There was a medium correlation with Attitude Towards Behaviour with Perceived Behavioural Control and Behavioural Intention. There was a small correlation between the remaining variables.
Table 2.18 Spearman’s Rank Order Correlation between the measures of Portfolio Engaging Behaviour and associated direct variables

<table>
<thead>
<tr>
<th>Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Portfolio Engaging Behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Perceived Behavioural Control</td>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Attitude Towards Behaviour</td>
<td>0.07</td>
<td>0.45**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Subjective Norm.</td>
<td>0.07</td>
<td>0.14</td>
<td>0.23**</td>
<td></td>
</tr>
<tr>
<td>(5) Behavioural Intention</td>
<td>0.25**</td>
<td>0.17**</td>
<td>0.32**</td>
<td>0.26**</td>
</tr>
</tbody>
</table>

n = 132. **p < 0.01

2.6.2.3 Reliability of the Big-Five questionnaire

The reliability coefficient alpha for the dimensions of the Big-Five ranged from 0.64 for intellect to 0.84 for surgency (Table 2.19). The overall reliability coefficient for the five dimensions was 0.878. This compares favourably to that reported by other authors (Goldberg, 1992; Ferguson, 2003).

Table 2.19 Internal reliability of the Big-Five questionnaire

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgency (Extraversion)</td>
<td>7</td>
<td>0.841</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>7</td>
<td>0.806</td>
</tr>
<tr>
<td>Emotional Stability (Neuroticism)</td>
<td>7</td>
<td>0.792</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>7</td>
<td>0.760</td>
</tr>
<tr>
<td>Intellect (Openness)</td>
<td>7</td>
<td>0.643</td>
</tr>
</tbody>
</table>

As part of the assessment of the reliability of the questionnaire, the stability should be tested over a period of time, to look for any changes. This was not possible in this study as participants were not traceable.

High scores on the Big-Five questionnaire indicated individuals with characteristics described in Table 2.20.

Table 2.20 Characteristics associated with high scores on the Big-Five questionnaire (Goldberg, 1992)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>High score Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgency (Extraversion)</td>
<td>Sociable, uninhibited and outgoing.</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>Good natured, caring and forgiving.</td>
</tr>
<tr>
<td>Emotional Stability (Neuroticism)</td>
<td>Calm, stable, unemotional.</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Careful, reliable and well organised.</td>
</tr>
<tr>
<td>Intellect (Openness)</td>
<td>Imaginative, and welcomes change.</td>
</tr>
</tbody>
</table>
The mean and standard deviation of the personality traits of hospital pharmacists are given in Table 2.21.

Table 2.21 Mean (SD) of the Big-Five dimensions and associated subscales for hospital pharmacists (n = 132)

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>SUBSCALES</th>
<th>MEAN</th>
<th>RANGE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>extraverted</td>
<td>energetic</td>
<td>5.7</td>
<td>2-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>talkative</td>
<td>6.2</td>
<td>1-9</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>bold</td>
<td>5.8</td>
<td>1-9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>active</td>
<td>6.9</td>
<td>3-9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>assertive</td>
<td>6.5</td>
<td>2-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>adventurous</td>
<td>6.5</td>
<td>1-9</td>
<td>1.5</td>
</tr>
<tr>
<td>Surgency (Extroversion)</td>
<td>warm</td>
<td>7.2</td>
<td>2-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>kind</td>
<td>7.8</td>
<td>4-9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>cooperative</td>
<td>7.9</td>
<td>5-9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>unselfish</td>
<td>7.0</td>
<td>3-9</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>agreeable</td>
<td>7.1</td>
<td>3-9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>trustful</td>
<td>7.7</td>
<td>2-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>generous</td>
<td>7.4</td>
<td>3-9</td>
<td>1.3</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>organised</td>
<td>6.6</td>
<td>2-9</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>responsible</td>
<td>7.8</td>
<td>4-9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>conscientious</td>
<td>7.7</td>
<td>4-9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>practical</td>
<td>7.5</td>
<td>4-9</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>thorough</td>
<td>7.4</td>
<td>4-9</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>hardworking</td>
<td>7.6</td>
<td>3-9</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>thrifty</td>
<td>5.0</td>
<td>1-9</td>
<td>1.6</td>
</tr>
<tr>
<td>Emotional stability</td>
<td>calm</td>
<td>6.6</td>
<td>1-9</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>relaxed</td>
<td>6.1</td>
<td>2-9</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>at ease</td>
<td>6.4</td>
<td>1-9</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>not envious</td>
<td>6.8</td>
<td>3-9</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>stable</td>
<td>7.4</td>
<td>3-9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>contented</td>
<td>6.7</td>
<td>1-9</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>unemotional</td>
<td>4.4</td>
<td>1-8</td>
<td>1.6</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>intelligent</td>
<td>7.2</td>
<td>5-9</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>analytical</td>
<td>6.9</td>
<td>4-9</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>reflective</td>
<td>6.8</td>
<td>1-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>curious</td>
<td>7.4</td>
<td>5-9</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>imaginative</td>
<td>6.7</td>
<td>2-9</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>creative</td>
<td>6.4</td>
<td>2-9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>sophisticated</td>
<td>6.6</td>
<td>2-9</td>
<td>1.5</td>
</tr>
<tr>
<td>Intellect (Openness)</td>
<td></td>
<td>48.0</td>
<td>36-61</td>
<td>5.1</td>
</tr>
</tbody>
</table>

*Subscales scored on 1-9 scale
Many of the subscales for each personality dimension produced a wide range of scores from 1-9, indicating the range of personality characteristics. There was a tendency for the means of each subscale to be greater than 5.0; suggesting hospital pharmacists to demonstrate the high score characteristics listed in Table 2.20. Alternatively pharmacists had attempted to bias their responses to the positive set of subscales in the questionnaire.

2.6.2.3.1 The personality traits of pharmacists with and without a portfolio

From the five traits involved in the Personality scores, there was a significant difference in the mean scores for pharmacists who kept a portfolio on the Agreeableness, Emotional stability and Conscientiousness traits, assessed using independent samples t-test (Table 2.22). This indicates hospital pharmacists who had a portfolio were: good natured, calm, and well organised, compared to those who did not keep a portfolio.

There was no significant difference in pharmacists with an outgoing and imaginative personality with regards to whether or not they kept a portfolio.

Table 2.22 Mean total scores and standard deviations of the Big-Five dimensions in participants with and without a portfolio

<table>
<thead>
<tr>
<th>Trait</th>
<th>WITH PORTFOLIO n = 80</th>
<th>NO PORTFOLIO n = 52</th>
<th>Probability (2-tailed t-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgency (Extroversion)</td>
<td>44.7 7.4</td>
<td>43.6 7.4</td>
<td>0.40</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>52.9 6.1</td>
<td>50.7 5.9</td>
<td>0.02*</td>
</tr>
<tr>
<td>Emotional Stability (Neuroticism)</td>
<td>45.4 7.4</td>
<td>42.6 7.7</td>
<td>0.03*</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>50.4 5.2</td>
<td>48.1 5.9</td>
<td>0.04*</td>
</tr>
<tr>
<td>Intellect (Openness)</td>
<td>48.3 5.2</td>
<td>47.4 5.0</td>
<td>0.36</td>
</tr>
</tbody>
</table>

*p < 0.05
2.6.2.4 The effect of the Big-Five on the PPEBQ scales

The intercorrelations (Spearman’s Rank Order) between personality dimensions and the PPEBQ scales are shown in Table 2.23. The significance level is reported but not used because of the strong influence of the sample size. There were small correlations between all of the dimensions from the Big-Five and the PPEBQ scales. There was a trend for Perceived Behavioural Control to be influenced by all the dimensions of personality except extroversion.

Table 2.23 Spearman’s Rank Order Correlation between measures of the Big-Five and the PPEBQ scales

<table>
<thead>
<tr>
<th>PPEBQ Scales</th>
<th>Big-Five Personality dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extroversion</td>
</tr>
<tr>
<td>Attitudes towards behaviour</td>
<td>-0.069</td>
</tr>
<tr>
<td>Belief about outcomes</td>
<td>-0.028</td>
</tr>
<tr>
<td>Evaluation of outcomes</td>
<td>-0.040</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>0.013</td>
</tr>
<tr>
<td>Motivation to comply</td>
<td>0.105</td>
</tr>
<tr>
<td>Normative beliefs</td>
<td>0.022</td>
</tr>
<tr>
<td>Perceived Behavioural control</td>
<td>-0.024</td>
</tr>
<tr>
<td>Perceived likelihood of occurrence</td>
<td>0.190*</td>
</tr>
<tr>
<td>Perceived facilitating/inhibiting power</td>
<td>0.102</td>
</tr>
<tr>
<td>Behavioural Intentions</td>
<td></td>
</tr>
<tr>
<td>Intention</td>
<td>0.140</td>
</tr>
<tr>
<td>Desire</td>
<td>0.070</td>
</tr>
<tr>
<td>Expectation</td>
<td>0.050</td>
</tr>
</tbody>
</table>

n = 132.  *p <0.05, **p <0.01 (2-tailed)
2.7 Phase One discussion

To address the Phase One research aim which was, “To investigate how the use of CPD portfolios influences practice and the role of reflective practice in health professionals”, three specific research questions were addressed in the context of a NHS Foundation Trust using qualitative and quantitative methodologies. The semi-structured interviews were used for all three questions and a questionnaire survey was used specifically to examine hospital pharmacists’ characteristics regarding keeping a portfolio. A discussion of the findings is presented in the next sections according to the research questions.

2.7.1 Use of portfolios and the role of reflective practice

The interview study found that a CPD portfolio was used by a large proportion of participants (87%), and was used at an undergraduate level but with little support. The undergraduate pharmacist use of a portfolio for learning and assessment is increasing (section 1.2.3) and may have an impact in the future. However, senior male practitioners from three professions did not keep a portfolio. In contrast, the gender and number of years qualified was not a predictor of whether pharmacists’ kept a portfolio, as revealed by the questionnaire data. This issue of gender and experience on keeping a CPD portfolio remains debateable. From the literature the current finding is supported by a questionnaire survey of pharmacists in England (n = 291) in which there was no difference in the gender of respondents who stated they kept a CPD portfolio (Mottram et al, 2002). This was supported by a study of qualified teachers (n = 117) which concluded that neither gender nor age affected portfolio keeping (De Rijdt et al, 2006). In contrast, a questionnaire survey of pharmacists in Northern Ireland (n = 424) reported that females were more likely to keep a CPD portfolio than men (Bell et al, 2002). However, the study did not state if these females were from the hospital sector. In addition a study of nine hospital pharmacists (Swallow et al, 2006) suggested the length
of time since qualification did influence respondents’ perception of keeping a portfolio.

In a recent community pharmacy study of 30 women, it was reported that they had
difficulty in entering CPD records online (Gidman et al, 2006) implying the method of
recording would be a major influence on activity. This study found that the design of
the portfolio used by health professionals varied in content and was more likely to be a
portmanteau which was carried from job to job. It was more common to find
professionals designing their own portfolio (70%), allowing more personal control.

This finding was confirmed by the questionnaire study of pharmacists, in which
Perceived Behavioural Control beliefs had a strong influence on the intention to keep a
portfolio. Therefore hospital pharmacists are more likely to maintain a portfolio, if they
are involved in the process of designing their own format, rather than being forced to
use a predetermined format. This finding has not been previously reported in the
literature.

2.7.1.1 Disclosure and Honesty

Selective disclosure of portfolio contents was a common finding among the research
participants. It was clear from the interviews that participants believed that the portfolio
would, and did, catalyse discussion with colleagues about current issues of practice, as
well as being a form of motivation to construct a portfolio.

The disclosure issue also raised the notion of honesty in providing data to a central
organisation. Senior participants described submitting copied or fabricated data for
assessment. This problem has previously been raised by pharmacists in a study by
Swallow et al (2006) and reported in a study with student nurses (Mackintosh, 1998).

Honesty in writing is a difficult field to resolve as there is an assumption that writing is
a direct representation of what a person actually thinks or does. In a recent discussion
on whether student learning journals should be assessed, this problem of writing
presenting hidden “truths” also highlighted the issue that writing may not be an appropriate medium to use by some students as a representation of practice (Creme, 2005).

It is of note that no practitioner discussed the notion of CPD recording being a control mechanism or an instrument of accountability. This lack of critical thinking about CPD records, may be more subdued from pharmacists when the Plan & Record system becomes mandatory and is routine practice.

2.7.1.2 Support

There was a large diversity of support for maintaining a portfolio amongst the participants. Some participants had individual mentors, protected time and a clinical supervisor, but this was not a common scenario, the majority were expected to complete records in their own time. The problem with the various support mechanisms that were in place was the lack of integration. This approach contributed to the compartmentalisation of some practitioners’ learning.

2.7.1.3 Effects on practice

The link between using a portfolio and its effect on practice was difficult to ascertain. The main effects reported were an increase in confidence for juniors, and a change in thinking patterns for others. It was easier for participants to describe the general effects of reflecting on practice from recording specific events, rather than the use of a portfolio, which has more elements of practice than just event records.

The effect of written reflection was described as assisting memory recall and indirectly affecting patient care. The lack of linking the use of a portfolio to practice change but stimulating reflective thinking is supported by the literature reviewed in section 1.2.6. Other participants raised concerns about the mechanistic, check-list approach to practice. This has also been termed the technical-rationalist approach (Schön, 1987) and can add to the dehumanisation of patient care, as reported by a junior nurse. The
drive to increase the throughput of patients in the NHS is adding to this problem, as patients are being regarded as a commodity. In order to engage with patients, practitioners have been described to practise at three levels: explanation, understanding and emotional understanding (Rolfe, 2002). However, this notion of patients being a commodity does not allow practitioners to reach the third level of practice.

Junior practitioners reported that recording reflective accounts led them to practice more instinctively, supporting the notion that they were moving from reflecting on-action to reflection in-action, as described by Schön (1987), and making it more difficult to verbalise specific effects on practice. The senior staff considered recording events was more appropriate for juniors, a view not shared by the juniors themselves.

2.7.1.4 Reflection

Reflective practice was thought to be mainly a process of reviewing and learning using various approaches. Often the reviewing process was done using various preset questions based on a number of reflective models (section 1.3.3.1). One junior nurse suggested this was due to her altruistic attitude, something not mentioned by the other participants. Altruism is claimed to be a core trait of health professions (McGaghie et al, 2002) however little is known about its role in the pharmacy profession.

Other forms of reviewing practice included clinical supervision, which has variable meanings and practices. The majority of the participants did not have this in place, and its role as another form of surveillance has recently been raised (Gilbert, 2001).

Triggers to reflecting and recording were often negative events. Although, one junior participant was encouraged to record both positive and negative events.

2.7.1.5 Barriers to recording

A number of barriers to recording reflection in a portfolio were identified. The most common included time, motivation and a reluctance to disclose material. One aspect
that has not yet been discussed in the literature is the issue of writing skills. The junior participants were concerned they had not been taught to write reflectively.

2.7.1.6 Emotional writing

Linked with the lack of writing skills was the notion of emotional distance (Rolfe, 2002). The effective involvement of a professional with a client can be termed emotional distance and the nature of professionalism is to keep this distance. Reflection with the inclusion of emotion has been shown to lead to a deeper learning process. However, participants were driven by evidence-based practice and the majority found it difficulty to record this. Emotion along with altruism has not been investigated in any great depth in a hospital setting.

2.7.2 Pharmacists’ characteristics of portfolio engaging behaviour

This is the first instance that the theory of planned behaviour (TPB) has been used to investigate the use of a portfolio. In the past, social cognition models have been mainly used to predict health behaviour. The questionnaire (PPEBQ) survey explored the behaviour of hospital pharmacists keeping a portfolio and the main influences on this behaviour. In this study, the PPEBQ was used to explore which variables were likely to predict pharmacists recording practice, termed portfolio engaging behaviour. The PPEBQ was found to have good reliability for the four direct variables impacting on pharmacists’ portfolio engaging behaviour. The indirect variables were less reliable. The pharmacists’ age, gender and number of years qualified were not different between those with or without a portfolio. The three main variables (attitudes towards the behaviour, subjective norm and perceived behavioural control), were used because of low Cronbach’s alpha for the subscales. The strongest association with the intention of keeping a portfolio was the attitude towards the behaviour, which in turn was influenced by perceived behavioural control. Perceived behavioural control (PBC) indicates the extent to which the pharmacist believes they have control of maintaining a portfolio.
The Theory of Planned Behaviour suggests this control is influenced by the belief about the ease or difficulty of keeping a portfolio in combination with the perceived power of these beliefs. This latter effect could not be confirmed in this study, because of the low reliability of the items used to measure these two variables. In addition, external variables such as personality traits are considered to influence these beliefs (section 2.3.1). Emotional stability and conscientiousness both influenced the PBC but the association was weak.

2.7.2.1 Personality Traits

Personality traits as illustrated by the Big-Five are open to criticism and the criticisms have been reviewed (Pervin, 2002). The main issue is that the Big-Five do not portray the depth of an individual’s personality and care must be taken not to over interpret the findings. Comparison of personality traits with a set of norms should also only be done if there was a population norm and this study sample was a representative subset (Goldberg et al, 2006). The population norm for hospital pharmacists is not yet available. However, a study of 176 first year medical students (Ferguson et al, 2003) using the same set of Goldberg’s adjectives, reported very similar scores to hospital pharmacists in this study (Table 2.24). There is a possibility that hospital pharmacists are more conscientious than medical students, but this would need further investigation and is not the focus of this thesis.

<table>
<thead>
<tr>
<th></th>
<th>Ferguson et al (2003) Mean (±SD) n = 176 Medical Students</th>
<th>Current study Mean (±SD) n = 132 Hospital pharmacists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgency (Extraversion)</td>
<td>44.4 (7.7)</td>
<td>44.3 (7.4)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>49.3 (5.8)</td>
<td>52.1 (6.1)</td>
</tr>
<tr>
<td>Emotional stability (Neuroticism)</td>
<td>43.1 (8.4)</td>
<td>44.3 (7.6)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>45.5 (9.1)</td>
<td>49.5 (5.9)</td>
</tr>
<tr>
<td>Intellect (Openness)</td>
<td>47.2 (6.6)</td>
<td>48.0 (5.1)</td>
</tr>
</tbody>
</table>
Both conscientiousness and intellect have been associated with the deep approach to learning, while neuroticism was a good predictor for the surface approach in a group of 420 undergraduates in Shanghai (Zhang, 2003).

In the present study, pharmacists with a portfolio exhibited a higher score for the conscientiousness, agreeableness and emotional stability trait compared to those with no portfolio. This suggests these personality traits are more developed and pharmacists may have a deep approach to learning, but this would need further investigation.

The TPB suggests that personality traits will affect the attitude towards behaviour. The attitudes associated with reflective thinking originally described by Dewey (1933) can therefore be compared with Goldberg’s (1992) personality traits as openness, conscientiousness and agreeableness (Table 2.25). This study suggested that pharmacists with a portfolio exhibited two out of the three personality traits that can be mapped onto Dewey’s three attitudes. In addition this study suggested a new finding, that pharmacists with a portfolio were also likely to be emotionally stable.
### Table 2.25 Attitudes for being a reflective thinker

<table>
<thead>
<tr>
<th>Attitudes for reflective thinking (Dewey, 1933)</th>
<th>Big-Five Personality Traits (Goldberg, 1992)</th>
<th>Pharmacists with a portfolio (n = 80) mean score (±SD)</th>
<th>Pharmacists without a portfolio (n = 52) mean score (±SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open-mindedness</td>
<td>Curious Imaginative Creative Sophisticated Analytical Intelligent Reflective</td>
<td>Openness</td>
<td>48.3 (5.2)</td>
</tr>
<tr>
<td>Whole-heartedness</td>
<td>Responsible Organised Thorough Conscientious Practical Hardworking Thrifty</td>
<td>Conscientiousness</td>
<td>50.4 (5.2)</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Warm Kind Co-operative Unselfish Agreeable Trustful Generous</td>
<td>Agreeableness</td>
<td>52.9 (6.1)</td>
</tr>
</tbody>
</table>

*p<0.05
2.7.3 Comparison of data

The questionnaire data can be blended with the interview data to gain a different perspective. This helps improve the validity of findings, although the two samples are different and can not be triangulated per se. The two sets of data were used to explore any associations or convergence of the findings concerning portfolio engaging behaviour (Table 2.26). Health professionals’ preference in using their own portfolio design from the interviews was supported by the influence of PBC on pharmacists’ intention to keeping a portfolio. The age and gender of the professionals who did not keep a portfolio in the interviews was not found in the questionnaire data. The age and gender of pharmacists completing the questionnaire did not influence keeping a portfolio. The small numbers in the interview sample will have influenced this finding.

Table 2.26 Integration of Portfolio Engaging Behaviour and the Big-Five of pharmacists with interview findings

<table>
<thead>
<tr>
<th>BIG-FIVE (Hospital Pharmacists n = 132)</th>
<th>PORTFOLIO ENGAGING BEHAVIOUR (Hospital Pharmacists n = 132)</th>
<th>INTERVIEWS (Health professionals n = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years qualified made no difference</td>
<td>Senior practitioners not keeping a portfolio</td>
<td></td>
</tr>
<tr>
<td>Gender of practitioner not different</td>
<td>Male practitioners not keeping a portfolio</td>
<td></td>
</tr>
<tr>
<td>Openness, emotional stability and conscientiousness influences PBC</td>
<td>Attitude and PBC influence the intention to keep a portfolio</td>
<td>Own portfolio design preferred</td>
</tr>
<tr>
<td></td>
<td>Helpfulness to view colleagues portfolio</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness, emotional stability and agreeableness found in those keeping a portfolio</td>
<td>Keen to share with peers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disclosure motivation to start portfolio</td>
<td></td>
</tr>
</tbody>
</table>

PBC = Perceived Behavioural Control
2.8 Phase One conclusions

The use of a portfolio system to record practice is becoming mandatory within the NHS. This has been closely linked to re-registration of health professionals. The use of a portfolio system called "Plan and Record" will be the route for future registration of pharmacists (Harman, 2002). It is expected that a portfolio of evidence will become mandatory for pharmacists from January 2007. It has also been suggested that the portfolio is a learning tool for developing reflective practice (Moon, 1999c; Smith and Tillema, 2001). It is clear from Phase One, that in the hospital settings investigated in this study, the majority of health professionals were already using a portfolio system to record their experiences. However, this was varied in design and depth. The findings of Phase One are summarised in table 2.27.

Table 2.27 Phase One findings of the use of portfolios by health professionals

<table>
<thead>
<tr>
<th>Findings</th>
<th>See Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Portfolios are being introduced at undergraduate level with little support</td>
<td>2.6.1.1.1</td>
</tr>
<tr>
<td>• A number of different formats of portfolios are being used and a self-designed portmanteau was common</td>
<td>2.6.1.1.1</td>
</tr>
<tr>
<td>• Disclosure of portfolios is an issue but professionals are keen to share with colleagues</td>
<td>2.6.1.1.2</td>
</tr>
<tr>
<td>• The honesty of records in the portfolio is questioned</td>
<td>2.6.1.1.2</td>
</tr>
<tr>
<td>• There is a large diversity of support for portfolio maintenance</td>
<td>2.6.1.1.3</td>
</tr>
<tr>
<td>• A number of support mechanisms for personal development are being used but not integrated</td>
<td>2.6.1.1.3</td>
</tr>
<tr>
<td>• There are very little data as to the effects of keeping a portfolio on practice but may encourage reflective thinking</td>
<td>2.6.1.1.4</td>
</tr>
<tr>
<td>• Pharmacist’s age and gender do not affect keeping a portfolio</td>
<td>2.6.2.1.1</td>
</tr>
<tr>
<td>• Attitude and perceived behavioural control influences keeping a portfolio</td>
<td>2.6.2.2.1</td>
</tr>
<tr>
<td>• Personality traits of pharmacists keeping a portfolio include: conscientiousness, agreeableness and emotional stability</td>
<td>2.6.2.3.1</td>
</tr>
</tbody>
</table>
The PPEBQ and the Big-Five were useful tools to examine pharmacists’ use of a portfolio, however the PPEBQ requires further development to improve its reliability and the Big-Five need a larger data set to obtain a bank of norms.

In this study, the lack of data to show that the portfolio is an effective learning tool for professional development raises the question: does a CPD portfolio have an affect on practice, or is it a portmanteau of past events? In addition there is an assumption that a portfolio will enhance reflective practice, which in turn is important for allowing a change in practice to occur (Hays et al, 2002). Currently there is little evidence regarding reflective practice in the pharmacy profession (Swart et al, 2003; Rees et al, 2003) and very little in the postgraduate sector of other health professions (Kember et al, 2001). In Phase One it was found that professionals’ understanding of reflective practice was superficially based on a concept of reviewing practice. Other findings are listed in table 2.28.

Table 2.28 Phase One findings of health professional's meanings and roles of reflective practice

<table>
<thead>
<tr>
<th>Findings</th>
<th>Evidence (Section)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large variation in professionals undertaking formal courses in reflective practice</td>
<td>2.6.1.2</td>
</tr>
<tr>
<td>Reflection is about reviewing practice, which is being driven by clinical governance</td>
<td>2.6.1.2.1</td>
</tr>
<tr>
<td>Specific sets of questions are used to guide reflective writing</td>
<td>2.6.1.2.1.3</td>
</tr>
<tr>
<td>There are different models and methods of reflecting that are not linked</td>
<td>2.6.1.2.3</td>
</tr>
<tr>
<td>Junior practitioners may reflect differently to senior practitioners</td>
<td>2.6.1.3.4</td>
</tr>
<tr>
<td>Reflection improves memory recall and clarifies thinking, but it is difficult to verbalise the effect on practice</td>
<td>2.6.1.3.1</td>
</tr>
<tr>
<td>There are a number of barriers to recording reflection</td>
<td>2.6.1.4</td>
</tr>
<tr>
<td>Emotional aspects are generally not recorded</td>
<td>2.6.1.5</td>
</tr>
</tbody>
</table>
Chapter 2

The purpose of maintaining a portfolio as a learning tool to develop reflective practice and how this links to the requirements for re-registration needs to be clarified before it becomes a regulatory tool. Providing research data to help develop learning through reflection will help understand these issues.

2.9 Implications for Phase Two

The purpose of Phase One was to scope the use of portfolios in a range of health professionals and to test methods to be used for the main study. Firstly the findings from Phase One have shown that portfolios are being used for different purposes by different professions, and are not integrated into other support mechanisms available within a hospital environment. The trend was for the portfolio to be a portmanteau/dossier of records to document past performance, with limited effect on future practice, and were mainly driven by the requirements of a current or future mandatory recording system. Pharmacists will have to use the “Plan and Record” portfolio system that will be assessed from 2007. It is therefore interesting to focus on this group of professionals to gain an in depth understanding of recording practice in order to inform policy makers.

Pharmacy has traditionally had its foundation in a scientific paradigm. The teaching in pharmacy schools has centred on the technical rationalist model, which assumes that effective practice is the result of application of accepted techniques to recurring problems of practice. This model is being fuelled by a national move to competency based professional education. However, professional practice is fraught with ambiguous or conflicting theories and the practitioner has to choose from among multiple approaches to practice. This ability to choose, has been termed professional judgement (Fish and Coles, 2002), insight (Hays et al, 2002) or mindful practice (Epstein, 1999). Different modes of knowledge use underpin these descriptions of judgement and one of the modes is reflection. This notion of reflection is a
constructivist epistemology and is often in opposition to the traditional scientific paradigm (Schön, 1987). Reflective practice has become a popular phrase with many meanings, and it is claimed to improve learning and practice, especially in teaching, social work and nursing. However, its use has not been adequately researched in any field (Ixer, 1999). Reflective practice has also been claimed to develop practitioners’ autonomy, self-realisation and professional judgement (Morrison, 1996). Published texts on pharmacy as a profession do not discuss reflective practice (Taylor and Harding, 2001) and only recently have strategies for reflective practice teaching in pharmacy been discussed (Robinson et al, 2001).

In Phase One of this study the technical rationalist approach to recording practice in a portfolio was suggested, and recording was not considered as part of routine practice. It was facilitated by the use of specific questions to encourage written reflection, as practitioners were keen to fill in the empty boxes containing trigger questions. This manner of reflecting is in opposition to the constructivist view of how reflection should be utilised. The findings of Phase One also suggested that when written reflection did occur, clarity of thinking was a positive outcome for some of the practitioners (reflection-on-action) but it was difficult for individuals to verbalise how this affected practice. The clarity of thinking may have influenced their professional judgement but there is lack of research data in this area (Paget, 2001).

Additional claims are that spontaneous reflection only happens when something goes wrong, fear of failure, or major life crisis (Gelter, 2003) because we need to allocate specific time to reflect. This was confirmed in Phase One in which time was the main barrier to recording reflection, and recording negative events was more common. What effect this may have on individuals’ future practice could not be clearly described by the participants. Reflection should occur as a whole rather than on individual tasks in order to change performance (Fitzgibbon and Grey, 2002), but participants in Phase One
described recording events without linking them to the wider aspect of practice.

Therefore, portfolios actually may not help individuals to reflect or even assess their ability to reflect.

The second purpose of Phase One was to pilot a number of research tools that could be used in Phase Two. The two main tools used were questionnaires, and face-to-face interviews. As an in-depth study was to be undertaken, questionnaires were not considered appropriate and a new method of assessing the level of reflective writing would have to be developed. A number of authors have suggested that written work is fundamental to the everyday accomplishment of medical, nursing and other professional work (Taylor, 2003). Pharmacists are the only health profession who do not record their treatment plans routinely in medical notes; therefore they are experientially at a disadvantage in comparison to other professional groups now that professional bodies are asking for written records. The lack of research in this area adds to the uncertainties faced by pharmacists in how and what types of records are required by their professional body. Phase One has given a multi-professional comparison at a single time point view. Therefore in Phase Two, a longitudinal, in-depth study of pharmacists in the hospital sector will be undertaken to examine the influence of portfolios on practice.
Chapter 3

Phase Two:

"The influence of Continuing Professional Development portfolios on pharmacy practice"
Chapter 3

The influence of CPD portfolios on pharmacy practice

3 Introduction

In Phase One, how the use of CPD portfolios affected reflection and practice was explored in a sample of allied health professionals, doctors, nurses and pharmacists. This highlighted the questionable benefits of maintaining such a record of practice, with a lack of integration of support mechanisms for this activity. In addition pharmacists' understanding of reflection in portfolio development and professional practice appeared superficial. This section will introduce the aims and objectives of Phase Two, provide background on the development of a reflective writing framework and then describe the methods used, the findings, analysis and discussion of the study.

3.1 Aim

The principal aim of this Phase of the study was to undertake an in-depth investigation of the influence of CPD portfolios on pharmacy practice and the character of pharmacists' reflective writing in CPD portfolios.

3.2 Study questions and objectives

The aim was developed into the following research questions:

a) What is the role of a CPD portfolio and its effect on pharmacy practice?

b) What are the characteristics of written reflection in CPD portfolios?
Chapter 3 Methods

The research questions were transformed into five objectives for the study:

i) To explore the views of pharmacists regarding the recording of professional practice and reflection in CPD portfolios.

ii) To identify how CPD records contribute to changing professional practice.

iii) To characterise the type of written reflection used by hospital pharmacists.

iv) To examine the characteristics of written reflective accounts over 12 months.

v) To explore the influence of professional experience on written reflective accounts.

3.3 Methods

3.3.1 Study Design

Phase Two of the study used a mixed-method approach. In order to explore individuals’ views of recording professional practice and reflection within CPD portfolios, a qualitative design was used. A quantitative approach was employed to obtain demographic data and to characterise the type of written reflection used by participants. A multi-centre, longitudinal design was used to explore views and reflective accounts over twelve months, within and between participants (i.e. a panel or cohort study). The role of the design was not to measure change but to describe the types of changes that may occur, and how they may have arisen. The methods used in this part of the study involved semi-structured in-depth interviews, focus groups and document analysis. This range of methods is mapped against each study objective listed in the methods matrix (Table 3.1).

The interviews and document collection from participants was undertaken at three time points: at the start of the study (July 2004), at six months (January 2005) and at twelve months (July 2005), the end of the study.
Three focus groups were conducted two months after the end of the main data collection period. The purpose of the focus groups was to verify the findings from the individual interview data and to explore similarities and differences between individuals, being aware that the same individual may answer the same question differently because of the different context of a focus group and interaction between individuals in the group.

Table 3.1 Phase Two study methods matrix

| Question 1. What is the role of a CPD portfolio and its effect on pharmacy practice? |
|----------------------------------|---------------------------------|------------------------------|
| Study objectives | Methodology | Method |
| 1.1) To explore the views of practitioners regarding the recording of professional practice and reflection in CPD portfolios | Qualitative | Interview – semi-structured Focus group |
| 1.2) To identify how CPD records contribute to changing professional practice | Qualitative | Interview – semi-structured Focus group |

| Question 2. What are the characteristics of written reflection in CPD portfolios? |
|----------------------------------|---------------------------------|------------------------------|
| Study objectives | Methodology | Method |
| 2.1) To characterise the type of written reflection used by hospital pharmacists | Qualitative | Content analysis of written reflective accounts |
| 2.2) To examine written reflective accounts over 12 months | Qualitative | Content analysis of written reflective accounts |
| 2.3) To explore the influence of professional experience on written reflective accounts | Qualitative | Content analysis of written reflective accounts |
3.3.2 Ethics approval

Permission to carry out this study was sought from a NHS Main Research Ethics Committee (MREC) at St. Thomas’ Hospital, using the Standard Operating Procedure which came into force in March 2004 (National Health Service and COREC, 2004). Following a formal interview with the MREC committee a number of changes were made to the participants’ information sheet before final approval was obtained (Appendix 19). The Ethics and Research and Development department at each of the nine sites was contacted and approval for the study obtained. Requirements for approval varied between each site. A participant information sheet was provided to all participants. This included details of the interview process, storing of tapes and computer records. It was made explicit that maintaining confidentiality would not compromise the researcher with respect to the Royal Pharmaceutical Society Code of Ethics or the NHS Trust’s Code of Conduct. A separate sheet was used to obtain written informed consent (Appendix 20) at the time of the first interview. In order to ensure anonymity of participants, all data collected were coded for analysis and only the investigator had access to actual participants’ names.

3.3.3 Development of interview schedule

The semi-structured interview method was non-experimental in design. An interview guide (Appendix 21) was developed based on Phase One of the study. The guide was not shown to the participants at any stage, but a participant information sheet and ethics consent form was issued to and signed by each participant before the interview. The interview guide was designed to contain the areas listed in Table 3.2.
Table 3.2 Main topics of the interview guide for Phase Two

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Participants' main skill areas of their current job</td>
</tr>
<tr>
<td>b)</td>
<td>Portfolio description</td>
</tr>
<tr>
<td>c)</td>
<td>Advantages and disadvantages of keeping a portfolio</td>
</tr>
<tr>
<td>d)</td>
<td>How is the portfolio linked to pharmacy practice</td>
</tr>
<tr>
<td>e)</td>
<td>Type of support given for portfolio activities</td>
</tr>
<tr>
<td>f)</td>
<td>Thoughts on mandatory and disclosure issues</td>
</tr>
<tr>
<td>g)</td>
<td>Description of a scenario, to look for evidence of openness,</td>
</tr>
<tr>
<td></td>
<td>responsibility and wholeheartedness</td>
</tr>
<tr>
<td>h)</td>
<td>Views of reflection</td>
</tr>
</tbody>
</table>

This list was used flexibly depending on the participants' responses. As an additional method for exploring a change in practice, participants were asked to identify what they considered to be their main practice skill area, then to self-rate their ability in each of these skill areas using a Likert style scale, similar to a visual analogue scale, with adjectives at either end. This type of scale was chosen as it is the most commonly used in attitude measures. The scale was defined as scoring one for a novice and five for an expert. The criteria for each point in the scale was left open to the participant to decide and not recorded. The intervals between each point cannot be assumed to be equal. Likert scales are ordinal type of measurements and have a rank order which would need non-parametric tests if statistical associations were being used. The five point scale was chosen based on the Dreyfus model of skill acquisition which uses five levels (Eraut, 1994). It was not the purpose of this study to use any statistical tests because of the small numbers used. Participants were asked to rate their skills at the start of each interview session. These data would allow the researcher to investigate any association of perceived change in skills, with the contribution of recording their practice.
Each interview was tape recorded using a portable cassette recorder (Sony TCM-453V) with a microphone extension (Sony ECM-F8). Field notes were taken during the interview to support the transcription. Each tape was transcribed verbatim. The transcription was checked for errors and the participants given the transcription for confirmation of the content. The interviews lasted 40 -50 minutes each. At the conclusion of each interview participants self-selected a copy of one reflective account from their portfolio for analysis.

3.3.4 Development of focus groups

On completion of the individual interviews, small focus groups (3 people in each group) were conducted with each of the three cohorts (section 3.3.6), giving the same number of years of practice by each participant in each cohort.

The main feature of such a method is the interaction achieved between participants. This was not a "group interview", which is a collection of individual interviews with responses directed solely through the researcher (Morgan, 1997). Participants did not have to answer questions in turn or answer at all. The researcher was the facilitator of the groups. The level of group moderation was kept low by allowing participants to discuss issues with minimal intervention by the researcher and allowing the group to have its own momentum.

One main advantage of this is to gain insight into the perspectives of the participants. One main disadvantage is that the discussion may wander away from the topic. The focus groups were used to test consistency of the individual interview data and in addition were to:

- Explore in detail attitudes and beliefs about recording pharmacy practice
- Give participants the opportunity to share experiences regarding using a portfolio
- Uncover similarities or differences between individuals
After discussion and agreement with individual participants, all focus groups were run centrally at Guy’s Hospital, Pharmacy Department and in the same small meeting room. For running the focus groups a topic guide was used, developed from the face-to-face interviews and published guidelines (Morgan, 1997). The topic guide included: opening statements, introductory questions, key question and reserve questions for key areas not discussed (Appendix 22).

Each focus group was tape recorded using a portable cassette recorder (Sony TCM-453V) with a microphone extension (Sony ECM-F8). Field notes were taken during the session to support the transcription. Each tape was transcribed verbatim. The transcription was checked for errors against the tape. The focus groups lasted 50-60 minutes each.

3.3.5 Development and description of the reflective writing assessment framework

The modified framework used was based on the Written Reflections In a Theoretical Teacher-training course (WRITT) published by Fund et al, (2002) and renamed the Modified Written Reflections In a Theoretical Teacher-training course framework (MWRITT). The framework is based on research from the field of writing and uses two main dimensions, that of form and content of the writing. The form dimension is concerned with how ideas are expressed from the style and structure of the writing. This is not driven by the syntax or vocabulary used. This dimension has four components: description (a description of an event), personal opinion (a personal view of the event), connection (explicit link to published accounts) and critical connection (analysis of the links). A further description of each component is listed in Appendix 23. The form dimension should give evidence of the extent of information retrieved from long-term memory. The content dimension has two components: subject and personal. The subject
content is concerned with what pharmaceutical (or other) issues are discussed in the account. The personal content is where the pharmacist writes about themselves, the "I" of the account. The original WRITT also had a "Didactic" content component, to include how teaching-learning strategies were being used. This was not relevant to the context of this study and so was removed from the framework.

