International
Accounting
Education
Standards Board

Information Paper

June 2008

Approaches to Continuing Professional Development (CPD) Measurement



International Federation of Accountants

International Accounting Education Standards Board International Federation of Accountants 545 Fifth Avenue, 14th Floor New York, New York 10017 USA

E-mail: educationpubs@ifac.org Website: http://www.ifac.org

The mission of the International Federation of Accountants (IFAC) is to serve the public interest, strengthen the worldwide accountancy profession and contribute to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards, and speaking out on public interest issues where the profession's expertise is most relevant.

The International Accounting Education Standards Board develops and issues in the public interest Standards, Practice Statements, and Information Papers on prequalification education, training of professional accountants, and on continuing professional education and development for members of the accountancy profession. The International Accounting Education Standards Board also acts as a catalyst in bringing together the developed, developing and emerging economies to assist in the advancement of accountancy education programs worldwide, particularly where this will assist economic development.

This Information Paper may be downloaded free-of-charge from the IFAC website: http://www.ifac.org. The approved text of this Information Paper is published in the English language.

Copyright © June 2008 by the International Federation of Accountants (IFAC). All rights reserved. Permission is granted to make copies of this work provided that such copies are for use in academic classrooms or for personal use and are not sold or disseminated, and provided further that each copy bears the following credit line: "Copyright © June 2008 by the International Federation of Accountants. All rights reserved. Used by permission." Otherwise, written permission from IFAC is required to reproduce, store or transmit this document, except as permitted by law. Contact permissions@ifac.org.

ISBN: 978-1-934779-37-8

Preface

The International Accounting Education Standards Board (IAESB) commissioned the Professional Associations Research Network (PARN) to conduct this research and prepare this Information Paper on measuring Continuing Professional Development (CPD). The purpose of an Information Paper is "... to promote awareness of, and transfer knowledge and information on, education and development issues or practices relating to the accountancy profession." As such, this Information Paper does not represent guidance, nor does it necessarily represent the collective or consensus view of the IAESB.

The objectives of the project were (a) to contribute to filling the current gap of research in this area, and (b) to promote discussion on how International Federation of Accountants (IFAC) member bodies can improve their CPD systems, especially those that combine input and output measures as identified in International Education Standard 7 (IES 7).

We believe that the Information Paper will interest many stakeholder groups, including professional accountants and those training for that profession; education directors and other executives of professional associations; regulators; educators; CPD providers; employers, including public accounting firms and their risk management groups; and policy makers. We believe that this research will also interest professional bodies outside the accounting profession, as many of the objectives and challenges of CPD exist in other professions, both regulated and unregulated.

Readers are introduced to the four-phase CPD cycle. We recommend that they consider how this cycle can be used to improve the effectiveness of their approach to current CPD responsibilities, whether these are measured and monitored by their member body using input, output, or a combination of these methods. The four-phase approach can add value to personal CPD by enhancing planning, action, results, and reflection (Chapters 1 and 2).

Those readers responsible for measuring and monitoring CPD are directed to the definition of "Professional Development Value" (PDV) and the use of the CPD model as a framework for measuring CPD (Chapter 2).

Education directors of professional associations will find that the case studies and profiles provide some practical examples of how measurement and monitoring systems have been developed and used in practice. In particular, the comparisons of the different CPD measurement systems show how the CPD model can be used to benchmark one CPD measurement system against others (Chapters 3 and 4).

The discussion of issues and recommendations, together with advice and opinions from other professional associations, will be of interest to those readers evaluating the pros and cons of various approaches to measuring CPD (Chapters 5 and 6).

The appendices provide additional detail on other topics:

- What other CPD research is available (Appendix A literature review);
- Current CPD practices in four countries (Appendix B);
- Background related to the case studies presented in Chapter 3 (Appendix C);
- Interview Questions used in researching the case studies presented in Chapter 3 (Appendix D); and
- A bibliography (Appendix E).

In publishing this Information Paper, the IAESB hopes to (a) advance developments in CPD measurement, and (b) stimulate an ongoing debate on how to achieve this most effectively. Based on feedback on this Information Paper and further developments in measuring CPD, the IAESB will reconsider the need to develop guidance in the form of a practice statement supporting IES 7.

The IAESB welcomes feedback from readers on the following questions:

- Whether the 4-phase CPD cycle represents a good framework for professionals.
- Whether the concept of "professional development value" offers a helpful approach to evaluating different measurement techniques.
- Whether the CPD measurement model (Figure 2.3) is useful in supporting the evaluation of measurement techniques.
- Whether additional guidance on implementing IES 7 in the form of an International Education Practice Statement (IEPS) would be helpful to member bodies.

Feedback on these or any other topics or issues related to CPD should be sent to

International Accounting Education Standards Board, 545 Fifth Avenue, 14th Floor New York, NY, USA 10017

We would like to take this opportunity to thank Professor Andy Friedman and Susannah Woodhead of PARN for undertaking this research and working collaboratively with the IAESB in its finalization.

Henry Saville Chair of IAESB June 2008

APPROACHES TO CONTINUING PROFESSIONAL DEVELOPMENT (CPD) MEASUREMENT

TABLE OF CONTENTS

Execut	Executive Summary	
1	Background	1
1.1	Introduction	1
1.2	What is CPD and What is its Purpose?	1
1.3	CPD Measurement: Inputs and Outputs	
1.4	CPD Measurement and Different Outputs from CPD	4
1.5	A Model of the CPD Process on Which to Base the CPD Measurement Model	
2	A Model of CPD Measurement	7
2.1	Introduction	7
2.2	Inspiration for the Model	7
2.3	Professional Development Value	9
2.4	Professional Development Value Measurement and the Public Interest	11
2.5	The Distinction Between Outputs and Results	12
2.6	The Overall Model	13
2.7	Using the Model	14
3	Mapping the Cases	16
3.1	PDV Measurement Scale: What the Levels Mean	16
3.2	The Cases	25
3.2.1	Chartered Institute of Management Accountants (CIMA)	26
3.2.2	Construction Industry Council (CIC)	28
3.2.3	Royal College of Psychiatry (RCPSYCH)	30
3.2.4	The Southern African Institute of Chartered Accountants (SAICA)	32
3.2.5	Pharmacy Council of New Zealand (PCNZ)	33
3.2.6	Chartered Institute of Public Relations (CIPR)	35
3.2.7	Case X	37
3.2.8	Association of Chartered Certified Accountants (ACCA)	39
3.2.9	The Institute of Information Technology Training (IITT)	42

3.2.10	Institut der Wirtschaftsprufer in Deutschland E.V.	44	
3.2.11	Institution of Civil Engineering Surveyors (ICES)	46	
3.2.12	College of Pharmacists of British Columbia (CPBC)	48	
3.2.13	Case Y	51	
3.2.14	Institute of Certified Public Accountants of Singapore (ICPAS)	53	
3.2.15	Institute of Certified Public Accountants of Kenya (ICPAK)	54	
3.3	Scoring Process	55	
3.4	Observed Routes to Various Levels	59	
4	Profiles and Paths		
4.1	Introduction	61	
4.2	Profile 1: Supporting the Reflective Practitioner	62	
4.3	Profile 2: Planning for Professional Development Value	64	
4.4	Profile 3: Measuring Results	67	
4.5	Anomalies	70	
4.6	Conclusions	72	
5	Analysis of Issues	74	
5.1	Introduction	74	
5.2	General Consensus on Input vs. Output Measurement	74	
5.3	Different Techniques for Output Measurement	75	
5.4	Broad Approaches to Output Measurement: Self Assessment	80	
5.5	Broad Approaches to Output Measurement: CPD Auditing, Auditors and Assessment	81	
5.6	Strategically Determined Directions for Professional Bodies	82	
5.7	Economically Determined Directions	84	
6	Summary of Findings and Ideas for Future Work		
6.1	Introduction	86	
6.2	Input vs. Output: A Reprise	86	
6.3	Is a Balanced Approach Best?	90	
6.4	The Future of CPD Measurement and Ideas for Further Work	91	
6.5	Final Remarks	Q/	

App	endix A	Literature Review	9			
App	endix B	Evidence from Four Countries: Australia, Canada, Ireland and the UK	12			
App	endix C	Case Studies	13			
App	endix D	Interview Templates	16			
App	endix E	Bibliography	17			
Figu	res					
1.1	Examp	le of a CPD Cycle				
2.1	Initial I	Prototype Model				
2.2	Basic S	tructure for Revised Model				
2.3	The Model					
3.1	Measurement Scale for Planning					
3.2	Measurement Scale for Action					
3.3	Measur	rement Scale for Results	2			
3.4	Measur	rement Scale for Reflection	2			
Tabl	les					
A.1	Compone	ents of Definitions of CPD	99, 10			
B.1	Summary	of PARN Surveys of Professional Bodies	12			
B.2	CPD Pol	icies and Types of Compliance Requirements	12			
B.3	Changes	in CPD Compliance Policies Between 2003 and 2006	12			
B.4	Measure	ment of CPD Participation	12			
B.5	Basis for	Input Measures of CPD Participation	12			
B.6	Methods	of Gathering Evidence of CPD Participation	12			
B.7	CPD Mea	asurement Philosophy by Size of Professional Body	12			
B.8	CPD Mea	asurement Philosophy by Sector	12			
B 9	CPD Me	asurement by Income	13			

Executive Summary

This project explores various approaches to CPD measurement employed by professional bodies from various sectors internationally.

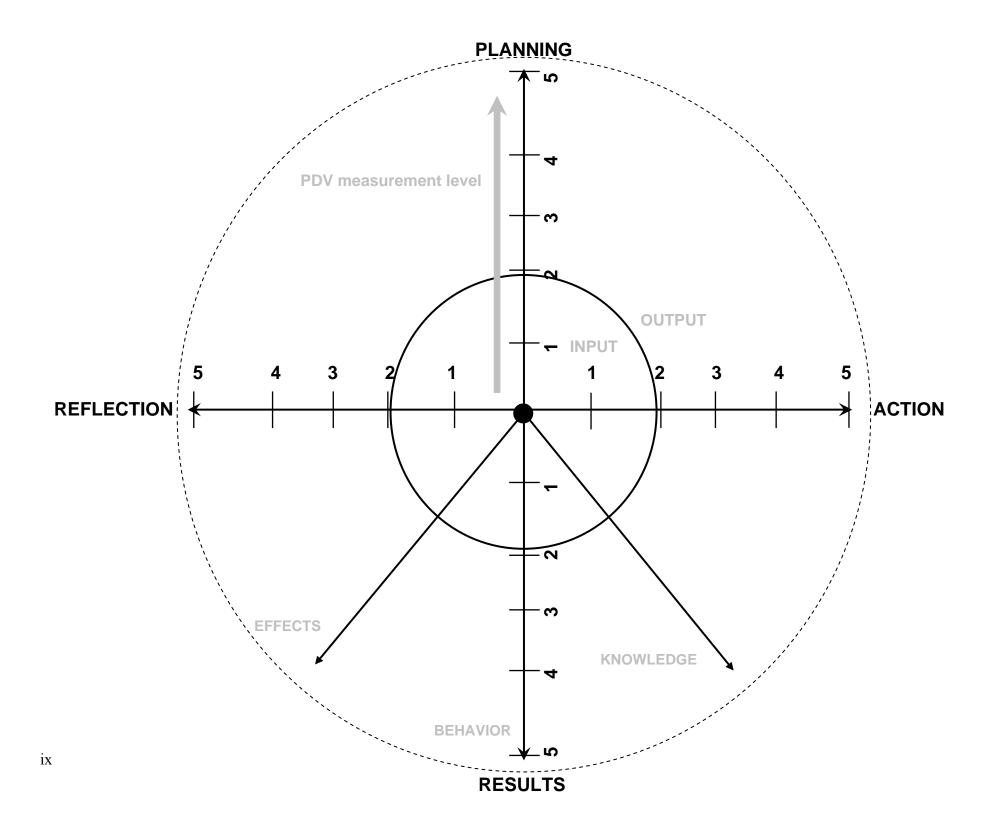
A fundamental theme of this paper is the debate between input and output-based CPD measurement. Input-based measurement has recently been brought into question by many professional bodies. These bodies recognize that simply recording the time spent on CPD does not necessarily indicate that anything has been learned, or that CPD will lead to any change in practice. In a climate of increased accountability and external pressures, professional bodies are turning to output-based measurement techniques that can measure exactly what input-based measurement cannot: the impact of CPD on the professionalism of practitioners.