3.3.6 Sampling

The NHS drivers for CPD have allowed the hospital environment to be one of the most structured in which health professionals may practice. This was found in Phase One of the study, in which a large majority (87%) of individuals interviewed had a portfolio of practice. In the United Kingdom, 20% of registered pharmacists work in hospital practice (Hassell, 2003). This group of pharmacists work in an environment that should be supportive to using portfolios, thus enabling a detailed examination of portfolio use in this study. Based on Phase One (Chapter 2), three cohorts of pharmacists were stratified according to years of practice (junior, intermediate and senior) in the NHS (Table 3.3).

Three individuals were used to represent each cohort based on the experience from Phase One, and to allow for attrition. A separate hospital site was randomly chosen for each of the nine volunteers, to obtain a variety of environments. Initially each site was allocated a pharmacist who would meet the required number of years of practice.

<table>
<thead>
<tr>
<th>COHORT DESCRIPTION</th>
<th>YEARS OF PHARMACY PRACTICE</th>
<th>NUMBER IN COHORT</th>
<th>NUMBER OF INTERVIEWS (Staged at 3 separate time points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>0 - 0.5</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Intermediate</td>
<td>2 - 3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Senior</td>
<td>&gt; 8</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

In the NHS, Workforce Development Confederations (WDC) are a network of organisations with the responsibility of developing the workforce needs of the health and
social care sector. Twenty-eight such confederations were established in April 2001 with a key role being to change the way in which staff are educated (Grout, 2003). A purposive (non-probability) sample of NHS hospital pharmacists within the London Workforce Development Confederation (LWDC) was used in this study. This comprised five separate WDCs, with 31 hospital sites. From the list of 31 hospital sites (Appendix 24) within the LWDC, 18 sites were finally contacted to obtain nine participants. The Senior Pharmacy Manager at each site was contacted, using telephone and email, for permission to undertake the study, and for the names of individuals who could fit the characteristics of the sampling frame. From the lists of names provided, individuals were invited to participate in the study.

Of the 18 sites, nine did not respond. The reasons for nine sites not providing volunteers were either a) nobody in the category (4 sites) or b) manager not able to be contacted (5 sites). Of the nine sites that did respond, identified individuals were approached by email or telephone and asked if they would participate. This was followed up by sending a copy of the participants' information sheet and ethics consent form to each identified individual. Focus groups were formed by combining the three participants in each cohort. These groups would bring together their shared experience. Whether or not participants already knew each other was a possibility due to the geographical sampling area. This would represent the norm within a relatively small professional group such as pharmacy and was considered a "naturally-occurring" group, in which ideas can be formed in similar contexts. The issue of negative effects from existing relationships within each cohort was a possibility.
The study was undertaken with a total of nine hospital pharmacists selected from five LWDC areas (Appendix 25). They were divided into three cohorts according to years of practice in the NHS. The total group included four males and five females. The age of the participants ranged from 24 to 45 years, with a mean of 31(±8.1) years old. The older male in cohort two was a qualified pharmacist from overseas, who had been working in London since 1997. All the participants, except for the 38 year old female in cohort three were in direct contact with patients as part of their practice. The pharmacists in cohort 1 were undertaking a rotational scheme through each section of their pharmacy departments.

Two of the participants were part-time employees; one was working five days but with compressed hours and the second, three days a week (Table 3.4).

Table 3.4 Characteristics of participants and hospital setting

<table>
<thead>
<tr>
<th>Cohort 1 Code</th>
<th>SEX</th>
<th>AGE</th>
<th>YRS QUALIFIED</th>
<th>MAIN PRACTICE AREA</th>
<th>JOB GRADE</th>
<th>HOSPITAL TYPE</th>
<th>MEDICAL SCHOOL</th>
<th>STAR RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>F</td>
<td>24</td>
<td>0.1</td>
<td>ROTATION</td>
<td>B</td>
<td>Acute Small/Medium</td>
<td>×</td>
<td>★</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>24</td>
<td>0.1</td>
<td>ROTATION</td>
<td>B</td>
<td>Acute Specialist</td>
<td>✓</td>
<td>★★★</td>
</tr>
<tr>
<td>8</td>
<td>M</td>
<td>23</td>
<td>0.1</td>
<td>ROTATION</td>
<td>B</td>
<td>Acute Teaching</td>
<td>✓</td>
<td>★★★</td>
</tr>
</tbody>
</table>

Cohort 2

<table>
<thead>
<tr>
<th>Cohort 1 Code</th>
<th>SEX</th>
<th>AGE</th>
<th>YRS QUALIFIED</th>
<th>MAIN PRACTICE AREA</th>
<th>JOB GRADE</th>
<th>HOSPITAL TYPE</th>
<th>MEDICAL SCHOOL</th>
<th>STAR RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>25</td>
<td>4</td>
<td>ICU rotation</td>
<td>C</td>
<td>Acute Large</td>
<td>✓</td>
<td>nil</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>38</td>
<td>3</td>
<td>PRODUCTION</td>
<td>C+</td>
<td>Acute Teaching</td>
<td>✓</td>
<td>★</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>29</td>
<td>4</td>
<td>PRODUCTION</td>
<td>E</td>
<td>Acute Teaching</td>
<td>✓</td>
<td>★★</td>
</tr>
</tbody>
</table>

Cohort 3

<table>
<thead>
<tr>
<th>Cohort 3 Code</th>
<th>SEX</th>
<th>AGE</th>
<th>YRS QUALIFIED</th>
<th>MAIN PRACTICE AREA</th>
<th>JOB GRADE</th>
<th>HOSPITAL TYPE</th>
<th>MEDICAL SCHOOL</th>
<th>STAR RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>F</td>
<td>36</td>
<td>14</td>
<td>MED INFO/PCT</td>
<td>E</td>
<td>Acute Large</td>
<td>✓</td>
<td>★★</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>38</td>
<td>14</td>
<td>IT/CPD</td>
<td>F</td>
<td>Acute Medium</td>
<td>×</td>
<td>★★</td>
</tr>
<tr>
<td>7</td>
<td>F#</td>
<td>45</td>
<td>21</td>
<td>EDU/CPD</td>
<td>D</td>
<td>Acute Large</td>
<td>✓</td>
<td>★★</td>
</tr>
</tbody>
</table>

ICU = Intensive Care Unit, Med Info = medicines information, IT = Information Technology, CPD = Continuing Professional Development, EDU = Education & Development Unit.

* Randomisation number of each participant; " NHS Executive and Public Health Development Unit 1999; " CHI 2004; " Became a permanent practice area in 2005; " Qualified abroad; " Part-time, 3 days a week. Moved to Primary Care Trust in 2005; " Part-time, 5 days a week, compressed hours.
All the hospitals were classified as having acute status, with variable star rating by the Commission for Health Improvement (CHI was replaced by the Commission for Healthcare Audit and Inspection in 2004). Two of the hospital sites did not have an associated medical school. All interviews were conducted at the participants’ chosen place and time in order to help them feel at ease during the interviews. All participants were happy for the interview to be tape-recorded.

3.3.7 Categorising interviews and focus groups

Discourse analysis (section 2.5.1) was used to interpret tape-recorded interview and focus group transcripts. Texts from these data collection methods should represent the participants’ different perspectives of the pharmacy world and their relationships with colleagues and their environment. The unit of analysis was themes generated from the interviews, focus groups and reflective accounts. Interviews and focus groups were analysed using a similar approach to that described in Phase One (Section 2.5.1) and based on the thematic framework described by Ritchie et al (2003). This method organises and classifies the data using the steps outlined in figure 3.1. Key themes were derived from the interview guide and served as a template to allocate text segments from the interviews. This is also termed the “a priori approach” in which defined key themes are decided beforehand and data obtained is sorted by these themes (Bailey, 1991).

After transcribing the data, the text was read repeatedly to allow familiarity with what was being said. Focus was placed on what the participants said in response to the study questions. Every comment was scrutinised for substantial text segments. These segments were then highlighted and were empirical evidence for the template themes. The template themes were analysed further by categorising the text segments and constructing sub-
Chapter 3 Methods

themes. The categories section was defined as being close to the original data and sub-themes a more interpretive label to the data.

Using the numerical scores given by each participant, self-reported skills were compared over the time frame of the study and reported as being a) improved, b) no change or c) decreased.

The first nine interviews were entered into a computer-assisted qualitative data analysis software: Q.S.R. NUD*IST Vivo 1.1. However, this method segmented the text too far and the context of analysis was being lost, therefore the manual approach was used to categorise the data. All interviews were transcribed into Microsoft® Word 2003 and segments manually highlighted. The highlighted text segments were transferred to Microsoft® Excel 2003 for categorisation and thematised.

Text is generated from tape

Text is read and substantial responses highlighted

Responses characterised into template key themes generated from interview guide – making sense of the data (Based on Phase One of the study)

Each main theme is reviewed & original text categorised

Categories combined to produce a set of sub-themes

Associations and explanations looked for in the cohort and time line

Figure 3.1 Scheme for interview and focus group data analysis
3.3.8 Trustworthiness of interviews and focus groups

In order to establish trustworthiness of this method, the following elements have been addressed: credibility, transferability, dependability and confirmability.

3.3.8.1 Credibility

In order to establish credibility in the study, checks were put into place at each stage of the interview process, using the format described in Phase One of the study (section 2.5.1).

3.3.8.2 Transferability

A number of criteria were used to ensure transferability in this study, based on the work of (Sale and Brazil, 2004). These criteria are listed in Table 3.5.

<table>
<thead>
<tr>
<th>Table 3.5 Transferability criteria used for qualitative data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Research question stated.</td>
</tr>
<tr>
<td>• Rationale for the use of qualitative methods given.</td>
</tr>
<tr>
<td>• Study context given.</td>
</tr>
<tr>
<td>• Sampling procedure described.</td>
</tr>
<tr>
<td>• Description of participants given.</td>
</tr>
<tr>
<td>• Data gathering procedures described.</td>
</tr>
</tbody>
</table>

3.3.8.3 Dependability

The interview guide helped avoiding asking leading questions. The interview data were categorised by two colleagues independently for two randomly chosen interview transcripts.

3.3.8.4 Confirmability

The statement of the investigator’s position as a researcher, practitioner, academic and CPD facilitator within this study is important when interpreting the results presented (section 3.5.4.1.2.1).
3.3.9 Categorising of reflective accounts

A previously published framework was modified for the categorisation of the reflective accounts which were submitted voluntarily by each participant at three different time points. The researcher did not define the format or length of the written account for the participants to submit. This was left to their discretion, but it had to be an account from their CPD portfolio. The modified framework used was based on the Written Reflections In a Theoretical Teacher-training course (WRITT) published by Fund et al (2002) and renamed MWRITTF. The unit of analysis was the whole account.

3.3.10 Credibility and dependability of reflective writing assessment framework

In order to achieve credibility, the MWRITTF instrument was developed using two stages.

i) Stage one

The MWRITTF is based on a presupposed theory of the level of reflective writing (Goodman, 1984; Gibbs, 1988; Mezirow, 1991a; Driscoll, 1994; Hatton and Smith, 1995; Kim, 1999; Duke and Appleton, 2000; Williams et al, 2000; Fund et al, 2002). This modified framework was mapped against these theoretical models (Appendix 26) and to the proposed generic framework for reflective writing (Moon, 2004c). Permission was obtained from the authors of the original framework and the modified tool sent to two educational experts and the two study supervisors for comment. Minor alterations were made to the design of the framework.

ii) Stage two

In stage two, three judges (the researcher and two study supervisors) each independently categorised four reflective accounts, purposively chosen on the basis that they represented a
different format of account, and agreement between them checked. The tool was revised until agreement was reached (Appendix 27).

In order to achieve dependability, an external judge (AS) with experience in educational processes was instructed in how to use the tool by the researcher. The researcher and external judge analysed three accounts from each of the nine pharmacists. Categories assigned had to be supported by textual data.

3.4 Phase Two findings and analysis

3.4.1 Introduction

This section describes the role of CPD portfolios in pharmacy practice by examining the views of pharmacists using face-to-face interviews and focus group data over a 12 month period. The data will be considered from the group as a whole, then the three cohorts examined for any specific differences. The influence of time on these views will also be examined. This is followed by a description of how CPD records may have contributed to professional practice.

The role of CPD portfolios within a discourse of a professional community can undertake a number of functions. The concept of discourse has many meanings but in this thesis it is a representation of the social world through all types of communication. This would include verbal and written accounts. The text used in these accounts is influenced by factors such as social practices (pharmacy practice), social structures (NHS Hospitals) and social groups (pharmacists). Discourse as a way of representation of social practices has been associated with the work of Foucault (Fairclough, 2003).
Community is a social group, in this case the hospital pharmacy system; that should have a common identity and purpose. A discourse community is formed by its members who use their social practices to make sense of experiences (Ovens, 2002). The discourse community of hospital pharmacy will have various views on reflection, competency assessment, and writing records of practice.

In the context of pharmacy practice, the role of a portfolio has been defined by both the NHS and the professional body, the RPSGB. The driver for keeping a portfolio by both these institutions is the requirement to undertake CPD and will form part of a revalidation system for fitness to practice in 2007.

In this work it will be argued that the CPD portfolio in hospital practice is perceived to be a tool of recording that is visited when necessary, amongst a vast range of factors influencing practice. The CPD portfolio may even germinate into multiple forms for one individual, particularly as pharmacists often have multiple roles (portfolio jobs), some of which require a portfolio for registration with various agencies other than the RPSGB. This tool of recording can often be isolated and lead to an evolution of different portfolio characteristics, compared to what was intended by the agencies. This isolation has direct links to the regulatory role of a portfolio. CPD portfolio recording may be considered as a technology of discipline that has been described by Foucault (1977) in his discussion of power, control and discourse. A technology of discipline is the organisation of disciplinary methods to normalise (establishment of a common set of procedures), produce docile and McDonalised (a process of calculability and predictability for control) practice as a form of domination. The tools of reflective recording may be conceptualised as Panopticon cells of professional practice, fitting a lifelong dislocated, modularised model of learning.
3.4.2 Exploring participant and written data

3.4.2.1 Semi-structured interviews

The aim of using semi-structured interviews was to gain an in-depth understanding of the meaning of CPD portfolios in the world of hospital pharmacy practice. The interviews attempted to obtain open descriptions of participants' views of keeping a portfolio of practice. The first research question was: What is the role of CPD portfolios in pharmacy practice? This had two objectives linked to it. The first was to explore the views of practitioners regarding the recording of professional practice and reflection in a CPD portfolio. The second was to identify how CPD records contribute to changing professional practice. The findings and analysis are presented in this order.

The key themes, sub-themes and categories for the first objective were constructed using a template based on the interview guide responses from the nine participants. The text was analysed and categories listed. The categories were then grouped into subthemes (section 3.3.7). These data are displayed in Table 3.6 and will be discussed with evidence presented by providing direct quotations from participants.
Table 3.6 Data analysis template for the views of practitioners regarding the recording of professional practice and reflection in a CPD portfolio

<table>
<thead>
<tr>
<th>KEY THEMES</th>
<th>SUB-THEMES</th>
<th>CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Integration of person and professional. Similarity. Compartmentalised.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Record of progress. Formal document. End product more important</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Format preference. Restrictive format. Clarity/confusion</td>
</tr>
<tr>
<td></td>
<td>ii. Duplication of records</td>
<td>Linked records. Not duplication</td>
</tr>
<tr>
<td>b) PORTFOLIO SUPPORT</td>
<td>i. Influence of colleagues</td>
<td>Sign posting. Practice support. One-to-one support. Feedback. Change of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>support over time.</td>
</tr>
<tr>
<td></td>
<td>ii. Motivation</td>
<td>Lack of support. Positive motivation. Time</td>
</tr>
<tr>
<td></td>
<td>iii. Work versus learning</td>
<td>Homework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Examination. Selection of records. Quantity of records. A chore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feedback</td>
</tr>
<tr>
<td></td>
<td>ii. Emphasis on error</td>
<td>Reluctance. Emphasis on own corrections</td>
</tr>
<tr>
<td></td>
<td>i. Linked to learning</td>
<td>Triggers to reflection. Self-examination of practice for improvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motivation to learn. Satisfaction with outcome. Awareness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>choice. Lack of feedback. Technical processes unreflective. Emotionless</td>
</tr>
<tr>
<td></td>
<td>iii. Support</td>
<td>Influence of colleagues. Peer review. Duplication</td>
</tr>
<tr>
<td>e) MEANING OF REFLECTION</td>
<td>i. Form</td>
<td>Preference. Handwriting. Format transfer. e-Form.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Influence of colleagues. Time. Emotionless</td>
</tr>
<tr>
<td>f) WRITERLYNESS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

173
3.4.2.1.1 Role of CPD portfolios in pharmacy practice

The views of participants about recording practice and reflection in a portfolio suggested six key themes (Table 3.6): a) the meaning of a portfolio, b) portfolio support, c) the mandatory nature of recording, d) disclosure of records, e) the meaning of reflection, and f) writerlyness; each of these themes will be discussed in the following sections.

3.4.2.1.1.1 The meaning of a portfolio

The meaning participants gave to their portfolio was either based on the architectural aspects, or the notion that this group of records was a duplication of effort.

3.4.2.1.1.1.1 Architecture of a portfolio

Architecture is normally associated with the design and construction of buildings, but it can also describe the complex structure of something. In this thesis that something is the portfolio. The architecture of participants' portfolios was based on two distinct types. The first was course-related and the second was the professional institutional type (Figure 3.2). In both cases the purpose of having the portfolio defined its structure. Portfolio definitions are varied, but the work of a number of authors illustrate that the main dimension to consider in describing a portfolio is the purpose (Tomkinson, 1997; Smith and Tillema, 2001; Klenowski, 2002; Heath, 2004).
Chapter 3 Phase Two findings and analysis

Architectural structures of a portfolio

Course-related
- RPSGB
- Postgraduate diploma

Professional institutional
- RPSGB
- Plan & Record
- NHS London Pharmacy
- Education & Training

Figure 3.2 Diagrammatic representation of participants’ description of a CPD portfolio.

Course-related portfolios were either the preregistration trainee type, designed by the RPSGB or a postgraduate portfolio used to submit elements of course work for a University-based diploma. In both these cases the portfolio was mandatory and assessed. The professional institutional portfolios were the Plan & Record system (also available electronically) designed by RPSGB or a NHS London system, designed jointly by two NHS pharmacy, Education and Training organisations (London Pharmacy and South East-South Coast Pharmacy). These formats were voluntary and not assessed formally. All participants with a portfolio described it as something that would include details of professional qualifications, significant events, presentations and attendance certificates, collected over different time periods.

"Has all your details, your professional and academic qualifications then the significant reports of significant events, what possible education educational training or seminars you’ve attended, presentations made." (1-1-85, P)

*The first number represents the participants’ code, the second number represents the interview number (1-3), the last number represents the line number from the transcribed text and the seniority of the participant is designated as J = junior, I = intermediate and S = senior. It is recognised that not describing all the details of the participants for the quotes may lose some interpretive context.*
Chapter 3

Phase Two findings and analysis

Others described a collection of practice evidence, testimonials, protocols and procedures that had been written. These would serve as a resource that could be referred to later and would theoretically give the collector an idea of which direction they could take their career. When moving jobs this was described as an expanded curriculum vitae.

"I suppose it gives you an idea of where you're going as well. You can take it from job to job and people can have a look to say ok, it's almost like an expanded CV in a way, to say these are my experiences, this is what I do."

(3-1-293, S)

These various collections were either part of a hard copy CPD portfolio, eP&R or higher educational portfolio system. The notion that these records were a personal, as well as professional collection (see section 2.6.1.1.1) was voiced by a number of participants.

"OK in the front of it I've got like all my ... I've got my CV and then personal information and professional information and then certificates." (7-1-213, S)

It was acknowledged that leaving the recording to be done in your own time also leads to last minute submission. This last minute submission may be due to individuals reverting back to their self-regulated learning behaviour from previous student activities (Nicol and Macfarlane-Dick, 2006). Self-regulated learning is a theory that views learning as a cyclical process in which the student in academia views learning as something to do for themselves rather than what is done for them. If the professional has previously managed their learning by late submission, it is relatively easy to revert back to this behaviour when the professional environment becomes similar to that of academia.

This collection of records was similar in some cases to that used at the undergraduate stage of a pharmacist's career. At this stage, the portfolio would involve filing tutor marked assignments, which would then be used for summative assessment as part of the curriculum.
"We were actually told to keep a portfolio ... we just had to copy a template for the first few pages and then we just had to include the work we had basically done throughout the year, which we thought might have actually provided some sort of CPD for ourselves."  

(5-1-36, J)

In this case, the participant's idea that undergraduate records would be of future use was never pursued. This example of not continuing the use of an educational tool from a formal environment of a University illustrated the isolation of portfolio use and its "portmanteau" nature (see section 2.6.1.1.1). Compiling the portfolio takes a lot of effort and for one participant who took his portfolio into an interview; there was disappointment when none of the interview panel asked to see it.

"When I attended my C grade interview they just had it (the portfolio) I just showed it to them but (they) didn't go through it."  

(2-1-159, J)

The keeping of a portfolio also involved the notion of an episodic aide-memoire. Episodic memories have been described as particular events that involve the person as the main actor or witness and are different to semantic (e.g. names, dates and facts) and procedural memories (e.g. skills), (Blakemore and Frith, 2005). Participants would record their involvement in various situations and store these records for future use. It was also suggested this was a good method for tracking personal development (although none of the participants had done this) and to recall past assignments completed during a formal educational course.

"You can use it to refresh yourself about things as well, I mean even though you've done the learning around an area you know there might come a time a year down the line you think actually I've sort of forgotten that, or it might crop up again. You can go back and refresh yourself which could be useful even though the situation might be slightly different."  

(3-1-308, J)

Since all but the senior cohort were familiar with recording evidence of practice at preregistration level, transition into CPD recording was easy because of the similarities in
recording process. The preregistration competency-based format was introduced in 1993 (Anon, 1994). In addition the various stages of the CPD model, described by the RPSGB, were felt to be similar to the way pharmacists actually practised in the hospital sector. The participants found that the main difference was that the RPSGB required written records to provide evidence that individuals were using the different stages of the CPD model.

"I mean we're doing, we are doing CPD all the time as hospital pharmacists, it's just that we don't put things down on paper so it's just, it's good to have it as evidence."  
(7-1-225, S)

For some, there was still some confusion about what CPD is. One participant described CPD as a process that had to end in a change of practice, which was not always the case for them. He commented that the inexperienced practitioner has a minimal base-line of practice and is only learning to follow published protocols. Therefore practice was not perceived as changing. The RPSGB P&R portfolio was described as a set of compartmentalised tasks that had to be completed.

"Then basically your aims and objectives what were you trying to achieve and then a description of what actually happened and what was the outcome of the event. And then there’s a section ... reflective section basically what you have learnt as a result of the event and the next section is how to improve or what do you need to learn more about it.”  
(4-1-105, J)

An alternative view of the portfolio was provided by a participant who saw his future career as head of a non-pharmaceutical company, specializing in event organisation. He would make his staff use a portfolio to focus purely on the outcomes of practice. In this way his company could learn from the experience of outcomes and improve productivity.

"They (the company) just want to know what the end product is, how good it was and how it was kept to budget, whatever they might want, video footage, whatever, so it ... wouldn't be as paper based as such, it would be more presentation, so PowerPoint or whatever power slides and so that's to go to the board meetings and give presentation."  
(8-3-262, J)
This view correlates with the collective approach to reflection (McHardy and Brown, 2003; Renolds and Vince, 2004). This method of using records is not an individual activity but involves the social, institutional and political influences in a scenario which is being recorded. Encouraging small firms to develop reflective practices, has been described recently, using strategies based on the work of Schôn (Martin, 2003).

For some participants, having an electronic template with structured questions was found to be useful and to reduce the time to produce a record. This was more important in the home situation, where time for recording was mainly available in short bouts.

"I’m working on my home PC. I can just always kind of slot in just about five, ten minutes I just note down some events that have happened for that day."

(2-1-120, I)

In addition a tick box system for recording was favored and easy to use. This allowed some participants to save printing paper records, which was a problem during the preregistration year, as well as for the previous manual CPD portfolio systems, all of which were found to generate a large amount of paper.

With a large number of important incidents occurring in their practice that could be recorded, participants felt they were unclear what should be written and in what depth. Experience at the preregistration stage suggested that records were often superficial in nature and therefore this was likely to be the case for professional records. This made the recording process tedious and a chore to do especially using the paper P&R version.

"Now I feel it’s becoming more of a chore to use this I mean I don’t know if there’s another version that’s being used, but I find it more and more difficult now to record."

(3-2-175, S)
Similarly, some participants felt the eP&R was confusing to use and required an example to follow. Some of the sections for recording electronic accounts had limitless word entry and this also made it time consuming. The large number of drop down menus led to some confusion in what should be ticked, but in contrast more check lists were thought to be needed in the competency list section of the eP&R.

"Yes there are a lot of boxes and a lot of like drop on points and that it can be potentially confusing and sometimes you don't know, everything kind of seems to apply to you." (4-3-160, J)

This notion of having to enter data quickly (fueled by software, as if the electronic world is one which is constantly making an individual want to speed up his/her own performance, as they get familiar with the data inputting) is interesting in this group of participants’ as it potentially generates a technical approach to written reflection, the complete opposite to the purpose of reflection, which is to allow an individual time to think.

The eP&R also has a facility to organise records, which would otherwise be difficult to do with a paper version. Some participants felt the guided questions used in the eP&R were too narrow and required only a short answer. This was thought to be different to the method of recording practice they had experienced when undertaking formal courses, which required a more in depth approach. A further section of the eP&R which participants had difficulty in completing was the “outcome” record. There was also some confusion on the process of accessing the eP&R system. The RPSGB have recently agreed to reduce the complexity of data entry into the eP&R system (Anon, 2006).

3.4.2.1.1.2 Duplication of records

Participants felt that providing records had become a duplication of effort. This was due mainly to the numerous accrediting bodies inside and outside the NHS who were asking for
evidence of practice, e.g. College of Pharmacy Practice, Medicines and Healthcare Products Regulatory Agency, Higher Education and internal appraisal schemes. These portfolio "islands" had little new to offer and visiting them was perceived as an additional task within a discourse of practice governance that some people were reluctant to undertake.

"You're required to keep notes and keep things you have done, so I think it's almost a duplication really of the CPD, so we're still required to keep documenting."

(2-3-361, 1)

The question of duplication has recently been raised in hospital practice (Ranshaw, 2006) and a KSF portfolio designed to merge CPD with the data required for the KSF (Middleton et al., 2006). This duplication of records also made participants challenge the need to record, and concern was raised about having to continually provide information about the worthiness of professional practice. This concern about providing records was the first indication that a form of surveillance was being instigated, as described by Foucault in Discipline and Punish (1977). In addition, the power relationship of governance by the NHS (and central government) and the freedom of professional practice is being enacted as described by the work of Foucault (Faubion, 1994). In describing the common anti-authority struggles, Foucault explains that authority (in this case the NHS) seems to support individual status on the one hand, but forces the individual back on himself (using a portfolio and reflective writing), which can break any links with others. This constraint on professional practice is illustrated by a senior participants comment:

"Sometimes I think it should be your choice to do it, it's almost like you have got to prove now what you do, prove your worth, is it worthwhile that you do this, what do you gain out of it?"

(3-1-279, S)
Chapter 3
Phase Two findings and analysis

The P&R portfolio was thought to be similar to what would be required by the KSF (another example of governance of healthcare) and therefore a duplication of effort. Practice records were also being produced to document errors in practice as a separate system. These records were felt to be personal evidence that practice has improved and it was important to include them into a portfolio, but this involved multiple recording methods, one for the Trust, one for the portfolio and one for an appraisal. One participant had not started the obligatory RPSGB recording system because he felt his postgraduate course portfolio was equivalent, as illustrated by the following comment:

"I've not done anything on top of what I've done before, because the way I see it is I can add CPD as part of my certificate so I'll do my certificate first."

(8-2-112, J)

His understanding of what CPD means is more about a collection of data than a process. Other participants preferred a hard copy of their records as a backup to the electronic version, resulting in two portfolios.

3.4.2.1.1.3 Portfolio architecture in different cohorts and time

Senior participants were the only ones to be recording practice in a portfolio that was maintained throughout the 12 months of the study and not assessed. This was changed from a hard copy to an electronic format (Table 3.7) after 12 months.
Chapter 3 Phase Two findings and analysis

Table 3.7 Type of portfolio maintained by hospital pharmacists over 12 months

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Qualified (Years)</th>
<th>Study Time Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004 (Start)</td>
<td>2005 (6 months)</td>
</tr>
<tr>
<td>JUNIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td>Paper P&amp;R</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>NIL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Started eP&amp;R</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>NIL</td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td>COURSE</td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>NIL</td>
</tr>
<tr>
<td>SENIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>Regional</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>eP&amp;R</td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>Starting eP&amp;R</td>
</tr>
</tbody>
</table>


At the start of the study all except two participants had to provide a portfolio of practice either during their preregistration year or related to a formal postgraduate course which they were undertaking. The two participants with no portfolio had experience of keeping a preregistration or a course-related portfolio, but were not motivated to continue using one. The preregistration portfolio was designed to assess performance against a standard and comprised a workbook and a portfolio which contained elements of the workbook. For the purpose of this thesis, both the workbook and portfolio are considered together as one document called a portfolio. Classification of this type of design using existing topologies would place it into the Dossier (Smith and Tillema, 2001) portfolio category. The preregistration competency portfolio is based on the NVQ model, a behaviouristic approach which has been criticized by a number of authors. The suggestion is that other models such as the interactive model of competence should be explored (Burchell, 1995). In this model, competences are generally constructed and do not involve set tasks to be followed.
In summary, the discontinuous use of professional portfolios seemed to start at the undergraduate stage. The portfolio at University would be discarded in order to move to the preregistration level and begin collecting evidence of practice. After completion of this stage of professional training the portfolio would again be discarded before the pharmacist moved onto their first job and collected more data. The junior cohort was slow in starting a CPD portfolio, with one participant refusing to duplicate recording as he was undertaking a formal course. The intermediate cohort, who were all qualified for three to four years were the least compliant with CPD recording. Only one participant towards the end of the study started to engage in the electronic version. The senior cohort was all recording practice to different extents.

3.4.2.1.1.2 Support for documenting practice

Support for documenting practice varied among the participants and was recognised by all three cohorts as being particularly important for new members of staff (this was also the case in Phase One of the study, section 2.6.1.1.3).

The sub-themes which emerged from the interview data suggested that support for documenting practice involved three sub-themes i) the influence of colleagues ii) motivation and iii) work versus learning (Table 3.6). These sub-themes are not mutually exclusive and will be discussed in the next sections.

3.4.2.1.2.1 Influence of colleagues

Participants' discussion with their colleagues and seniors was thought to be extremely valuable, even if the discussions were informal, occurring in a corridor or lift. The awareness that colleagues had not started recording was used as an excuse for not personally being involved. In order to overcome this problem, one Trust organised peer
support in the form of a “buddy” system, in which pairs of individuals would meet and
discuss their CPD records. This would “discipline” the group by means of monitoring and
ensure compliance with the recording system.

“It involved basically developing and ensuring the staff are doing their plan and
recording on the website ... we were hoping to set up a database to keep a record of
who is doing it and who is not because I mean everyone needs to do it eventually,
just to make sure they are doing it.” (6-1-201, S)

A positive side-effect of having another person review the records was to give confidence
to the writer by ensuring that the method of recording was appropriate.

“To be reviewed by someone, that might be quite helpful as well ... to make sure
that you’re going right way for one thing and being able to actually provide
evidence that you have ... you’ve reflected on or identified and you have evaluated
and made sure that you added it your practice, improved your practice.” (5-1-372, J)

However this sort of feedback was only available to the two CPD facilitators in the senior
cohort. The RPSGB is still in the process of devising a feedback system following
assessment of CPD records submitted (Anon, 2005).

Practice support in departmental meetings was a common occurrence, but there was
segregation amongst the different types of pharmacy staff regarding what support was
given. In one Trust, support was provided for the technical pharmacy staff but not the
pharmacists, compared to all pharmacy staff in another Trust. Why this segregation
occurred is not clear, but adds to the problem of intra-departmental barriers between
technicians and pharmacists. Suggested reasons include the view that technical staff have
very diverse learning backgrounds and require more support than staff educated to degree
level. As support was provided by a technical person in this Trust, this barrier was being
reinforced. The regularity of such departmental meetings was important and it was
remarked that the kind of support that was provided during preregistration training period would be welcome.

Learning from the sharing of written records was useful and peer review meetings were organised in some departments for this to happen. These would take the form of either a discussion of an individual's practice, review of published articles from professional journals or review of an individual's written account. In some of these peer review meetings it was a case of encouraging colleagues to start or complete their records, rather than a review of practice.

"Well most of the time she'll be ... reminding us to actually do our CPD because most of us can't find the time to." (4-2-181, J)

In one Trust, if nobody wished to share their accounts in the meeting, the time would be given to individuals to write their reflective accounts.

One-to-one support was variable. Some participants had no CPD facilitator; others had regular individual meetings (see also section 3.4.2.1.1.5.3). At two sites the supporting structures were the result of pharmacists' attendance at formal, mandatory, and postgraduate educational courses. In another two sites, individual support for CPD was withdrawn because of workload pressures, which de-motivated the participants involved. The responsibility of contacting a CPD facilitator was often left with the participant, through the use of the email system, rather than face-to-face contact. This led to one participant (who was a facilitator) being quite concerned about his lack of knowledge of pharmacists who had not contacted him, and their current progress in making records although he did not suggest that he should be proactive in obtaining this information at any time.
Chapter 3

Phase Two findings and analysis

“As yet nobody has come to me and I don’t know whether that means that nobody has been doing any entries at all or not.” (9-2-131, I)

The type of support given to individual participants over the twelve months is summarised in Table 3.8. All participants were involved in peer review meetings. A CPD facilitator was available to all participants except the two females in cohorts 1 and 2 at the start of the study. This facilitation varied from proactive regular meetings which would focus on practice problems and medicine errors, to a facilitator being available if required. Over the twelve months this one-to-one support was withdrawn with mainly peer review meetings left in place.

Table 3.8 Type of support available for Continuing Professional Development between cohorts and time

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Qualified (Years)</th>
<th>Study Time Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004 (Start)</td>
<td>2005(6 months)</td>
</tr>
<tr>
<td>JUNIOR</td>
<td>Peer meetings</td>
<td>Peer meetings</td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td>Peer meetings</td>
</tr>
<tr>
<td>M</td>
<td>CPD Facilitator (not used) Peer meetings</td>
<td>Peer meetings</td>
</tr>
<tr>
<td>M</td>
<td>CPD Facilitator meetings Peer meetings</td>
<td>CPD Facilitator meetings Peer meetings</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td>4 nil</td>
<td>Peer meetings</td>
</tr>
<tr>
<td>F</td>
<td>CPD facilitation as required Peer meetings</td>
<td>CPD facilitation withdrawn. Peer meetings</td>
</tr>
<tr>
<td>M</td>
<td>3 CPD facilitation as required Peer meetings</td>
<td>Peer meetings</td>
</tr>
<tr>
<td>*M</td>
<td>4 Departmental CPD meetings</td>
<td>No CPD meetings Peer meetings</td>
</tr>
<tr>
<td>SENIOR</td>
<td>CPD Facilitator regular meetings Peer meetings</td>
<td>CPD facilitation reduced Peer meetings</td>
</tr>
<tr>
<td>F</td>
<td>14 CPD Facilitator regular meetings Peer meetings</td>
<td>CPD facilitation reduced Peer meetings</td>
</tr>
<tr>
<td>*F</td>
<td>14 Regional CPD meetings Peer meetings</td>
<td>Regional CPD meetings Peer meetings</td>
</tr>
<tr>
<td>*F</td>
<td>21 Regional CPD meetings Peer meetings</td>
<td>Regional CPD meetings Peer meetings</td>
</tr>
</tbody>
</table>

*CPD Facilitator

Overall support by appointed CPD facilitators was deteriorating because of service workload. The role of a CPD facilitator was often secondary to another service commitment. Over the previous few months the workload within the pharmacy service had
increased to the point that individual facilitation was not possible, because both facilitator
and facilitate were undertaking other commitments.

3.4.2.1.2.2 Motivation

Encouragement to keep a portfolio for CPD records was needed. Some participants lacked
self-motivation in keeping any sort of portfolio once an official driver (e.g. formal
educational requirement) was removed. It was acknowledged that after four months of
obligatory recording (required by the RPSGB code of ethics), there was a feeling of
disappointment about the number of records completed so far, but there was no motivation
to comply.

"I think I might have done one other record since then which is a bit disappointing
because I thought I would be very good and do more regularly."

(3-2-155, S)

For this participant starting a new job triggered thoughts to produce records, but they were
never written.

A participant from the intermediate cohort had not made any entries or kept a portfolio
since his preregistration training, but was a CPD facilitator for others in the department.

For this individual the lack of engagement with record keeping was maintained throughout
the 12 months and no member of staff had approached him for CPD support. One factor
for this was that he was undertaking a part-time University Masters course during this time,
as illustrated by the comment:

"Hasn't really got any further, I need to, now that I have you know completed all
the core elements of this Masters. I need to actually start producing and submitting
things to the society."

(9-3-213, I)

The lack of motivation was compounded by the lack of Regional support for local CPD
facilitators. There was a perception that Regional training meetings lacked any educational
novelty. This was partly due to individual practitioners becoming more familiar with the CPD process. Alongside this lack of support has been the emergence of the NHS KSF. In this new appraisal system the role of the CPD facilitator is not recognised because the main focus of the appraisal will be on assessing performance against specific job objectives, which are also linked to the pay structure; rather than to any professional development.

"I don't think there is much use to be honest and because every time they just look at each other's CPD sort of like strategy and how they do it. There isn't much there isn't anything new and now they're talking about KSF for their role which to be honest I think that is going disappear." (6-3-266, S)

In some Trusts the lack of suitably trained individuals has led to pharmacy managers taking on the role of CPD facilitator, which is contrary to the recommendations of the London Region CPD guidelines:

"The facilitator should fulfill the following criteria: Is not usually the individual's line manager."

(North Thames and South Thames Education and Training, 2000)

Some participants considered these managers to be open and trustworthy even if they were also conducting their job appraisals. In contrast, other participants were not happy that the manager should also be the facilitator for CPD.

The lack of support for CPD facilitation was also due to a lack of departmental concern. Within the NHS hospital system, with the current financial haemorrhaging of departments, education always falls below any service delivery to patients. This was in contrast to another Trust that specifically allowed time at the end of a peer review session for individuals to maintain their CPD records. One of the participants, who was a CPD facilitator at this meeting, found she did not use this opportunity herself and relied on recording at home. This is an illustration of how pharmacists develop a technical rationalist paradigm to work, with a "no gap" work culture, continually moving in a "sea of practice"
with a fear of drowning in work load; the reverse of what reflection tries to accomplish.

Having a supportive home family was therefore important.

"I always do that (take work home) ... I wouldn't say it's difficult. I mean well my husband and my family understand it, we do the same thing because some days he will have to work at home." 

(6-3-222, S)

The lack of access to a computer at work, and a perceived lack of time in the job, meant data entry for CPD records was often undertaken at home, as described above. Having to record events in participants' own time, rather than work time, was not viewed as a good idea. As professional work was already being taken home, having to produce these records as well was not a priority. This became more acute in one case in which the participant had strong family commitments.

"Once you're at home you try and switch off from work even though I do often take work home. To catch up with like read these papers for that evaluation, that needs to be done but I don't want to be doing things like this in my own time either, because other things become a priority." 

(3-2-270, S)

Suggestions were made for having protected time for recording within the working day, which was already available in one Trust. This would be particularly useful for part-time workers and when moving to a new job.

"I think we should have protected time ... because I mean at the end of the day working nine to five, just too many things in course of the day to do then by the time you get home when you have kids you have very little time to yourself." 

(2-1-217, I)

Recalling time wasting during the preregistration year in trying to match events with listed competencies also had a negative influence on participants' motivation for recording practice.
3.4.2.1.2.3 Work versus learning

Some participants felt that recording of practice had to be done in their own time because they are paid to do a job which does not include CPD recording.

"... in a way when you come to work you're paid to come to work." (6-3-214, S)

This division of work versus learning was perceived to be similar across Trusts, where it was better to send individuals away from the workplace, so colleagues would not observe staff sitting down and writing, as would be the case for CPD records. This isolation of recording would encourage the Panopticon concept of power and control. Participants would sit at home knowing the central body (RPSGB) could be observing them through their written accounts, which are not shared with others. The ideology of work for some departmental heads often does not involve support for individuals, but a technical competence to perform. This technical approach to education is being driven by many health professional organisations and the NHS KSF. Learning then becomes an end to an "economic proficiency" of work. Economic proficiency in pharmacy is very difficult to define but is similar to the notion of an "observable commodity" used to describe competency-based training in industry (Garrick, 1998).

In summary the support for documenting practice was found to be variable and one-to-one facilitation diminishing over time. The influence of colleagues was important and peer review meetings, dealing mainly with medicine errors or day to day process problems, were evident.
3.4.2.1.3 The mandatory nature of recording

Participants’ views about the mandatory nature of CPD records resulted in two sub-themes: i) assessment and ii) utility.

3.4.2.1.3.1 Assessment

The assessment of a pharmacist is becoming multi-directional. It could involve a) keeping marked records for a formal course, b) another professional body that governs a specific aspect of the job, c) a job appraisal, and d) the RPSGB. These systems are not linked in anyway for an individual and become a duplication of effort, compounded by some participants keeping electronic and paper versions of the same thing. Since the RPSGB made CPD records obligatory in January 2005 with mandatory status in spring 2007, the assessment of these records was a concern for participants. Details of the assessment process have not been described by the RPSGB and recording negative events by participants was more common practice than positive ones. The concern was if assessors of these records start to quantify these errors. Participants felt assessors would not interpret the accounts as a positive change in the individual.

"If people are going to count, I mean raise issues against you. Based on that, I think it’s quite negative because I mean I’ve had events during my pre-reg period when things happened months back and maybe three months after I mean I have an appraisal if such incidences are still being referred to without people realising that, look I’ve moved on from when I made that mistake."

(2-1-183, I)

This concern was not raised in a recent questionnaire survey of hospital pharmacists, although community pharmacists did so (Swainson and Silcock, 2004). As with all assessment processes, there was concern about the possible sanctions imposed on individuals if assessors viewing their records were not appropriate and not using set guidelines. It was not considered appropriate for a community pharmacist assessor to judge
a record written by a hospital practitioner. Records would be reviewed out of context and feedback would therefore be of little value.

"I don't think that's a major problem as long as they pass it off looking at it within sort of set guidelines whatever their supposed to be looking at."

(1-1-254, J)

In this case the judge or judges sit in their towers unseen by the professional, but the professional knows someone is looking. A stronger method of discipline compared to knowing the assessor, as described by Foucault's Panopticism (section 1.3.5). The problem with the feedback would be compounded by the perceived lack of assessors compared to the number of records to be judged at the RPSGB. In contrast it was suggested that assessors’ lack of contextuality of records would also be less threatening, as they would not be able to make value judgments about individuals.

"It doesn't bother me in the slightest. Because I don't know them, they won't know me, so they're not going to be able to judge me over it and they can only see what they're seeing online they can't decide what I'm actually like."

(8-2-247, J)

Participants’ remarked that the mandatory nature of keeping CPD records was a powerful method of ensuring compliance with the process of CPD, and some would not otherwise undertake this recording. This was also found by Bell et al (2002), in a study of 418 pharmacists. However it was not clear which area of pharmacy practice these concerns originated from.

There was a suggestion that pharmacist’s should be given a choice in providing evidence of practice. Participants’ also felt they had lost some freedom in their professional practice (a loss of autonomy) and their self-control as a result of recording becoming mandatory, as illustrated by the following comment:
"But they make you record them as well so they don't give you the freedom to choose whether you want to record it or not because you have to record it in order to prove you know to show evidence of your competency." (4-1-452, J)

Involving students in the use of portfolio assessment has been demonstrated to enhance their perception of control, from an internal rather than external view (Ezell and Klein, 2003). This links with the findings in Phase One, in which perceived behavioural control was associated with pharmacists' attitude, which in turn impacted on the intention to keep a portfolio (section 2.6.2.2.1).

The loss of freedom and self-control in professional practice has been commented on by Charlton (2001). In a discussion of the managerial control of clinical practice using quality assurance systems, the practitioner is no longer trusted to perform, but trusted to use auditable documentation. Hence clinical governance and CPD as a tool to control professionals has been accepted, without a debate on the evidence of its use. This type of control was suggested to be detrimental:

"Like most parasites, clinical governance will tend to weaken, and eventually kill, its host."

(Charlton, 2001)

The feeling that mandatory recording was a form of additional pressure on the individual was raised. This was associated with already pressurised jobs and in one case, the challenges of moving to a new job. This move was to be an incentive to complete records in case the interview panel asked for evidence of practice. However, records were not completed and the panel did not ask for any evidence.

The quantity of records required for submission was also a contributory factor to feelings of being pressurised. Concern that these sorts of pressures may be excessive for some
colleagues and that a more flexible approach should be used when allocating specific time
for recording practice was voiced by one of the CPD facilitators:

"Becoming mandatory will put that sort of pressure on you, and you will get there, I
think in that way, but on the other hand it might not be such a good thing for some
people because they don't like that kind of pressure."  (7-1-254, S)

3.4.2.1.3.2 Utility

The lack of motivation by colleagues to record practice was a contributory factor for the
impassive, detached and indifferent view presented by some participants. Making the
system mandatory was the only way that colleagues would change their behaviour, which
would possibly influence the participants' behaviour. Some of the impassive views were
because participants believed that recording CPD was already part of professional practice.

"They make you record things, even though, I mean to me, it seems like normal
practice to just, you know, ... a task to complete it to the best of your ability."
(4-1-448, J)

The compulsory nature of recording CPD was considered to be more important for certain
selected groups of colleagues, e.g. those in the community, part-time, retired and colleagues
new to a job. As these were stereotyped into individuals who do not normally undertake
any form of continuing education.

"Especially those who've been qualified for a long time I wouldn't say probably in
secondary care but a lot of people who work in retail in the community they just sit
in the shop and do nothing all day...I don't know how they can do that."
(6-3-333, S)

A few participants suggested the mandatory system was fair and a good idea as it made
them aware of their achievements. It was suggested this could lead some managers into
providing some kind of support for individuals to maintain records.
"So if at work, I mean our managers will recognise that it's now mandatory we need to keep these portfolios ... and I think it's quite good because ... I mean it tells you whatever point in time it's a kind of be able to measure yourself, what you've achieved and what you need to do."

(2-1-224, I)

3.4.2.1.3.3 Views on the mandatory nature of CPD records: differences between cohorts and over time

A summary of the views of the junior cohort on the mandatory nature of recording over time, is listed in Table 3.9. A common view was that recording was part of normal practice. This was not unusual as they had just finished an intensive period of recording practice as part of preregistration training. Although pharmacy workload was beginning to affect juniors finding the time to record events (compared to the preregistration year).

Juniors were beginning to feel recording was a tedious task, as illustrated by this comment:

"To make a mental note of the events that happens, like basically when you're dispensing you know its so busy in the dispensary but yet you have to make, you jot down all the details, to make a record of it. So in that way I find it very tedious and very you know inconvenient at times."

(4-1-458, J)

After one year two junior participants' views changed from recording CPD being normal practice to it being a chore.

The intermediate cohort was generally unconcerned about records being mandatory. One participant who was also a CPD facilitator agreed that mandatory records were useful, but for colleagues, not himself. Although he kept technical notes about various clinical problems, these were not in the format required by the RPSGB.

The senior group was more positive about recording at the start of the study compared to the end. Pressure from the pharmacy service was a particular concern, with the most experienced participant questioning the need for making these records. This individual was
in a dilemma because being a CPD facilitator she was also trying to encourage others to comply.

Table 3.9 Categories of views on the mandatory nature of CPD records: differences between cohorts and time

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Qualified</th>
<th>Study Time Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUNIOR</td>
<td></td>
<td>2004 (Start)</td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td>Normal practice</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>Normal practice</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>Good idea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive motivator to learn</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>Impassive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td>Wants protected time</td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>Impassive</td>
</tr>
<tr>
<td>SENIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>Good idea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concern over assessment</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>Positive motivator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Normal Practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>Positive motivator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantity of records is a concern</td>
</tr>
</tbody>
</table>

This insight into the mandatory nature of recording is possibly a result of a high level of reflective thinking, which other members of the group had not demonstrated in the interviews. Over the study period guidance from the RPSGB on CPD (RPSGB, 2005) illustrated a gradual introduction of the mandatory system (Table 3.10).

In summary, the mandatory nature of CPD records made participants concerned with the process of assessment, but as this was not in place currently, recording was becoming a "chore".
Table 3.10 Medicines, Ethics and Practice CPD Guidance on good practice over a three year period.

<table>
<thead>
<tr>
<th>Publication Date of Medicines, Ethics and Practice Guidance</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The roll-out (of CPD) is planned to be completed by the end of 2004. Shortly after this, there will be a mandatory requirement for pharmacists to adopt CPD.”</td>
<td>“Expected that a mandatory requirement for pharmacists to adopt CPD will be introduced during 2005”</td>
<td>“Pharmacists to adopt CPD is obligatory and is expected to become law during 2006*.”</td>
<td></td>
</tr>
</tbody>
</table>

*This has been changed to “2007” in the 30th Edition of the Medicine, Ethics & Practice Guidance (RPSGB, 2006).

3.4.2.1.4 Disclosure of records

Participants’ views on disclosing their records suggested two sub-themes, which included i) confidentiality and ii) emphasis on error.

3.4.2.1.4.1 Confidentiality

The majority of participants were happy to disclose their records, but with some reservations. Discussing a record with a senior colleague or peers was felt to be useful, especially when positive criticism was given. This sharing of records would include individuals reading out excerpts. However, if the writer thought the record was of a major event this would limit the extent of what was disclosed.

“If it was like a major thing I couldn’t tell it in front of everybody else.”

(1-2-462, 1)

This disclosure of records would also select out the positive, non-controversial accounts.

“If I have to disclose to second person, it will only be positives not the negatives.”

(2-3-319, 1)

One view of disclosure from a junior participant, who was imagining what would be done in his future business, was to involve a group of individuals and depersonalise the records so the whole group would learn. This would focus mainly on positive events:
"It’s not going to be a personal, it’s not going to be a reflection on the person, it’s going to be a reflection of the event everyone would have access to it, the way I see it, because everyone’s going to learn from it, so they can see what other people have done that worked well for them.”

(8-3-358, J)

More concerning was the view that since CPD records were personal any disclosure was contrary to the ground rules of CPD:

"I’m rather thinking that’s contrary to the basic principles of the CPD because I rather thought the CPD was something personal, you only disclosed to who you want to see, so to be asked to make it available to a second party, now I see it as a breach of confidentiality.”

(2-3-309, I)

These ground rules are still being developed by the RPSGB and were not available before Summer 2006. The London CPD Facilitators group and Pharmacy Education and Training (2001) have published ground rules which state that a facilitatee can choose not to share personal information.

3.4.2.1.4.2 Emphasis on error

There was reluctance by some participants to disclose records that included their errors, particularly if these records were to be used in some kind of regulatory way. The reluctance was fuelled by a number of policies being implemented including the emphasis in all NHS Trusts on critical incident recording, which is a separate mandatory recording process.

“Wouldn’t see it as an intrusion into privacy but where it can affect negatively where people want to maybe pause look back at your mistakes and use against you then I think I would be opposed I mean I would be reluctant to give it up.”

(2-I-172, I)

In addition, the “Whistleblowing” policy pack in the NHS was introduced in 2003, in order for staff to raise concerns about the misconduct of others, without being victimised. The
issue of ensuring anonymity of those reporting an error is still unsettled within the NHS, because a dispensing error can be a criminal offence (Nathan, 2004).

Overall participants would happily share selected records and care had to be taken not to record practice errors only.

3.4.2.1.5 The meaning of reflection

When participants were asked what reflection meant to them, individuals would either discuss the thought process involved or the recording process. The sub-themes which emerged were: i) link to learning, ii) difficulties and iii) support.

3.4.2.1.5.1 Link to learning

Reflection was described as a process of thinking that was associated with learning, in terms of identifying a lack of knowledge and evaluating job performance. This would often start with viewing past behaviour.

"It's just ... sort of looking back at what you've done and seeing what's good and bad about what's happening really." (1-3-599, l)

In some cases this was achieved by comparison to performance objectives, which were set annually through a management appraisal system. Having an appraisal was not a common occurrence in the group and the format of such a system was variable.

One participant seemed to differentiate reflection by what the trigger was. She suggested that if the trigger was after a formal meeting, this was reflection. However, if the trigger was another type of event, there was less reflection needed.

"I think reflection is probably ... maybe something's only come up during a meeting and then you sort of click yourself saying oh what is this person talking about I know nothing about it shall I go and find out? If things doesn't really affect me directly or not directly, on my job, then I will like to find out more about it, that will, that is more from a reflection point of view, rather than from an incident because it happened in a meeting." (6-1-330, S)
Other participants described triggers to reflection as: new situations, learning from mistakes, looking for faults, ways of improving and doing things differently in their practice. This self-searching would also involve a sense of self-satisfaction by some:

"I suppose thinking about what you've actually done and would you have done anything different if you did it again ... am I satisfied with the outcome and will it help me next time."

(3-3-565, S)

Reflection also involved being more aware of surroundings and thinking of what others were thinking:

"To me it's like looking back at what you are actually doing and appraising ... is it good, is it bad, could I have done it better? ... I think of what you did today or how did you conduct a meeting ... you're thinking what do other people think of you."

(7-2-454, S)

Other participants described reflection as putting learning from formal education into practice:

"Or where I've gone to you know identified a need really, like going on a study day, you think well ... I've identified a need, so I should be able to go to the day and also reflect on it as well and see if I put it into practice."

(3-1-496, S)

All these meanings fit well with the model of reflection being promoted by the RPSGB; a model based on reflection-on-action but there were no signs of any other ways of reflecting, e.g. in-action and for-action.

3.4.2.1.5.2 Difficulties with reflection

Participants described writing reflective accounts as difficult, and confusing, whilst finding the time during their job was difficult. Experiences were often noted down and turned into a fuller record at home. One participant who was designated a CPD facilitator was not clear whether reflection and CPD were even the same thing.

"I think (CPD) it's reflection. I mean its all part of the same thing, whether it's any different or not I'm not sure."

(9-2-237, I)
Recording was driven by the quickest route to complete the task, so the “Action” section of the eR&P was preferred to the “Reflective” section, because the latter involves more directed questions to answer.

“You'll end up people probably just concentrating on writing action record, rather than reflection because reflection takes longer.”  

(6-1-368, S)

It was acknowledged that writing reflective accounts was difficult, often descriptive, though improving with time. However, no formal training had been given, though some written guidance was provided. The degree of guidance wanted varied. Some participants preferred to be directed in how and what to write because otherwise they thought the record would be too descriptive.

“But it kind of teaches us how to reflect and whether our reflections are appropriate, because most people, you know when you first start off you have no clue what a reflection is, you think it’s like reporting what has happened to the patient.”  

(4-3-327, J)

Another participant said it was better to have their own space to record reflections rather than being directed by set questions, as is often used. This lack of choice made one participant produce records with little purpose other than its compulsory nature.

“Some of the ones that I did feel like I was just yeah doing it because I had to.”  

(1-1-486, I)

Reflective thinking was seen as a positive process but the value of reflective writing was doubtful. This particular view was expressed more commonly when asked about the affect of reflection on professional practice.

“I still think its reflection is a good thing but whether you have to actually physically record it I’m not convinced of that particularly.”  

(1-1-451, I)
Feedback by CPD facilitators on participants’ written accounts was often limited to comments asking for more reflection, but without explanation of what this meant, leaving the participant confused.

"The only feedback we get is when we go through with our facilitator,... who might say oh you need to reflect a bit more, but how?" (3-1-511, S)

Participants also felt that reflection was more concerned with clinical practice, or where incidences involved interactions with individuals, rather than any other area of pharmacy practice. For example in the context of a manufacturing unit within the pharmacy department, procedures were already set in stone for recording any incidences and it was difficult to record anything but technical descriptive accounts.

"It's a lot more relevant, reflective practice, in the clinical than maybe in the technical sense." (2-3-434, I)

This perception of reflection, being associated only with clinical practice was being fueled by thinking the RPSGB were asking practitioners to record mainly patient-related events, even though this is not the case. There was also a view that reflective accounts did not need to include any emotional words and made one participant uncomfortable when asked to do so:

"Well when I wrote that incident as a reflective account I then followed the guidance of filling out a reflective account and it asks what are you feelings so because of that I then put my emotions in it then but I can’t see the point of putting in emotions again, I felt a bit silly writing emotional words." (8-2-350, J)

The lack of emotional content in written accounts for the pharmacy profession is common, as the role of emotion in learning or professional practice within pharmacy is not addressed in the undergraduate years. Rarely is it even discussed in post-registration training. In general, the pharmacy profession is founded epistemologically on objectivism which underpins the positivist view within the pharmacy profession. This lack of recording
feelings was also found when discussing the process of writing in a portfolio (section 3.4.2.1.6.1).

3.4.2.1.5.3 Support for reflective writing

Support for reflective writing was similar to support for portfolio construction but more limited. Participants were often not clear what was required for reflective accounts. There was no formal training in reflective writing and participants relied on sign-posted questions within the documentation supplied by the RPSGB, or on the web-site.

A number of participants preferred to get support by discussing issues with colleagues and peers, rather than writing anything down, as illustrated by this comment from a CPD facilitator in the cohort:

"... I prefer to reflect by discussing it with colleagues if you like. I think an independent second or third person would be a better option to reflect on what you've done."

(9-1-609, 1)

In one Trust reflective sessions were being extended to involve the whole pharmacy department rather than one sector. The notion of reflection in this situation was extended to involving peers, but participants overall did not show that there are different methods for reflecting. They seem to be locked into the teaching of the CPD model by the RPSGB.

"And I think this is quite important ... even as a department we are trying to set up reflective session now...maybe it's another word to call like a peer review."

(6-2-165, S)

The use of portfolios is only one method which can motivate individuals to assign time for reflective thinking through the process of writing. Participants seemed to be focused on the self-centered nature of reflection and did not discuss many other methods (such as problem-based learning, action learning sets and appraisals) except the use of a journal club and
Chapter 3 Phase Two findings and analysis

Individual Performance Review (IPR). Performance review was variable amongst the group and its link to other forms of personal record keeping was not voiced.

"The IPR sessions with my manager there is a section there for reflective action and how you feel you could improve and what you would like to do in the next few months and what is expected of you in the next few months prior to next appraisal." (9-1-467, I)

This narrow view reinforces the modularised notion of learning which can then become disjointed within professional practice.

3.4.2.1.1.5.4 The meaning of reflection between cohorts and over time

All participants described reflection as a process of self-examination and their views did not change over the study period (Table 3.11). It was common for participants in any cohort to be confused about what reflection is, and the terminology used by the RPSGB in their CPD model. For example, the two participants from a manufacturing context described reflection as a process of self-examination but a technically narrow directed process. One of these participants described this technical approach to examination in production as not reflective. He was unaware that technical reflection has been described in the literature as one form of reflection (section 1.3.6).
Chapter 3  Phase Two findings and analysis

Table 3.11 Summary of categories of views on the meaning of recording reflection: differences between cohorts and time

<table>
<thead>
<tr>
<th>COHORT</th>
<th>QUALIFIED</th>
<th>Study Time Points</th>
<th>2004 (Start)</th>
<th>2005(6 months)</th>
<th>2005(12 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JUNIOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td>Self-examination of practice</td>
<td>Useful but doubting need to record</td>
<td>Self-examination of practice</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>Self-examination of practice Confused</td>
<td>Confused</td>
<td>Self-examination of practice Confused</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>Self-examination of practice Motivation to learn</td>
<td>Confused Emotionless</td>
<td>Lack of feedback Motivation to learn</td>
<td></td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>Self-examination of practice Satisfaction with outcome</td>
<td>Self-examination of practice Difficult Good thing</td>
<td>Self-examination of practice Doubting usefulness</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td>Awareness</td>
<td>Self-examination of practice</td>
<td>Technical process unreflective</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>Self-examination of practice Influence of colleagues Emotionless</td>
<td>Confused</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SENIOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>Self-examination of practice Lack of feedback</td>
<td>Self-examination of practice Difficult to write</td>
<td>Satisfaction with outcome</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>Confused</td>
<td>Self-examination of practice Peer review Good thing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>Self-examination of practice</td>
<td>Self-examination of practice Awareness</td>
<td>Self-examination of practice Doubting usefulness</td>
<td></td>
</tr>
</tbody>
</table>

At the preregistration stage, the junior cohort viewed their records of evidence as descriptive and not reflective. This is another example of a professionally inexperienced group not understanding how reflective writing can take on a number of forms.

"I think it's a bit different because as a pre-reg I don't think my accounts were very reflective I would say it's more reporting what happened." (4-2-255, J)
Another junior participant described his process of recording and completing learning outcomes, but not returning to the original record; a compartmentalised approach to learning. This he felt was not a reflective process, as illustrated in this comment:

"Because you might have learning objectives from writing a record of evidence, then you go back to do those learning objectives, you might want to reflect on that say if you’ve actually met your needs, but even then you wouldn’t really you wouldn’t bother writing up a record of evidence you would just discuss it with your tutor. So there wasn’t anything really in that way reflective." (8-1-506, J)

In summary, reflection was compartmentalised to one section of the RPSGB’s model of CPD. Support for this type of thinking and writing was limited and technical in nature.

3.4.2.1.6 Writerlyness

Writerlyness is a key theme being used in this study to describe the state of writing that participants were undertaking. This theme emerged from the comments about portfolio use and was associated with two sub-themes: i) form of writing, and ii) utility of writing.

3.4.2.1.6.1 Form of writing

There was a mixture of preferences for the method of recording used, and one participant said they did not like writing in any format. It was common for participants to handwrite accounts before transferring electronically using a keyboard. This involved some participants keeping a notebook which allowed easier recall of the event, deciding what should be disclosed and producing more logical thinking:

“Well I prefer writing I mean using a pen to write. I’m a lot more logical, I’m a lot more able to express my thoughts ... if I kind of use the keyboard then ... I’m less coordinated I would say than when I use a pen.” (2-1-433, I)

As writing a full record was often undertaken at home, this process of taking notes was similar to what had occurred in their undergraduate days. For the immediate situation it was quicker to handwrite notes, which involved minimal thinking and having thoughts
Chapter 3

Phase Two findings and analysis

described as “crumbs”, but when handwritting a full account participants found this format triggered more thinking and required more concentration. For one participant, handwriting gave a feeling of freedom in constructing sentences which was not felt when using a keyboard:

“Handwriting, I feel more free basically I can like jot down and be able to get like get sentences to change and like you know cut and paste kind of thing but like being able to cross it out I find it easier than doing on typing cause I think its more time consuming maybe.” (5-1-570, J)

Others preferred using a computer keyboard directly to save time. As the process of reflective writing requires time it is interesting to speculate that those participants who suggested the keyboard for saving time were being driven by a technical approach to reflection. This technical approach has been called the “enemy to reflection” (Parker, 1997). The continual drive to save time often meant participants were prioritizing their practice and were struggling to find time to record.

Knowing what to write, made keyboard entry the first choice, but typing was felt to be a slower process than that of thinking. This would lead to words being missed out and records having to be reviewed. The review was made easier by the editing facilities of the computerized system. In addition there was some concern about other colleagues knowing a record was being written on-line at work. One participant admitted that using a Word document would not attract attention when they were recording an account, but using the eP&R system attracted colleague’s attention which was not welcomed by the writer, as it could end in a certain amount of ridicule from the colleague:

“Because I think if you’re just using a Word document no one really knows what you’re doing do they, Whereas when that giant screen came up people can see what your doing.” (1-3-386, I)
This illustrates again the disciplinary nature of recording professional practice in the context of the Panopticon model.

Another characteristic in the form of writing was the notion of emotion. Overall, participants considered these records to be official documents and therefore they did not require emotional entries.

"But there's not supposed to be emotions when you record things formally."

(4-1-596, J)

The same participant, who did not include emotional statements in their record, suggested that including emotion may be appropriate in a limited form, if the account involved interpersonal issues.

"Some issues have more you know, where you can put in more feelings than others but it should be a balance between both actually not too emotional, should be a placed at the right level."

(4-3-283, J)

The imposed limit of words for recording by the manual CPD systems was felt to reduce the depth of any writing and only allowed minimal feelings to be included. Any attempt to put emotions into the records would make them too personal and not suitable for disclosure. CPD records were viewed as official documents which do not contain emotional entries.

"But sometimes I'm not sure whether it's appropriate thing putting emotion because emotions make it very personal and I mean it is official document."

(4-2-280, J)

Personal records were more likely to be written by hand or off-line and not submitted.

The role of emotions in reflective writing is poorly researched. One of the issues is that this notion of emotion comes from a qualitative paradigm and does not sit comfortably in the practice of pharmacy, which is viewed by many as being a quantitatively founded profession.
3.4.2.1.6.2 Utility of writing

Writing in any form was not a common feature for this group of participants. It was rare for pharmacists to record any involvement in patient care, which left only writing specific protocols or other procedural activities in a scientific format. Many pharmacists have also been taught that it is inappropriate to write in the first person.

"You're writing the notes, probably not every day, probably only when you've got an exceptional situation and you want to make a point and they find it unusual, that when we're writing the notes we're writing that, you know you're summarising the patient's presentation." (9-3-168, J)

The trigger for writing these events would often be an issue the participant thought was of major concern to them, or the profession; in some cases these were errors of other professionals' practice. It was acknowledged by a junior participant that the consequences of not doing this could impact on harm that other patients may be subjected to:

"I feel where it's a major issue, a major event, perhaps I've made a mistake or I didn't achieve the standards or the goals that I would love to achieve, in that event then I would record it to say that this in the future, if this were to happen again I would have done it differently you know and perhaps that would have a better impact on my future practice." (4-1-417, J)

This continual recording of negative events was a common response by participants, but by only one experienced participant was there a suggestion that this could prove to be viewed detrimental to the person producing these records:

"Tend to write all the negative where my knowledge is lacking or my skills is lacking, so in a way it's like putting you down." (7-3-585, S)

There was some experience in recording official incident forms when an error had occurred. This made the particular participant feel very negative about the process, because of the implications of an investigation. This could in turn influence what this individual recorded and how, in his portfolio.
"I think so, that's where it hit me, because it probably ... slightly scary writing an incident but like they're going to write incident forms and then like investigate what actually happened."  
(5-1-504, J)

For another participant there was no purpose in recording practice because it was routine to think in the same way as the RPSGB CPD model was described:

"Yes, I didn't have to write anything down. I mean do it all the time."  
(7-3-431, S)

The notion that this routinisation of practice should be challenged was not discussed by any of the participants in the study. The usefulness of writing also included the notion of triggering thinking about an event; something that would not have occurred if the process of writing was not involved:

"I think writing it down has made me think more about it than you know thinking in my head."  
(7-1-348, S)

Writing could also work as a spring board for reflective thinking in other situations, for example when trying to decide how to meet job-related objectives.

"It's just really sitting down and thinking about it, time, yes but sometimes looking at all your different options about how you could go about meeting your objective."  
(3-1-758, S)

In only one instance was it noticed that the act of recording itself was a form of reflection. This particular participant described it as a "reflective period", a time when alternative ways of practice could be thought about. He was someone who was working in a technical production area and had been educated in a country which had little if any sort of clinical or other governance:

"During the process of writing it's more or less like a reflective period as well, because I mean you're writing up an event that has happened. So you're trying to recollect, to reflect and kind of pick up positives from whatever and know how you can change. I think the process of writing is quite important."  
(2-3-207, I)

Overall participants found writing difficult and tended to be technical in content.
3.4.2.1.2 Contribution of CPD records to professional practice

The second objective was to identify how CPD records contribute to professional practice. The key themes, sub-themes and categories for this objective were constructed using a template based on the interview guide and are displayed in Table 3.12. As with the first objective, the themes will be discussed and evidence provided from the direct quotes of participants. The general view suggested no major change in practice, but three key-themes and seven sub-themes emerged from the interview categories. The key themes were: a) lack of contribution to practice, b) tacit contribution, and c) mentality.

3.4.2.1.2.1 Lack of contribution to practice

Participants’ task of recording CPD did not seem to contribute to practice for the majority of cases or at least there was doubt as to an effect.

3.4.2.1.2.1.1 No effect

The lack of effect was partly attributed to the view that professional practice already involved the elements described by the RPSGB model of CPD, and there was no justification for recording this, as illustrated by a senior CPD facilitator:

"... in terms of like whether writing down the reflection has helped me, has changed me, not really because as I say, I continuously, always, that’s how I operate, I reflect on things."  

(7-3-345, S)
A junior participant explained that her daily work involved CPD, but she did not elaborate as to how routine work involved professional development:

"Because even simple things...I think most people think CPD is all about things that you have to, you know, think of in your own time, or how to improve yourself. But they don't realise that doing work, you're actually you know doing CPD."

(4-3-191, J)
Once these records were made, they were left to "gather dust" as the participant returned to daily practice. This view has also been raised in context of ePortfolios in higher education, where learners are being closely directed as to how to record various elements, which they discard on completion of a program, loosing any value to further learning (Siemens, 2004).

Some participants viewed these CPD records as pieces of historical evidence that had to be provided for the RPSGB. The evidence was focused onto set standards or competencies, similar to the preregistration records of evidence. This evidence would not be revisited and therefore had no effect on practice. In addition because of the historical nature, these records were not indicative of current performance.

"Looking at the records I think it's just evidence. Really it's nothing as far as I can see. It's like keeping your evidence but for me it's looking back at it. I don't think it's that important as long as you can perform. You can have the records and all that, but you're not performing." (7-3-176, S)

3.4.2.1.2.1.2 Doubt as to effect

Other participants could only theorise that recording would have no effect on practice and that their normal process of learning would change their practice:

"Probably wouldn't have changed. It would have changed anyway from a learning experience; I like to think it would have changed from a learning experience without having to write it down." (9-1-399, I)

One participant was adamant that they reflected continuously in their practice, and saw no justification of having to record it:

"Or by just reflecting, I mean I reflect anyway all day long, I don't necessarily have to write it down." (7-3-334, S)

Doubt was also expressed about the relevance of these records in the future. Although recording was expressed as being useful, the same recorded scenario would have to occur in the future, for the records to be of any use.
"Yeah I think they (the records) are(useful) but it’s quite difficult to sort of see how, when your doing reflective practice, how that’s going then apply sort of further down the line, probably until you do the same thing again." (1-1-498, I)

Records would also have to be continually updated if they were to be of any use:

"And then I thought oh yeah that was useful to do (make a record), but I thought if you’re not doing that on a regular basis (recording) and they’re just sitting there then you think well ok it was probably useful doing it at the time, but in six months time is it going to be of any use?" (3-3-683, S)

One participant suggested that submission of records could be left to the last minute and easy to fabricate:

"One per month; so I mean whether that’s actually going to show anything constructive I don’t know really I don’t see the point in it ... you could potentially make one up every month, and no one would know any different, and... if you’ve got every single pharmacist in the UK submitting twelve a year ...then are they actually going to be looked at and are they actually going to be acted on and is anyone going to do anything with the data and are they going to do anything constructive is my fear?" (9-1-444, I)

A similar finding that falsification of records was common was reported by Friedman and Phillips (2004) in a survey of 18 different professional associations. In addition it has also been suggested in the pharmaceutical press that professional writers could be employed to record accounts (Potter, 2006).

3.4.2.1.2.2 Tacit contribution

The implied contribution to practice was linked to three sub-themes which included a) difficulty in vocalising, b) an episodic aide-memoire, and c) self-preservation.

3.4.2.1.2.2.1 Difficultly in vocalising

The effect of recording events on individual practice was difficult to explain or describe by some of the participants and one suggested it would be a useful question to be added onto the RPSGB eP&R. A contributory factor to not being able to explain an effect on practice was the perception that CPD records had to be directly linked to patient care (section 215
3.4.2.1.5.2) For example, a pharmacist’s work for a PCT (Primary Care Trust) often involves more global medicines management issues. The record in this situation will often be completion of some form of medicine usage report, not involving patient care directly but the link was able to be explained:

"Because at the end of the day I think that that was one of the things that my colleague did say: what about the patient, how will it affect the patient? This one didn’t directly because I was doing an overall review of their prescribing but the outcomes of this would affect patient care because there were going to be follow up visits to look at more the individual drugs." (3-1-728, S)

3.4.2.1.2.2.2 Episodic aide-memoire

The second implied contribution to practice was that records produced for educational courses were often not used immediately, but became a library of presentations and situational strategies for reference at a future date. Participants felt these records may become a trigger to change practice in the future, rather than changing practice at the time of recording. Participants viewed their records as specific for a particular incident, any change in practice was therefore specific to that circumstance, if it re-enacted itself. This return to the records may take a long time. After recording events for a number of years, one participant said that they had never revisited their records. Even encountering a similar event would lead to another record, but it would not necessarily be linked to the first one.

3.4.2.1.2.2.3 Self-preservation

Since the Government’s attention to errors in the NHS made by healthcare staff (Department of Health, 2000a), recording of errors has been vigorously promoted (see section 3.4.2.1.1.4.2). Side-effects of this promotion of recording of errors includes, practitioners wanting to protect themselves against possible repercussions by defensive
practice by continually revisiting the error situation. An illustration of this was provided by one of the participants who become consciously more cautious and defensive in his practice. This participant had not previously experienced such formal documentation of practice and error reporting when employed as a pharmacist in his home country. As a result he would make short notes of any incident which he thought may have an impact in the future. This is an example of the how Foucault described the connection of writing with the self, ethics and the role of hypomnemata used in early Plato’s time (Dreyfus and Rabinow, 1983). The hypomnemata was a notebook for personal use and became a guide for living with oneself. This particular participant also described how his recorded errors would return into his conscious thinking in waves:

“When I make an error ... I have to document that, have it documented, it kind of plays up in my mind.”

(2-1-237, J)

Another self-preservation side-effect was described by a junior participant who viewed the standards required in practice and the recording of practice as a form of shield, behind which he could escape, leaving more experienced colleagues to deal with the situation.

“I wasn’t qualified to change anything and it was also something to almost hide, because you’re not qualified to do it, so it was good for you that you don’t have to do any anymore to it, you just leave it and let the people that know best do it.”

(8-2-191, J)

The third key theme in this section was the notion of mentality and this will be discussed in the next section.

3.4.2.1.2.3 Mentality

Mentality as a characteristic way of thinking was used by participants to describe how recording influenced the way they structured their thinking. This would occur in two main ways, i) as a trigger for learning, and ii) a change in their method of thinking.
3.4.2.1.2.3.1 Trigger for learning

The recording of practice was considered as a positive trigger for further learning. Practice records were seen to provide a driver to attend formal education courses and provided evidence of how attendance on courses was put into practice. The learning could then be better planned, and allowed to trigger more ideas for learning in the future, as illustrated by this comment:

"I would have had to plan it out in my mind and maybe would have missed something out. But if I can just go onto it, just know what I need to do, I can just make a list up of the three four things I need to do and then I can identify other areas." (5-2-392, J)

For one participant, more learning occurred about a topic after having to revisit the old records, although this revisiting of old records was not a common feature amongst the participants. Learning from written records could also prove useful to not only the local department but the hospital in general, especially when recording errors as illustrated by this comment:

"At the end of the year you have a record of everything that you have achieved and you could actually see on paper how you have progressed. I mean, I think it’s definitely important to think about what you are doing, and how you can possibly improve what you’re doing and I think that more in terms of how you can improve the whole department or the whole trust." (9-1-360, J)

Paradoxically, the participant (a CPD facilitator) who suggested this, did not keep any CPD records, but was made to keep technical descriptive evidence of practice in a production unit context.

3.4.2.1.2.3.2 Change in thinking

The CPD model that is promoted by the RPSGB had changed some participants' way of thinking about past experience, which some had not been consciously aware of before. The
difficulty for them was to record this change. The change in thinking had resulted in reviewing and being critical of personal actions, rather than just recounting an event. One participant said that it helped thinking about achievements. In contrast, another described an incident which keeps returning to his consciousness in waves, for reconstruction and deliberation.

"Have it documented. It kind of plays up in my mind, every time I come across similar instances I'm faced with a similar situation or an incident I kind of reflect back so ... kind of well I say reflecting thing, really it's been quite helpful because it keeps coming back to me." (2-1-241, I)

This continual deliberation could be seen as the discipline agent of self, in the context of Foucault's Panopticon, as previously described. Another view is that proposed by Kolb and others who remarked that in constant change (as in the NHS), perpetual new experiences can leave people "paralysed by insecurity, incapable of effective action" (Dyke, 2006).