There is some resistance to the implementation of output-based measures, including perceived cost, and professionals feeling as if they are being "tested." The aim of this paper is to find out what professional bodies are currently doing in terms of CPD measurement, and to understand the success of different types of systems. This will result in an informed analysis of the arguments for and against input and output-based measurement systems. We discovered that there are many steps along the way to a fully output-based system, and that successful output measurement is not as far from reach as many professional bodies may suspect.

Interviews were held with representatives from 15 professional bodies, from which case studies were written; these formed the basis of the research. Information from the case studies was then carefully analyzed by the research team at PARN, not only to record the details of the various measurement systems, but also to derive general trends and attitudes towards CPD measurement, and to gather valuable advice for other professional bodies looking to review their CPD policy.

The information gathered from the case studies was complemented by an in-depth literature review (Appendix A) covering the theoretical knowledge base surrounding CPD as well as educational and training assessment techniques and measurement tools. Data from the PARN "Professionalization of Professional Bodies" survey (Appendix B) also added weight to the knowledge base for this project.

At the heart of this paper is a model of CPD measurement that acts as a template that can be used to illustrate and compare various approaches employed by professional bodies.



Examination of literature about CPD, as well as an evident trend within professional bodies, suggests that modern CPD schemes more often than not employ what is commonly known as the "CPD cycle" to guide members through the cyclic process of CPD; moving through four phases planning, action, results and reflection. The CPD cycle has been used as the basis of the model developed, and our examination of measurement systems will discuss each phase of the cycle individually. (For a full explanation of the development and evolution of the model, see Chapter 2.)

The model (a) needed to incorporate the vast diversity of sophistication of CPD measurement revealed by the case studies, and (b) had to show the different measurement techniques in some sort of hierarchical order for comparison and benchmarking. For this reason we developed a method of "scoring" the measurement techniques according to the accuracy of their detection of the impact of CPD on the professional. To help understand this system, we developed the concept "professional development value" (PDV) which represents the impact of CPD on the professional development of an individual as defined by the stated purpose of CPD. We assessed how well the measurement technique of each professional body was able to identify the occurrence of PDV due to CPD, and further, the accuracy with which it could distinguish between higher or lower PDVs.

The model incorporates a scale at each phase of the cycle to establish how well a particular measurement technique can detect PDV. The placing of the technique on the scale is referred to as the "PDV measurement level" (i.e. the level of accuracy with which it can detect or measure PDV).

The "accuracy" of a measurement system in identifying PDV can be broken down into two related considerations:

- 1. The accuracy with which the measurement system can distinguish between different PDVs; and
- 2. The highest PDV it is capable of detecting.

The "accuracy" referred to in point 1 describes the ability of a measurement system to identify and differentiate between different PDVs, i.e. low accuracy would refer to a system which could merely identify whether or not any PDV had been achieved. A more accurate system could for example, identify the attainment of low, medium or high PDV. A highly accurate measurement system in the context of point 1 would have a greater number of levels between "low" and "medium" for example.

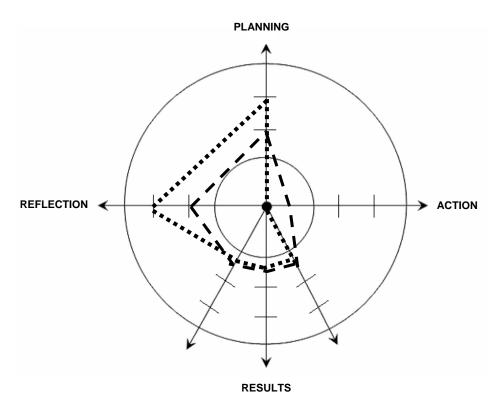
Point 2 needs some explanation. It can be illustrated by reference to input measurement, and its inability to discern higher PDVs. Input measures can only (at best) demonstrate that something was done, but the value or impact of that activity cannot be detected. Input measurement is obviously at the low end of the scale, but there is a range in the ability of output measures to perform this function. For example, a simple output measurement at the results phase of the CPD cycle is self-assessment against learning objectives—simply stating whether or not they have been met. This measurement system can detect only low, or rather, generic PDV, that is, that there has been some impact or value. But it does not reveal what kind or how much impact it has had, how well it has improved practice or specifically how and to what extent it has had an impact on clients; furthermore it does not identify any unexpected results beyond those stated in the learning objectives.

Chapter 3 includes a detailed explanation of the scale, examples of what qualifies at each PDV measurement level, and examples of various routes to each level.

After analysis of the elements of measurement systems, the various systems were plotted on the model (see Chapter 3). This provides a visual aid to understanding the different systems, and how they compare and relate to each other.

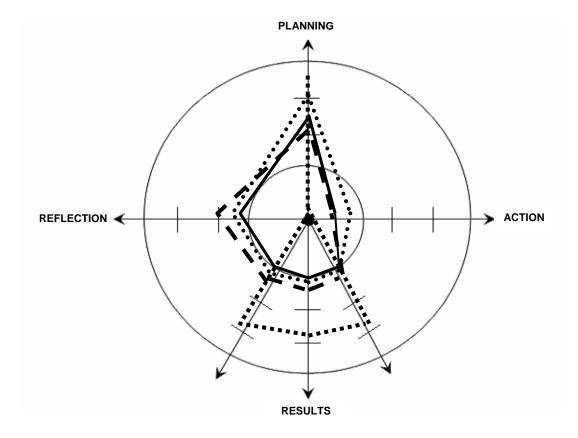
As a result of this "mapping" process, three main patterns were observed. In Chapter 4, the similarities between the measurement systems encompassed by each pattern were discussed to generate a "profile" detailing motivations and limitations that may have shaped the particular observed pattern. The range of profiles demonstrated in this chapter shows the value of the complex model. It demonstrates clear differences in approaches to measuring CPD connected to different views of the purpose of CPD.

Profile one, "Supporting the Reflective Practitioner" generally placed a strong emphasis on the reflection and planning phases of the cycle, showing less accuracy when measuring the results phase.



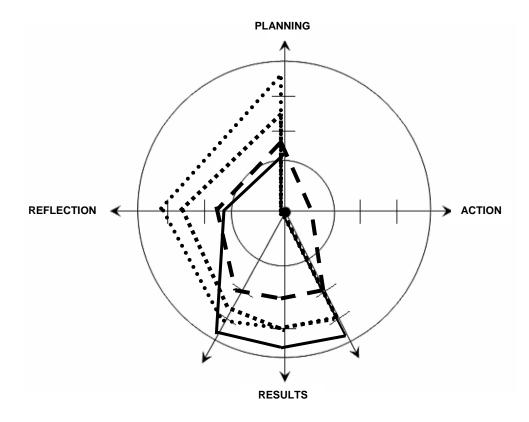
Professional bodies included in this profile were characterized by common features including (a) a liberal attitude towards what contributes to CPD, and (b) their view on monitoring and assessing records. They tended to focus on the personal and professional development of individual professionals.

Profile two, "Planning for Professional Development Value" emphasized planning, with various PDV measurement levels at the reflection and results phases, generally measuring the action phase by inputs.



Professional bodies within this profile tended to be non-regulatory and to give individuals the responsibility and autonomy to self assess their CPD against a well developed and guided plan.

Profile three, "Measuring Results" contrasted with the first two by placing the emphasis, sometimes exclusively, on the results phase of the CPD cycle.



Interestingly, all the cases included in this profile were from the medical sector and hence had a high level of responsibility regarding the competence of practitioners and indeed, the public interest.

Chapter 5 focuses more on general issues surrounding CPD measurement, and discusses some of the attitudes, opinions and advice that came through in the case study interviews. The pros and cons of both input and output-based measurement are weighed up, and factors involved in the decision to implement one or the other are considered, such as the relative benefits of various output-based measurement techniques available. We also look at how external pressures might influence the type of measurement approach adopted, and look at ways to reduce costs in implementing output-based schemes, such as the accreditation of employer development schemes. We discuss why the most sophisticated output-based schemes are not necessarily the best for all professional bodies, and stress the importance of careful analysis of strategy, purposes and resources when revising a CPD measurement system. An important revelation in this chapter was that a measurement system with a high PDV measurement level does not have to be very expensive. We analyze ways in which self-assessment can be supported to make it reliable and valid enough to warrant a high PDV measurement level, specifically by auditing self-assessed CPD records (the detail of which can vary greatly, depending on the available resources).

EXECUTIVE SUMMARY

In the final chapter, general findings on the input versus output debate are summarized, and ideas for further work to modify the model are proposed. The majority of case study organizations had experienced highly positive experiences with output-based measurement systems. One interesting consequence of moving from a rigid input-based scheme towards outputs was that professional bodies were able to give autonomy back to their members by not controlling access to CPD activities. They did not have to tell individuals what to learn or what would be useful for them; it was now up to the individual to show that there were useful outputs from the CPD which they chose for themselves.

In the light of requirements for accountability and transparency in the modern climate, outputmeasurement is in demand, and is hence a rapidly growing phenomenon. Along with this increase in demand come rapid developments in the field, particularly in the technology used to support CPD. Output-based CPD is therefore a moving target, and the frontiers of what is expected, possible, and indeed affordable, are changing rapidly.

Chapter 1 Background

1.1 **Introduction**

In this paper, we explore approaches to CPD measurement employed by a range of professional bodies. Examples of good practice are given, detailing output-based approaches to CPD measurement.

A model of CPD measurement lies at the heart of this paper, a model that enables various measurement methods and techniques to be evaluated for their accuracy in measuring the impact of a CPD activity on PDV.

Although we generally recommend that professional bodies adopt output-based measures for CPD, specifically those that identify a higher PDV, we do not recommend that specific techniques or approaches to output-based measurement are appropriate for all professional bodies in all circumstances. This is because the concept of CPD is itself complex, and the purposes it serves vary between professional bodies.

In the next section, issues concerning CPD measurement are put into perspective through a discussion of the complex and varied nature of CPD. Because CPD has many purposes, what is to be measured and measurement methods are also complex and varied. In addition, we emphasize that CPD is a rapidly developing phenomenon, and that this affects the methods by which it is currently measured. With these issues in mind, the concepts "input-based," "output-based" and "combination" CPD measurement are introduced in the context of the different purposes of CPD.

1.2 What is CPD and What is its Purpose?

1.2.1 Discerning purposes from definitions of CPD

The following commonly used definition of CPD was developed as far back as 1986 by the Construction Industry Council (UK). However, Friedman et al. (2000) found that it was still the most commonly cited definition of CPD among UK professional bodies in 1999.

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

Within this definition, multiple purposes of CPD can be observed:

- CPD is concerned with maintaining knowledge and skills. More recently, this would be summarized as maintaining one's competence or competencies; in other words, CPD is about keeping up-to-date.
- CPD improves and broadens knowledge and skills; that is, CPD is intended to support future professional development.
- CPD develops personal qualities necessary to execute professional and technical duties; such personal qualities as may be needed to achieve the above two purposes.

The label "CPD" was specifically chosen to embrace these differences in the purpose of post professional qualification development. Gardner (1978: 2-3) wanted the label to embrace informal (or incidental) learning that would normally be achieved as part of actual practice (what

we now call "work-based learning"). "CPD" was chosen because it did not suggest a divide between education and practice. The term CPD was intended as a more formal and more public way of organizing what professionals did informally as part of their working lives.

The purpose of CPD depends on its intended beneficiary. The second purpose above relates largely to the individual professional as the beneficiary. CPD supports individual professionals in developing and broadening their knowledge and skills, which can then support their career development. The third purpose benefits individual professionals, but also affects clients and employers. The first purpose clearly benefits clients and employers, but also contributes to the reputation of the profession as a whole and the professional body as well as public interest. All these purposes can benefit wider stakeholder groups, though perhaps the first purpose benefits them more directly.

Although the three different purposes listed above are contained in this popular definition of CPD, it must be recognized that not all professional bodies define CPD in this way (Friedman et al., 2000: 47). Research indicated that a substantial number did not define CPD as systematic or planned. Also, a number of professional bodies included other characteristics in their definitions. For some, CPD explicitly benefits stakeholders beyond the individual professionals themselves: the profession, the professional body, employers, society, or the general public.