Thinking also became lateral for one participant, in situations outside of professional practice. An example of this was being able to use a wider range of terms to search the internet. This participant who was also a CPD facilitator, had not discussed this change in thinking with other colleagues, but could not offer an explanation of why not.

"It (recording accounts) has (had an effect on practice) but I wouldn't say the effect is huge it will make me think more now, I tend to sort of like in a way reflect more on what's happened in the past and what I need to do now and it's the approach of trying to learn things, might have a slight impact from previous record written." (6-3-72, S)

"I don't think it would happen without doing the record. It certainly had an impact on what I think now." (6-3-376, S)

Other participants felt that reflective thinking as described by the RPSBG did affect their practice, often in an intangible way (see section 3.4.2.1.2.2.1) and this had become a
routine way of practising. Again the rider to this was that participants could not justify the writing aspect.

Undertaking a formal course in which reflective accounts were required as part of the course work often involved individuals thinking and recording strengths and weaknesses, making them more self-aware. This was illustrated by a junior participant who remarked:

"Yes in a way it has (affected practice) ...after you finish dealing with an issue you can reflect on your strengths your weaknesses and how well you can improve the next time."

(4-3-342, J)

Recording events also signposted what needed to be learned in a particular context of practice. This includes having to impose deadlines for completion of a record and meeting the immediate learning needs which are often knowledge gaps, this would then lead to an increase in confidence. This increase in pharmacists' confidence has also been reported from the Royal Pharmaceutical Society's CPD pilot study (Adcock, 2004). Finally recording may have helped one participant in their problem solving skills in clinical practice.

"Yeah I think it probably has, (made me think more about practice) it's just sort of a good way to work out what you can do. Particularly if there's something that you want to go and look up to do, something like, to make that intervention."

(1-3-622, I)

3.4.2.1.2.4 The effect of time on participants views of CPD records contributing to practice

Over the twelve month period of the study there were a number of changes in participants’ views of whether recording CPD had any impact on their practice. This has been represented in Table 3.13, using the key themes from the interview data as the unit of representation. The key themes are not mutually exclusive but represent the predominate view held at that time point.
Table 3.13 Data analysis template of how participants key themes of CPD records contributing to professional practice changed over twelve months

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Qualified</th>
<th>Study Time Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Years)</td>
<td>2004 (Start)</td>
</tr>
<tr>
<td>JUNIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>SENIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Key Themes</td>
<td></td>
<td>LACK OF CONTRIBUTION</td>
</tr>
</tbody>
</table>

There were no consistent changes in the views expressed over the study period. However, the data suggested that participants in the junior cohort were not clear what changes had occurred in their practice, as a result of recording accounts. A number of issues were raised about the lack of effect the eP&R system had on their practice, starting in their preregistration year. In that year, records of evidence seemed to identify learning gaps but these were not acted on.

"No I don’t think it has (effect on practice) I mean I always felt what is the point of having records of evidences. The Society never wanted them, it’s only for the tutors to look at and the tutor may just look at it quite briefly and say what can you learn from this?" (8-1-397, J)

For these newly qualified participants, the move from student status to professional led to a lack of time being available for reflection, including written accounts, because of work pressures. This led to one newly qualified participant suggesting fabricating records:
"The majority of time you are almost making it up ... trying to find something to learn from it ... it's not valuable because you're trying to find something to learn from it you're not actually going to learn from it because you're making them up as you go along. So I don't think they were worthwhile having ... but in terms of getting signed off, that's what you need." (8-1-420, J)

This was also the one junior participant who described his thinking as changing towards the end of the study, when he was required to keep records of practice as part of a formal course rather than the RPSGB ones.

Participants in the intermediate cohort also demonstrated varying contributions of CPD records to practice. The one CPD facilitator in this cohort did not record any accounts throughout the study.

Participants in the senior cohort also had variable views. The most experienced member who was also a CPD facilitator was feeling very disillusioned with the recording process at the end of the study.

Overall the recording process made little if any change, other than an alteration in the way participants thought, but this could not be easily described. The more experienced participants (intermediate and senior cohorts) were less likely to be able to explain any changes in practice resulting from the recording process.

In order to trigger participants into thinking about their practice, each one was asked to self-rate their main skill area at the start of each interview. This will be discussed in the next section.

3.4.2.1.2.5 Self-assessment of practice skills

Each participant was asked to self-rate their main practice skill area at each of three time periods over 12 months. This data would allow a comparison to be made of participants’
perceived change in skills, with the key themes emerging from their comments about the contribution of CPD records to their practice (Table 3.14).

The main skill areas identified by participants were similar. In particular, knowledge, organisational and team working were reported commonly amongst the cohorts.

All but one participant (code 3) indicated they had improved in some of their main skill areas at the end of 12 months. The one participant who reported no change in her main skills had changed jobs. In the previous two interview periods, in the same job she also reported no change in her main skill areas.

Participants, who from the interviews said CPD recording had not changed their practice, did report a number of main skills that had improved. For one participant their oral communication skills got worse because of increased workload and having to attend numerous meetings, but not being able to transmit information learned to his staff.

Participants who described recording of their CPD as having a tacit or mentality impact on practice also rated a number of skill areas which had improved over 12 months. These skill areas did not match any of the issues they raised during questions about CPD records affecting practice.

Written skills were listed by all but one junior participant, and these did not change over the twelve months in the majority. Two participants reported an improvement in written skills over time. One was from the intermediate cohort, but who did not record his CPD, and thought it would not make any contribution to practice. The second participant remarked that recording CPD had changed her way of thinking and she reported that her written skills had improved.
Participants’ self-selected skills were also mapped onto the KSF and RPSGB frameworks for skill comparison (Appendix 29 and 30). All the main skills mentioned by the participants were mapped onto the KSF framework, with communication being the most common. A number of skills could not be mapped onto the RPSGB framework. These included attention to detail, flexibility, accurate decision making, confidence, compassion and role modeling.
Table 3.14 Comparison of participants’ self-reported main skill change and key themes representing contribution to practice after 12 months

<table>
<thead>
<tr>
<th>LACK OF CONTRIBUTION</th>
<th>TACIT CONTRIBUTION</th>
<th>KEY THEMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPROVED</td>
<td>NO CHANGE</td>
<td>DECREASED</td>
</tr>
<tr>
<td>Written</td>
<td>Team working</td>
<td>Oral communication</td>
</tr>
<tr>
<td>Clinical Knowledge</td>
<td>Role model</td>
<td>Written</td>
</tr>
<tr>
<td>Empathy</td>
<td>Organisational</td>
<td>Presentation</td>
</tr>
<tr>
<td>People management</td>
<td></td>
<td>Problem solving</td>
</tr>
<tr>
<td>Clinical Knowledge</td>
<td>Written</td>
<td>Management</td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td>Presentation</td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b Self-reported skill change after 12 months.

* Participant code
3.4.2.2 Focus groups

The three focus groups at the end of the study period examined the influence of CPD portfolios on pharmacy practice. The participants could answer questions differently in the group compared to individually. The response of each cohort was examined using the same approach that was used with interview data. The sub-themes identified were then mapped onto the interview data.

3.4.2.2.1 Junior cohort

The junior cohort comprised two males and a female, all undertaking a hospital rotational programme. When asked about their views on CPD portfolios a number of themes emerged; a) experience of keeping a portfolio, b) preregistration records, c) mandatory records, and d) contribution of records to practice.

3.4.2.2.1.1 Experience of keeping a portfolio

The immediate response to the question of portfolio keeping was the problem of workload. Participants were concerned that with the pressure of daily activities, recalling and recording events was difficult. One participant was honest to admit his motivation for CPD was low because of his current activities outside of the profession. The only way he would comply with the RPSGB obligatory requirements would be if they were changed to mandatory status. The cohort agreed that work colleagues were negative towards the process of mandatory recording. This view was more common amongst experienced pharmacists, who remarked that they were already using the process in their practice, and could not see any benefit of recording in a busy environment.

There was some agreement in the cohort that the eP&R was easier to use than the paper version because of tick box drop down menus, although one participant was hand-writing
records. However the eP&R system also led to some feelings of inflexibility when it came to recording certain events, and it was difficult to fit things into prescribed boxes.

"Sometimes I find that you know ...this (question in the eP&R) doesn't seem very relevant, you don't know what to actually key in into that slot or that column because you know it doesn't seem to apply to your CPD." (1-4-80f)

Recording CPD as it currently is was not seen as a fair assessment of performance. Partly because of a lack of written skills, which do not represent actual practice. This gap between text and practice has been raised recently in an editorial by Eraut (2004). His view is that in professional practice the time and place for reflection is not appropriate for recording and this is made more complex by getting groups to agree what counts as reflection. The suggestion was to organise a specific period for group reflection on priority areas specified by the group.

The term “technical writing” was used by one participant to describe professional records but this form of writing is in direct opposition to what is considered to be necessary for reflection (Parker, 1997). The technical view of recording was pursued by the cohort who commented that the RPSGB could only assess quantity and not quality of records. This triggered discussion on maintaining standards by providing protected study time for all pharmacists as a means of updating their knowledge. Attendance at such a scheme would have to be assessed in some format because attendance did not mean practice change. This assessment should be specific to different sectors and specialty of the profession, e.g. hospital and community.

The cohort felt the act of writing reflective accounts allowed time for more in depth thinking and could be done in a group manner, to learn from mistakes as well as positive events. One male participant, who did not currently record his reflections, went on to say

References to comments are coded as: (cohort number; participant number and transcript line number).

227
he thought that adding emotional aspects to any record would make the writing harder. His idea of reflection was a description of the facts with no emotion. He justified this by explaining that his future career lay outside of pharmacy, but he saw a use for “collective” reflection, which is not the model proposed by RSPGB.

"Because I want to use it as a template almost so that anyone can look at, not something for one person to look at and it’s their reflection, so only they can look at it. I would like in my company for all the reflective pieces to be open to anyone to look, at so that everybody can learn from them and not just one person. Where as what happens with the Society it’s confidential.” (1-8-302)

This notion that reflection can be useful on a wider scale is in opposition to the Panoptic notion of CPD recording being promoted by the HPC and RPSGB. Not all participants agreed with this collective reflection. The female participant was unhappy with sharing personal reflections, because it may have an adverse effect on colleagues. What form this effect would take was not discussed. She was also adamant that including feelings was necessary for the records, but that it was a personal choice if they were included. There appeared to be a range of guidance about the inclusion of emotion in the three pharmacy departments represented. One participant suggested setting criteria of what should be recorded, similar to the “intervention log”, a system which was relatively quick to complete. The “intervention log” is a collection of records that involve partly descriptive and quantitative accounts of medicine errors, made by the medical profession.

The act of using this system would trigger his thoughts of other things useful to that situation. He commented:

“If you do pick up a mistake by a doctor or something when you write it down I think you think about more stuff, rather than what you did at the situation.” (1-5-264)
Chapter 3

The notion that CPD recording may be a duplication of other processes within a hospital pharmacy context was not immediately apparent from the group. There were some similarities with recording intervention logs and "on-call" logs, but CPD records were more extensive. "On-call" logs are partly descriptive and quantitative records of work done outside of normal hours. This illustrates the dichotomy of writing styles being presented to pharmacists; from a very positivistic narrow descriptive approach of logs, to the more in-depth CPD version. Other systems of recording performance were in place for the group under the title of Individual Appraisal. These were part of a formal postgraduate certificate course or end of rotation appraisal, but CPD was a separate entity, with personal development plans and Individual Performance Records separate processes.

"And there is a bit in there (in the appraisal) which has a personal development plan and a CPD completed. It's up to you whether you do or not, but I think your IPR has to have a PDP and CPD done, in order to take a pay rise."

Another isolated example of recording was the technical services portfolio, which participants had to keep as evidence of competence, when working in the manufacturing section of the pharmacy. The portfolio would contain a minimum number of observed tasks. This was not something other departments within pharmacy asked for. The same participant went on to describe his view of CPD as "one thing", "a reflective thing" not a cycle of events, as proposed by the RPSGB. The rest of the CPD model involved recording actions, which he was not happy to do.

3.4.2.2.1.2 Preregistration records

As all participants in this cohort had recently qualified, their experience of preregistration records would add to the historical understanding of the impact and perceptions of recording practice. Across the interviews the assessment driven nature of the
preregistration year was the key theme. These records were time consuming, requiring minimal work and forgotten as soon as the tutor acknowledged the written evidence.

"I mean you fill them up, to fill them up."

(1-8-101)

For one participant the record was only to verify the achievement of the competency by discussion with their tutor. The process of this interaction with a tutor was variable and subject to local differences in the cohort.

3.4.2.2.1.3 Mandatory records

The mandatory nature of recording was a two-edged sword. On the one hand participants' felt being forced to comply could lead to a lack of quality. However without compulsion, finding time to record was unlikely, as participants illustrated by saying:

"When you are forced to do something you always don't do it well."

(1-4-489)

"If it wasn't forced you'd never find the time. I certainly wouldn't find the time to do it. The fact it's forced, I now have to make time for it."

(1-8-492)

There was also awareness that other professions were undergoing similar Governmental edicts, and the mandatory nature of recording had to be complied with. One participant, who did not see his future career in pharmacy, suggested using examinations as a way of assessing practitioners being up-to-date, similar to the General Medical Council system or even proof of practice based on the Agenda for Change method.
3.4.2.2.1.4 Contribution of CPD records to professional practice

Initial thoughts on the contribution of records to practice were that it was premature to judge at this stage. It was accepted that knowledge gain would have occurred without the need to record it, and as all participants were undertaking a formal postgraduate programme, there was confusion as to what should be recorded for the RPSGB.

For the cohort, the process of reflection was something that was considered as being positive, but in a tacit form as seen in this extract:

"The only thing that I think that I got out of it would be reflection, so it hasn't changed my practice as of yet. It may do in the future, when I'm reflecting on things I do to improve things. I will be doing later on, but at the moment it's not changed anything."  

This individual who had not kept any CPD records remarked that taking part in the study had not influenced him to reflect more, but made him more consciously aware he was thinking in a reflective manner:

"I don't think the study has actually made, influenced me, to do it more. I think the study has made me realise that I'm doing it rather than actually making me do it."

This led to the comment that reflection was taught as part of a structured training programme, which the older generation of practitioners have not had. This newness of practice with formal education allowed the participants to use reflective thinking as part of everyday practice and therefore accept it as routine. The danger not expressed by the group was the routinisation of this process. CPD recording was generally left for major incidents, where as minor ones would be solved and recorded as numerical incidents with little if any detail. Reflection as part of learning was considered a good thing especially in a group context but this led to suggesting that reflection was the same as evaluation.

"You could then call reflection maybe an evaluation."

(1-4-475)
Chapter 3  Phase Two findings and analysis

3.4.2.2 Intermediate cohort

This group comprised two males and one female. Both males worked in a similar environment of a pharmacy production unit, with partial clinical activities, and the female was involved with direct clinical care of patients. One male participant was also a CPD facilitator. The themes that emerged included: a) mandatory records, b) selectivity, c) support, and d) contribution to practice. These themes will be discussed in the following sections.

3.4.2.2.1 Mandatory records

When asked about their views of mandatory recording participants began to explain why they and their colleagues had not yet engaged in the process. Finding time at work was a concern, along with the lack of access to eR&P at home. Other concerns included, how the RPSGB will implement the system and who was to judge the written accounts. There was agreement that motivation to record any CPD had lapsed since the last communication from the Society. As there were no clear sanctions for non-compliance, this was an excuse not to engage in recording. This view was fuelled by observing colleagues who had not started recording, as one participant remarked:

"I think that's the thing isn't it, they (RPSGB) haven't really said anything about what you should be doing. They send out the packs, it's sort of gone a bit quiet. I don't think anybody; well where I work no one seems that bothered." (2-1-40)

3.4.2.2.2 Selectivity

There was a suggestion that CPD portfolios would be useful to take to a job interview but this was challenged by the CPD facilitator in the cohort, as to whether it would be an honest representation of what a person could actually do. He suggested individuals would market themselves with only the positive records. He said:

"Are we only writing down the best things anyway? The answer to that probably is yes. We're going write down the top ten, well top twelve things you've done in the
year and you know whoop!, you can do twelve good things in a year and obviously do about fifty bad things.” (2-9-55)

The issue of recording mistakes triggered the group to agree that these records had to be confidential, otherwise they could be used by the RPSGB to request more records from that individual, which could make them lose face. The conversation between two of the cohort was:

“Yeah, it’s going to discourage people isn’t it and they think...make you look silly.” (2-9-66)

“In case they ask you to do extra ones.” (2-1-70)

3.4.2.2.3 Support for recording

The difference between different sectors of the profession was also discussed. Although community, industry and hospital pharmacy should be integrated, this is not the reality. Community pharmacists were perceived to be more pro-active with the recording process. This may be due to monetary or other incentives, and different to the hospital practice, where if the work is completed to a good standard, then that is all that is required.

Support for CPD recording was variable between participants. In one case, support was available for technical staff and not pharmacists. The lack of support was confirmed by two of the participants, as they wanted more guidance on what should be submitted and the motivation to record, from a named facilitator. This view was challenged by the third participant, who was a designated CPD facilitator. He described his departmental system of support that was supposedly in place. However he was sceptical about how it should function, because over the past twelve months nobody had asked for his support:

“So yeah, we do have CPD facilitators within our department, the thought is there in theory.” (2-9-105)
The cohort were aware that other health professions were given protected time for recording, but participants questioned whether in a pharmacy environment this time would be used appropriately. This led onto the issue of performance appraisal. Individual performance records (IPR) were mandatory for all three participants, but were managed and timed in different ways, ranging from annually to every 30 months. It was clear that for the participant who undertook regular appraisals, he considered it to be a two way process but the rest felt that CPD recording was a one way system at the moment, divorced from the appraisal system. This was complicated by the number of different systems being used for assessing practice, including CPD, performance appraisals and the new KSF. Participants suggested they would be providing records for each system separately. The CPD facilitator in the cohort suggested the link to all of these was to do with meeting set targets, but he was quick to point out that this could lead to dishonesty in performance self-ratings.

"That process (KSF) as well is a little bit flawed because you could quite easily give yourself an initial target of score one rather than score two, three, or four and therefore to reach the next stage you don't have to do a great deal, so it's not really going to encourage people to do things properly, I don't think, because it's very easy to play the system if you like." (2-9-143)

In addition, there was concern that individuals would be more focused on appraisal objectives, rather than CPD recording. When asked what they would do if the RPSGB were to ask for the records at this point in time, the CPD facilitator would comply by saying:

"Well I'd probably write them out and then say that I haven't had time to put them on the computer system. Here they are." (2-9-463)

The participants based in the production area had to maintain specific competencies in their section, and this was recorded in a training file that was considered as being separate to their own CPD portfolio. There was no suggestion of combining these records in any way.
Although recording CPD was considered to be evidence of being competent, not all participants agreed with this view. One view was that CPD was a reflective activity that was to improve practice, mainly from errors and not really to show competence. As one male participant remarked:

"I mean something has happened where probably good or bad something you could always reflect on, look back to just to improve your practice, that's it, so it doesn't really show that you're competent in a certain area of practice, because I mean no matter how competent you could be, errors do happen." (2-2-184)

This stimulated the comment that reflection was easy for situations that had gone badly, but was difficult if it went well, and since there were more areas of pharmacy practice that needed improving it was logical to concentrate on these. This is in contrast to the work of Professor Rosenfeld (a student of Schon) in Israel and his Unit of Learning from Success. Using his field of Social Work, he focuses on reflecting from success in order to create new knowledge for the future (Billups, 2002).

All participants would also file product information they had obtained, or relevant articles about situations from practice that may occur in the future. This created a personalised library. However, filing may or may not be organised, and the process was not considered as CPD because these were just collections of articles with no attached narrative. One participant explained this as:

"That information (collection of articles) I think that might be slightly different to CPD's, you are just collecting them. You're not actually writing anything about why you've collected it." (2-1-230)

This participant illustrates the discourse of pharmacists on CPD, as being a "thing", rather than a process, i.e. "...different to CPD's, you are just collecting...". The "thing" or the CPD record becomes a collection of written accounts of questionable value. This notion was similar to the junior cohort remarks about CPD.
3.4.2 Contribution of CPD records to professional practice

The contribution of CPD records to practice was a difficult question to answer, as the CPD facilitator did not keep records, and the other two participants were recording events in brief note form only. The cohort felt the records which they did keep did not seem to affect their practice, and practice would have changed without the need to record events.

For one participant who made notes (often about errors), he would produce them at anytime up to two months after the event:

"No, it's because again first by time you get to record something first I mean the only things I record are maybe mistakes, errors, near misses." (2-2-299)

CPD was considered to be different to recording errors. Although the latter may be of use to identify individual needs, participants felt that changes in practice after an error would occur without any need for documentation. This was illustrated by the clinical pharmacist in the cohort:

"I think I agree with ... that if something actually happened then you can probably make a change irrespective of whether you write it down or not. I think that the point where it's going to make a difference writing it down is if you identify something for yourself not because an error has occurred just that you want to go find out more about it and if you like sit down and document that." (2-1-330)

In both the pharmacy production facilities, participants undertook weekly meetings to discuss logged errors, as this was a mandatory requirement by an outside agency. If an error involved the death of a patient there was debate amongst the cohort whether this would be included into their portfolio. On balance they all agreed not to include such accounts, but only select the records which made them look in a positive light.

The lack of motivation to recording practice was illustrated by one participant who compiled records during a formal educational course, but after the course did not continue with recording, as he said:
Chapter 3

Phase Two findings and analysis

"Just like when we're doing the diploma one ... ten interventions well I mean we had to, it was mandatory, so there was a reason for that but since I mean post my diploma I've been going up to my ward and I haven't found myself documenting, making all those documentations anymore, so when there is a requirement, when it's mandatory, then you're forced to - only then."

(2-2-531)

The effect of recording IPR appraisals on practice was also doubted. Prepared questions for the meetings were forgotten and the records stored without recall, until the next meeting. The IPR meeting was a time in which views about work could be discussed directly with the line manager and was different to weekly meetings discussing departmental systems. The appraisal was likely to be more honest than information provided to the RPSGB as part of CPD, as one participant remarked:

"Like I said before you're probably only going to tell the Society the good things that you do."

(2-1-290)

3.4.2.2.3 Senior cohort

This group comprised all females, two were working part-time and one full-time. Two were CPD facilitators for their department as part of their routine job, and one participant changed job during the course of the research, from a hospital environment to a PCT. A number of themes emerged: a) views of mandatory recording, b) support for recording, and c) contribution of CPD records to practice.

3.4.2.2.3.1 Mandatory records

When asked their views concerning mandatory recording, two of the cohort agreed they were struggling to record. Both were part-time and one was a facilitator. The facilitator was critical of the need to provide evidence of practice because as a professional she was already keeping up-to-date. She was particularly concerned with having to continually prove herself to others.
"Why we have to record it because we are, as professionals, we are continually updating ourselves anyway, that's how I am, that's the kind of person I am anyway, ... I don't need the Society to tell me to do it put it, on you know, put it on a piece of paper as evidence, I find this evidence fulfilling evidence why you have to keep continuously proving yourself, why?"  
(3-7-16)

This view was reinforced by her explanation of how the KSF was the tool which would define and control job performance for all healthcare workers. The need to produce a second set of records for registration was therefore a duplication of effort. In order to minimize this duplication, this participant encouraged her work colleagues to combine the KSF with CPD paperwork for submission to the RPSGB.

In response to this view, another participant suggested that CPD records were evidence of learning, but these records did not prove learning had actually occurred. These records were often retrospective and their relevance at the time of disclosure suspect. In addition, these records were laborious to produce.

"The thing is what you put down on paper might not be a true reflection of what you've actually done. Because it depends on how you recorded it, so again I think there are a lot of flaws in the system...."  
(3-3-500)

In contrast, the full-time participant and CPD facilitator disagreed with the view of the rest of the cohort that recording was a struggle. She described how the majority of her recording was made during her annual leave, but recently she had fallen behind in recording the required number of records. This drive for achieving a predetermined number of records and targets was an illustration of how she went on to describe the situation in her department. A discourse that is similar to the dimensions of a McDonaldized organisation, using efficiency, calculability and predictability (Ritzer, 2000). When challenged by the other group members, she did admit that senior pharmacists found it difficult to record their practice.
Recording of feelings within these accounts was thought to be harder if they were written on paper, compared to discussions with a colleague, but this was not confirmed or denied by the other participants.

“It could be your feelings, but that’s probably quite a lot harder to put down onto paper than talking to someone about it.” (3-3-344)

The cohort agreed that the quantity of records for submission should be reduced to six per year, and copies of appraisal forms should be allowed for submission. A different system would have to be adopted for community colleagues, as the majority did not have appraisal systems. The most experienced pharmacist remarked:

“I don’t know what the community pharmacy structure is like how will they prove to the society that they are fit to practice. This is what the CPD’s all about isn’t it, an MOT to practice.” (3-7-530)

The issue of honesty in submitting records was acknowledged by the group; therefore keeping evidence for each record was necessary. This was then part of the portfolio, as one participant said:

“You can make them up as you go along, well where’s the evidence supporting, that’s what I keep in a portfolio.” (3-7-644)

This collecting of evidence made one participant question how an interaction with a colleague or reading an article could be validated if included as a CPD record. The cohort responded by suggesting recording the names of these people, but reading an article was more difficult to verify. This cohort also kept a hard copy of their portfolio which was constructed as part of a hospital system, either using a RPSGB format or a London Region format. This would be a collection of certificates or study day programs. However these portfolios have not been revisited since their construction:
3.4.2.2.3.2 Support for recording

The senior participant described regular CPD support meetings within their department, but admitted that she did not have the time to check the individual progress of colleagues. When asked about any links with appraisal systems, participants said that this was not in place in some Trusts and not linked to CPD recording. One Trust did have a database that was kept to record how many records individuals had completed, which made one participant angry. This was because she felt it was more like a surveillance system. As she remarked:

“I don’t think you should go around policing people.”

(3-7-115)

This kind of database can be interpreted as being a part of a more sophisticated control mechanism, but she did not discuss this notion that CPD itself can be a professional control mechanism. In contrast, the participant who was now working in a PCT, explained that professionals are likely to be working independently and support for CPD from a named individual was necessary to maintain motivation to complete records. Her comment was:

“So we’ve got no one to really chuck us along kind of thing, and I think that would really help me because we’ve got enough things to do without having to do that anyway. Really don’t have enough hours in the day to worry about doing the records.”

(3-3-166)

In discussing appraisals compared to CPD, participants had a variety of their own meanings. The experienced CPD facilitators view was that CPD is a record of what has been achieved in many different contexts, but that appraisal was an assessment tool. The full-time participant suggested that CPD is a grey area with no fixed way of doing it, but their appraisals were more focused on performance, which was assessed against preset objectives. She suggested undertaking the process of CPD could be used to identify areas
for improvement suggested at an appraisal, and the two systems would support each other.

The words "...do a CPD" as a "thing", were used in a similar way to that in the intermediate cohort (section 3.4.2.2.2.3) implying that "CPD" was an isolated task that could be completed and put aside. This triggered the experienced participant to question the value of recording this change in performance as the same information would be communicated through the appraisal management system. This participant also pointed out that an appraisal was a method of reflecting on practice, and the cohort agreed. It was also agreed that the CPD process was more beneficial to community colleagues and pharmacists who work alone, with no appraisal system. Support for community colleagues through a local branch RPSGB system was considered a good idea that was beginning to take shape, although the cohort did not use these links, which are available in the community setting. Unfortunately, the PCT participant who was communicating with a number of community colleagues did not have access to this support mechanism.

There was some discussion on the role of getting feedback from the RPSGB, but participants were not comfortable with having to return to events that had occurred some time ago, as illustrated by this comment by the full time participant:

"You don't want to go back to things that you did two months ago." (3-6-487)

3.4.2.2.3.3 Contribution of CPD records to professional practice

The contribution that CPD records have made to practice was difficult for the cohort to describe. The most senior CPD facilitator suggested the only change to her practice after a number of years of keeping a portfolio was organisation of workload, as she remarked:

"It doesn't really change you, who you are, who you are is who you are, you're going to do it, the only thing that I find like having a record, I put a time frame that I'm gonna get something done, I may try and get it done, that's the only thing I find getting it done within that time." (3-7-66)
This participant repeatedly reinforced the lack of explicit effect throughout the discussion.

Although, at one stage she did imply that some implicit change had occurred but could not be described.

“I don’t really see how recording something will change your view, help you to get things done,... it has helped me get some things done.” (3-7-174)

Another cohort member also agreed that CPD records were a reference source and any benefit to practice was minimal, as she illustrated in this extract:

“I don’t actually get much out of what I’ve written it’s probably just as a reference just to check how I did it last time, there might be ways that I haven’t explored it last time that I might be able to explore it this time, but in a way it’s not much benefit for future practice.” (3-6-203)

The recording process allowed the participant to organise their account into different sections, which in some cases made it easier to understand. This was thought to be particularly useful to juniors who would come across many new experiences and needed to examine the situation in some detail.

The full-time participant found the listing of competencies by the RPSGB a useful trigger for her to think about the areas she had not ticked off or even come across before.

The PCT participant was clear at the end of the focus group that recording practice was of no benefit to her, or her colleagues, in the following remarks:

“My general feeling is with my colleagues as well, is that it’s another thing to do, and I think I’ve not come across anyone who’s learning a lot from this, using the time. So unless there are more positive thoughts about it, it almost makes you wonder what is the purpose of the whole system.” (3-3-654)

3.4.2.3 Integration of interviews and focus group data

In summary, the sub-themes that have emerged from each cohort can be mapped onto the individual interview data, as a method of comparison and verification. This is presented in Table 3.15. Overall the findings from the focus groups verify the sub-themes found from
Chapter 3

Phase Two findings and analysis

the individual interviews after 12 months. The first sets of themes were concerned with participants’ views about recording practice in a portfolio. The portfolio was a collection of material that was often a duplication of other records. CPD was perceived to be an isolated account that had to be recorded. The influence of colleagues was an important factor in supporting documenting activities in conjunction with being given protected time for recording. If records had to be disclosed, the intermediate and senior cohorts were more likely to do this selectively, and not to include any serious errors. All three cohorts verified that these records were not considered to be an assessment of performance.

The second set of themes concerned the participants’ views on the contribution of their records to practice. These are presented in Table 3.16. The findings verified the themes from the individual interviews. The junior cohort thought it was too soon to make any judgment as to the usefulness of these records. The more experienced groups (intermediate and seniors) remarked that there was no effect on practice. Although the junior and senior practitioners thought the records were a trigger for further thinking about the event recorded.
<table>
<thead>
<tr>
<th>Interview themes</th>
<th>Focus group sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Themes</strong></td>
<td><strong>Junior</strong></td>
</tr>
<tr>
<td><strong>Sub-Themes</strong></td>
<td></td>
</tr>
<tr>
<td>a) Meaning of a portfolio</td>
<td>i. Architecture of a portfolio</td>
</tr>
<tr>
<td></td>
<td>ii. Duplication of records</td>
</tr>
<tr>
<td>b) Portfolio support</td>
<td>i. Influence of colleagues</td>
</tr>
<tr>
<td></td>
<td>ii. Motivation</td>
</tr>
<tr>
<td></td>
<td>iii. Work versus learning</td>
</tr>
<tr>
<td>c) Mandatory nature of recording</td>
<td>i. Assessment concerns</td>
</tr>
<tr>
<td></td>
<td>ii. Utility</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Disclosure of records</td>
<td>i. Confidentiality</td>
</tr>
<tr>
<td></td>
<td>ii. Emphasis on error</td>
</tr>
<tr>
<td>e) Meaning of reflection</td>
<td>i. Linked to learning</td>
</tr>
<tr>
<td></td>
<td>ii. Difficulties with reflection</td>
</tr>
<tr>
<td></td>
<td>iii. Support</td>
</tr>
<tr>
<td>f) Writerlness</td>
<td>i. Form</td>
</tr>
<tr>
<td></td>
<td>ii. Utility of writing</td>
</tr>
</tbody>
</table>
Table 3.16 Interview and focus group themes for views of participants’ on how records contribute to professional practice

<table>
<thead>
<tr>
<th>Interview themes</th>
<th>Focus group sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Themes</strong></td>
<td><strong>Sub-Themes</strong></td>
</tr>
<tr>
<td>a) Lack of contribution</td>
<td>i) No effect on practice</td>
</tr>
<tr>
<td></td>
<td>ii) Doubt as to effect on practice</td>
</tr>
<tr>
<td>b) Tacit contribution</td>
<td>i) Difficulty in vocalising</td>
</tr>
<tr>
<td></td>
<td>ii) Episodic aide-memoire</td>
</tr>
<tr>
<td></td>
<td>iii) Self -Preservation</td>
</tr>
<tr>
<td>c) Mentality</td>
<td>i) Trigger for learning</td>
</tr>
<tr>
<td></td>
<td>ii) Change in thinking</td>
</tr>
</tbody>
</table>
3.4.2.4 Reflective accounts

As written reflection may influence practice, it was important to characterise the level of written reflection participants produced over the twelve month period. Therefore, the second research question for Phase Two was: What level of written reflection do pharmacists use? This was subdivided into three objectives: a) to characterise the type of written reflection used by hospital pharmacists, b) to examine written reflective accounts over twelve months, and c) to explore the influence of professional experience on written reflective accounts. Each of these objectives will be discussed in turn.

Participants submitted a self-selected written CPD account and the unit of analysis was the whole account.

3.4.2.4.1 Characterisation of the type of written reflection used

Each reflective account that was submitted is first described in terms of its structure and then analysed using the MWRITTF.

3.4.2.4.1.1 Structure of reflective records submitted

Submitted records were characterised into a number of architectural structures ranging from an open account with no trigger questions to a fixed set of questions to answer (Table 3.17). There were three basic types of record submitted, but with the common theme of reflection for learning. The first was a blank sheet of paper onto which the writer would have to compose their reflections on a practice event [Table 3.17, (1)]. Only the individual’s experience would be the guide as to how this was completed. The second was a written account of an identified learning need [Table 3.17, (2)] which may or may not have arisen from a particular event, based on Kolb’s learning cycle (1975). The third type involved using guided reflective questions, starting from a description of an event [Table 3.17, (3)]. The questions were based on the work of Gibbs’ reflective cycle (Appendix 7).
Participants in each cohort used a variety of reflective formats (Table 3.18), with the majority moving towards using the online eP&R system. All participants in the junior cohort began using a structured format and two moved to an electronic version. The third
participant changed from a structured to an open format. This particular pharmacist was not motivated to record his practice because of plans to change his career.

The intermediate cohort demonstrated the greatest variability in the format of records used. One participant kept no records (although he was a CPD facilitator), the second moved from an open format to a set of sub-headings (as he was undertaking a formal educational course) and then reverted back to an open format as he lost the mandatory nature of which format to use. The third participant in the group moved from a sub-headed format to the eP&R.

The senior cohort all used the RPSGB model for recording either in hard copy or electronic format.

Table 3.18 Structure of reflective recording forms used by each participant over 12 months

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Qualified</th>
<th>Study Time Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2004 (Start)</td>
</tr>
<tr>
<td>JUNIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.1</td>
<td>d</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>d</td>
</tr>
<tr>
<td>M</td>
<td>0.1</td>
<td>d</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4</td>
<td>b</td>
</tr>
<tr>
<td>M</td>
<td>3</td>
<td>a</td>
</tr>
<tr>
<td>M</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>SENIOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>f</td>
</tr>
<tr>
<td>F</td>
<td>14</td>
<td>g</td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>f</td>
</tr>
</tbody>
</table>

(a-h) represent the category of form listed in Table 3.17

3.4.2.4.1.2 The level of written reflection

The MWRITTF was used to code the participants’ submitted accounts in order to characterise the level of written reflection used. Each participant submitted one record at
each of three time points (0, 6 and 12 months) of the study. There were 24 accounts submitted in total and two assessors read each account. Assessors noted the presence or absence of the eight categories described in the MWRITTF (Appendix 27). The observed agreement\(^d\) was 0.78 when categorisation was performed independently, using two assessors. The expected agreement was 0.51. To know how different the observed agreement is from the expected agreement, the kappa statistic is used. The value of kappa in this case is 0.55. As a quantitative measure of the magnitude of agreement between the two assessors, this value is considered to be in the moderate agreement range, perfect agreement would be a kappa value of 1 (Viera and Garret, 2005). After discussion of the accounts, full agreement was reached. Each participant’s account was allocated the reference code for each cohort from Table 3.4.

The analysis of all the accounts is represented in Table 3.19. The form of writing could range from a simple descriptive level to a more complex account involving critical analysis of the account. The content of the account could be either the subject of what happened only (from a descriptive to a critical level), or with personal involvement in the situation. All participants produced a descriptive account which included both the subject and personal dimensions. None of the participant’s accounts demonstrated a critical level in both the subject, and personal content. A purely descriptive account is illustrated by the following extract:

“Shadowed a specialist nurse (J) who initiated a new patient on chemotherapy (EC regimen for breast cancer). Patient counselling about cancer, drugs, side-effects, monitoring issues and reassurances. Explained to the patient briefly about preparation of the chemo drugs by the production unit within pharmacy services.”

(Table 3.19, Code 4.1)

\(^d\) Observed agreement is the percentage of all categories for which the two assessors agree, which is 89+60/192 or 0.78. (Viera and Garret, 2005)
Six accounts were found to demonstrate a critical connective level of writing. Three of these were from one participant in the junior cohort (code 8), one account was from the intermediate cohort (code 2), and two accounts from one participant in the senior cohort (code 3, Table 3.19). An illustration of a critical connective level of writing is given by the following extract:

"I am responsible for producing the next pharmacy prescribing bulletin and there are no guidelines to help me to do this. I have not been involved in the production of a bulletin before. A standard operating procedure (SOP) would be useful. Read literature on writing, papers identified: Pharmaceutical Journal, 2001; 2666:615. Advantage of this is: simple, cover most areas of writing SOP, can read articles in my own time; disadvantage is the articles may be focused on practice based work."

(Table 3.19, Code 3.3)

3.4.2.4.1.3 The influence of professional experience on written reflective accounts

Overall, participants written accounts were categorised as having the connecting level of reflection, with few accounts demonstrating a critical level (Table 3.19). Each of the three cohorts of participants will be examined in the next sections.