In the model of CPD measurement developed in this paper, CPD is viewed as a process that involves different phases. Some professional bodies regard all of these phases to be the responsibility of individual practitioners, and outputs from them to be assessed by the professionals themselves. Other professional bodies expect practitioners to assess their CPD in relation to only one or two of these phases, and fewer still audit these returns.

In contrast, however, some professional bodies have taken responsibility for supporting selected phases, and provide not only measurement of one or more phases, but also take responsibility for the output itself. They do this by providing CPD events and learning opportunities, as well as by providing detailed formats that shape the output contributions of individual practitioners.

1.2.2 Discerning purposes from compliance policies

According to survey data in Appendix B, between a quarter and a half of professional bodies in the four countries surveyed had voluntary CPD compliance policies. It is likely that professional bodies with voluntary policies regard CPD as primarily a way of supporting the personal and professional development of individual practitioners. Between a third and three-quarters of professional bodies in those countries had either a compulsory policy or a mixed policy (which almost always included compulsory CPD for some category of membership of the professional body). These professional bodies are likely to view CPD as a means for maintaining competence.

Regarding CPD as the responsibility of individuals will often be expressed either as (a) a policy of voluntary compliance with the CPD activities offered, advertised, or accredited by professional bodies, or (b) what is known in some countries as an "obligatory" CPD policy, perhaps formalized in a code of conduct.

Obligatory CPD is a traditional approach. It arises from the heart of the traditional relationship between professionals and the organizations that represent or regulate them through a professional code of ethics or code of conduct. The code contains a series of professional obligations, owed primarily to clients/patients, but also to society, to the profession and to other stakeholders. As noted in Appendix B, obligatory policies towards CPD are not recognized in Canada, but are quite common in Australia. In the UK and Ireland, they appear to be declining. One would expect those with an obligatory policy to consider CPD as a matter of keeping up-to-date and maintaining competence, as these phrases are often included in ethical codes (see Friedman et al. 2005).

1.3 **CPD Measurement: Inputs and Outputs**

Roughly between 20% and 40% of professional bodies in the four countries surveyed (as shown in Appendix B) have no formal CPD measurement scheme. These tend to be smaller professional bodies with voluntary policies.

Traditionally, those that have measured CPD participation have done so in terms of inputs. The most common input schemes have specified a certain number of hours of CPD per year, or a certain number of hours over a longer time period. Some professional bodies limit what can count as CPD to activities such as attending events organized by the professional body, or training offered by accredited agencies. Others allow individual professionals to count informal activities such as reading journals or other forms of private study.

One way to develop input-based measurement schemes involves converting hours into points, with some activities counting for more points than others (for example, giving a paper at a conference would count for more than merely attending).

As noted in the literature review (Appendix A), input-based measurement of CPD has been considered inadequate by many. Input-based CPD schemes do not directly indicate whether any learning, change in behavior on the job, or impact on the organization has taken place. Measuring only by inputs appears to be based on the idea that whatever is done under the CPD scheme is useful for achieving the purposes of CPD. This presumes that all CPD activities allowed under the scheme will be of sufficient quality to lead to professional development and that the individuals attending will be sufficiently attentive and receptive to reap the benefits. However, even though a purely input-based approach does not measure whether or how much learning has taken place, it does provide an easily quantifiable record of participation in CPD that can justify sanctions where necessary. It is relatively cheap to implement, and does not require a high level of resources to maintain.

In the past a link has been suggested between CPD compliance policies and whether CPD is measured by inputs or by outputs. Rapkins (1996), basing her conclusions on work carried out in the early 1990s, distinguished a "benefits approach" to CPD from a "sanctions approach." The purpose of the benefits approach was to raise the status and profile of the professional body. The sanctions approach was used to demonstrate that members are up-to-date. According to Rapkins, newer professional bodies tended to adopt a benefits approach, with CPD being voluntary and output-based. Older, more established professional bodies, particularly regulatory bodies, tended to adopt the sanctions approach, with compulsory compliance policies and input-based schemes. This appears to be counter-intuitive. If the aims are to demonstrate that skills are up-to-date, one would expect that an output-based approach would be preferred. However, recognizing that input approaches are easier to quantify than an output-based approach, are cheaper to maintain and that in the early 1990s they were far better understood, the connection becomes more understandable.

Conversely, measuring CPD by outputs has serious drawbacks, due to the greater resources required to do so, and the difficulty of accurately measuring outputs, particularly if the output of concern is a change in professional practice that leads to improvements to client/patient care or organizational performance. The effects of CPD on these outputs are difficult to isolate from other factors.

Another factor holding output-based CPD measures back has been the difficulty of precisely defining the intended outputs of CPD. There are differing opinions on what CPD measurement is intended to indicate. This is bound up with differing views on the purpose of CPD and, indeed, the very notion of what CPD is. Output-based CPD measurement can refer to the extent to which and how well professionals are maintaining, developing and broadening both competence and personal qualities. CPD output may have to be judged on the degree to which it is systematic or planned, and it may involve a range of beneficiaries of those outputs: beneficiaries who are likely to be interested in different outputs, or a different balance or pattern of outputs, than the individual professionals themselves.

In addition there is the problem that output-based CPD measurement is a relatively new phenomenon. The technology of output-based measurement is not well developed, particularly in relation to baselines of expected practice or organizational performance. The situation is, however, changing.

As the case studies provided in Appendix C demonstrate, new experiences with output-based CPD measurement are emerging, and as they do, new techniques and approaches are being developed from which lessons can be learned.

What has become clear throughout this research is the possibility of moving towards an outputbased approach to CPD measurement through a series of small, manageable steps, rather than by converting in one major overhaul of policy. Not only are these small steps possible, but they would help ease professionals into a new way of thinking about and doing their CPD with minimal resistance.

Professional bodies that incorporate output at some or even just one of the phases of the CPD cycle, and implement a "combination" approach to CPD measurement, are certainly moving towards an output-based system without necessarily abolishing input measurement at the action phase of the CPD cycle. Outputs can be measured without measurement at the results phase. Increase in knowledge, change in practice—all the things commonly associated with the term "output" within the context of CPD—(a) actually constitutes only one of the four stages of the CPD cycle, and (b) are typically the most difficult and resource-intensive to measure or assess. Professional bodies should consider outputs at every stage of the CPD cycle: by implementing a simple plan or reflection template into a CPD scheme, a professional body has made the change to an output-based measurement system without perhaps realizing it. Even these subtle introductions will help make CPD more effective, and will present a positive, transparent and accountable image to the general public. Professional bodies can introduce elements of output measurement without prohibitive cost, and with tangible success.

1.4 CPD Measurement and Different Outputs from CPD

Measurement of CPD output is a relatively new activity. Currently, output measurement is not well understood, and the extent to which it takes place is relatively unknown. Many professional

bodies have not even thought of output measurement as an option, and they are unaware that others are doing it. In addition, there are many different methods of measuring CPD by output. In part, this is because many different things may be regarded as desired outputs of CPD. This reflects many different views of what CPD is, or what it should achieve. Also, different levels of effort can be put into CPD measurement. This leads to different levels of detail and rigor among those attempting to measure CPD by output.

However, it is in relation to the object of CPD that differences in definition have particularly important consequences for CPD measurement. Several possible objects of CPD are listed below:

- To improve the capacity of professionals to develop their technical and scientific knowledge
- To improve the personal and ethical capacities of professionals
- To ensure that professionals fulfill their responsibilities and tasks or duties
- To allow professionals to improve their performance in their current role
- To allow professionals to take on new roles
- To improve career prospects with current employers or in current practice
- To support career progression to new employers or to different practices

For the last two of these there is also an underlying tension between whether CPD should (a) support new roles and progression for professional employees within their current organization, or (b) support what is best for their careers, which may be positions outside the organization.

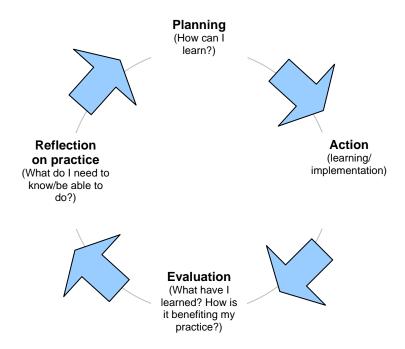
Methods for measuring improvements to skills, knowledge, competencies, or expertise can be very different from those that could effectively measure personal qualities, attitudes and capabilities. Methods of measuring performance in current roles can be different from those used to measure ability or competency for taking on new roles. The methods one may use to measure contribution to existing organizational goals may be very different from methods used to measure the ease of transfer between organizations.

Considering the tension between (a) CPD as primarily personal and professional development, and (b) CPD as a means for professionals to maintain and develop their knowledge, skills and competence, we suggest that CPD is intended to embrace both and that output measures should be capable of reflecting both aims. We must develop a model of CPD measurement that takes into account both types of aims or objects of CPD output. In addition, we must develop a model that accommodates current and future changes in the techniques of output measurement.

1.5 A Model of the CPD Process on Which to Base the CPD Measurement Model

To take account of the different purposes of CPD in the model of CPD measurement developed in the next chapter, we believe it is essential to appreciate what is known as the CPD cycle. The background for this cycle and justification for its use are presented in Appendix A. Here, we reproduce the model of this cycle from the Appendix.

Figure 1.1
Example of a CPD Cycle
(Adapted from RPSGB "A Journey Round the CPD Cycle," 2004:7)



There are many other models of the CPD cycle. Some, for example, break down the planning phase into (a) identification of gaps between current and needed competencies, and (b) development of procedures to fill those gaps. However, the above four phases are the most common, and in the next chapter we begin our development of a model of CPD measurement using these four phases.

Chapter 2 A Model of CPD Measurement

2.1 **Introduction**

Few organizations actually measure CPD by outputs; those that do usually only require "evidence" of output. The quality or standard of this output is rarely "measured" in any systematic manner. Most professional bodies still only ask for a record of activities, without regard to the quality or impact of those activities. Very few require objective evidence of learning or change in behavior, while still fewer require evidence of the effectiveness of the learning or changed behavior in affecting services delivered to clients.

Many professional bodies have a notion of standard or quality of output, but do not have a structured or defined set of criteria or scale for determining this standard. The standard of CPD records seems to be determined generally in a simple manner: adequate or not adequate. Even this decision tends to be made rather subjectively.

There is, however, great diversity in (a) the robustness and accuracy of CPD measurement systems, and (b) their ability to identify what we have labeled the "Professional Development Value" (PDV) of the CPD for an individual. The proposed model acts as a framework to illustrate the sophistication and effectiveness of various measurement techniques evident in the case studies, and provides a scale for comparing the cases investigated. It also serves as a benchmarking tool for any professional body interested in evaluating and improving its scheme.

The purposes of CPD are multiple and complex. In addition, the relative importance of different purposes is changing. Any general model that can be used to guide professional bodies in deciding how to measure—and how to conceive of measuring—the outputs of CPD must allow for these complexities. They affect how CPD outputs are defined and therefore how they can or should be measured.

2.2 Inspiration for the Model

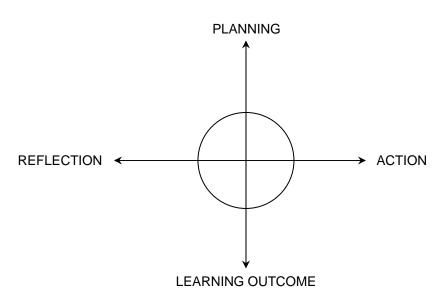
What came out of the literature review was the centrality of the Kolb cycle of experiential learning, or some adaptation of it, to modern CPD schemes. Simply employing the cycle (planning, action, learning, reflection—or an elaboration of the cycle, such as by adding application of learning) indicates a move towards output-based CPD, even if no measurement takes place. For this reason, it was decided that our model of CPD measurement must have the CPD cycle at its heart.

Building a system of CPD measurement on this cyclic model meant that there would be an individual system of measurement for each phase of the cycle. We noted that it was crucial to individually recognize each phase of the cycle as valuable in its own right, and that this must be taken into consideration when developing a comprehensive model of CPD measurement. If this were not to be done, a potentially crucial impact of an element of CPD could be neglected in the measurement system. We presumed that to identify measures of CPD that would actually indicate whether the purposes of CPD were being achieved, each individual phase of the cycle had to be completed to a certain standard, because each phase influences the next phase. For example, without reflection, planning will not be as well informed as it could be, and hence plans would not be as effective as they could be.