3.4.2.4.1.3.1 Junior cohort

At the start of the study all participants were using the same preregistration form for recording accounts. Using this format resulted in a range of levels of reflective writing, from descriptive to critical connections. The descriptive level was found for both the subject being discussed and personal involvement in the situation. The critical connections level should include the merits and faults of the situation linked to evidence from the literature for both the subject and personal content of the account. One male participant demonstrated critical connections in the personal content of his writing, but not the subject of the account. He critically analyses himself in a situation, as illustrated by this extract:
"I could not think of the name of the building, also being relatively new in the hospital, much time was wasted by this. ... I need to learn more about legal issues of pharmacy staff treating patients with drugs in an emergency situation, hospital politics and their appropriateness in emergency first aid."  
(Table 3.19, Code 8.1)

3.4.2.4.1.3.2 Intermediate cohort

The intermediate cohort used a formal course recording form and one participant did not submit any records throughout the study period. This participant was followed up on a number of occasion's in-between the three interview meetings, and each time agreed to submit. However, nothing was submitted. The two participants who did submit accounts demonstrated connecting in both the subject and personal content as illustrated in the following extract:

"As I had not seen a patient on tirofibran for some time I needed to look into prescribing and administration ... based on that data sheet. I advised the doctors of the need to change from enoxaparin to heparin and the dose required."  
(Table 3.19, Code 1.1)

3.4.2.4.1.3.3 Senior cohort

The senior cohort all used the RPSGB Plan & Record forms, either electronic or manual. A critical connection level of reflection was demonstrated by one female participant in the subject she wrote about, but did not include any personal critical issues. An example of critical connection of the subject was:

"To understand the clinical aspects of Glycogen Storage Disease in order to establish the importance of a doctors request for a preparation not commercially available, for a 15 year old girl. Quickly read literature from a search... discussed patient with registrar and looked at other options... I finally liaised with production."  
(Table 3.19, Code 3.1)
Table 3.19: Analysis of the levels of reflective accounts submitted by 3 cohorts of pharmacists over 12 months

### JUNIOR COHORT

<table>
<thead>
<tr>
<th>Code</th>
<th>Format</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Form Boxed</td>
<td>Understanding services provided by chemotherapy lounge</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>4.2</td>
<td>Form Boxed</td>
<td>How to critically appraise journals</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>4.3</td>
<td>Form Boxed</td>
<td>How to use the Online CPD system</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
</tbody>
</table>

### INTERMEDIATE COHORT

<table>
<thead>
<tr>
<th>Code</th>
<th>Format</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Open Questions</td>
<td>Understanding a CPD facilitator</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>1.2</td>
<td>Form Boxed</td>
<td>Giving feedback about an error that was discovered</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>1.3</td>
<td>Form Boxed</td>
<td>Understanding P40s</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
</tbody>
</table>

### SENIOR COHORT

<table>
<thead>
<tr>
<th>Code</th>
<th>Format</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Form Boxed</td>
<td>Understanding a metabolic disorder</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>3.2</td>
<td>Form Boxed</td>
<td>Calculation of renal function</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
<tr>
<td>3.3</td>
<td>Form Boxed</td>
<td>Writing an SOP</td>
<td>Personal Opinion Connecting Critical Connections</td>
</tr>
</tbody>
</table>

---

**TIME = 0**

**TIME = 6 MONTHS**

**TIME = 12 MONTHS**

---

PRESENT

ABSENT

252
There were no clear differences between the cohorts because the numbers of participants were low. The two CPD facilitators that submitted records demonstrated the technical approach to writing as the personal content did not go beyond a descriptive level.

3.4.2.4.1.4 Reflective accounts over time

The junior cohort showed a progression in the level of reflective writing particularly when writing about the subject. The personal element of the accounts remained limited to a descriptive level. However, one male participant consistently wrote at a critical level about his personal involvement in situations. This level of writing was maintained even when they changed from a fixed format to an open format.

The intermediate cohort showed minor changes both in the subject and the personal content levels over the time period. Both participants used a formal course recording form during the first two time periods and then changed to using the eP&R or their own open format. Critical connections were found in one account in the personal section after six months, but not after 12 months. The personal critical connection example was recorded when discussing switching to a different antibiotic, as illustrated in this comment:

"I suggested to the doctors to stop A and switch to B. B has a better profile side effect profile...I should have spoken to the pharmacist to clearly endorse the administration of a. It is important not to assume that the nurses will always check...I have learnt the importance of endorsing instructions clearly on a patient's chart."

(Table 3.19, Code 2.2)

The senior cohort all used the RPSGB forms either electronic or manual copies. The subject content reached the critical connection level by one participant who maintained this level over the 12 months.

The overall content of each account was classified as involving either a: positive, neutral or negative situation (Table 3.20). This revealed that as a group the participants’ submitted
mostly neutral accounts but there were differences between cohorts. One junior participant submitted accounts over the 12 months which involved errors each time. The majority of the intermediate cohort also submitted accounts of errors. The senior cohort all submitted accounts which were neutral in content.

Table 3.20 Summative classification of submitted CPD accounts over 12 months

<table>
<thead>
<tr>
<th>Study Time points</th>
<th>2004 (Start)</th>
<th>2005 (6 months)</th>
<th>2005 (12 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Cohort</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Institutional error</td>
<td>Nurses error</td>
<td>Physician error</td>
<td></td>
</tr>
<tr>
<td>Intermediate Cohort</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician error</td>
<td>Colleagues error</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Colleagues error</td>
<td>Physician error</td>
<td>Colleagues error</td>
<td></td>
</tr>
<tr>
<td>None submitted</td>
<td>None submitted</td>
<td>None submitted</td>
<td></td>
</tr>
<tr>
<td>Senior Cohort</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
<td>Neutral</td>
<td></td>
</tr>
</tbody>
</table>

In summary, the reflective accounts submitted were in a descriptive format with limited personal content. From the group of nine pharmacists, one junior male consistently wrote about his personal involvement (not subject) to a level of critical connectivity; one senior female wrote to a critical connectivity level about the subject (not personal).
3.5 Discussion

The main purpose of this study was to investigate the influence of CPD portfolios on pharmacy practice and the character of reflective writing used by pharmacists in CPD portfolios. The study focused on NHS hospital practice within the London Workforce Development Confederation. The findings from Phase Two will be discussed in two main sections, a) the influence of CPD portfolios on practice and b) the character of reflective writing in CPD portfolios.

3.5.1 The influence of CPD portfolios on pharmacy practice

The influence of CPD portfolios was investigated by exploring the views of pharmacists keeping a portfolio, and then focusing on how these portfolios contributed to changing practice over a 12 month period. The views will be discussed first, followed by the contribution of portfolios to changing practice.

3.5.1.1 Participants views of keeping a CPD portfolio

The views of participants keeping a portfolio demonstrated a number of themes and sub-themes illustrated schematically in Figure 3.3, each of which will be discussed in this section.

3.5.1.1.1 Meaning of a portfolio

The relationship between a portfolio and CPD was found to be confusing, in both Phases of this study. Some participants believed CPD to be a collection of data or simply increasing their knowledge, i.e. continuing education (CE). This confusion over CPD/CE is supported by previous studies of pharmacists using a structured questionnaire approach (Bell et al, 2002; Mottram et al, 2002; Swainson and Silcock, 2004; Attewell et al, 2005; Swallow et al, 2006). These authors suggested that hospital pharmacists were more likely to understand
the difference between CPD and CE than community colleagues, and those registered before 1990.

Figure 3.3 Participants key themes and sub-themes of CPD portfolios

The influence of gender on keeping a portfolio was not found to be consistent in this Phase of the study. Both females and males kept a portfolio. All the senior and junior pharmacists kept a portfolio. However, the juniors all used a formal course portfolio.

This study found that all three senior pharmacists were the only practitioners that continued to record practice throughout the 12 months, during which time recording was not a mandatory requirement. The motivation to recording was probably linked to the fact that two of these participants were CPD facilitators. The third participant was keeping records, but was aware that a recent change in job had prevented her from allocating sufficient time
to recording in the last three months of the study. The intermediate cohort (3-4 years of practice) was found to be the least compliant in recording practice.

In relation to experience of the practitioner, a study of hospital pharmacists by Swallow et al (2006) suggested the years post qualification did influence respondents’ perception of keeping a portfolio. This was confirmed by Austin et al (2005b) in which more experienced pharmacists felt the portfolio to be an unhelpful tool in practice. There is evidence from Occupational Therapy that at the undergraduate level, prior educational experience and age does not make a difference as to the performance in using a portfolio (Routledge et al, 1997). In a more recent questionnaire survey of 413 preregistration student nurses Narin et al (2006) found third year students were less positive about the use of a portfolio than first years. This suggests an experiential negative effect on portfolio use at undergraduate level, which could spill over into the postgraduate territory. In the same study, nursing students were also sceptical about portfolios enhancing key transferable skills, a notion supported by the Phase Two findings, in which the key job skills improved without direct influence of portfolio recording. This negativity towards portfolios has also been demonstrated in pre-service teachers (Pedro, 2005). Pre-service teachers were concerned about numerous different courses all asking for portfolio evidence, which seemed to reduce the benefits of the recording.

In Phase Two, all but two participants were keeping a portfolio of some description. The architectural layouts of these portfolios were being driven either by a formal educational course or the RPSGB. In some cases this resulted in duplication of effort. The two most commonly reported ways of classifying portfolios are based on Tomkinson (1997) and Smith and Tillema (2001). It was difficult to characterise the portfolios of the participants
in this study using Smith and Tillema’s approach because these authors imply some portfolios are not reflective. All portfolios will be reflective in some way, as a portfolio is a tool for a learning process and reflection is core to this process. In addition, portfolios are retrospectively constructed and are therefore reflective. Tomkinson’s (1997) taxonomy of the teaching profession’s portfolios is more functional as it uses a number of key dimensions. It could be adopted for professions other than teaching, and used as a guide. This guide would provide a “spirit level” approach to each dimensional description listed (section 1.2.1), depending on the context of the portfolio use. For example, a portfolio can be maintained as a personal document that is edited prior to becoming public for assessment. Based on findings from Phase Two, examining reflective writing characteristics, it is suggested the style dimension could be replaced with a dimension of “Reflectivity” using a potential “spirit level”, flowing between “descriptive and critical connectivity”.

3.5.1.1.2 Portfolio support

Support for documenting practice in a CPD portfolio was variable amongst the three cohorts in this study. Individual facilitation is not being accessed due to workload of all parties. However, within the context of a hospital environment the influence of colleagues was important. This would take on the form of informal discussions in the corridor or a buddy system, in which pairs of individuals discussed their portfolio records. As well as a useful way of encouraging staff to learn from each other, it is a form of learning grounded in Group Socialization Theory, previously described as “learnworthiness” (Austin, 2002). This process can also be seen as reinforcing the discourse of power and discipline; described as “government of men by other men” by Foucault (Faubion, 1994; also see
section 1.3.5). Peer support for engaging in the context of CPD has been suggested by a number of authors (Bollington, 2003; Swainson and Silcock, 2004; Gross, 2005) but the notion of this being a form of discipline has not been raised. In Phase Two, one senior participant commented about CPD:

"I don't think you should go around policing people." (3-7-115)

This concept of surveillance was raised as an issue in Swallow et al.'s study (2006), where pharmacists were concerned over someone “watching”.

In a study of teachers (De Rijdt et al, 2006) none of the respondents started creating a portfolio because colleagues recommended they should do, but mainly because of their own initiative. This suggests that the role and culture of learning in an environment should be carefully considered. Support toolkits for CPD facilitators have been developed both from the RPSGB and the London Pharmacy Education and Training organisations (2004), in addition 21 part-time CPD facilitators have been employed by the RPSGB to help at local branch meetings (Wang, 2004; Anon, 2006). This support is mainly aimed at community pharmacists and although not restricted to this group, hospital pharmacists do not routinely attend branch meetings. This was confirmed by the participants in Phase Two. In Phase Two, participants were concerned with the decline in support available, which had been gradually eroded due to workload commitments over the 12 months. In place of this individual support, all the participants had the opportunity to attend local peer review meetings for updating their knowledge base.

The perception that there is a lack of time for CPD has been suggested by a recent survey of 134 preregistration pharmacists (Haughey et al, 2006). Participants in Phase Two also
suggested that protected time should be made available, as discussed by Attewell et al (2005) in the context of community pharmacists.

Participants in this study indicated they would accept facilitation from non-managerial colleagues on a one-to-one basis, rather than managers. This finding is supported by two recent studies involving hospital pharmacists (Swainson and Silcock, 2004; Swallow et al, 2006). The lack of support in terms of separating work from learning within the hospital setting was found to be present in some hospital Trusts within this study. It is compounded by the systems of discipline mentioned above that could eventually lead to staff leaving the NHS.

3.5.1.1.3 Mandatory records

The recommendation by the Professional Associations Research Network in 2001 was that CPD should focus on learning and be divorced from requirements of audit or accountability. However, clinical governance in the NHS has overtaken this recommendation. In this study the mandatory nature of record keeping in a portfolio raised the problem of assessment. Participants were concerned with who and how the assessments of their records would be undertaken. With the assessor unknown, the notion of CPD recording being a model of Foucault’s Panoptic control is enhanced. This finding is contrary to that published by Swainson and Silcock (2004). In their questionnaire-based study of hospital pharmacists, concerns with assessment were not raised. This difference may have been due to the use of a questionnaire that was not sufficiently flexible to capture the data. The concern over assessment is further fuelled by participants’ feelings of a lack of self-control.
A common view from junior participants was that recording was now part of normal practice. This is supported by comments from community pharmacists in a study by Attewell et al (2005). However, over the twelve months of Phase Two, this view had changed to recording becoming a chore, which had to be completed as part of the forthcoming mandatory requirement to record CPD. This kind of routinisation of practice is a warning and has been described by Nietzsche as "eternal repetition" which can lead to a failure of learning from experience. Nietzsche was a late 19th century German philosopher who proposed that time is cyclical, repeating itself. This becomes negative when there is failure to learn from experience, and he uses a quotation about demons to illustrate eternal repetition:

"What if a demon crept after you one day or night in your solitude and said to you: this life, as you live it now and have lived it, you will live again and again, times without number; and there will be nothing new in it."

(Cox, 2005)

3.5.1.1.4 Disclosure

This study suggested that participants were happy to selectively disclose their records. However, it was only positive accounts that would be disclosed. A finding that was also suggested by Swallow et al (2006), but not yet reported in other pharmacy studies. The intermediate cohort in Phase Two reported that they would be more honest in a performance review with their manager than submitting true records of practice as part of their CPD. One participant in Phase Two also suggested the ease of fabricating records, something that was commented on when discussing disclosure of records. This was also found in the Canadian study (Austin et al, 2005b) of pharmacists' use of a learning portfolio. The issue of fabricated records has been fuelled by a recent letter from a
pharmacist suggesting someone should set up an internet writing service (Potter, 2006) to provide practice records to download.

In a questionnaire study of nursing students’ use of a portfolio in a clinical placement, McMullan (2006) found that assessment and learning conflict. Student nurses suggested that honesty of records would be reduced if assessed. The notion of dishonesty has also been commented on in relation to medical students forging signatures and copying material in learning portfolios (Hays, 2004; Davis, 2004).

3.5.1.1.5 Meaning of reflection

In this study, participants described the notion of reflection as self-examination of practice, by looking back at behaviour in various contexts which were mainly triggered by a negative event. This would result in some new learning which would then make it a positive process. The difficulty came with writing about these events. Participants in some cases were confused as to how reflection linked into the model of CPD being encouraged by the RPSGB. This confusion is partly due to the RPSGB changing their model of practice from a “good practice cycle” to a “CPD cycle”, and using the term reflection in different parts of the CPD cycle over the past five years (Table 3.21).
As discussed in Chapter 1, reflection is core to a portfolio and to learning. Separating it out to link with individual parts of a model of learning is confusing. This confusion about the meaning of reflection by pharmacists has been reported previously by a number of authors (James et al, 2002; Swainson and Silcock, 2004; Attewell et al, 2005) and has also been reported in the teaching and nursing professions (Pedro, 2005; Horan, 2005; Bumard, 2005). The role of different social cultures in reflective practice was not examined in this study but may be another factor that needs to be investigated, as recently raised in the nursing profession (Stockhausen and Kawashima, 2002; Jones, 2006).

This study also highlighted the perception by some participants that records had to be of a clinical nature, but this is not what the RPSGB recommends (Cook et al, 2006).

Participants were also locked into the notion that reflection was a self-examination process and did not discuss the use of other methods of learning that involve reflective thinking. These issues of confusion and isolated episodes of recording add to the notion of professional learning being disjointed and over modularised. This disjointedness has been illustrated in a study of nurse teachers’ perceptions of reflective practice in a University.
context (O’Connor and Hyde, 2005). Their integration of academic and practice elements of reflection did not occur, adding to the confusion of students about the role of reflection in professionalism.

In Phase Two, support for reflective writing was limited even more than portfolio construction, although peer support for reflective thinking was common. Over time participants’ views of reflection did not change, and they were still confused by its use in the RPSGB model after 12 months. Therefore there is a need to clearly define reflective practice within pharmacy.

3.5.1.6 Writerlyness

An area that has not been previously reported in the pharmacy literature is the issue of “writerlyness”. The term “writerlyness” has been used in this study to describe the writing that participants were undertaking. This would involve different forms of writing using a computer keyboard and/or hand written accounts. In Phase Two, it was common for participants to handwrite their accounts in note form before transferring electronically; a process which would filter some initial thoughts, knowing the keyboard was the tool for final disclosure of the account. Other participants in Phase Two used the keyboard to save time, a notion that can easily lead to a technical rationalist approach to writing. This issue of keyboard versus handwriting has recently been described by Wright (2005) in a group of six psychotherapy masters students. The keyboard for four out of the six students was restricting their creativity, with the knowledge that when in electronic format it is for others to read. In Phase Two, participants’ act of writing slowed down their thought process and allowed other thoughts to develop; a triggering process (see section 3.5.1.2) also found in the study by Wright (2005).
The problem for some participants was the dichotomy of writing styles which were being asked of them; from the positivistic narrow description of intervention logs to a CPD reflective account. Eventually this ended with the process of CPD being conceptualised by the intermediate cohort as a physical bounded entity that was deposited into the bank for withdrawal when revalidation was necessary. This struggle with different styles of writing has also recently been raised by Rai (2006). In this study of 15 adult social work students, reflective writing was difficult. Those students that had experience of writing in higher education were found to resist writing guidelines if they conflicted with their own experience.

The act of using an electronic system was thought to make writing less personal due to awareness of colleagues observing when using this form of recording. This notion of privacy and seclusion also demonstrates the disciplinary nature of writing as a form of Foucauldian Panoptic control of professions.

Most participants viewed CPD records as official documents and as such they would not, or could not include emotions. The role of emotion in reflection has been poorly addressed within the pharmacy profession and little has been discussed in other contexts of written accounts (Bolton, 2001d; Swan and Baily, 2004; Moon, 2004d; Harrist et al, 2006).

Emotion is central to learning. There seem to be two dominate cultural models of emotion, which in turn affect the beliefs about expressing and controlling emotions (Swan and Baily, 2004). The first is that emotions are a threat to our rational thinking. The ideologies of "professionalism" and evidence-based practice state that emotion needs to be kept suppressed. The second model sees emotions as the most authentic part of self because emotion is the least interfered with part of self (the romantic view). Pharmacy as a
profession sits firmly in the first camp. Rolfe (2002), from the field of social work has called on the helping professions not only to have empathy, but sympathy with patients. This he claims to be the third and most intimate level of practice and requires deeper emotional understanding. The first level is "explanation" from a quantitative paradigm, all that is needed is knowledge from research; the second level is an empathetic "understanding" from the qualitative paradigm. This area of emotional level is something most pharmacists have had little if any training in.

In summary, writing by participants was not a common activity and was generally restricted to technical procedural accounts. Participants acknowledged their writing was descriptive and would prefer some direction, but did acknowledge that writing acted as a springboard for reflective thinking.

The ability to write reflectively does not match the level of reflection that professionals actually engage in, and this mismatch must be appreciated by professional organisations using portfolios to assess reflection or practice. This has been recently raised by comments from Bold (2006) who examined eight students' reflective writing after sixteen weeks of a Foundation Education Degree. Content analysis showed that some students' reflective writing skills remained static while others improved in their writing skills.
3.5.1.2 Contribution of CPD records to changing practice

In Phase Two, considering what contribution CPD records had to changing practice, a number of themes and sub-themes emerged illustrated schematically in Figure 3.4. The general view was that CPD records had little, if any effect on practice after 12 months.

![Figure 3.4 Participant themes of CPD recording contribution to practice](image)

This lack of effect is supported by other authors. In the study by Austin et al (2005b), 258 (19%) Canadian pharmacists reported in a self-completion questionnaire that no change had occurred from using a learning portfolio. It was not clear what proportion of these were hospital based. In another questionnaire based study, Swainson and Silcock (2004) reported that only 3 hospital pharmacists (7%) discussed the effect of CPD on patient care compared to 13 (30%) of community pharmacists. In addition, recent reviews from
chiropractors and nurses have shown that mandatory CPD schemes have not yet been shown to produce a change in practice and health care (Bolton, 2002; Lawton and Wimpenny, 2003). A lack of effect for some of the participants in Phase Two was because reflection-on-practice was already a daily routine. This was the same as found in the study by De Rijdt et al (2006) in the context of student teachers.

Two themes which have not been widely discussed in the pharmacy literature before were the notion of a tacit contribution and a mentality change in practice. Some participants suggested that there was a tacit contribution of CPD recording to practice, something that is difficult to vocalise to others, and a behaviour that is found in many professions (Eraut, 1994). This may or may not represent a progression in the novice to expert model, or tacit knowledge that appears in three different forms as described by Eraut (2005): situational understanding, routinized procedures or intuitive decision-making. In Phase Two the portfolio was perceived by some to be a useful tool for learning to think reflectively. This has also been suggested by Black and Plowright (2005) who studied the perception of 13 pharmacists using a learning portfolio from a prescribing course.

There was a general consensus that having a number of written records would allow the formation of a personal library (different from the bank concept mentioned above) that is visited to recall specific events when required. However, some participants’ had not visited their records for a number of years.

Participants were encouraged by their Trusts to record errors of practice. This type of recording has led two of the participants to become defensive in their practice. This type of writing is an example of self-discipline which resembles the features of the Greek notebook called a Hypomenmata. This was used as a personal confessional in which the writing
disciplined the self (Bleakley, 2000). This in turn supports yet again the notion of Foucault's Panopticon of self-regulated behaviour. One particular example from Phase Two was a participant whose memory of a previous error would return to his conscious for more deliberation.

An effect on practice that emerged from the interviews was the way in which participants structured their thinking. Recording would trigger thoughts for further learning or changing their way of thinking to a more lateral approach. This view was confirmed by comments made in the focus groups.

In this study, the notion of increasing the confidence of participants, by recording practice, was reported by one junior participant. However, this was not raised by other participants. In the RPSGB's pilot study of pharmacists using the Plan & Record system, confidence was reported as a main factor that had increased as a result of recording practice (Adcock, 2004).

The longitudinal nature of this study demonstrated that over the 12 month period, participants' views of the effect on practice were not consistent, making any single time point survey difficult to interpret. Overall, the intermediate and senior cohorts were less likely to be able to explain any changes in practice resulting from the recording process. This lack of contribution of records to influencing practice could be due to the compartmentalised approach to learning that was evident particularly in the junior cohort. In addition, had the recording system been designed using a holistic approach to learning, a better quality of learning may have resulted. However, the profession is currently insistent on recording isolated snippets of experience.
3.5.1.2.1 Self-perception of professional skills

A finding that has not been reported for hospital pharmacists before was the self-assessment of job skills that was used at the start of the interviews in order to see if it would trigger participants to link changes in skill areas with CPD recording. Although CPD recording had little or no effect on practice, all but one of the participants’ self-reported skills improved over the 12 months. None of the participants’ attributed the change in skill area to recording their practice. The one participant who reported no change in skills did so because she had changed employment.

From the literature, a qualitative study of 40 hospital pharmacists by Swart et al (2003) found a number of descriptors of professional practice. This study correlated with those descriptors and identified additional skills of: role modelling, influencing, learning from others and assertiveness (Table 3.22).

Table 3.22 Self-perceived key skills in hospital pharmacists as found in this study compared to previous research

<table>
<thead>
<tr>
<th>Hospital pharmacists key skills (Swart et al, 2003)</th>
<th>Phase Two key skills (from Table 3.14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>Confidence</td>
</tr>
<tr>
<td>Clinical Knowledge</td>
<td>Clinical knowledge</td>
</tr>
<tr>
<td>Communication skills</td>
<td>Communication skills</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Attention to detail</td>
</tr>
<tr>
<td>Impartiality</td>
<td></td>
</tr>
<tr>
<td>Approachability</td>
<td>Team working</td>
</tr>
<tr>
<td>Empathy</td>
<td>Empathy</td>
</tr>
<tr>
<td>Education skills</td>
<td>Education skills</td>
</tr>
<tr>
<td>Time management skills</td>
<td>Time management skills</td>
</tr>
<tr>
<td></td>
<td>Role model</td>
</tr>
<tr>
<td></td>
<td>Influencing</td>
</tr>
<tr>
<td></td>
<td>Learning from others</td>
</tr>
<tr>
<td></td>
<td>Assertiveness</td>
</tr>
</tbody>
</table>
3.5.2 Characteristics of written reflection in CPD Portfolios

In this study assessing reflective accounts was an attempt to understand the process of reflective thinking, using a reflective framework based on the work of Fund et al (2002) to map the level of pharmacists' reflective thinking. One difficulty in this area is that assessing writing does not directly represent reflective thinking, learning or practice (Eraut, 2004). One senior participant began questioning the justification for recording towards the end of the study period. Her records did not exhibit this feeling, as they were mainly descriptive throughout. However, how language is used can disclose levels of reflective thinking as discussed in section 1.3.7. Factors impacting on the level of reflective writing may include prior experience and the design of the form used to record the account. All participants had been influenced by the RPSGB's model of CPD, and the role of reflection was directed to this. The majority had recorded some form of reflective account but none could describe the different models or ways of recording reflection. This was partly driven by the limited direction given to write reflectively, which derived largely from the directed questions on the forms or electronic Plan & Record system. The accounts submitted by senior participants were all neutral in terms of positive or negative situations. It is difficult to determine why this occurred, but may have been a result of knowing that the accounts would be analysed or some other influencing factor, e.g. demographics.

One participant exhibited a critical level of reflective writing within the subject content of the account, and one participant managed this level with the personnel content. The lack of criticality implies superficial learning, and a lack of change in practice as a result of recording the experience.
Another senior participant used the Plan & Record form starting from the reflective heading, and only wrote in a descriptive manner. The intermediate cohort recorded mostly errors that they found from the practice of other professionals. One participant exhibited critical connections in the personal and not the subject content. This implies he is more likely to change his practice, but this would be based on assumptions made of the subject, that may be incorrect. This also suggests the participant was not confident in his own practice and is continually looking for faults in his or others’ practice.

One intermediate participant did not submit any records over the 12 months. Halfway through the study this participant was appointed as a CPD facilitator and expressed a lack of interest in this role. This reflected a lack of motivation to CPD in general. The lack of motivation to do this may have been similar to the lack of interest in being appointed a CPD facilitator half way through the study.

Two of the three juniors wrote about neutral events with no criticality. One junior participant recorded all errors involving other professionals practice and exhibited critical connection in all accounts but not the subject content. This individual used both directed and open forms for recording. Therefore, for this individual, even recording errors of others practice does not necessarily result in critical connective writing and the use of directed forms does not necessarily help move towards a critical level. The lack of criticality of the subject may also be due to the lack of experience of the participants practice. This lack of experience makes the juniors rely on standard protocols which are not questioned.

In summary, this study found that most participants’ submitted descriptive accounts with limited evidence of critical connections. This did not change over the twelve month study
This would imply any change in practice would be unrelated to the written account. This was not unexpected, because from the interview data participants’ lacked description of an effect of recording on practice. These findings have not previously been reported in hospital pharmacists but are supported by a number of studies in other contexts which will be reviewed in the next sections.

3.5.2.1 Level of written reflection

All participants in this study were submitting accounts but there was a variety of recording forms being used. The majority were moving to using the obligatory online or hard copy of the “Plan & Record” type. A content analysis of the RPSGB forms (Appendix 28) either electronic or manual does allow participants to record accounts to higher levels of reflection that go beyond the immediate situation. Participants in this study used the RPSGB forms most of the time and demonstrated a descriptive approach to their writing with little evidence of reflection beyond the immediate situation. This lack of criticality was also found in their mainly neutral or negative feelings towards mandatory recording.

A review of the educational literature (Appendix 8) has shown similar findings. Orland-Barak (2005) analysed 300 entries from in-service teachers’ course portfolios and found a descriptive level of writing using Hatton and Smith’s (1995) framework. Similar findings have been reported by other authors in the educational field (Hatton and Smith, 1995; Maclellan, 1999).

In nursing (Appendix 9), similar findings have been observed. Powell (1989) used an observational study of eight nurses undertaking a Diploma course and demonstrated a lack of higher levels of reflection. Richardson and Maltby (1995) studied 30 undergraduate nurses using a mixed method approach and found similar reflective levels to Powell (1989).
In addition, focus group analysis indicated that some students were unable to write about their feelings because of concerns about disclosure. This was a finding confirmed by this study in which some participants viewed their writing as personal and not for disclosure. Thorpe (2004) studied 52 nursing students using a qualitative methodology and six were coded as critical reflectors. Nearly half were coded as non-reflectors. Recently Chirema (2007) investigated the journals of 42 qualified nurses undertaking a part-time course. The findings revealed that two thirds of the nurses were either reflective or critically reflective and a third non-reflective using Mezirow’s (1991a) three broad categories. This lack of criticality has also been observed in other health professions. Rosie and Murray (1998) evaluated 31 student radiographers, findings demonstrated 36% of the diaries included emotions, the majority were impersonal but helped students to reflect on their learning. Pee et al (2002) studied 14 student dental therapists’ progress files, using a mixed method approach. All students demonstrated a descriptive level and nine (64%) had entries at a critical level. Plack et al (2005) examined 43 journals from 27 physical therapy students using two levels of coding. The first level used nine elements of reflection and found that returning to the experience was the most common element, and exploring own values and beliefs the least. The second level, using Mezirow’s three levels of reflection, showed that 14.7% of the journals were non-reflective, and the rest either reflective (43.4%) or critically reflective (41.9%). In a study of 149 medical students, Carr and Carmody (2006) identified four levels of reflection from thematic analysis of reflective case summaries. Few students were able to demonstrate an integrated approach to reflection.
In the pharmacy profession there is little data for comparison. The findings of this study are supported by a preliminary report by Swart et al (2003) who described 40 hospital pharmacists' as being challenged by the activity of written reflection after eight months. Kansanaho et al (2005) investigated 40 (38 women) Finnish community pharmacists' patient counselling skills, in conjunction with Mezirow's (1981) seven levels of reflectivity. Content analysis of a pre-course essay suggested ten (half with a master's degree) pharmacists to be non-reflective, and the majority (n = 22, seven with a master’s degree) to be at the consciousness level of reflection, and eight at the critical level. The consciousness level includes a range of actions which involve: description of the situation, awareness of feelings about the thoughts or actions, ability to assess the actions and thoughts and finally awareness of value judgments being made in action. The critical level includes: becoming aware of one’s own awareness, and challenging assumptions. However, these levels include a wide range of concepts which are difficult to recognise from written accounts and may have compromised the findings.

The lack of critical written reflection found with students and professionals may be linked to the role of emotion. There seem to be at least three ways emotions link with reflection (Swan and Bailey, 2004). Firstly, emotions can be a source of critical reflections, as illustrated by one participant’s accounts of errors and badly managed emergencies. Secondly, critical reflections can generate emotions, which may be difficult to handle by the individual, which in turn can interfere with their learning (Beard and Wilson, 2002). Thirdly, emotions are a source of knowledge about power relations.

In this study the majority of participants did not move to a critical level. It is proposed that this could be caused by one of two processes: a) during the writing process certain
Chapter 3 Discussion

emotions were recognised which triggered the individual not to write any further (emotions in a science-based profession are kept hidden so as not to affect control over decision making, i.e. emotions are seen as disruptive) and/or b) the distancing and self-regulation of emotions, which is generated by the professional body and educational institutions, trains the participant to form a block towards writing in this critical genre, at an unconscious level.

3.5.2.2 Reflective accounts over time

Each participant in this study consistently maintained a descriptive level of reflective writing despite some using different recording forms. At no stage over the 12 months had feedback on their accounts been received. Any change in the level of reflection was individually based, no clear differences between cohorts was identified. However, the junior cohort demonstrated some progression towards critical connections in their writing over the 12 months of the study. This lack of clear development illustrates the difficulty in assessing the reflective level of written accounts at one time point.

In the literature, the majority of authors use Mezirow's (1991a) or Boud et al's (1985) levels of reflection. The findings are that there is a variation in the levels and some improvement in relation to support on feedback. However, most studies were conducted over a short period of time.

Bain et al (2002) studied 35 student teachers and found low levels (using a five point scale based on Bain et al 1999) of reflection at the first entry but significant improvement in the second entry which was maintained. This was mainly attributed to feedback the students received (confirmed in a follow up report in 2002), but this did not have to be an intense supervised type of feedback. In another study Duke and Appleton (2000) studied 62 post-
registration nurses using a quantitative methodology and demonstrated that reflective writing skills (using their own reflective tool) improved over an academic year. Nurses in this study did obtain feedback on their accounts. In contrast, Williams et al (2000) studied the journals of 53 physical therapy students using a modified Boud scale of reflective process and found no improvement in reflective level over an eight-week period. In a flow-up study of 56 physical therapy students (Williams et al, 2002) these authors found 98% of students not to have reached the critical level of reflection. In a recent study Jensen and Joy (2005) assessed the level of reflective writing among 60 journals from 20 nursing students over a 12 week period. Students were found to demonstrate a gradual decline in reflective writing over the period of time using Mezirow’s levels of reflection. This was attributed to a lack of reinforcement of the reflective process over the 12 weeks. This requirement for support has been found in three other studies. In the first study of social science students, Fisher (2003) changed the documentation, from an open to a guided reflective account, and reduced the number of students being weak reflectors from 33(70%) to 13(27%). In the second study, Wessel and Larin (2006) examined 15 physiotherapy students who did not receive feedback on their journal entries. The authors found that at the start of the course 61% of journal entries were at level 2 of 5 (association, relating current situation to prior knowledge) using Boud, Keogh and Walker’s (1985b) framework, and this increased to 71% after two years.

The third study examined a group of 20 science student teachers, collected at four time points (Fund et al, 2002). Feedback was intensive and involved peers and tutors. Over one semester there was a significant rise of about 30% in critical bridging in the accounts, with
Chapter 3

Discussion

description falling. This study is the only one that is based on the theories of writing and content of reflection.

3.5.2.3 Effect of professional experience on written reflection

This study has demonstrated that the professional experience of the participants' did not seem to influence the level or content of reflective accounts submitted.

This was also found by Wong et al (1995) who studied 45 registered nurses written accounts using Mezirow's frame work. In contrast Boenink et al (2004) studied 147 fourth year medical students using four vignettes to assess the degree of reflection in medical practice. Women scored higher on reflection than men in three out of the four vignettes, and previous work experience in health care also resulted in higher reflection scores. This difference in medical students and nurses may represent the technical-rationalist approach of the medical course in the first few years and it would have been interesting to see if the scores increased further after a number of years in practice.

3.5.3 CPD portfolio as a form of discipline

This study has demonstrated learning can become compartmentalised by using a tool for documenting practice events in a portfolio format, i.e. the RPSGB “Plan & Record”. The majority of participants were happy to disclose their edited records as requested by the RPSGB. One senior participant began to deconstruct the need for these records, an activity that the juniors and intermediate cohorts did not do, and a number of participants were confused about the meaning of writing reflective accounts. The majority also considered recording reflective accounts, a form of self-examination of practice, which was a positive thing to do.
Foucault, the French philosopher, in discussing disciplinary technology using Bentham’s vision of a prison called the “Panopticon”, argued that power, education and knowledge converge leading to a more politically docile person. Foucault used an example of the exam system. This can also be interpreted as the examination of professional practice using CPD portfolios and reflective accounts. The assessment of mandatory CPD records is unknown but the pharmacist is aware of its presence. The pharmacist is categorised, compared with others and with a norm. This power Foucault described as being productive as well as oppressive. Although with power comes resistance, it also gives the chance to develop and grow. This power of portfolio recording was not found in this study.

Resistance to mandatory recording was beginning to demonstrate a negative approach with participants describing the recording as a chore, rather than offering a way of asking how practice might be done differently, in order to improve quality of care.

This study has also thrown up power relationships which the NHS and professionals are struggling with. This involves control mechanisms of both the prescriptive architectural design of portfolios and the level of reflective recording. Portfolios have gradually been introduced as part of clinical governance without full research into their effect on the learning and development of professionals.

The Panopticon model of control is being centred on the isolation of professionals and a central body overseeing their practice to maintain conformability and economic proficiency of work; rather than a lifelong learning approach which the portfolio is capable of catalysing.

The evidence for this Panopticon starts with fragmentation and compartmentalisation of learning. Participants leave university having some experience of how to complete a
portfolio of learning, to enter preregistration training where a portfolio has become compartmentalised because of the assessment involved. On qualification, the RPSGB model of CPD has to be adopted. Each stage of the CPD model has the potential to become an isolated event into which practitioners enter, complete their activity under surveillance from an unseen body, and then move into another stage round the outer circle of the Panopticon which can represent experiential learning sectors.

The evidence for this was seen when listening to participants' views of the mandatory nature of CPD records becoming a chore, similar to preregistration recording. Linked to this were guilt feelings arising as a result of not achieving the required number of records in a set time period. This would add to the isolatory nature of the Panopticon sectors in which professionals continue to practice, only exiting the sector for an IPR or clinical supervision session, having to return to undertake more records with little learning from this process.

In one Trust, a data base of how many records were kept has already been instituted as a form of surveillance.

The process of CPD although constructed as a model using various stages of learning has been coalesced into a "congealed record entry" by a number of participants, making the process of CPD into a label for one record. For some individuals the compartmentalisation may be the serialistic approach to their learning rather than a holistic one, and therefore is acceptable. The compartmentalisation was also being fuelled by the technical approach being adopted by participants with a "last minute" submission attitude, a portmanteau aide-memoire portfolio, tick-box data entry, lack of emotional involvement in the accounts, duplication of information with other control mechanisms of the KSF and IPR. With increasing demands of the working environment there is an increasing work versus learning...
gap, and practice is becoming an observable commodity with measurable benchmarks, standards and competencies to be achieved.

The second piece of evidence for Panopticism comes from the assessment of professional records by unknown assessors, i.e. the assessors being in the Panopticon's central tower overseeing isolated/compartmentalised professionals. This was also seen in Phase One, where loss of professional autonomy and perceived behavioural control was associated with keeping a portfolio.