Although there is relatively little literature focused specifically on measuring CPD, there is considerable literature on what we regard as essential components of CPD, based on the concept of the CPD cycle. We therefore drew on literature regarding methods for measuring planning, learning, and reflection outside of the context of CPD. This literature suggested that diverse methods and tools could be used to measure each specific phase of the cycle, methods and tools that can provide a range of degrees of accuracy and reliability. We believe that most professional bodies are unaware of such methods for measuring learning, planning, or reflection, and that this may be attributed to the present lack of literature on CPD measurement.

Originally, we anticipated developing a single linear scale of finer and more valid measures of CPD output. However, our appreciation of the importance of the CPD cycle, and of the very different nature of each of its components, led us to develop different scales of measurement for each phase of the cycle. Our first attempt at this type of model is shown as Figure 2.1. This prototype model had four "rays," one for each phase of the CPD cycle as we perceived it at that time.

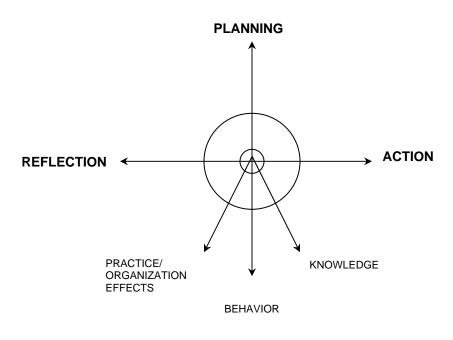
Figure 2.1 Initial Prototype Model



After further consideration of the literature, however, it became obvious that this model did not entirely reflect the complexities of accurate and thorough CPD measurement. Considering the theories of Kirkpatrick and Guskey, and the methods employed by training providers to measure learning, it became clear that the learning phase of the CPD cycle could not be measured in isolation. Within the learning evaluation phase of the cycle, we found that it was imperative not only to measure the results (in terms of changes in knowledge or skills), but also to measure the impact of that knowledge. Drawing from Kirkpatrick's four levels of training evaluation, we incorporated levels into the learning phase by creating three rays in the place of the previous one. For the purposes of CPD, learning results should not simply be measured by measuring an increase in knowledge. It is also important to measure the impact of learning on the behavior of

professionals and on other stakeholders and institutions; that is, the impact of CPD activities on clients and employers as well as on organizational aspects such as profitability and sustainability. The amended model is illustrated in Figure 2.2. We have summarized the three rays, originally called learning outcomes, as "results." This term comprises changes in knowledge and behavior and, ultimately, the impact of these knowledge and behavior changes on stakeholders and institutions, an impact that we have labeled as "practice/organization effects."

Figure 2.2
Basic Structure for Revised Model



RESULTS

2.3 Professional Development Value

What are we evaluating the various elements of the model against? What does it mean to have a "higher" level of output measurement?

The overall criterion by which aspects of CPD output measurement schemes are being evaluated is the notion of a scale that indexes output measurement techniques, approaches and overall schemes according to their ability to reliably and accurately detect and measure the achievement of aims (or purposes) of CPD in the broadest sense. We may summarize this as the ability of the output measurement scheme, and parts of it, to identify and measure not only a practitioner's personal and professional development but also development as a "true professional"— someone who is both (a) ethically and technically competent, and (b) capable of delivering professional services to a standard expected of a professional in that field. Putting it another way, we are aiming to develop a model that will help to indicate what measurement techniques are more or less effective at measuring the effects of pursuing CPD activities on the purposes of CPD.

This is the concept behind the phrase we use to indicate the overall purpose of CPD; that is, its "professional development value" or PDV. If a CPD circuit (one progression through the cycle) has a large impact on the individual's professionalism, it can be said to have a high PDV. Ideally, a measurement technique will be capable of detecting the correct PDV of a CPD circuit and of particular phases of the CPD cycle. Output measures have the capability of identifying PDV, and the model illustrates the extent to which various types of output measurement fulfill this capability.

The scale on the proposed model of CPD measurement will act as a gauge of how well the particular measurement technique can accurately detect the real PDV for an individual. We must emphasize that individuals may derive high PDV (that is, they may achieve the purposes of CPD to a high degree) without it being detected by an output measurement system. They may even achieve the purposes of CPD without following any formal CPD program at all. They may go to events without submitting evidence for it to their professional body; or they may reflect on their experiences and implement new ideas in their practice without filling out reflection forms and without submitting evidence of practice changes for assessment.

However, an output-based measurement system can itself potentially lead to PDV. By following the measurement system, certain professional habits such as reflection and planning can be developed, as can the follow-up and application of experiences of CPD activities in practice situations. Although there is a complex relationship between any measurement system and what is being measured, one result of CPD output measurement systems is almost exclusively attributable to the measurement system itself. That is the ability of the measurement system to be used as evidence that the purposes of CPD are indeed being pursued.

The model incorporates a scale at each phase of the cycle to establish how well a particular measurement technique can detect PDV. The placing of the technique on the scale is referred to as the "PDV measurement level," i.e., the level of accuracy with which it can detect or measure PDV.

The "accuracy" of a measurement system in identifying PDV can be broken down into two related considerations:

- 1. The accuracy with which the measurement system can distinguish between different PDVs; and
- 2. The highest PDV it is capable of detecting.

The "accuracy" referred to in point 1 describes the ability of a measurement system to identify and differentiate between different PDVs, e.g., a low accuracy indicates a system that could merely identify whether or not any PDV had been achieved. A more accurate system could, for example, identify the attainment of low, medium, or high PDV. A highly accurate measurement system in the context of point 1 would discern even more levels between "medium" and "high," for example.

Point 2 needs some explanation. It can be illustrated by reference to input measurement, and its inability to discern higher PDVs. Input measures can only (at best) demonstrate that something was done, without detecting the value or impact of that activity. Input measurement is obviously at the low end of the scale, but there is a range in the ability of output measures to perform this function. For example, a simple output measurement at the results phase of the CPD cycle is self-assessment against learning objectives—simply stating whether or not they have been met. This

measurement system can detect only low, or rather, generic PDV, that is, that there has been some impact or value. But it does not reveal the kind or extent of impact, how well CPD has improved practice, or specifically how and to what extent it has had an impact on clients; furthermore it does not identify any results beyond those stated in the learning objectives.