The third piece of evidence comes from the type of support offered. Some Trusts started using buddying methods to make sure colleagues are disciplined into the correct behaviour. At the same time, individuals are not using CPD facilitators to deconstruct their accounts but rather construct evidence for submission. This is working with some participants who are describing feelings of guilt for not having completed enough records. Without local support the use of the eP&R will not become a cultural norm. Therefore this has made some participants not want to be seen using the eP&R; in effect, driving the recording process underground rather than being part of normal practice.

The correct type of support would destabilise the Panopticon allowing colleagues to discuss accounts of practice in a non-threatening atmosphere.

The fourth piece of evidence is seen in the confusion participants were experiencing with what reflection is, and being manipulated into thinking that it is a separate compartmentalised part of learning, and that recording of it is important.

The fifth piece of evidence is the lack of participants' ability to vocalise the effect of recording on practice. This fits with the notion that participants do not understand the central role of reflection in learning and the use of a portfolio as a learning tool, rather than
an assessment instrument. A third of the reflective accounts submitted for this study were
based on errors, two-thirds were neutral accounts and none were based on successes. This
has also been found for student teachers (Admiraal and Wubbels, 2005) and suggests the
negative approach placed on records, which, if continued to be recorded could be subject to
disciplinary action by the central body. In relation to reflective practice there has been an
try to distinguish the apolitical versus the political domains (Morrison, 1996).
However, within the NHS, the political domains of reflective practice or recording cannot
be prised apart from the educational aspects. This lack of vocalisation may even be the
result of insecurity being perpetuated throughout the NHS by the constant changes to
structures and processes.
3.5.4 Limitations of the study

It is important for researchers to consider the limitations of their study. In social research this has been termed “reflexivity” (Finlay, 2003) and represents the relationship between the researcher, the participants’ and the social world of both. An advantage of this study was that the researcher was part of the social world being investigated. The limitation is that the researcher does not see the world outside of pharmacy and would therefore miss important data.

3.5.4.1 Limitations of Phase One

Phase One used a mixed-method design that incorporated face-to-face interviews and questionnaires based on the research questions. During the conduct of the research a number of limitations need to be considered.

3.5.4.1.1 Sampling

The interview study involved purposive sampling. The choice of participant was determined partly by senior managers supplying the names of individuals to be contacted. This could limit the availability of a wider group of participants. However, the inclusion criteria for each cohort were met.

The questionnaire was returned from nine different hospital Trusts and postgraduates attending a University Diploma course. The Diploma pharmacists represent a specific group motivated towards higher education, and therefore would influence the generalisability of the findings.

There was no opportunity to follow up responses from the questionnaires to improve the internal validity. This was not practical in the time frame and not the main aim of the study.
Chapter 3

Limitations of the study

3.5.4.1.2 Methods

3.5.4.1.2.1 Interview study

In social research, data collection using participant observation has been considered as a gold-standard by some authors, but the method must be guided by the purpose of the research (Atkinson and Coffey, 2002). Interviews provide data that have intrinsic properties of their own and observations will not correct the inaccuracy of an interview account. Interviewing was the most appropriate method to use as it gained a deeper understanding of the meanings of using a portfolio and reflection in the world of health care compared to other methods available.

As the researcher conducted all the interviews, it was important that the transcriptions were read using the image of the person talking and recalling the environment in which the interview had occurred, otherwise a different interpretation may have been produced. The interview is about self as well as other (Warren, 2002) and interpretation of the data may be shaped by the researcher’s experiences as a practitioner, academic and CPD facilitator. The researcher is responsible for the CPD within the pharmacy directorate at Guy’s and St. Thomas’ NHS Foundation Trust. He maintains a number of portfolios: College of Pharmacy Practice, Teaching practice portfolio, PhD record of progress and PhD research journal. However, having such experience of the interview topic allows an understanding of what issues are important to pursue.

The interviewer must also avoid anything that could influence the participant’s response. In particular the use of leading questions during the interview must be appropriate to the research theme (Kvale, 1996b). In some instances, a leading question can be used to check the consistency and lead to a new direction of interviewees’ answers. A review of the
interviews highlighted the use of leading questions and this was taken into account when categorizing the data. The interviewer was known to eight participants in this part of the study which could have affected the credibility of responses in the interviews. However, a more open and personal discussion was found to have resulted. An example was that participants raised the issue of submitting dishonest records.

3.5.4.1.2.2 Questionnaire study

In comparison to an interview, self-completion questionnaires have a number of limitations which have been described by Bryman (2004c) and McColl et al (2001). These are summarised in Table 3.23.

<table>
<thead>
<tr>
<th>Limitations to using self-completion questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cannot prompt or probe</td>
</tr>
<tr>
<td>- Questions are not open format</td>
</tr>
<tr>
<td>- Respondents often read the whole questionnaire or in any order, so ordering of questions may be important</td>
</tr>
<tr>
<td>- Cannot collect additional data</td>
</tr>
<tr>
<td>- There is a limit to the number of questions</td>
</tr>
<tr>
<td>- Literacy of respondent</td>
</tr>
<tr>
<td>- Missing data</td>
</tr>
<tr>
<td>- Response rate is low</td>
</tr>
<tr>
<td>- Respondent fatigue</td>
</tr>
</tbody>
</table>

The main advantage of a self-completion questionnaire is the low cost, larger groups can be covered, and it avoids interviewer influence.

3.5.4.1.3 Data analysis

3.5.4.1.3.1 Interview study

The analysis of interviews used an iterative process illustrated in Figure 2.2. The transcript was checked by the participants but the interpretation of three transcripts was checked by
two pharmacy colleagues (SD and KG). It would have been interesting to have the participants verify the interpretation of the interviews. To improve the dependability, colleagues could have coded all the interviews in order to reach a consensus, but due to time constraints this was not done.

3.5.4.1.3.2 Questionnaire study

The Big-Five questionnaire is a previously validated tool, but this was the first study to have used it in the context of pharmacy. It is necessary to survey larger numbers of pharmacists, obtain norms of each of the five traits of personality and to generalize the data. In future this could be done through the internet using the International Personality Item Pool recently developed (Buchanan et al, 2005).

The Pharmacist Portfolio Engaging Behaviour questionnaire was a new tool and requires further development using factor analysis to determine the structure of the scales. In this study the reliability for two of the scales did not reach an acceptable level. This may have been due to the relatively low numbers of questionnaires returned, or the number of items used in each scale. As this section of the research was a scoping exercise and not the main focus of the study further development would involve further research. In retrospect this questionnaire should have been developed and administered earlier in the study.

3.5.4.2 Limitations of Phase Two

Phase Two also used a mixed-method approach. The limitations of this Phase will be discussed in the next sections.

3.5.4.2.1 Sampling

This Phase used a purposive sampling strategy. As in Phase One, participants were chosen from a list provided by senior pharmacy managers. This may have limited the range of
participants, but as in Phase One the inclusion criteria were met. Evidence for the effect of senior managers may have resulted from two of the senior cohort being CPD facilitators. However, this was useful in comparing their contributions to the rest of the sample and they provided valuable insight into their beliefs about recording professional practice. Purposive sampling allowed an in-depth study, and this is recommended for extending this work into other sectors of the profession, in order to inform large scale quantitative studies.

3.5.4.2.2 Methods

A longitudinal design over 12 months was used to collect the data. This was important as most other studies were at a single time point, and required participants to recall past events. The limitations to this were a) the possibility of participants being lost, and b) the effect of repeated data collection on credibility. No participants withdrew from the study, but this is an important consideration for the future. The repeated data collection is discussed in the next sections. Phase Two used interviews, focus groups and document analysis; each of these will be briefly reviewed.

3.5.4.2.1 Interview study

Limitations of the face-to-face interviews, discussed in section 3.5.4.1.2.1 also apply to this Phase. The researcher was known by four of the participants (1 junior, 1 intermediate and 2 seniors) which will have influenced the first interview, but as this was a longitudinal study, a relationship was formed with all nine by the end of the study. An alternative method could have used a non-pharmacist or different interviewers at different time points. Both these alternatives would not have given the same depth and would have possibly compromised honesty of opinions provided.
As part of the interview participants were asked to self-report their skills over the 12 months, using a five point scale. Self-report techniques have been reported to be honest and consistent in their responses (Reid, 2006), and anonymity has not shown any consistent effects on the quality of the response (McColl et al, 2001). This was originally to be based on the KSF dimensions. However these dimensions were under constant change and therefore this tool was abandoned. In the future this tool can be developed and used alongside other lists of professional activities to investigate changes in practice.

3.5.4.2.2.2 Focus groups

Three focus groups were used at the end of the study. The focus groups were used to test consistency of the individual interview data, and could have been used at the start of the study to develop an interview guide. As Phase One informed the guide, it was appropriate to use the focus groups as a consistency check and generate new insights.

An example of new insights was provided by one junior participant who acknowledged that the study made him consciously aware that he was reflecting in his practice.

Limitations of the focus groups include the issue that participants express accepted views rather than their own in front of colleagues. This may occur in a group in which one participant is more dominant. This was found in the senior and intermediate cohorts, and had to be managed by the researcher, to allow the group to express their views.

3.5.4.2.2.3 Written accounts

A review of participants’ practice records was seen as a primary source of evidence and they were accepted as being truthful. This assumption was based on the relationship of trust between the researcher and participant. This would be more of a problem had this relationship not been formed.
Chapter 3

Limitations of the study

The influences that affect how participants record their accounts include: a) the type of form used, b) time of sampling the account, c) the topic and its emotional setting, d) influence of the researcher and e) prior experience of reflective writing. Three time points were used in this study to obtain a historical view and therefore, an advantage of this study. Participants were asked to submit any examples of their records and the topics submitted were mainly neutral with little emotion. This may have been due to the influence of a) being a participant in the study, b) the researcher and c) a lack of experience in reflective writing. The choice of records supplied would then involve picking what the participant believed to be the most complete and reflective. An alternative method would have been to review all or specific accounts which had involved a strong emotion component.

A limitation to this method also involved missing data. One intermediate participant did not supply any records even when asked for on a number of occasions. This lack of compliance is difficult to deal with, as dictatorship by the researcher could compromise the relationship over the study period, but could also represent the attitude of the participant to the recording process.

3.5.4.2.3 Data analysis

3.5.4.2.3.1 Interviews and focus groups

The analysis of interviews used an iterative process illustrated in Figure 2.2. The transcript was checked by the participants but the interpretation of two transcripts was checked by two pharmacy colleagues (SD and DG). It would have been better to check all transcripts and have the participants verify the interpretation of the interviews, but the time frame of the study would not allow this. However the use of participants to check interpretations could have also affected their response to the subsequent interviews over the 12 months.
Chapter 3

Limitations of the study

The recording and transcribing of focus group conversations was difficult. Technically the room had to be small and a microphone of sufficient quality is required to pick up individual voices over a much larger area than the face-to-face interview. Video recording from an overhead camera would be a better option in the future. The transcriptions were not verified by the individual members of each cohort, and the analysis was not verified by independent colleagues. As the focus groups were being used to supplement the interview data, this was not considered a major limitation to the study. The analysis of all the textual data could have involved a more in-depth discourse analysis.

3.5.4.2.3.2 Analysis of written accounts

The written accounts were analysed using a modified tool from the world of teaching. Credibility was achieved using three individuals to test the tool, and dependability exercised using two individuals to analyse all the accounts until agreement reached. As most of the accounts were neutral it would have been useful to see if the more positive or negative accounts generated a deeper level of reflection in the writing. One limitation to this method of analysis is to be clear what the unit of analysis is. This could be the whole account, paragraphs, sentences or individual words. This in turn makes it difficult to compare studies which have used different approaches. Using discourse analysis would have been an alternative method but the lack of content for most of the submitted accounts prevented this.
Chapter 4

**Final discussion, summary and conclusion**
4 Final discussion

The RPSGB has adopted the use of a portfolio system of recording practice in order to meet the Government's directive for clinical governance in the NHS. From 2007, this will form part of the registration process for all pharmacists. In addition, reflection has been adopted as part of professional practice, and is central to maintaining a portfolio. The influence of continuing professional development portfolios and reflection on practice has not been studied in any great depth especially in pharmacy.

This research has used both inductive and deductive theory to investigate the use of CPD portfolios in healthcare professionals, and the influence of portfolios on the practice of pharmacists in secondary healthcare. This study is in the context of the social and cultural system of hospital pharmacy practice within the NHS, and the findings are not generalisable. The study comprised of two phases. The purpose of Phase One was to describe the use of portfolios in a range of health professionals, including pharmacists, at a single time point and understand the meaning of reflective practice. Phase One was undertaken as a preliminary study which was designed to inform a more in-depth longitudinal study of the use of portfolios by hospital pharmacists, and the impact on their practice.

In Phase One of this study, some professionals (a pharmacist, physiotherapist and nurse), had used a portfolio at an undergraduate level, but were no longer maintaining them. The majority of professionals had a portfolio that was architecturally divided into portmanteau and reflective types. In Phase Two, the portfolios were either based on the RPSGB guidance or a direct result of a formal educational course requirement. Both phases of the study showed that there were a variety of portfolio types being used, making classification
difficult. This research suggests that a modified taxonomy, originally proposed by Tomkinson (1997), should be used.

The Phase One study showed that there seemed to be a duplication of records and discontinuous use of the portfolio, therefore not making it a lifelong tool for learning, this was further confirmed in Phase Two. This may be the result of how individuals prefer to learn, i.e. in selective modules and not wanting to link their learning. This is an example of serialist rather than holistic learners as described by Beard and Hartley (1984). Although a great deal of informal learning is possible within the hospital environment, support for maintaining and using CPD portfolios was found to be limited. The introduction of the Knowledge and Skills Framework into the NHS appraisal system has created a further need to record practice. One attempt to link the numerous health and professional organisations records is to record practice in a combined KSF and CPD portfolio proposed by Middleton and Varia (2006). This linkage needs to be addressed by Trusts or the portfolio is likely to become a duplication of methods of performance appraisal and a "chore", rather than a tool for learning, contributing to the negative attitude of pharmacists towards portfolios found in Phase Two. Based on the evidence from Phase Two, compartmentalisation of using the portfolio has led to the notion that a Pantopticon approach to the discipline and control of pharmacists is being instigated through CPD. This makes it even more important for Trusts to review their processes.

In Phase One, support in the form of clinical supervision was in place for some professions, but its role in portfolio use was not clear. A recent review of the role of clinical supervision acknowledged the lack of information concerning its utility in professional nursing practice (Jones, 2006). In Phase Two, clinical supervision of pharmacists was not in place and
support was variable. The lack of support within the working environment was a reason why some pharmacists were not using a portfolio as a learning tool. Pharmacists were happy to share portfolio contents with colleagues, but admitted that honesty of the records can become an issue. This was also found in Phase One.

The personality traits of pharmacists’ were examined using the previously published Big-Five questionnaire and a new questionnaire was designed as part of this study to investigate the use of a portfolio, based on the theory of planned behaviour. The findings from the Pharmacists’ Portfolio Engaging Behaviour questionnaire suggested that pharmacists with a portfolio were being influenced mainly by what close friends and role models thought, (i.e. subjective norm) and the overall control the pharmacist has in keeping a portfolio (i.e. perceived behavioural control). These findings are from the preliminary use of the questionnaire in pharmacists, and this tool requires further validation. However, this notion of control was also found from the pharmacists in Phase Two, who were concerned with the assessment of their records. This was linked to feelings of a lack of self-control over the recording process, a finding not previously reported in the literature. The issue of disclosure and assessment of records was raised in both phases of the study by all health professionals. Clarity over the mandatory nature and assessment of portfolio records for registration purposes is required, as this will influence how practitioners use and maintain records.

Using the Big-Five questionnaire hospital pharmacists using a voluntary portfolio were found to demonstrate a more developed set of three personality traits than those that did not have a portfolio. The three personality traits were: agreeableness, emotional stability and
conscientiousness, which match two of Dewey’s (1933) attitudes, which are necessary for reflective thinking.

The issue of whether there are gender or experience effects was not resolved in this study. The pharmacists’ questionnaire data found no difference between these two variables and keeping a portfolio. However, the findings of the interview sample in Phase One were not consistent with the questionnaire findings, and suggested there was a gender and experience effect. This finding would have been affected by the two sample sizes. However, a similar finding was found amongst a group of 129 teachers in Belgium (De Rijdt et al, 2006), and some authors believe that women are more reflective than men, therefore more likely to keep a portfolio (Moon, 1999d).

Reflective practice was perceived to be a process of self-examination, driven by clinical governance, in both phases of the study. Different models and methods were being used by health professions, but pharmacists were following the RPSGB model. This model was causing confusion between the terms evaluation and reflection. In addition, the description of reflection in the RPSGB model was not consistent over time. Phase Two of the study showed that pharmacists demonstrated a lack of reflective writing skills. These effects were leading to a negative approach to CPD portfolios and the use of reflective writing in developing practice.

The findings of Phase One came from a multi-professional comparison and single time point. This generated the hypothesis that CPD portfolios had no impact on pharmacy practice in a secondary care setting. The aim of Phase Two was to undertake an investigation of the influence of CPD portfolios on pharmacy practice over a period of time, and characterise the type of reflective writing used in portfolios. The contribution of
CPD recording to practice over the 12 months could not be demonstrated easily. In Phase One, the effect on practice in the different professions was difficult to describe, although there was a tendency for practitioners to report a change in thinking pattern. In Phase Two, over the 12 months, the pharmacists had improved their perceived skills, but with minimal if any influence from recording their practice. Pharmacists suggested that records of practice were used as an aide-memoire and could be a trigger for further learning. However, over the 12 month period their views of any effect on practice were variable, and inconsistent, making single time point survey’s difficult to interpret.

The majority of the pharmacists maintained their records at a descriptive level, which is unlikely to change their behaviour and have any effect on practice. This descriptive format of writing was maintained over the 12 months of the study. In addition, the notion of emotional “distancing” initially found in Phase One, was also demonstrated in Phase Two. Pharmacists were more likely to objectify their accounts, and felt more at ease in verbalising the emotional aspects of the situation to colleagues. Emotional expression can deepen learning, but it was common for pharmacists to distance themselves emotionally in their records using a technical-rationalist approach to practice.

Although the literature is encouraging practitioners in health care to undertake written reflection (Raw et al, 2005; Bolton, 2006), a number of authors (Wellard and Bethune, 1996; Burnard, 2005; Horan, 2005) are suggesting changing the word reflection to “mindfulness” or “framing”. In pre-service teacher education there was a call for research into the claim that portfolios cause teachers to reflect more, and to discover the nature of this reflection (Zeichner and Wray, 2001).
Overall, this study found a lack of understanding of reflection and its use in portfolios. Therefore it is important that the pharmacy profession should take on a holistic and integrated approach to professional development, learning and the use of reflection. This would allow practitioners to have a clear understanding of what is required of them to practice throughout their careers, and for re-registration purposes.

4.1 Summary

What is already known about this topic:

- CPD portfolios are useful for feedback and can stimulate reflective thinking.
- Reflection is poorly understood, as is the role of recording. This has been confirmed by this study.
- Support is required in the work environment to make the portfolio a useful tool.
- CPD portfolios vary in use and how they have developed.

Impact of this research:

- Portfolios are being perceived negatively and as a “chore” by some pharmacists; and not as a learning tool.
- Maintenance of a portfolio is being used as a form of professional discipline which is not being recognized.
- Written accounts of hospital pharmacists practice have little impact and a tacit effect on practice, making assessment for re-registration difficult.
- “Writerlyness” is a problem for some hospital pharmacists.
- The level of reflective writing is mainly descriptive both for “person” and “subject” in a group of hospital pharmacists, and there is a lack of criticality.
- Personality traits of hospital pharmacists have been described using the Big-Five instrument. The three associated with keeping a portfolio were: conscientiousness, emotional stability, and agreeableness.
- Use can be made of the theory of planned behaviour to predict hospital pharmacists’ psychological variables for keeping a portfolio.
Chapter 4

4.2 Conclusion

This study has suggested that there is a Panopticon approach of control and discipline in keeping a CPD portfolio. This approach has been demonstrated by the lack of critical support, and use of unknown assessors of portfolios in practice. Learning appears to be compartmentalised with a technical-rationalist approach. In addition, there is confusion over the meaning of reflection and an inability of pharmacists to be able to write reflectively. Therefore, CPD portfolio recording is unlikely to change behaviour for any beneficial effect on practice.

A CPD portfolio is by definition a tool for learning, with reflection as a core component. It is becoming a mandatory requirement from 2007 for re-registration. This study has demonstrated that the new regulation system is influencing how CPD portfolios are perceived; as a log to maintain registration rather than an aid to professional development and learning.

From the data presented, the hypothesis that CPD portfolios had limited impact on pharmacy practice in a secondary care setting over 12 months can be accepted.

The pharmacy profession needs to disentangle from the regulatory aspect of CPD portfolios and recording, and move to a learning culture, where text is used to represent professional thinking and for the development of practice.
4.3 Further research

There needs to be further research into the use of portfolios, the recording of reflective accounts and their effect on practice. This should be undertaken in a wider range of pharmacists working in different sectors including community, industry, academia and private practice. This is important as re-registration will require the submission of some form of a portfolio for assessment.

The notion of “writerlyness” was discussed in both Phase One and Two. At the postgraduate level it is assumed pharmacists can write both technically and reflectively. This study has shown that in a group of hospital pharmacists the technical method predominates, but little is known about this subject in other branches of the profession. It may even be responsible for the negative attitude professionals have towards recording practice. The RPSGB accredited courses should include the teaching of reflective and technical forms of writing and this would impact on undergraduate provision in Schools of Pharmacy. The modified MWRITT framework should be developed into a tool for supporting both undergraduates and postgraduates as a self-evaluation instrument. A need has also been identified to survey how reflective writing is being taught in schools of pharmacy in order to provide clearer direction for educators. This can then be extended into investigating how pharmacists undergo reflective thinking at different stages of their career, from undergraduate to preregistration through to pharmacist and beyond.

Alongside the notion of “writerlyness” is the lack of information concerning the critical thinking skills in pharmacists. The latter is a requirement of all undergraduate courses but little information is available as to how this is achieved and assessed. The use of different critical thinking methods should be investigated in the postgraduate field. There are a
number of critical thinking skills questionnaires available as a starting point and reflective thinking questionnaires have also been published (Kember et al, 2000; Allen and Bond, 2001; Mamede and Schmidt, 2004; Sobral, 2005; El-Dib, 2007).

A further finding of this study was the lack of information on the nature of different attitudes in pharmacy practice. In particular, the dehumanisation of patients in a rapid turnover Trust that was found in Phase One. Using the Theory of Planned Behaviour, as piloted in Phase One, this could be developed into examining how these attitudes influence pharmacists undertaking mandatory CPD from a large sample survey in different sectors of pharmacy practice. This could also examine the role of morals and altruism in having to record practice events.

The role of emotion in pharmacy practice is another aspect of practice that needs investigating as, from Phase Two in particular, the lack of emotion in the reflective writing may have an influence on future practice.

A further study on the role of recording on practice could be conducted using video diaries to record changes in practice.

Finally the effect of social cultural issues in reflective writing needs to be investigated, as the mobility of pharmacists' increases globally.
4.4 Implications:

- The RPSGB CPD department must be aware not to over-interpret records and develop transparent assessment systems.

- The RPSGB needs to review the use of practice records as evidence for re-registration.

- The RPSGB must define "reflective practice" in pharmacy, as the current model of CPD using this term is confusing.

- There is a need to educate pharmacists in how to write in different styles.

- There is a need to review local support networks and involve peer support more.

- There is a need to develop accredited prior learning, so pharmacists can stop unnecessary duplication of records.

4.5 Impact of the research on the researcher:

- I am more critical of words used in conversation.

- I am better at focusing on what is the underlying problem.

- The research has impressed on me the limitations of using questionnaire data and the time taken for analysing interview data.

- I understand the qualitative paradigm better, if there is a paradigm or more likely a continuum between objectivism and constructionism.

- The research has informed me of the importance of philosophy in research and practice.

- I have learned the importance of language, which is predominantly "political" in terms of "social goods" and these goods include the use of power.
REFERENCES


Aschcroft DM and Hall J (2006b) Using portfolios to learn about prescribing: Qualitative insights into students' experiences. *Pharmacy Education* 6, 91-95.


Dagley V and Berrington B (2005) Learning from an evaluation of an electronic portfolio to support general practitioners’ personal development planning, appraisal and revalidation. *Education for Primary Care* 16, 567-574.


Department of Health (2000a) An Organisation with a Memory. In Chief Medical Officer (Ed), London: HMSO.


Jensen SK and Joy C (2005) Exploring a model to evaluate levels of reflection in baccalaureate nursing students' journals. Journal of Nursing Education 44, 139-142.


316


Middleton H, O'Loan L, and Varia S (2006) Getting the most from the KSF - how to link it with CPD. *Hospital Pharmacy* **13**, 211-214.


Ranshaw C (2006) Section 60 Order - what does it mean for you? Hospital Pharmacy 13, 194.

Rees C (2005a) The use (and abuse) of the term "portfolio". *Medical Education* 39, 436.

Rees C (2005b) "Portfolio" definitions: do we need a wider debate? *Medical Education* 39, 1142.


Rolfe G (2002) "A lie that helps us see the truth": research, truth and fiction in the helping professions. Reflective Practice 3, 89-102.


Working group on higher professional education (1994) Portfolio-based learning in General Practice. London: Royal College of General Practitioners.


APPENDICES
APPENDIX 1

STAKEHOLDERS WITH INTERESTS IN CPD (Department of Health, 2001a)

<table>
<thead>
<tr>
<th>STAKEHOLDERS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users &amp; Carers</td>
<td>Particularly in implementation of National Service Frameworks</td>
</tr>
<tr>
<td>Practitioners</td>
<td>In order to benefit from transferable learning</td>
</tr>
<tr>
<td>Higher Education Institutions</td>
<td>Plus other education providers</td>
</tr>
<tr>
<td>NHS organisations &amp; Workforce</td>
<td>These support in often complex post-registration education structures</td>
</tr>
<tr>
<td>Development Confederations</td>
<td></td>
</tr>
<tr>
<td>Regulatory bodies</td>
<td>Have a strong public protection</td>
</tr>
<tr>
<td>Newly emerging clinical networks</td>
<td>These use a multi-professional approach to development of specialists</td>
</tr>
<tr>
<td>Professional bodies and trade unions</td>
<td>In some cases post-registration education is accredited by these bodies.</td>
</tr>
<tr>
<td>National and local “networks of knowledge providers”</td>
<td>These often provide electronic health information as a form of support.</td>
</tr>
</tbody>
</table>
## APPENDIX 2

### TERMINOLOGY USED IN PORTFOLIO DESCRIPTION IN DIFFERENT CONTEXTS

<table>
<thead>
<tr>
<th>TERM</th>
<th>Example of profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autobiography</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>Clinical Journal</td>
<td>Nursing</td>
</tr>
<tr>
<td>Clinical Diary/Log book</td>
<td>Nursing, Medicine</td>
</tr>
<tr>
<td>Course diary</td>
<td></td>
</tr>
<tr>
<td>CPD Diary</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Dialogue Journal</td>
<td>Nursing</td>
</tr>
<tr>
<td>Diary</td>
<td>Medicine, Teachers Education</td>
</tr>
<tr>
<td>Dossier</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>ePortfolios</td>
<td>Higher Education</td>
</tr>
<tr>
<td>Learning Journal</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Learning Log</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>Learning portfolio</td>
<td>Royal College of Physicians &amp; Surgeons of Canada</td>
</tr>
<tr>
<td></td>
<td>Ontario College of Pharmacists</td>
</tr>
<tr>
<td>Log Diary</td>
<td>Medicine</td>
</tr>
<tr>
<td>Personal Development file/diary</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Personal Development Journal</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>Personal log</td>
<td></td>
</tr>
<tr>
<td>Plan &amp; Record</td>
<td>Pharmacy</td>
</tr>
<tr>
<td>Professional Profile</td>
<td>Nursing</td>
</tr>
<tr>
<td>Professional Development Diary</td>
<td>Physiotherapy</td>
</tr>
<tr>
<td>Professional Journal</td>
<td></td>
</tr>
<tr>
<td>Profile</td>
<td>Teacher Education</td>
</tr>
<tr>
<td>Progress files</td>
<td>Higher Education</td>
</tr>
<tr>
<td>Portfolio Learning</td>
<td>Medicine</td>
</tr>
<tr>
<td>Record of achievement</td>
<td>NVQ</td>
</tr>
<tr>
<td>Revalidation folder</td>
<td>General Medical Practitioners</td>
</tr>
<tr>
<td>Web-based portfolio</td>
<td>Higher Education</td>
</tr>
<tr>
<td>webfolios</td>
<td>Higher Education</td>
</tr>
</tbody>
</table>
APPENDIX 3

A MATRIX OF THE PURPOSE AND CHARACTERISTICS OF A PROFESSIONAL PORTFOLIO

<table>
<thead>
<tr>
<th>MAIN PURPOSE</th>
<th>TYPE OF PORTFOLIO</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess performance in a standard way</td>
<td>DOSSIER</td>
<td>- Tools to document work performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fixed formats</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Judged in the form of appraisals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Long term use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- For certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- For promotion</td>
</tr>
<tr>
<td>Assessment in relation to course objectives.</td>
<td>COURSE-RELATED</td>
<td>- Inform individuals on their progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fixed format</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Judged</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Short term use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mandatory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- For certification</td>
</tr>
<tr>
<td>Development of self in understanding work experiences.</td>
<td>REFLECTIVE LEARNING</td>
<td>- Collection of personal data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Integration of practice directed by personal goals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and learning needs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Broad in scope</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Long term use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Not assessed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Voluntary</td>
</tr>
</tbody>
</table>

Adapted from Smith and Tillema (2001)

Common features of portfolios

- Provider of feedback
- Document strengths and weaknesses/development needs
- Develop awareness of competence
- Can resolve differences between external standards and achieved performance
- Capture achievement in the real world.
- Role of self is central to choosing the content.

Adapted from Smith and Tillema (2001)
## APPENDIX 4
A SELECTIVE COMPARISON OF PORTFOLIO CONTENTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (Past and/or Present)</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Preparing for appraisals/interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualifications</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Learning contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Record of evidence</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Testimonial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Assessment record</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>Self responsibility assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing Education</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Clinical supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>
APPENDIX 4 (continued)  A SELECTIVE COMPARISON OF PORTFOLIO CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>Progress file in higher education. PhD</th>
<th>Preregistration pharmacist (Portfolio/Workbook) PHARMACY</th>
<th>CPP CPD PORTFOLIO PHARMACY</th>
<th>Guy's &amp; St. Thomas' Hospital Trust Professional Profile NURSING</th>
<th>Mosby's Personal Professional Profile NURSING</th>
<th>Royal Society of Chemistry Record book CHEMISTS</th>
<th>Ravensbourne NHS Trust Individual Development Portfolio MULTIDISCIPLINARY</th>
<th>British Dietetic Association. Professional Portfolio DIETITIANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional &amp; Interprofessional activities</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Reflective &amp; analytical practice</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Progress reports</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Future/Career Plans PDP</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
APPENDIX 5

DATABASES SEARCHED

<table>
<thead>
<tr>
<th>Database</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMED</td>
<td>1985 - 2006</td>
</tr>
<tr>
<td>BEI</td>
<td>1986 - 2006</td>
</tr>
<tr>
<td>CINAHL</td>
<td>1982 - 2006</td>
</tr>
<tr>
<td>EMBASE</td>
<td>1980 - 2006</td>
</tr>
<tr>
<td>ERIC</td>
<td>1985 - 2006</td>
</tr>
<tr>
<td>IPA</td>
<td>1970 - 2006</td>
</tr>
<tr>
<td>MEDLINE</td>
<td>1966 - 2006</td>
</tr>
<tr>
<td>PHARM-LINE</td>
<td>1978 - 2006</td>
</tr>
<tr>
<td>PSYCINFO</td>
<td>1972 - 2006</td>
</tr>
<tr>
<td>TIMELIT</td>
<td>1980 - 2006</td>
</tr>
<tr>
<td>ZETOC</td>
<td>1993 - 2006</td>
</tr>
</tbody>
</table>
## APPENDIX 6

### STUDIES ON THE INFLUENCE OF PORTFOLIOS ON PROFESSIONAL PRACTICE

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Methods</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cayne, (1995)</td>
<td>UK</td>
<td>Portfolios a developmental influence?</td>
<td>Action research, tapped interviews/open questionnaire. 6 categories emerged. Over 2 months</td>
<td>Reflection on experience of complying a portfolio</td>
</tr>
<tr>
<td>Campbell et al, (1999)</td>
<td>Canada</td>
<td>Learning, change and practicing physicians.</td>
<td>Categorised 9 triggers for learning, used paper or PC Diary to record learning</td>
<td>PC diary theoretical change in practice</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Methods</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>--------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>Kelly and Murray, (1999) The development and evaluation of a personal learning log for Senior House Officers.</td>
<td>UK Hospital</td>
<td>150 SHO’s in A&amp;E, Obstetrics &amp; Gynaecology. MCQ, confidence check list and evaluation form. After 6 months NO MENTION OF ETHICS</td>
<td>21/48 logs returned from Obstetrics &amp; Gynaecology. 24/61 A&amp;E returned. QUANTITATIVE</td>
<td>Mean scores in MCQ, Confidence no change and few documented specific learning achieved.</td>
</tr>
<tr>
<td>Lonka et al, (2001) Portfolios as a learning tool in Obs. &amp; Gynae. Undergraduate training.</td>
<td>Finland Medical students</td>
<td>91 medical students in 5th year NO MENTION OF ETHICS</td>
<td>Content analysis of texts, neg+pos comments, open question to evaluate port. Looked at the amount of text correlated with final exam. Summative score of variables for accomplishment. Correlation to exam success. MIXED METHOD</td>
<td>28 page portfolio obst. As booklet. 50% found the portfolio good for feedback.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Methods</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Smith and Tillema, (2001)</td>
<td>Israel/Holland</td>
<td>15 school (15 interviewed 4 continued to use them after 5 yrs) principals 1996 - voluntary 26 senior (12 interviewed and continued to use) nurses 1997 - voluntary 33 nurses mandatory All experienced professionals.</td>
<td>Semi-structured questionnaire – No reliability data</td>
<td>Self-awareness and flexibility</td>
</tr>
<tr>
<td></td>
<td>Teachers in Holland and nurses in Israel</td>
<td></td>
<td>Interview – qualitative, little details of format, semi-structured.</td>
<td>Openness in discussing problems with others Structuring problems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Disadvantages were time, focus on individual, question of validity, High stakes assessment.</td>
</tr>
<tr>
<td>Dornan et al, (2002)</td>
<td>Canada</td>
<td>95(22%) applied to use, 87(94%) reported use, 30(34%) used it in some form, 10% regularly.</td>
<td>Questionnaire after 1 year. No details. Freehand responses coded. No long term follow up. No information on the effect on practice.</td>
<td>Workload problem Lack of IT support. Stimulates reflection for some. No information on the effect on practice.</td>
</tr>
<tr>
<td>An electronic learning portfolio for reflective continuing professional development.</td>
<td>Royal College of physicians &amp; Surgeons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Langer et al, (2002)</td>
<td>USA</td>
<td>10 postgraduates interviewed Learning Journals from 20 students 18 month computer technology course.</td>
<td>Interview - 6/12 after completing course. Journal analysis, very broad looking for critical reflection – not defined, content analysis not clear.</td>
<td>Students used set format in spite of independent type. Anxiety to use a journal, insult to adults, may not understand critical reflection.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Methods</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Maastricht Medical School</td>
<td>1 mentor for 20 students, 2 meetings a year</td>
<td>Qualitative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Practice</td>
<td>8 2nd yr GP’s 1 Pharmaceutical advisor</td>
<td>journal and mentoring system.</td>
<td>Practical benefits—day-to-day scored most</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td></td>
<td>votes</td>
</tr>
<tr>
<td>Tucker et al, (2003)</td>
<td>USA</td>
<td>Reviewed 24 portfolios of teachers</td>
<td>Mixed design. Content analysis, 2 pairs of</td>
<td>Identifies strengths and weakens and self-</td>
</tr>
<tr>
<td></td>
<td>WJC County Schools, Virginia</td>
<td></td>
<td>raters. Survey questionnaire n = 606. Focus</td>
<td>reflection but not a change in practice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td>groups x 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-registration nursing</td>
<td></td>
<td>styles. Self-completion survey. Semi-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students.</td>
<td></td>
<td>structured interviews and focus groups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td>MIXED METHOD</td>
<td></td>
</tr>
<tr>
<td>O’Sullivan et al, (2004)</td>
<td>USA</td>
<td>18 residents, years 1, 2, 3, 4</td>
<td>Cross section of 4 yrs residency. Two</td>
<td>Portfolio scores improved with knowledge but</td>
</tr>
<tr>
<td></td>
<td>Psychiatric residency</td>
<td>8 interviewed, + 4 faculty.</td>
<td>external raters. Used portfolio score, global</td>
<td>not performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>evaluation score, psychiatric knowledge score</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>About reliability and validity of rating.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MIXED METHOD</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 6 Continued

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Methods</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson and Haywood, (2004)</td>
<td>UK</td>
<td>71 registrars (from 92), 82 trainers NO MENTION OF ETHICS</td>
<td>Questionnaire – Likert scale plus free text. Focus group and interview</td>
<td>GP's use of portfolios tails off. Support important, experienced GP's use less.</td>
</tr>
<tr>
<td>Portfolio use in general practice vocational training.</td>
<td>General Practice</td>
<td></td>
<td>QUANTITATIVE</td>
<td></td>
</tr>
<tr>
<td>Scholes et al, (2004)</td>
<td>UK</td>
<td>122 students, 58 educationalists 4 study sites</td>
<td>Interviews QUALITATIVE</td>
<td>Need to match outcomes to clinical experience. Writing is a task</td>
</tr>
<tr>
<td>Making portfolios work in practice.</td>
<td>HEI's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austin et al, (2005b)</td>
<td>Canada</td>
<td>75.1% community, 18% hospital, 5.7% other. Use of a learning portfolio. N = 1,360 NO MENTION OF ETHICS</td>
<td>Survey, - mandatory completion. Also used written comments on the value of the portfolio – qualitative. No details of this analysis other than thematic, inductive. MIXED METHOD</td>
<td>Limited effectiveness in promoting self-reflection. Useful to share CPD experiences. 2.2 changes in practice per year per pharmacist.</td>
</tr>
<tr>
<td>Use of a learning portfolio for continuous professional development: A study of pharmacists in Ontario (Canada).</td>
<td>Qualified pharmacists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffey, (2005)</td>
<td>Ireland</td>
<td>22 Post-registration nurses Higher diploma</td>
<td>Postal questionnaire evaluation, no piloting details, open ended questions QUALITATIVE</td>
<td>Link is found between theory and practice. Trigger to continue learning.</td>
</tr>
<tr>
<td>The clinical learning portfolio: a practice development experience in gerontological nursing.</td>
<td>Nursing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX 6 Continued

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Methods</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Dagley et al, (2005)  
Learning from an evaluation of an electronic portfolio to support general practitioners' personal development planning, appraisal and revalidation. | UK  
General Practitioners | 23 GPs agreed. 8 used the system but only 5 mailed reports over 3 months. | 19 Pre-use questionnaires, - no pilots  
6 semi-structured interviews with users, discussion with 2 non-users by email, 5 portfolio reports.  
N-Vivo for coding.  
Evaluation study.  
MIXED METHOD | Lack of understanding of reflective practice.  
IT issues.  
Time. Long-term research is needed to allow the entire cycle to take place and to assess the sustainability of portfolio use. |
| Driessen et al, (2005a)  
Conditions for successful reflective use of portfolios in undergraduate medical education. | Netherlands  
Maastricht Medical School | 13 mentors of Year 1 medical students, | Interviewed 13 mentors. Fee given.  
Member checking of interview data.  
Not clear how interviews conducted.  
QUALITATIVE | Portfolio potentially valuable for assessing and developing reflective skills. Certain conditions to be met. |
| Johnston and Thomas, (2005)  
Riding the wave of administrator accountability: a portfolio approach. | USA  
Ohio State University | 70 School principals, 24 completed a portfolio between 1999-2002. | Focus groups, phone interviews, 26 portfolios.  
Used a 3 level benefit of portfolios.  
QUALITATIVE | 3 levels described, Only benefit was at level 3 for practice development.  
Portfolio no longer used. |
| Ashcroft and Hall, (2006a)  
Pharmacy students' attitudes and views about portfolio-based learning: a questionnaire survey. | UK  
Higher Education Pharmacy Masters course | 154(75.5%) Two final year pharmacy undergraduates cohorts, 04/05 | Questionnaire  
Multi-statements! No reliability data, descriptive, likert scale  
Nothing on reflection QUANTITATIVE | Felt useful as an assessment for prescribing module, 53% useful for CPD |
<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Methods</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using portfolios to learn about prescribing: Qualitative insights into students' experiences</td>
<td>Higher Education Pharmacy Masters course</td>
<td>Ethics approved.</td>
<td>Not clear what critical self-reflection was. QUALITATIVE</td>
<td>Helped to develop a logical approach to prescribing.</td>
</tr>
<tr>
<td>De Rijdt et al, (2006)</td>
<td>Belgium</td>
<td>117 qualified teachers</td>
<td>Self-completion, 3 part questionnaire, total response rate 32.1%.</td>
<td>22.1% kept a portfolio 60.9% used own initiative to start.</td>
</tr>
<tr>
<td>Teaching portfolios in higher education and their effects: An explorative study.</td>
<td>Higher Education Teachers</td>
<td>NO MENTION OF ETHICS</td>
<td>No details of reliability or how categories were obtained for part c.</td>
<td>Age, gender and organisation made no difference to keeping a portfolio.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Effects on colleagues (7.8% respect of others), their students (8.9% efforts of teaching)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Personal (16.7% stimulates reflection to improve teaching)</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Methods</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>--------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td>McMullan, (2006) Students' perceptions on the use of portfolios in pre-registration nursing education: A questionnaire survey.</td>
<td>UK Pre-registration nursing students</td>
<td>174 nursing students, 90 first years, and 84 third years. Ethics approved.</td>
<td>Postal questionnaire, 69% response rate Not clear number of items but used 7 sections. QUANTITATIVE</td>
<td>60% agreed enhanced reflection 42% felt the portfolio to promote critical thinking 31% portfolio helped to improve their self-esteem</td>
</tr>
<tr>
<td>Nairn et al, (2006) Student nurses' knowledge, skills and attitudes towards the use of portfolios in a school of nursing</td>
<td>UK</td>
<td>413 student nurses from all four years of study. One school Questionnaire study 4 sections, handed out in class Ethics approved.</td>
<td>Self-completion QUANTITATIVE</td>
<td>Portfolios more useful got the “art” of nursing rather than “technical” skills. Confused about purpose but positive.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Methods</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Swallow et al, (2006)</td>
<td>UK</td>
<td>CPP portfolios available to 25 hospital pharmacists, from 2 Trusts, 10 consented and 9 used.</td>
<td>9 Interviewed prior to and 5 weeks later by telephone, semi-structured, no verification of transcription. Little information on quality checks. Few used the portfolio, not clear how many.</td>
<td>Conclusions not supported by data. Confusion of CPD use and portfolios. Disparity in the concept of a portfolio. Socialised learning, paradoxical de-motivation</td>
</tr>
<tr>
<td>Tigelaar et al, (2006a)</td>
<td>Netherlands</td>
<td>5 medical doctors and coaches. Teaching portfolio (50 hours contact time) for professional development – formative</td>
<td>Semi-structured interviews after completion of portfolio. With teachers and coaches. Analysis using a top-down strategy.</td>
<td>Portfolio structure some to prescriptive. Social interaction: valuable. Heavy workload, portfolio should be only for those wanting to be teachers. Benefits of longitudinal portfolio processes to be done!</td>
</tr>
<tr>
<td>Mansvelder-Longayroux, et al, (2007)</td>
<td>Netherlands</td>
<td>25 student teachers 18 language, 7 science, 5 men and 20 women</td>
<td>39 portfolios analysed, should have been 2 per student, but four left. Qualitative</td>
<td>Supervision and guidance on the production of portfolios was essential.</td>
</tr>
</tbody>
</table>
A REFLECTIVE CYCLE (Gibbs, 1988)
# APPENDIX 8

## STUDIES OF ASSESSING WRITTEN REFLECTIVE ACCOUNTS FROM EDUCATIONAL LITERATURE

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bold, (2006)</td>
<td>UK</td>
<td>45 Foundation degree students teacher training</td>
<td>Content analysis of 27 second pieces of writing after 12 weeks. Comparative analysis of 8 students writing not changed. NO MENTION OF ETHICS Qualitative</td>
<td>Confidence in writing improved. No change in some students.</td>
</tr>
<tr>
<td>Pedro, (2005)</td>
<td>USA</td>
<td>5 pre-service teachers</td>
<td>3 in depth interviews and journal analysis- no details of journal analysis. NO MENTION OF ETHICS Qualitative</td>
<td>To answer what is reflection. No mention of the type of reflection.</td>
</tr>
</tbody>
</table>
### APPENDIX 8 Continued.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graham &amp; Megarry, (2005)</td>
<td>Ireland</td>
<td>Evaluation of a portfolio model for social care</td>
<td>40% of overall portfolio work awarded for reflective accounts. Used assessment criteria(4) Uses Boud's model of reflection. How the reflective element contributed to learning process. Questionnaire – no details for the first year; 2nd year used focus group but no details</td>
<td>Concluded that 3rd yr students a portfolio integrated learning and practice and developed reflective capacities. No mention of the type of reflection.</td>
</tr>
<tr>
<td>Admiraal &amp; Wubbels, (2005)</td>
<td>Holland</td>
<td>30 student teachers + 4 supervisors.</td>
<td>525 emails (80% used) ? number of people Used ALACT model of reflection. Thematically categorised. At 2 sites: Norway- gradual approach + analysis is based on reflections chains that occurred, 4 studied Holland- do it all approach + analysis coding instrument, quantitative data, + content analysis.</td>
<td>Researchers used different methods of analysis. Overall descriptive reflection</td>
</tr>
<tr>
<td>Norton et al, (2004)</td>
<td>UK</td>
<td>191 Social science + 82 Business 6 written accounts from each</td>
<td>Used the RoLi inventory. 1500 worded essay content analysis using 5 reflectiveness categories (not levels + related to understanding the RoLi) and 3 unreflective</td>
<td>Counted number of words for each category. RoLi is how students learn using reflection. No mention of the type of reflection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed method</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Koliba, (2004)            | USA         | A descriptive account of public affairs course with 3 individuals as examples. | Describes a matrix using a 5 point scale against the learning objectives. Based on Kolbs learning cycle. 1=no effect, 2 = novice, 3 = proficient, 4 = advanced, 5 = distinguished. | Useful background theory of experiential learning.  
No mention of the type of reflection. |
| Lavelle, (2003)           | USA         | 30 voluntary undergraduate portfolios after graduation (4yrs)           | Rated early and late samples using 3 point holistic scale and deep/surface approach to writing. | Early writing scored better then late writing holistically  
Early writing scored higher on the deep approach |
47 students total internal, and external | Used 11 criteria weighted levels for critical reflection then ranked into 5 levels of critical reflectors  
Own interpretation based on Mezirow (1981) | Good review of critical reflection  
Used 6 guided questions for critical reflection.  
Assignment 1, 70% weak or no critical reflection.  
Assignment 2, (using guided questions) 27% weak critical reflectors. |
<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund et al, (2002)</td>
<td>Israel</td>
<td>65 science students in final year of 1st degree, 2 parallel groups, 30 biology and 35 maths</td>
<td>Assessed 20 students at 4 time points, 4 reflective pieces (total of 80) over 2 dimensional Hatton &amp; Smith (1995) theory, &amp; Van Manen (1995) Unit of analysis was sentence. Feedback given during the first 8 lessons by tutors, then peer assessments and sharing of accounts. NO MENTION OF ETHICS Mixed method</td>
<td>Time changes were significant Critical bridging increased by about 30% Description reduced by same amount Personal form remains constant Linking rises then falls.</td>
</tr>
<tr>
<td>Bain et al, (2002)</td>
<td>Australia</td>
<td>35 student teachers At 2 sites, 8 males 27 females, during a 6/52 placement. Looked at type of feedback given.</td>
<td>Mixed method study using statistical approach. Interesting interview analysis post course on conceptions of writing. Used questionnaire on reflective ability, looked at demonstration of reasoning and 5 point scale of reflective writing (Bain et al, 1999) NO MENTION OF ETHICS Mixed method</td>
<td>Reflective Writing was a record of thinking, motivator of reflective thinking or extension of reflective thinking.</td>
</tr>
<tr>
<td>Farrell, (2001)</td>
<td>Singapore</td>
<td>1 teacher 6 entries</td>
<td>3 modes for reflecting: journals, classroom observations, group discussions. After 16 weeks. Reflective levels difficult to interpret as mixed process with level of reflection. NO MENTION OF ETHICS Mixed method</td>
<td>Good review of reflection Do not like journal writing Teachers need training in journal writing</td>
</tr>
</tbody>
</table>
## APPENDIX 8 Continued.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample Details</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Maclellan, (1999)      | UK        | PGCE 25 commentaries (2500 word essay) by 3 raters | Categorisation by author - no validity check on this.  
3 stages of descriptive categories complexity then Hatton & Smith's 4 levels.  
NO MENTION OF ETHICS  
Mixed method | Most common category was descriptive reflection.  
Good review of writing as knowledge-transforming or telling. |
8 mature students, 27 younger students  
Questionnaire at end of placement  
Interviewed on 4 occasions  
Coded the focus  
+ level of reflection – 5 point scale (Griffiths & Tann 1991), Unit of analysis was segments  
2 researchers,  
NO MENTION OF ETHICS  
Mixed method | No gender difference in the level of reflection reached.  
1st entry in journal  
Mature students (>30yrs) reached higher levels, 60% of all reached level 3  
Significant improvement after the second submission.  
Levels of reflection remained constant over time and not dependant on type of feedback. |
120 item questionnaire for students opinions on learning and portfolio  
7 in depth interviews  
NO MENTION OF ETHICS  
Quantitative | Teacher education - undergrads.  
Not an attempt to check level of reflection.  
No mention of the type of reflection. |
<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hatton and Smith, (1995)</td>
<td>Australia</td>
<td>60 Teacher education - undergrads. Final year</td>
<td>Report (4000 words)</td>
<td>60-70% descriptive reflection 30% dialogic also 50% mixed perspective.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 self-evaluations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>interview (vignette) + videos(13 but not useful)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 levels based on Schôn + Van Manen</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Used reflective units, not clear what the unit of analysis was.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed methods</td>
<td></td>
</tr>
<tr>
<td>Sparks–Langer et al,</td>
<td>USA</td>
<td>24 student teachers Divided into high/average/low achievers based on course work</td>
<td>Completed journal daily during teaching week Used Gagnés &amp; Van Manen’s ideas.</td>
<td>Mean rating of 4.5(1.2) on a 7 point scale.</td>
</tr>
<tr>
<td>(1990)</td>
<td></td>
<td></td>
<td>Framework for reflective thinking – 7 levels.</td>
<td>Achievement level paralleled score i.e. high achiever high interview score.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Two colleagues coded interviews and journals</td>
<td>Not written reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reliability for journal was poor and not used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO MENTION OF ETHICS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed method</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Richardson &amp; Maltby, (1995)</td>
<td>Australia</td>
<td>30 undergrads. 2yr. nurses after community experience</td>
<td>Used Powells paper and 6 Mezirows (1981) levels. Analysis of reflective diaries, + focus groups. NO MENTION OF ETHICS Mixed method</td>
<td>Scores weighted towards lower levels (1-3) for 94% of nurses. Concerns about disclosure.</td>
</tr>
<tr>
<td>Wong et al, (1995)</td>
<td>Hong Kong</td>
<td>45 registered nurses studying a course</td>
<td>6 categories of Boud (1985); 3 categories of Mezirow (1991) Nonref/ref/ ref Content analysis of 45 accounts. 2 levels of coding, using paragraphs and student. Interviews + accounts. NO MENTION OF ETHICS Qualitative</td>
<td>Bouds scheme not reliable. Experience does not effect level. 6(13.5%) classed as non-reflectors</td>
</tr>
<tr>
<td>Rosie and Murray, (1998)</td>
<td>UK</td>
<td>31 3rd yr BSc Radiographers + 28 supervisors</td>
<td>Student questionnaire + Diary (2 types, one for +ve and one for -ve influences on learning). Diary analysis was type of language + content analysis produced 6 main categories: Mixed method</td>
<td>Evaluation of placements Diaries 36% included emotions; 53% impersonal. Diaries helped to reflect on learning but little evidence of reflective practice in placement. No mention of the level of reflection.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>Duke and Appleton, (2000)</td>
<td>UK</td>
<td>62 post-registration nurses palliative care module.</td>
<td>160 assignments ticked criteria using reflective process with 12 reflective skill areas, but not a validated tool. Quantitative</td>
<td>Reflective skills improved over time and different ones with different individuals. No mention of the level of reflection</td>
</tr>
<tr>
<td>Sobral, (2000)</td>
<td>Brazil</td>
<td>103 med students 71 controls</td>
<td>Undertook a 30 hr learning skills course. Learning styles. Short Approaches to study questionnaire, 10 item self-report questionnaire for appraisal of reflection-in-learning. 11 item appraisal of self-perceived competence 36 item Course valuing inventory Diagnostic thinking inventory NO MENTION OF ETHICS Quantitative</td>
<td>Reflection-in-learning improved at end of the course. Reflection correlated with more positive learning. No mention of the level of reflection.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Williams et al, (2000)</td>
<td>Canada</td>
<td>58 Physical Therapy undergraduate students</td>
<td>3 educators rated using modified Boud (1985) 6 processes to 5 levels of reflective writing. Keep reflective journals during 8 week academic part. 10% of final grade. Used journal as unit of measure. 53 journals evaluated. Quantitative</td>
<td>No improvement in writing skills in 8 weeks</td>
</tr>
<tr>
<td>Pee et al, (2002)</td>
<td>UK</td>
<td>14 student dental therapist from 3 schools, 20 tutors</td>
<td>Worksheets examined for reflection, using literature criteria (Johns (1994) questions + Hatton &amp; Smith) and Peer criteria of reflection. 2 researchers. Unit of coding was a worksheet for evidence of compliance to Johns questions. Used “ALE” (a learning experience) based on Boud plus above. Mixed method</td>
<td>9 (64%) were critical reflectors, all were descriptive.</td>
</tr>
<tr>
<td>Williams et al, (2002)</td>
<td>Canada</td>
<td>56 students on the physical therapy course</td>
<td>Graded for level of reflection by 2 investigators. Also thematised the journal contents. Not clear unit of coding 46 journals coded &amp; categorised. Mixed method 10% of final grade NO MENTION OF ETHICS</td>
<td>98% achieved at least level 3 of 5 using modified Boud’s levels.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a) Quality of reflection, from 12 perspectives, presence or absence. 3</td>
<td>Women scored higher in % vignettes and work experience also scored high.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>point scale. (0 = none, 1 = once, 2 = extensive)</td>
<td>Mean score for each vignette 4.5, so have comparable reflection on each but large range of 1 -10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b) Degree of overall reflection 6 point scale. Defined 6 as excellent,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>using own definition.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quantitative</td>
<td></td>
</tr>
<tr>
<td>Edwards et al, (2004)</td>
<td>UK</td>
<td>17 pharmacists in a prescribing</td>
<td>Content analysis of 162 accounts</td>
<td>Main themes were consultation process, therapeutics and teamwork.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>course</td>
<td>Qualitative</td>
<td>No mention of the level of reflection</td>
</tr>
<tr>
<td>Thorpe, (2004)</td>
<td>Canada</td>
<td>52 nursing undergraduates</td>
<td>Unit of analysis was the sentence in journal entry, or a phrase. Coded</td>
<td>6 critical reflectors 8-20 non-reflectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>students</td>
<td>and compared to the 2 models of Scanlon and levels of Kember (1999)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>and merged the two.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Journals worth 25% of final grade</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Qualitative</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------</td>
<td>-------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Black and Plowright, (2005)</td>
<td>UK</td>
<td>13 pharmacists, (3 hospital)</td>
<td>Volunteers, from 48 students registered on prescribing course. Semi-structured interview and 3 focus groups. Abstract NO MENTION OF ETHICS Qualitative</td>
<td>Themes: Learning, empowerment, levels of reflection, emotion to reflection, writing. Portfolio is a training tool for developing a mindset of reflection. No mention of the level of reflection</td>
</tr>
<tr>
<td>Jensen and Joy, (2005)</td>
<td>USA</td>
<td>20 nursing students</td>
<td>60 journals (573 entries) 7 levels taught the 7 levels. 3 time points, Based on Mezirow (1981). NO MENTION OF ETHICS Mixed method</td>
<td>Total number of entries decreased over (12 weeks) time, higher levels of reflection (levels 5 to 7) decreased over time.</td>
</tr>
<tr>
<td>Reference</td>
<td>Country</td>
<td>Sample</td>
<td>Method</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
22 = reflective level 1-4  
8 = critical reflectors level 5-7  
Support for reflective process is needed. |
| Plack et al, (2005)          | USA         | 27 Physical therapy students                | Use journals for 3 weeks. 43 journals assessed. Two levels of coding: using nine elements, in words, sentences, and paragraphs; and whole journal (Mezirow (1990) 3 types)  
3 raters. Journals had to be submitted but not graded. Quantitative | Premise (exploring own assumptions, values and biases) reflection noted least often, return to experience most often.  
14.7% no reflection  
43.4% reflection  
41.9% critical reflection |
4 levels of “critical” reflection from the data. Mixed method | 16 recurring themes  
46% reflected at the level of application (level 3 of 4)  
Few demonstrated the ability to reach level of integration. |
| Chirema, (2006)              | UK          | 42 registered nurses undertaking a part-time course | Coded 42 journals using Mezirow (1990) 3 types of reflection  
17 face-to-face interviews, with students, 2 teachers and 3 preceptors Quantitative | Two thirds of respondents varying levels of reflection, either reflective or critical, one third unable to demonstrate reflection |
<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Wessel and Larkin, (2006)  | United Arab Emirates| 15 female physiotherapy students            | Content analysis of journals using 5 levels of reflection by Williams (2000). Journals summatively assessed. After clinical placements, over a 2 year period. Qualitative | Level 1, 41 to 22%  
Level 2, 20.5 to 49%  
Level 3, 32 to 21%  
Level 4, 6 to 9%(gained new understanding)  
Level 5, Nil |
## APPENDIX 10

### PROFESSIONS ALLIED TO MEDICINE (Watson and Hope, 1999)

<table>
<thead>
<tr>
<th>Profession</th>
<th>% Full time</th>
<th>% Part-time</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropodists</td>
<td>4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Dietitians</td>
<td>5</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Occupational therapists</td>
<td>26</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>Orthoptists</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>33</td>
<td>31</td>
<td>64</td>
</tr>
<tr>
<td>Radiographers</td>
<td>9</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Speech &amp; Language therapists</td>
<td>11</td>
<td>15</td>
<td>26</td>
</tr>
</tbody>
</table>

### AHP's 2001/SELEC

<table>
<thead>
<tr>
<th>Clinical Psychologists</th>
<th>Occupational Therapist</th>
<th>Occupational Therapist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Psychologist</td>
<td>Physiotherapist</td>
<td>Physiotherapist</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Radiographer</td>
<td>Radiographer</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>Orthoptist</td>
<td>Orthoptist</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>Podiatrist</td>
<td>Podiatrist</td>
</tr>
<tr>
<td>Radiographer</td>
<td>Speech &amp; Language Therapist</td>
<td>Speech &amp; Language Therapist</td>
</tr>
<tr>
<td>Orthoptist</td>
<td>Dietitian</td>
<td>Dietitian</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>Prosthetics</td>
<td>Prosthetics</td>
</tr>
<tr>
<td>Speech &amp; Language Therapist</td>
<td>Scientific groups</td>
<td>Scientific groups</td>
</tr>
<tr>
<td>Dietitian</td>
<td>Operating Department Practitioners</td>
<td>Operating Department Practitioners</td>
</tr>
<tr>
<td>Prosthetics</td>
<td>Medical Lab scientific officer</td>
<td>Medical Lab scientific officer</td>
</tr>
<tr>
<td>Scientific groups</td>
<td>Pharmacy Technician</td>
<td>Pharmacy Technician</td>
</tr>
<tr>
<td>Operating Department Practitioners</td>
<td>Cytoscreener</td>
<td>Cytoscreener</td>
</tr>
<tr>
<td>Medical Lab scientific officer</td>
<td>Paramedics</td>
<td>Paramedics</td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td>Art Therapist</td>
<td>Art Therapist</td>
</tr>
<tr>
<td>Cytoscreener</td>
<td>Drama Therapist</td>
<td>Drama Therapist</td>
</tr>
<tr>
<td>Paramedics</td>
<td>Music therapist</td>
<td>Music therapist</td>
</tr>
</tbody>
</table>

### CPSM 2002

### HEALTH PROFESSIONS COUNCIL

Jul-02

<table>
<thead>
<tr>
<th>Clinical Psychologists</th>
<th>Occupational Therapist</th>
<th>Occupational Therapist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Psychologist</td>
<td>Physiotherapist</td>
<td>Physiotherapist</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Radiographer</td>
<td>Radiographer</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>Orthoptist</td>
<td>Orthoptist</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>Podiatrist</td>
<td>Podiatrist</td>
</tr>
<tr>
<td>Radiographer</td>
<td>Speech &amp; Language Therapist</td>
<td>Speech &amp; Language Therapist</td>
</tr>
<tr>
<td>Orthoptist</td>
<td>Dietitian</td>
<td>Dietitian</td>
</tr>
<tr>
<td>Podiatrist</td>
<td>Prosthetics</td>
<td>Prosthetics</td>
</tr>
<tr>
<td>Speech &amp; Language Therapist</td>
<td>Scientific groups</td>
<td>Scientific groups</td>
</tr>
<tr>
<td>Dietitian</td>
<td>Operating Department Practitioners</td>
<td>Operating Department Practitioners</td>
</tr>
<tr>
<td>Prosthetics</td>
<td>Medical Lab scientific officer</td>
<td>Medical Lab scientific officer</td>
</tr>
<tr>
<td>Scientific groups</td>
<td>Pharmacy Technician</td>
<td>Pharmacy Technician</td>
</tr>
<tr>
<td>Operating Department Practitioners</td>
<td>Cytoscreener</td>
<td>Cytoscreener</td>
</tr>
<tr>
<td>Medical Lab scientific officer</td>
<td>Paramedics</td>
<td>Paramedics</td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td>Art Therapist</td>
<td>Art Therapist</td>
</tr>
<tr>
<td>Cytoscreener</td>
<td>Drama Therapist</td>
<td>Drama Therapist</td>
</tr>
<tr>
<td>Paramedics</td>
<td>Music therapist</td>
<td>Music therapist</td>
</tr>
</tbody>
</table>

### 120,000 PRACTITIONERS

Over 600,000 healthcare staff in NHS Trusts in England & Wales excluding doctors and dentists. (Audit Commission, 1999)
Dear Colleague,

I am a pharmacist and postgraduate clinical lecturer, based at Guy’s & St. Thomas’ Hospital NHS Trust and I am writing to you to ask for support in a project entitled “Continuing Professional development portfolio’s and reflective practice in health professionals.”

I would like your approval to interview 4 members of your department for approximately 45mins in order to gain some views on the above topic. I am looking for four interviewees all of whom keep some form of portfolio/logbook of practice. Ideally I require individuals who are:

a) Male, registered between 1 – 2 years
b) Female, registered between 1 – 2 years
c) Male, registered 8 years or more
d) Female, registered 8 years or more

I would appreciate it if you could select and send me the names of volunteers. The interviews would be arranged between myself and the individual concerned.

This study is part of my PhD degree. I am conducting it independently of any professional body and hope to include pharmacists, nurses, physiotherapists, dietitians, occupational therapists, podiatrists and physicians.

The study has been approved by the ethics committee and I enclose a copy of the consent form which will be used. If you have anyquires please contact me on the internal email or bleep me on 1727.

Thank you.

Yours sincerely

Andy Kostrzewski

Principal Pharmacist/Postgraduate Clinical lecturer
## SAMPLING FRAME FOR PHASE ONE

<table>
<thead>
<tr>
<th>Professional Group</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>TOTAL TRUST NUMBERS(^1)</th>
<th>Registrants(^2,3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHARMACISTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td>43,000</td>
</tr>
<tr>
<td>PHYSIOTHERAPISTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120</td>
<td>33,835</td>
</tr>
<tr>
<td>DIETITIANS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
<td>5,397</td>
</tr>
<tr>
<td>NURSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,500</td>
<td>329,640</td>
</tr>
<tr>
<td>PODIATRY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>8,764</td>
</tr>
<tr>
<td>OCUPATIONAL THERAPISTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35</td>
<td>22,979</td>
</tr>
<tr>
<td>SPECIALIST REGISTRARS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>243</td>
<td></td>
</tr>
<tr>
<td>&gt;8yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1 Human Resources Department, Guy’s & St.Thomas’ NHS Foundation Trust.

2 Department of Health, 2000b

3 Edwards, 2002
APPENDIX 13

ST THOMAS' HOSPITAL LOCAL RESEARCH ETHICS COMMITTEE
APPLICATION FORM

1) TITLE OF PROJECT
Continuing Professional Development portfolios and reflective practice in health professions

2a) Has this study been considered by research and development? Yes
   If 'yes', quote R&D number .......... R31 01/0366.............

2b) Number Of UK Centres Involved: If 5 or more see MREC guidance ...... 1
   NB. This project may move to more than 5 in the final stage.

2c) Gene Therapy/Xenotransplantation research:
   Has application been made to Gene Therapy Advisory Committee (GTAC)
   Yes No
   Or
   UK Xenotransplantation Interim Regulatory Authority UKXIRA
   Yes/No If yes give approval status

2d) Proposed Starting Date July 2002
2e) Proposed Duration of Study 4 years

3) INVESTIGATORS (expand boxes if necessary)

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Address</th>
<th>Contact:</th>
<th>MDU/MPR or Other body inc Membership no</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Principal</td>
<td>A. Kostrzewski</td>
<td>Pharmacist</td>
<td>Pharmacy Dept. St. Thomas' Hospital</td>
<td>Ext.6495/1727 <a href="mailto:andy.kostrzewski@gtst.nhs.uk">andy.kostrzewski@gtst.nhs.uk</a></td>
</tr>
<tr>
<td>b) Others</td>
<td>Dr S Dhillon</td>
<td>Director of postgraduate education</td>
<td>The School of pharmacy, University of London</td>
<td><a href="mailto:soraya.dhillon@ulsop.a.c.uk">soraya.dhillon@ulsop.a.c.uk</a></td>
</tr>
<tr>
<td>a) Supervisor</td>
<td>Dr D Goodsmans</td>
<td>Educational Advisor</td>
<td>GKT Medical &amp; Dental Education</td>
<td>020 7848 6991 <a href="mailto:dane.goodsman@kcl.ac.uk">dane.goodsman@kcl.ac.uk</a></td>
</tr>
</tbody>
</table>

4) WILL ANY OTHER STAFF BE INVOLVED IN THE RESEARCH PROJECT? NO

   Nursing Staff  (give particulars of involvement)
   Social Workers Laboratory staff Any other staff

5) PLACES WHERE THE RESEARCH WILL BE DONE
Are the patients to be admitted?

**NO** If so is their admission part of a routine clinical admission?

**NO**

If so will this research involve an extended stay in hospital?

**NO**

If so, how long will this extension of their stay be?

6) **SCIENTIFIC BACKGROUND OF THE STUDY**

Guidance on continuing professional development in the NHS has been published (NHS Executive, 1999). It is recommended that work based learning should be accredited in a portfolio system and a process of reflection should be included. Keeping a portfolio for registration renewal has also received approval by the Council for the regulation of Health Care Professionals and the General Medical Council. Very limited data is available on the long-term influences of portfolios on professional development. The most recent study (Smith K and Tillema HH, 2001) in which 15 school principals used a portfolio on a voluntary basis; only 4 continued with it, after their initial training period.

Portfolios are used to enhance (Walker D, 1985) and foster (Wade RC and Yarbrough DB, 1996) the skills of reflection particularly in teacher and nurse education. In nursing practice, reflection is claimed to improve health care (Ghaye T, 1996). Recently Rosie and Murray (Rosie J and Murray R, 1998) comment that reflectivity seems well established in the health professions in principle and that most health professions emphasize development of reflective skills to enhance the quality of practice.

However in their study of 31 radiography students undertaking clinical placements, there was little evidence that reflection was promoted or that reflective learning occurred.

Health care quality was commented on in the Kennedy report in which a lack of reflection led to significant clinical errors (Kennedy I, 2001).

The paradox may be that if the purpose of the portfolio is assessment of performance and grading, then very little reflection is necessary to collect evidence of practice. As it is the product that counts not the process. Other than in nursing, there is no published data as to the use of reflective practice by other qualified health professions.

7) AIMS OF THE STUDY

(Please include anticipated clinical use of outcomes, the potential benefit to the patient and the potential benefit to medical science).

There are two themes to the purpose of this study: a) to investigate use of portfolios and b) to examine the role of reflective practice; within the context of CPD in health professionals.

Since the NHS is to adopt the feature of a learning organisation and hospital Trusts develop a culture of learning, then more information is required on the different aspects of CPD. This study will inform strategic and managerial actions to improve the quality of learning experiences and lead to improved patient care, in line with the Trust and NHS objectives.

8a) STUDY PROTOCOL

(provide a concise description of what the research involves and how this differs from standard management)

No standard management.

A longitudinal study over 5 years.

The research will involve a number of stages.

A longitudinal design will be used to describe and assess changes and developments over time. A four stage process is to be used:

Stage 1 Fieldwork for exploratory study, in order to produce a sampling frame for a more detailed investigation in stage 4. A tapped unstructured interview technique and review of reflective writing will be used.

Stage 2 Validation of stage 1 using focus groups, and content analysis of portfolios.

This will influence the direction of stage 3 and 4.

Stage 3 Questionnaire development for the main study.

Stage 4 Main Study is to survey a more representative sample of health professionals.

8b) STUDY DESIGN (e.g. RCT, cohort, case control, etc.)

Survey strategy using qualitative and quantitative methods.

8c) SCIENTIFIC CRITIQUE

Has the protocol been subject to scientific critique - if yes give details NO

9) SIZE OF THE STUDY/STATISTICAL ANALYSIS

Has the methodology and size of the study been discussed with a statistician? If yes indicate with whom – include contact details NO

(a) Is your application for a pilot study? YES

(b) If no, how was the size of the study determined?

(c) What is the primary endpoint?

(d) What is the statistical power of the study?

(e) If subjects to be randomised state method to be used Please append statistical analysis/power calculation if appropriate

10) SUBJECTS

a) Number of patients to be studied

364
b) Number of healthy volunteers (HV)/controls
(28 healthcare professionals)
c) Age range
   2 – (>5) years post registration
d) Method of recruiting patients
   A purposive sample.
e) Method of recruiting HV/controls
   for d) & e) indicate if using poster/email/other and submit draft if applicable
f) inclusion criteria
g) exclusion criteria
h) if pregnancy an exclusion state how this will be done
i) Details of any payments or other inducements to be made to the subjects
ii) Expenses
j) Are medical students to be involved?
   NO
   If yes, has permission been sought from university?

11) DETAILS OF PROCEDURES
A) Does the study involve use of a new medicine product or the use of an existing product outside the license?
   NO

Drugs

<table>
<thead>
<tr>
<th>Name</th>
<th>Formulation</th>
<th>Dose/Frequency of administration</th>
<th>Route</th>
<th>Legal Status CTC, CTX, Product Licence</th>
</tr>
</thead>
</table>

11) details of procedures cont:
What adverse effects are expected with these drugs? NOT APPLICABLE
Are there any possible serious risks or dangers associated with their use?
(Append details if space is insufficient)

B: (a) Does the study involve a new medical device?
   NO
   If yes give details
   (b) Has the device been approved by the Medical Devices Agency? N/A

C: Will any ionising or radioactive substances or X rays be administered? NO
   (a) Details of any isotopes to be used include dose, frequency
      N/A
   (b) Details of radiographic procedures including dose, frequency and site:
      i) Has advice of the Radiation Protection Adviser been sought? N/A
      if yes, enclose written advice from Radiation Protection Adviser or delegate
      ii) Has an ARSAC certificate been obtained or applied for? N/A
      iii) Specify a routine investigation of equivalent radiation exposure.

D: Are questionnaires to be used?
   YES

Will questionnaires be filled in by subject or administered by someone else?

SUBJECT

(Interviews will be conducted by principal investigator)
If someone else, by whom and where
- give estimated total time to complete 45 mins.

What published evidence is there of validation of questionnaire design? Based on initial exploratory fieldwork stage 1

Q 11 cont  
E: Will the study include the use of audio/video recording? YES

If yes, how will confidentiality and anonymity be ensured?

All interviews will have written consent, subjects will be assured of confidentiality and security of tapes and field notes. Tapes will be erased when no longer required. Any results published will be anonymized.

F: Will patient records be examined NO

If yes, who will undertake the examination?

G: i) Will study data be retrieved from computer? YES
   ii) Will study data be held on computer? YES
   iii) If yes, will the Data protection Act (1998) be followed? YES

H: Are other additional investigations, substances or agents required for the research NO

12) COMMERCIAL SPONSORSHIP

Is this study being performed with commercial sponsorship NO

Or sponsorship from an outside body e.g. MRC

If a pharmaceutical company, has the company signified its acceptance of the Association of British Pharmaceutical Industries (APBI) guidelines for such projects? N/A

What kind of financial support will be provided by the company (if any) to include provisions of drugs, payment to researchers. Etc?

13a) WHAT ASPECTS OF THE PROCEDURES DESCRIBED ARE NOT PART OF ROUTINE CLINICAL CARE? NOT APPLICABLE

b) Is Consultant/ Health Professional with overall responsibility for patient's care involved in study? N/A

If no, provide written evidence that his/her permission has been obtained to approach patients

14) THE HEALTH AND COMFORT OF THE SUBJECTS

Will there be any risk of damage to the health of the subjects, or any pain, discomfort, distress, or inconvenience? NO

If so please give an assessment of the seriousness of any possible damage to health, and of any pain, discomfort, etc, and the degree of risk

15) CONSENT

(a) Who will explain the study to the subject? (If no one please justify)

   Principal investigator

(b) Will the subject by given a written information sheet or letter? Letter

(c) Who will be the signatory if the initial approach is by letter:
GP/hospital doctor/researcher/other- please state

(d) Consent Form (Available from Ethics Committee Office, Block 5, South Wing, St Thomas' Hospital):

Is the standard research consent form to be used?  

YES

If not, please justify this departure and submit 16 copies of the substitute form which is to be used.

(e) Who will seek the subject's consent?  

Principal investigator

(f) How long will the subject have to decide whether to take part in the study? 24 hours

If less than 24 hours please justify.

(g) i) Will any of the subjects or controls be from one of the following vulnerable groups?  

NO

children under 18, people with learning difficulties, unconscious or severely ill, other vulnerable groups

if yes please specify

ii) What special arrangements have been made to deal with the issue of consent/assent

(h) In case of research on discarded operative tissue/organs/cadavers what arrangements have been made for obtaining consent ie from whom and when

NOT APPLICABLE

16) INFORMATION TO THE G.P.  

NOT APPLICABLE

i) Will the General Practitioner be informed?

N/A

If yes, please enclose a copy of letter/information for the GP -  
this should include telephone number of researcher for GP to contact in an emergency

If no, please justify

ii) When a new drug is being administered will the patient be asked to carry information about the study in the event of sudden illness or accident?

N/A

if yes, please enclose a copy

17) COSTS

Have any arrangements been made to defray costs of the research to the District?  

N/A

18) WHAT ARE THE ETHICAL PROBLEMS WHICH APPEAR TO THE APPLICANTS FROM THIS APPLICATION?

Please set them out and add any comments considered likely to assist the Committee

Information from the portfolios might be considered private by the candidates. Care will be taken to make sure all transcribed and other forms of data are cleared by the respondents.

SIGNATURE OF INVESTIGATOR(S) : DATE:

SIGNATURE OF HEAD OF DEPARTMENT: DATE:

DEPARTMENT:
Title of Project: Continuing Professional Development portfolio’s and reflective practice in health professions.

Principal Investigator: A. Kostrzewski

Outline explanation:

I am a pharmacist and postgraduate clinical lecturer based at Guy’s & St. Thomas’ Hospital NHS Trust. A portfolio/logbook has been introduced in your professional group for Continuing Professional Development (CPD). I would like to –

♦ See how portfolios are being used in practice.
♦ Explore experience and attitudes to recording reflective practice.

I am very interested in your views on keeping portfolios and reflective practice. I would like to do this using an interview. I would be very grateful if you could spare 45 minutes to discuss these issues.

The interview will be taped and transcribed, the transcription will be sent to you for verification and any of your changes incorporated before final analysis. A copy of the tape can be sent to you if you require one.

Information from each interview will remain confidential to myself and my supervisors. Any results and comments will be published in an anonymous form. The tapes will be secure in my possession and destroyed on completion of the study.

Any written information you may supply will be treated in the same confidential secure way as the interview data.

This study is part of my Ph.D. degree. I am conducting it independently of any professional body. The health professions involved are pharmacists, nurses, medical staff and allied health professions.

The information gained will be made available locally and nationally and should influence future use of the portfolios. It is entirely up to you whether you take part. If you decide to take part and later change your mind you are free to withdraw at any time without giving a reason.

I (name)
of (address)
hereby consent to take part in the above investigation, the nature and purpose of which have been explained to me. Any questions I wished to ask have been answered to my satisfaction. I understand that I may withdraw from the investigation at any stage without necessarily giving a reason for doing so and that this will in no way affect the care I receive as a patient.

SIGNED (Volunteer) ______________________________ Date ____

(Doctor/Investigator) _____________________________ Date __

(Witness, where appropriate) _________________________ Date __

3 copies required: one for researcher, one for patient/volunteer, one for patient's notes
## Purpose of interview

Use of tape any questions anything about the study wait till after the interview.

**AIMS:** How the use of CPD portfolios influences practice and the role of reflective practice in health professionals

- a) Investigate the use of portfolios.
- b) Examine meanings and roles of reflective practice within CPD.

## DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Age</th>
<th>Years qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of practice</td>
<td>Grade</td>
</tr>
<tr>
<td>Brakes in career</td>
<td>Currently any education</td>
</tr>
<tr>
<td>Background education?</td>
<td></td>
</tr>
<tr>
<td>Enjoy writing/why/on pc or by hand/</td>
<td></td>
</tr>
<tr>
<td>Ever kept a diary/</td>
<td></td>
</tr>
<tr>
<td>Currently keep a diary of any kind?</td>
<td></td>
</tr>
</tbody>
</table>

## PORTFOLIO

If not one why not?
What is it to you?
Describe how you use one/parts........Describe its format........
Hand-written or not?
What are your feelings about having to keep a portfolio?
How long you’ve used one?
Do you have a mentor to help with it?
Good and bad feelings about a portfolio?
Any effect on patient care associated with it?

## REFLECTION

What does reflection mean to you?
Feelings about its role in patient care?
How do you record reflective events?
Any problems with this?
Could you describe a reflective practitioner?
Does keeping a portfolio help with reflection?
Scenario of where practitioner may have to write about an incident?

*Round off main points*

*THANK YOU – anything else to bring up*
I AM INTERESTED IN YOUR PERSONAL VIEWS

INSTRUCTIONS.

The results of this questionnaire are completely confidential. It will be seen only by the researchers and not by any managerial staff or registration organisation.

- PLEASE ANSWER EVERY QUESTION.
- ANSWER EACH QUESTION IN TURN.
- MOST QUESTIONS CAN BE ANSWERED BY CIRCLING THE APPROPRIATE NUMBER.
- DO NOT FEEL YOU HAVE TO SPEND A LONG TIME OVER EACH QUESTION. OFTEN THE FIRST ANSWER THAT COMES TO YOU IS THE BEST.

FURTHER INFORMATION
Andrzej Kostrzewski
Senior Principal Pharmacist Education
Tel: 0207188 5036
Air call: 0870 0555500 Pager 881707
Email: andy.kostrzewski@gstt.sthames.nhs.uk
SURVEY OF PHARMACISTS VIEWS OF RECORDING PROFESSIONAL PRACTICE

This is a survey of your views about producing written records of your professional practice for your continuing professional development.

Please circle the appropriate number and answer every question.

1. I expect to produce written records of my professional practice at regular intervals (approx. monthly) over a year:
   Unlikely 1 2 3 4 5 6 7 Likely

2. My close professional colleagues think I:
   Should 1 2 3 4 5 6 7 Should not produce written records of my professional practice at regular intervals (approx. monthly) over a year.

3. The Trust training department would:
   Approve 1 2 3 4 5 6 7 Disapprove of me producing written records of my professional practice at regular intervals (approx. monthly) over a year.

4. Producing written records of my professional practice is a good way of reviewing my practice.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. I plan to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
   Definitely do not 1 2 3 4 5 6 7 Definitely do

6. To produce written records of my professional practice at regular intervals (approx. monthly) over a year is...
   Difficult 1 2 3 4 5 6 7 Easy

7. When producing written records of my professional practice, there is a limited number of events I can choose from...
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

8. I intend to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
   Definitely do not 1 2 3 4 5 6 7 Definitely do.

9. Being more confident in my practice would be...
   Bad 1 2 3 4 5 6 7 Good

10. Personally reviewing my practice would be ...
    Bad 1 2 3 4 5 6 7 Good

11. I want to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
    Strongly disagree 1 2 3 4 5 6 7 Strongly agree.
12. I do not have time to produce written records of my professional practice.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

13. My manager at work wants me to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

14. I would like to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
   Definitely yes 1 2 3 4 5 6 7 Definitely no.

15. How much control do you feel you have over producing written records of your professional practice at regular intervals (approx. monthly) over a year?
   No control 1 2 3 4 5 6 7 Complete control

16. I am happy to disclose my written records of professional practice.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

17. I feel under pressure from the Royal Pharmaceutical Society to produce written records of my professional practice at regular intervals (approx. monthly) over a year.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

18. Producing written records of my professional practice at regular intervals (approx. monthly) over a year would make me a more confident practitioner.
   Unlikely 1 2 3 4 5 6 7 Likely

19. Whether I do or do not produce written records of my professional practice at regular intervals (approx. monthly) over a year is entirely up to me.
   Strongly disagree 1 2 3 4 5 6 7 Strongly agree

20. Producing written records of my professional practice at regular intervals (approx. monthly) over a year would be:
   a) Useful 1 2 3 4 5 6 7 Useless
   b) Convenient 1 2 3 4 5 6 7 Inconvenient
   c) Enjoyable 1 2 3 4 5 6 7 Unenjoyable
   d) Wise 1 2 3 4 5 6 7 Foolish
   e) Interesting 1 2 3 4 5 6 7 Boring

21. My close colleagues outside of the Trust think I:
   Should 1 2 3 4 5 6 7 Should not produce written records my professional practice at regular intervals (approx. monthly) over a year.

22. In context to producing written records of professional practice, how much do you want to do what your close professional colleagues think you should?
   Not at all 1 2 3 4 5 6 7 Very much

372
23. How likely is it that you will produce written records of your professional practice at regular intervals (approx. monthly) over a year?
   Unlikely  1  2  3  4  5  6  7  Likely.

24. I am confident that I could produce written records of my professional practice at regular intervals (approx. monthly) over a year if I wanted to.
   Strongly disagree  1  2  3  4  5  6  7  Strongly agree

25. Pharmacists I work closely within the Trust think I:
   Should  1  2  3  4  5  6  7  Should not produce written records of my professional practice at regular intervals (approx. monthly) over a year.

26. For me the limited choice of events makes producing written records of professional practice at regular intervals (approx. monthly) over a year:
   Less likely  1  2  3  4  5  6  7  More likely

27. The act of writing makes recording of professional practice at regular intervals (approx. monthly) over a year:
   Difficult  1  2  3  4  5  6  7  Easy

ABOUT YOU

28. Are you?
   Male □  Female □

29. How old are you?
   Years □  Months □

30. How many years have you been registered as a pharmacist?
   Years □  Months □

31. What is your current job grade? □  or AFC band □

32. Please tick your main area of Pharmacy involvement:
   Clinical □  Sterile/Non-sterile production □
   Dispensary □  Quality control □
   Education □  Stores & Distribution □
   Formulary □
   Medicines information □  Other (Please specify)..........................

THANK YOU FOR TAKING PART
APPENDIX 17  BIG FIVE QUESTIONNAIRE

NAME..........................Job Grade............... Male □  Female □  Age......Years Registered as pharmacist...........Do you maintain a CPD portfolio? YES □  NO □

How accurately can you describe yourself?  Please use the following list of common human traits to describe yourself as accurately as possible by circling a number. Describe yourself as you see yourself at the present time, not as you wish to be in the future. Describe yourself as you are generally or typically, as compared with other persons you know of the same sex and roughly your same age.

<table>
<thead>
<tr>
<th>Very</th>
<th>Moderately</th>
<th>Neither</th>
<th>Moderately</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>introverted</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>extroverted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unenergetic</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>energetic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>silent</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>talkative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>timid</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>bold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inactive</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unassertive</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>assertive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unadventurous</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>adventurous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cold</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>warm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unkind</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>kind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>uncooperative</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>cooperative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>selfish</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>unselfish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disagreeable</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>agreeable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>distrustful</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>trustful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stingy</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>generous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>disorganised</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>organised</td>
<td></td>
<td></td>
</tr>
<tr>
<td>irresponsible</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>responsible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>negligent</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>conscientious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>impractical</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>practical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>careless</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>thorough</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lazy</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>hardworking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>extravagant</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>thrifty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>angry</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>calm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tense</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>relaxed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nervous</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>at ease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>envious</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>not envious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unstable</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>stable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>discontented</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>contended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>emotional</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>unemotional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unintelligent</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>intelligent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unanalytical</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>analytical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unreflective</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>reflective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>uninquisitive</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>curious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unimaginative</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>imaginative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>uncreative</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>creative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unsophisticated</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>sophisticated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX 18
CODING MATRIX FOR SELECTED INTERVIEWS IN PHASE ONE

<table>
<thead>
<tr>
<th>INDEX</th>
<th>QUESTION - What is a portfolio?</th>
<th>INTERVIEW RESPONSES - HIGHLIGHTED</th>
<th>AK interview 1,2,3</th>
<th>SD interview 1,2,3</th>
<th>KG interview 1,2,3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Global view of self</td>
<td>Personal development goals</td>
<td>Personal characterisations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What I've done in my life</td>
<td>Personal achievements</td>
<td>work-related</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Personal reference for future</td>
<td>non-work related</td>
<td>predictions</td>
</tr>
<tr>
<td>I</td>
<td>90 ... snapshot a global view of yourself to take with you</td>
<td>Evidence of positive practice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>99 ... another part encourages you to forecast where you want to go</td>
<td>Personal attributes on paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 ... by some sort of map</td>
<td>Encourages forecasting by mapping career</td>
<td></td>
<td>Career motivated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>105 all I've done is to file I have got a CV but it's not in their...</td>
<td>Filling cabinet of certificates</td>
<td>File with CV</td>
<td>CV &amp; Certificates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>106 ... and I haven't filled out any of my personal stuff supposed...</td>
<td>Encourages to better yourself</td>
<td>Self assessment/goals</td>
<td>Encourages/promotes critical self-analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>107 ... because I've always used a CV if I wanted one what I have done...</td>
<td>Documentation of past</td>
<td>?Reflective element</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>108 ... I've got all the certificates from anything I've done any course</td>
<td>Formal reflective log</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

375
<table>
<thead>
<tr>
<th>INTERVIEW</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 110</td>
<td>...but its probably not in any specific order</td>
</tr>
<tr>
<td>174</td>
<td>... I think its trying to encourage you to</td>
</tr>
<tr>
<td>174</td>
<td>...look at who you are what you are what you've done...</td>
</tr>
<tr>
<td>176</td>
<td>...where you want to go... and what you might like to achieve</td>
</tr>
<tr>
<td>177</td>
<td>...possibly with in a given time span... in order to better yourself</td>
</tr>
<tr>
<td>178</td>
<td>... to make you more able to do the job that you're doing better and to look towards a better job if that is what you want to do</td>
</tr>
<tr>
<td>2 115</td>
<td>Gathering all the information for things that I've done um pause so its qualifications, certificates, um any sort of training that I've done, um basically my life, um so if a stranger came along I could give that to them and they would have an idea what I've done in my life.</td>
</tr>
<tr>
<td>INTERVIEW</td>
<td>RESPONSES</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>2 123</td>
<td>I've got my CV which isn't which hasn't been updated and then I've got um pause…things that I've done in the past so all the training that I've done in the past. Um the training that I want to do and sort of the direction in which I want to I want my career to go.</td>
</tr>
<tr>
<td>127</td>
<td>So it's mapping it but um I suppose its filling those gaps really</td>
</tr>
<tr>
<td>182</td>
<td>I think I see it as a help to myself it would help me</td>
</tr>
<tr>
<td>194</td>
<td>Its up to you what you do with it and I do keep it and I use it for future reference if I ever want to go back to something.</td>
</tr>
<tr>
<td>222</td>
<td>What I have done is I've mapped out the two areas that I want to develop my career in.</td>
</tr>
<tr>
<td>235</td>
<td>I suppose it's a point of reference.</td>
</tr>
<tr>
<td>INDEX</td>
<td>QUESTION - What is a portfolio?</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>3177</td>
<td>Well I think of it in lots of different contexts really.</td>
</tr>
<tr>
<td>179</td>
<td>...photography portfolios, in a way a reflection of what you are about of what you’ve done um you know something that you can see, visual, tangible, you know of what you have done in the past or what you are doing in the present.</td>
</tr>
<tr>
<td>185</td>
<td>...it’s a portfolio that is divided up into sections, um pause, of past achievements, of past things that you’ve done, past projects, past thoughts, um and also present, all of those things um</td>
</tr>
<tr>
<td>189</td>
<td>... it’s a requirement now, not by, its very hard to explain, it is by ah the um pause the professional body of occupational therapy um because they could our portfolios we have been told can be called up</td>
</tr>
<tr>
<td>283</td>
<td>um there’s a section on skills, what skills you have, what skills you’ve obtained, there is a section on um sort of recognised treatments, sort of um like um not presents but um compliments from patients like if they’ve written a letter</td>
</tr>
<tr>
<td>241</td>
<td>I don’t think there’s a requirement but it looks a lot neater and a lot more professional if its typed up.</td>
</tr>
<tr>
<td>Index</td>
<td>RESPONSES</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
</tr>
<tr>
<td>216</td>
<td>It was good to discuss what was required in the sort of the format uum in that sense and the bits that I didn’t understand I could I could talk through so that was helpful</td>
</tr>
<tr>
<td>292</td>
<td>I can’t remember offhand there’s quite a few about 12 sections in all but they’re all divided</td>
</tr>
<tr>
<td>295</td>
<td>Sorry yeah that’s an important one we have um a learning log and a reflective log section and we have a format a um devised by the OT department that we can use</td>
</tr>
<tr>
<td>635</td>
<td>Because when you do your own CPD file it’s your own personal attributes its your own personal life isn’t it you know on paper</td>
</tr>
</tbody>
</table>
05 April 2014

Dear Mr Kostrowski,

RI C reference number: 04/Q07.02.23

Full title of study: The influence of continuing professional development portfolio on practice and self-development in pharmacists (previously 1C04/045)

Thank you for your prompt response to the Committee’s request for further information on the above research.

The further information has been considered on behalf of the Committee by the Chairman on 15 May 2014.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation.

The favourable opinion applies to the following research site:

Site: Guy’s and St Thomas NHS Trust
Principal investigator: Mr A Kostrowski
Senior Principal Pharmacists

Conditions of approval

The favourable opinion is granted provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Protocol Version 2014
Cover letter dated 2014
Patient information sheet, Version 3.0 dated 22.05.04
Consent Form, Version 3.0 dated 22.05.04
Questionnaire Draft 3

An advisory committee to NHS Estates Strategic Health Authority

ST THOMAS HOSPITAL
RESEARCH ETHICS COMMITTEE
Floor C. General Office
Block G, South Wing
St Thomas Hospital
London SE1 7EH

Chairman – Dr. A. H. Popple
Dr. A. Williams
Administrator – Mrs. S. H. Finch

Phone: 020-7188-2267
Fax: 020-7188-2248
Email: sth hurricane@get.com
1. STUDY TITLE.
The influence of continuing professional development portfolios on practice and self-development in pharmacists.

2. INVITATION
You are being asked to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Consumers for Ethics in Research (CERES) publish a leaflet entitled "Medical Research and You". This leaflet gives more information about medical research and looks at some questions you may want to ask. Please ask for a copy, or if you wish, a copy may be obtained from CERES, PO Box 1365, London N16 0BW.

Thank you for reading this.

3. WHAT IS THE PURPOSE OF THE STUDY?
Continuing Professional Development (CPD) has become a priority in the NHS in order to provide records of practice for registration requirements. In addition the NHS is to implement the Knowledge and Skills Framework to develop individuals and provide the basis for pay progression. A portfolio as a written record of CPD, and regarded as a reflective tool that could be used in many ways. What effect this may have on future practice is not known. Although there are a number of publications on the use of a portfolio as an assessment tool containing reflective records, there is a lack of research on the links between written reflective records in portfolios, professional practice and judgement. It is proposed to do a comprehensive study of pharmacists in the hospital sector over one year, to try and answer this question.

4. WHY HAVE I BEEN CHOSEN?
You have been chosen because of your level of experience. There will be six pharmacists in total in the study.

5. DO I HAVE TO TAKE PART?
It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This will not affect your job in any way.

6. WHAT WILL HAPPEN TO ME IF I TAKE PART?
You will be involved in the research for a period of one year. I will arrange to visit you on three occasions over the year, at a time convenient to you. At each meeting I will conduct a taped face to face interview with you for approximately 45mins, ask for a copy of your Continuing Professional Development records for the last month and ask you to complete two short questionnaires (Attitudes to...
pharmacy practice and Knowledge Skills Framework). You will be sent the transcript of the interview to confirm the content and make any changes before it is used for the analysis. After the final interview you will be invited to attend a focus group meeting at the University of London, alongside the other participants of the study.

7. WHAT DO I HAVE TO DO?
You should not do anything different from your normal practice.

8. WHAT ARE THE POSSIBLE BENEFITS OF TAKING PART?
There is no intended benefit to you from taking part in this study, but the results of the study will benefit the future use of portfolios in the pharmacy profession.

9. WHAT IF NEW INFORMATION BECOMES AVAILABLE?
If any new information becomes available about any aspect of the study I will contact you directly. If you decide to withdraw you may do so, without any reason. If you decide to continue in the study you will be asked to sign an updated consent form.

10. WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?
All information which is collected about you during the course of the research will be kept strictly confidential. Any information about you will have your name and address removed so that you cannot be recognised from it. All quotations from the interviews will also be anonymised. Tapes of the interviews, computer records and any hand written information will be destroyed in line with the University of London, The School of Pharmacy regulations at the end of the study. Maintaining confidentiality should not compromise me as the investigator with respect to the Royal Pharmaceutical Society code of ethics or the Trust Code of Conduct. If at any time I feel that it is my duty of care to avoid harm to patients and overrides the requirement for confidentiality then I will discuss this with my project supervisors and if necessary I will then discuss this with your Chief Pharmacist with your full knowledge.

11. WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?
The results of the study will form a major part of my PhD thesis and the completion date is October 2006, at which time you can obtain a copy of the results. You will not be identified in any report/publication. Any publication of the study will occur after the PhD is completed.

12. WHO HAS REVIEWED THE STUDY?
The St. Thomas' Hospital Local Research ethics committee reviewed the study.

13. CONTACT FOR FURTHER INFORMATION
Your contact point for further information is:
Andrzej Kostrzewski  Tel: 020 7118 7118 extension 8506 or bleep 1727 (Guy's Hospital site)  Email: andy.kostrzewski@gsst.thames.nhs.uk
Pager: 08700 555500 number881707

YOU WILL BE GIVEN A COPY OF THE INFORMATION SHEET AND A SIGNED CONSENT FORM TO KEEP.
CONSENT FORM

Title of project: The influence of continuing professional development portfolios on practice and self-development in pharmacists.

Name Of Researcher: Andrzej Kostrzewski

1. I confirm that I have read and understand the information sheet (version 3.0 Dated 10/5/04) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical or legal rights being affected.

3. I understand that sections of my Continuing Professional Portfolio/Plan & Record may be looked at by the project supervisors from The School of Pharmacy, University of London. I give permission for these individuals to have access to my records.

4. I agree to take part in the above study.

Name of Participant  Date  Signature

Researcher  Date  Signature

(1 for the participant and 1 for the researcher.)
Purpose of interview

Use of tape any questions anything about the study wait till after the interview.

*Aim:* To investigate how the use of Continuing Professional Development portfolios affect reflection and influence practice amongst a group pre and post-registration pharmacists.

There are two themes to the purpose of this study to:

a) investigate the use of CPD portfolios/Plan & Record in pre and post registration pharmacists.

b) determine what links the portfolio/Plan & Record may have on future practice.

**RESPONDENTS CHARACTERISTICS**

Age .........................Years qualified...................... Gender......

Area of practice...............Grade......................

Enjoy writing/why/on PC or by hand?

Currently keep a diary of any kind?

**PORTFOLIO**

If not one why not?

What is it to you?

Describe how you use one/parts............Describe its format............

What are your feelings about having to keep a portfolio?

How long you’ve used one?

Do you have a mentor to help with it?

Good and bad feelings about a portfolio?

Any effect on patient care associated with it?

**REFLECTION**

What does reflection mean to you?

Feelings about its role in patient care?

How do you record reflective events? Any problems with recording?

Could you describe a reflective practitioner?

Does keeping a portfolio help with reflection?

Willingness to question own views?

How do you work through your fears of making mistakes and insecurity of being criticised?

How do you make sense out of non-sense and apply the information in the desired direction?

*Round off main points*

THANK YOU – anything else to bring up
FOCUS GROUP TOPIC GUIDE

OPENING STATEMENTS:
- Introduction to the topic
- State what will happen to the data
- Assure confidentiality, ask participants to respect confidentiality of all members of the group
- No private conversations, respect views of others, the need for people to let others talk.
- Stress there are no right and wrong answers
- Stress what I am exploring: their understanding and experience of keeping a portfolio, affect on practice and them as a person, by recording events.

INTRODUCTORY QUESTIONS:
- Brief description of your pharmacy practice (as a voice check).
- What do you understand by the term “CPD”, “reflection” “portfolio”?

KEY QUESTION:
- What is the role of CPD portfolios in pharmacy practice?

KEY RESERVE QUESTIONS:
- What is the most challenging aspect of CPD recording?
- What is the most personally satisfying aspect of CPD recording?
- All listed a number of personal key skills, what influence has recording had on these?
  - “What are your views of recording your practice?”
  - “How has recording your practice affected your thinking processes?”
  - “What is the role of appraisal in CPD and recording?”
- How is CPD linked to KSF?
## FRAMEWORK FOR ASSESSING REFLECTIVE ACCOUNTS: MODIFIED WRITT*

<table>
<thead>
<tr>
<th>Short-term memory needed</th>
<th>Long-term Memory needed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level of reflection, specific to event</td>
<td>Higher level of reflection, beyond immediate situation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUBJECT CONTENT</th>
<th>DESCRIPTION</th>
<th>PERSONAL OPINION</th>
<th>CONNECTING</th>
<th>CRITICAL CONNECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describes what happened</td>
<td>Personal concern of the situation linked to previous experience.</td>
<td>Connects the description to published evidence, does not develop it further.</td>
<td>Critical analysis of the description with other opinions and gives evidence from the literature. Suggests alternatives with explanations and reasons.</td>
</tr>
<tr>
<td></td>
<td>No mention of himself/herself</td>
<td>&quot;What I've learnt from the event&quot;. Not on a scientific basis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL CONTENT</th>
<th>DESCRIPTION</th>
<th>PERSONAL OPINION</th>
<th>CONNECTING</th>
<th>CRITICAL CONNECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describes himself/herself in the situation</td>
<td>Personal insight about himself/herself as a practitioner, human being etc.</td>
<td>Explicitly aware of the linking process himself/herself employs.</td>
<td>Critical analysis of himself/herself in the context of the situation. General conclusions about &quot;my way of practice&quot; based on knowledge and literature.</td>
</tr>
</tbody>
</table>

(*Adapted from Fund et al, 2002)

CONTENT = one element of task environment, topic of the writing.

FORM = extent of retrieval of information from long-term memory (writer's previous knowledge and links to the literature)
# Sampling Frame for Hospital Sites

**London Work Force Confederation**

**NORTH CENTRAL**

1. Barnet & Chase Farm Hospitals NHS Trust
   Barnet, Enfield & Haringey MH NHS Trust
   Camden & Islington MH NHS Trust

2. Great Ormond Street Hospital for Sick Children NHS Trust
3. Moorfields Eye Hospital NHS Trust
4. North Middlesex Hospital NHS Trust
5. Royal Free Hampstead NHS Trust
6. Royal National Orthopaedic Hospital NHS Trust
7. Tavistock & Portman NHS Trust
8. University College London Hospitals NHS Trust

**NORTH WEST**

10. Ealing Hospital NHS Trust
11. Hammersmith Hospitals NHS Trust
12. Hillingdon Hospitals NHS Trust
14. St. Mary's NHS Trust

**NORTH EAST**

15. West Middlesex University Hospital NHS Trust
16. Barts & the London NHS Trust
17. Barking, Havering & Redbridge Hospitals NHS Trust
18. Homerton Hospital NHS Trust
19. Newham Healthcare NHS Trust
20. Whipps Cross University Hospital NHS Trust
21. Whittington hospital NHS Trust

**SOUTH WEST**

22. Epsom & St. Helier NHS Trust
23. Kingston Hospital NHS Trust
24. Mayday Healthcare NHS Trust
25. St. George's Healthcare NHS Trust

**SOUTH EAST**

26. Bromley Hospitals NHS Trust
27. Queen Elizabeth Hospital NHS Trust
28. Guy's & St. Thomas' Hospital Trust
29. King's College Hospital NHS Trust
30. Queen Mary's Hospital(Sidcup) NHS Trust
31. Lewisham Hospital NHS Trust

---

* STARS: University Medical School

---

4 Commission for Health Improvement, 2004
**APPENDIX 25  SAMPLING FRAME FOR PHARMACISTS PARTICIPATION**

2004 March

**London Work Force Confederation**

**NORTH CENTRAL**

1. **Barnet & Chase Farm Hospitals NHS Trust**
   - Barnet, Enfield & Haringey MH NHS Trust*
   - Camden & Islington MH NHS Trust*
   - Male  prereg

2. **Great Ormond Street Hospital for Sick Children NHS Trust**
   - Female  prereg

3. **Moorfields Eye Hospital NHS Trust**
   - No participants available

4. **North Middlesex Hospital NHS Trust**
   - Female  >8yrs

5. **Royal Free Hampstead NHS Trust**
   - Not available

6. **Royal National Orthopaedic Hospital NHS Trust**
   - Tavistock & Portman NHS Trust
   - Not available

7. **University College London Hospitals NHS Trust**
   - Central & North West London MH NHS Trust

**NORTH WEST**

8. **Chelsea & Westminster Healthcare NHS Trust**

9. **Ealing Hospital NHS Trust**
   - Not available

10. **Hammersmith Hospitals NHS Trust**

11. **Hillingdon Hospitals NHS Trust**
    - No participants available

12. **North West London Hospitals NHS Trust**
    - Female  >8yrs

13. **Royal Brompton & Harefield NHS Trust**

14. **St.Mary's NHS Trust**
    - West London MH Trust

15. **West Middlesex University Hospital NHS Trust**
    - Not available

**NORTH EAST**

16. **Barts & the London NHS Trust**
    - Male  2-3yrs

17. **Barking, Havering & Redbridge Hospitals NHS Trust**
    - East London & City MH NHS Trust

18. **Homerton Hospital NHS Trust**
    - Not available

19. **Newham Healthcare NHS Trust**
    - NE London MH NHS Trust

20. **Whipps Cross University Hospital NHS Trust**
    - Not available

21. **Whittington hospital NHS Trust**

**SOUTH WEST**

22. **Epsom & St.Helier NHS Trust**

23. **Kingston Hospital NHS Trust**

24. **Mayday Healthcare NHS Trust**
    - Female  >8yrs

25. **St. George's Healthcare NHS Trust**
    - SW London & St.George's MH NHS Trust
    - Male  2-3yrs

**SOUTH EAST**

26. **Bromely Hospitals NHS Trust**
    - No participants available

27. **Queen Elizabeth Hospital NHS Trust**
    - Not available

28. **Guy's & St.Thomas' Hospital Trust**
    - Male  prereg

29. **King's College Hospital NHS Trust**
    - South London & Maudsley NHS Trust

30. **Queen Mary's Hospital(Sidcup) NHS Trust**
    - No participants available

31. **Lewisham Hospital NHS Trust**
    - Female  2-3yrs
APPENDIX 26

Mapping of the theories of the level of reflection in written accounts with the Modified Written Reflections In a Theoretical Teacher-training course Framework (MWRITTF)

<table>
<thead>
<tr>
<th>FORM OF WRITING</th>
<th>LOW LEVEL OF REFLECTION, SPECIFIC TO EVENT</th>
<th>HIGHER LEVEL OF REFLECTION, BEYOND IMMEDIATE SITUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MWRITTF</strong></td>
<td><strong>DESCRIPTION</strong></td>
<td><strong>PERSONAL OPINION</strong></td>
</tr>
<tr>
<td>Fund et al, (2002)</td>
<td>Limited to issues of accountability</td>
<td>Questions 1,2</td>
</tr>
<tr>
<td>Goodman, (1984)</td>
<td>Questions 3,4,5,6,</td>
<td></td>
</tr>
<tr>
<td>Gibbons, (1988)</td>
<td>Non-reflector</td>
<td>Reflective Content and process</td>
</tr>
<tr>
<td>Mezirow, (1991a)</td>
<td>Non-reflector</td>
<td>Reflective Content and process</td>
</tr>
<tr>
<td></td>
<td>What happened</td>
<td></td>
</tr>
</tbody>
</table>

389
HOW TO USE THE

FRAMEWORK FOR ASSESSING THE FOCUS OF REFLECTIVE ENGAGEMENT IN WRITTEN ACCOUNTS.

BACKGROUND:

The framework below is two-dimensional. One dimension is the CONTENT (object of writing) and the second is the FORM (level of coordination between different ideas) of writing.

The CONTENT dimension has two components, Subject and Personal.

The Subject content is concerned with the "what", what pharmaceutical (or other) issues are discussed.

The Personal content is where the pharmacist writes about themselves, the "I" of the account.

The FORM dimension has four components, description, personal opinion, connection and critical connections.

Description is a written account of a situation.

Personal opinion is where the pharmacist expresses their own reservations, hesitations, or agreement with what has happened.

Connecting is linking and associations of the situation to published evidence but is not developed any further.

Critical connections is a broader critical deliberation of the situation, based on literature, arguing the issue concerned, including how to act in the future.

PROCEDURE:

In order to assess the focus of reflection in the written accounts the following procedure must be adopted:

a) obtain instruction on how to use the framework attached and the meaning of each component, b) read each respondent account in total first, c) go back to the account and read it again, allocating the presence or absence of each component of the framework using the blank framework sheet provided. Provide an example from the text to justify your assessment and add any comments that you feel necessary in the compartments, d) Finally label the subject matter of the account.
### Framework for Assessing the Focus of Written Reflective Accounts

<table>
<thead>
<tr>
<th>Description</th>
<th>Personal Opinion</th>
<th>Connecting</th>
<th>Critical Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject Content</strong></td>
<td>Personal concern of the situation linked to previous experience.</td>
<td>The description is linked to published evidence and guidelines, but do not develop it further.</td>
<td>Critical analysis of the description with other opinions and gives evidence from the literature. Suggests alternatives with explanations and reasons. Includes decisions about how to act in the future.</td>
</tr>
<tr>
<td>Describes what happened.</td>
<td>&quot;What I've learnt from the event&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No mention of themselves.</td>
<td>Why this situation was important.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not on a scientific basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Personal Content</strong></td>
<td>Own insight about themselves as a practitioner, and a person etc. feelings exhibited.</td>
<td>Explicitly aware of the linking process they employ.</td>
<td>Critical analysis of themselves in the context of the situation. General conclusions about &quot;my way of practice&quot; based on own knowledge and literature.</td>
</tr>
<tr>
<td>Describes themselves in the situation</td>
<td>&quot;How I felt at the time&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;What was troubling me about the situation&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Content** = topic of the writing. Adapted from (Fund et al 2002).

**Form** = extent of retrieval of information from long-term memory (writer's previous knowledge & links to the literature, not to look at syntax or vocabulary only ideas.)
## FRAMEWORK FOR ASSESSING THE FOCUS OF WRITTEN REFLECTIVE ACCOUNTS

Please tick if the account demonstrates the presence of each component and add any comments or examples of text into the compartment.

<table>
<thead>
<tr>
<th>REFLECTIVE ACCOUNT NUMBER</th>
<th>SUBJECT MATTER OF THE ACCOUNT</th>
</tr>
</thead>
</table>

**FORMAT OF THE REFLECTIVE ACCOUNT:**

- (a) OPEN □
- (b) A FORM CONTAINING LIST OF QUESTIONS:
  - i) BOXED □
  - ii) OPEN □

<table>
<thead>
<tr>
<th>FORM OF WRITING</th>
<th>DESCRIPTION</th>
<th>PERSONAL OPINION</th>
<th>CONNECTING</th>
<th>CRITICAL CONNECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUBJECT CONTENT</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
</tr>
<tr>
<td>PERSONAL CONTENT</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
<td>TICK BOX □</td>
</tr>
</tbody>
</table>

(a) OPEN ACCOUNT = no preformatted form used. (b) i LIST OF QUESTIONS BOXED = a form has specific questions with boxes for reply. (b) ii LIST OF QUESTIONS OPEN = a form has specific questions but no boxes to limit reply.
<table>
<thead>
<tr>
<th>TRIGGER QUESTIONS (non-tick boxes)</th>
<th>MASTER RECORD SHEETS (p21) 2004</th>
<th>eP&amp;R 2004</th>
<th>eP&amp;R 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFLECTION</td>
<td>What do you want to learn to do?</td>
<td>What do you want to learn to do?</td>
<td>What do you want to learn to be able to do?</td>
</tr>
<tr>
<td>Explain how you have identified this learning objective?</td>
<td>How you have identified this learning objective?</td>
<td>How you have identified this learning objective?</td>
<td>3,4,5,6,7,8</td>
</tr>
<tr>
<td>PLANNING</td>
<td>What will be the impact of your learning?</td>
<td>What will be the impact of your learning on you, users of your services, colleagues and organisations to whom you are contracted?</td>
<td>What will be the impact of your learning on you, users of your services, colleagues and organisations to whom you are contracted?</td>
</tr>
<tr>
<td>Description of activities undertaken – advantages/disadvantages</td>
<td>Description of activities undertaken – advantages/disadvantages</td>
<td>What activities could you undertake to meet this need?</td>
<td></td>
</tr>
<tr>
<td>ACTION</td>
<td>Description</td>
<td>Describe the activity you have undertaken</td>
<td>Description</td>
</tr>
<tr>
<td>What have you learnt as a result?</td>
<td>What skills, knowledge, attitudes and behaviours have you developed as a result of undertaking the selected activity?</td>
<td>What skills, knowledge, attitudes and behaviours have you developed as a result of undertaking the selected activity?</td>
<td></td>
</tr>
<tr>
<td>EVALUATION</td>
<td>Describe an example of how you have applied what you have learnt?</td>
<td>Describe an example of how you have applied this learning</td>
<td>Describe an example of how you have applied what you have learnt? 1,2,3,4,5,6</td>
</tr>
<tr>
<td>Describe any feedback you have had?</td>
<td>Describe any feedback you have had from those on whom this learning has had an impact.</td>
<td>Describe any feedback you have had from those on whom your learning was to have an impact or those who have been able to observe your performance. 1,2,3,4</td>
<td></td>
</tr>
<tr>
<td>Describe what part of your learning objective you did not achieve?</td>
<td></td>
<td>Describe what part of your learning objective you did not achieve. 1,2</td>
<td></td>
</tr>
<tr>
<td>Explain the reasons why your learning objective was not fully met or not met at all?</td>
<td>Explain the reasons why your learning objective was not fully met.</td>
<td>Explain the reasons why your learning objective was not fully met. 5,6,7,8</td>
<td></td>
</tr>
<tr>
<td>Why do you think you have not met your learning objective?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

393
**SKILLS MAPPING (IDENTIFIED AT FIRST INTERVIEW)**

**KSF DIMENSIONS (2004)**

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>COMMUNICATION</th>
<th>P/P DEVELOP</th>
<th>H&amp;S&amp;S</th>
<th>SER.IMPROV</th>
<th>QUALITY</th>
<th>EQUAL&amp;DIVER</th>
<th>HEALTH &amp; WELLBEING</th>
<th>INFO &amp; KNOW</th>
<th>GENERAL</th>
</tr>
</thead>
</table>

**APPENDIX 29**

Shaded areas indicate skill present.

**APPENDIX 29 (b)**

RPSGB COMPETENCIES (Mitchell, 2006)

<table>
<thead>
<tr>
<th>PARTICIPANTS</th>
<th>GENERIC</th>
<th>PHARMACY -SPECIFIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A2</td>
<td>B19 D1 T12</td>
</tr>
<tr>
<td>2</td>
<td>A2</td>
<td>B19 C4 D1</td>
</tr>
<tr>
<td>3</td>
<td>B19</td>
<td>C4 D1 T12</td>
</tr>
<tr>
<td>4</td>
<td>C4 C8</td>
<td>D1 J2 T12</td>
</tr>
<tr>
<td>5</td>
<td>A2</td>
<td>D1 J2</td>
</tr>
<tr>
<td>6</td>
<td>B9</td>
<td>B13 D1 S11 J3</td>
</tr>
<tr>
<td>7</td>
<td>B13</td>
<td>B19 D1 J3 T12</td>
</tr>
<tr>
<td>8</td>
<td>C4</td>
<td>D1 E12 F12 T12</td>
</tr>
<tr>
<td>9</td>
<td>A2</td>
<td>B13 C4 D1 T12</td>
</tr>
</tbody>
</table>

Skills not specified by RPSGB

- Attention to detail
- Flexibility
- Info speed decisions
- Accurate decisions
- Confidence
- Compassionate Role Model
## APPENDIX 30

### RPSGB CODE TO COMPETENCIES

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Effective team working</td>
</tr>
<tr>
<td>B9</td>
<td>Project management</td>
</tr>
<tr>
<td>B13</td>
<td>Using skill mix</td>
</tr>
<tr>
<td>B19</td>
<td>Training others</td>
</tr>
<tr>
<td>C4</td>
<td>Managing workload</td>
</tr>
<tr>
<td>C8</td>
<td>Problem solving</td>
</tr>
<tr>
<td>D1</td>
<td>Oral/written communication</td>
</tr>
<tr>
<td>E12</td>
<td>Lifelong learning</td>
</tr>
<tr>
<td>F12</td>
<td>Sensitivity and understanding</td>
</tr>
<tr>
<td>S11</td>
<td>Stock management</td>
</tr>
<tr>
<td>J2</td>
<td>Information processing</td>
</tr>
<tr>
<td>J3</td>
<td>Using information effectively</td>
</tr>
<tr>
<td>T12</td>
<td>Clinical therapeutic uses of drugs</td>
</tr>
</tbody>
</table>