CPD may have resulted in huge PDV for a particular individual, but an output measurement at this lower level could not identify the magnitude of this value. This individual could not be distinguished from someone else for whom there had been a much lower PDV, even though objectives had still been met. A measurement technique positioned at a higher level on the scale can make this distinction. This distinction is also of further benefit, because it will add to the PDV for the individual as they will have a better idea of where they are and what they need to do in order to keep up professionally. Finally, it will be of further benefit to other stakeholders, by revealing a higher level of PDV achievement among professionals in that field (as long as most do in fact achieve this higher level of PDV).

The PDV measurement level is not influenced by the reliability of the measurement technique, only by its accuracy. Reliability of measurement techniques is perhaps worth considering for further research in this area.

2.4 Professional Development Value Measurement and the Public Interest

Professional development value, if achieved, will benefit society directly in the short term by improving professional services to clients. New techniques, adopted more quickly and with more clear connections to good professional practice, will benefit society by providing clients or patients with (a) new professional services, (b) improvements to existing services, or (c) services at a lower cost. Increased quality of professional services may less directly be expected to lead to reduced negative consequences of untreated problems, or increased positive consequences of healthier, more transparent, and more accountable financial records. These indirect effects will benefit the economy by reducing the number of days off work and facilitating financial transactions. They will also benefit society by raising the health and well-being of groups. Finally, PDV from more and better CPD will raise the status of professionalism in society, increasing the supply of young people to the professions, and inspiring more groups to aspire to professional status.

One can argue that PDV measurement serves the public interest in three broadly different ways: direct, semi-direct and indirect. The direct practice effects of professionals maintaining and developing their competencies are those that will directly benefit the general public as clients. They concern improvements to professional services or reduced costs due to improved techniques. Less directly, improved professional services will benefit entire economies and societies. The availability of more ethically and technically competent medical or financial services improves quality of life in terms of physical and financial health. A greater sense of security or trust in these services is also likely to be found. Indirectly, even dimensions of a CPD scheme such as supporting the personal and career ambitions of individual professionals can contribute to the public interest indirectly, if those dimensions encourage more individuals in society to take a more professional approach to their work.

On the other hand, achieving higher levels of PDV measurement comes at a cost, and this cost may be borne by people other than the professionals themselves by being passed on through higher professional fees.

One problem with PDV measurement in relation to the perceived public interest in CPD is that it is typically not well understood by the general public (and not even by many professionals themselves). In addition, the available ways of measuring CPD, and how professional bodies can increase their PDV measurement level, are not well understood by many professional bodies, their members or the general public. This derives from the complex and changing nature of CPD and the range of stakeholders involved. The concept of PDV measurement, as supported by the model of the CPD process developed here, is intended to illustrate current practice of output-based CPD measurement in a way that encourages benchmarking. In addition, we believe that the model and the analyses of the case studies in this paper can help clarify the issues involved in adopting an output-based CPD measurement scheme.

2.5 The Distinction Between Outputs and Results

"Results," as used in this report, refers to the impact of CPD activity—how it has affected knowledge, behavior, practice, or organizational development. It is only one phase of the CPD cycle, and therefore measurement of results is not measurement of the output of CPD as a whole. "Output" is generated at three of the four phases of the CPD cycle, including at the results phase. Output can come in the form of a personal development plan at the planning phase, or a reflective piece of writing at the reflection phase. We are loosely defining outputs as whatever emerges from CPD.

We can think about the difference between results and outputs in several ways. One is to compare direct and indirect results of CPD activities. In these terms, outputs are direct effects or results of CPD activities. Examples include a plan or a piece of reflection, or the results of an examination following a course. On the other hand, results can be indirect effects, effects that require some intervening factor. Outputs can also be thought of as intended effects. They are what is specifically required or requested by the professional body as evidence of CPD. Results are therefore both intended and unintended effects of CPD activities. What actually occurs as a result of CPD activities will depend on intervening and contingent factors, most of which are beyond the control of the individual professional, the direct supplier of CPD activities, and the professional body.

To gauge the full impact of CPD on individuals as professionals (rather than exclusively on their job performance), it is advisable to collect material at each phase of the cycle. But the usefulness of the measurement at each of these phases depends ultimately on the objectives of CPD as set by a particular professional body.

If the role of the professional body is simply to ensure competence, then measurement of results is perhaps enough, but to monitor the professional development of an individual, output at each phase will be equally valuable. For example, perhaps the development activity had no or little impact on practice. Reflection on it, and its lack of success, may contribute independently to the professionalism of the individual.

How much emphasis is placed on results may depend on the regulatory function of the professional body, or the risk involved in the particular profession. For example, a regulatory

body, or a profession where there is a life/death risk, may give priority to assessing results assessment rather than measuring overall output.

A more rounded measurement of output may also be advantageous where the individual is already competent in a particular area, resulting in no tangible change in knowledge or performance. However, the other elements will enhance the professionalism of that individual beyond competence.

2.6 The Overall Model

Figure 2.3, shown at the end of this chapter, illustrates the overall model of CPD measurement, including the scale for PDV measurement level.

The circular model represents the CPD cycle with a "ray" for each phase of the cycle:

- Planning
- Action
- Results, which includes:
 - Knowledge (change in knowledge)
 - Behavior (change in actions of individuals, or change in practice)
 - Effects (impacts resulting from changes in knowledge or behavior on practice that affects clients, organizational change, reputation, or levels of productivity or profitability)

Reflection

The "results" ray on the model is split into three, to show that by using output measures it is possible to measure at least these three distinct categories of results. Although they are distinct, and are indeed each valuable in themselves, they do in a sense form a natural sequence. One would assume that the first level of results would be to gain new knowledge. It would be the first to be achieved and the lowest level of results in terms of the overall purpose of CPD. The second level would be to implement that knowledge, and hence create behavioral results or a change in practice after the knowledge is acquired. The highest and most long-term level result would be for a change in behavior to contribute to professional services' effects, those that make a demonstrable difference to client well-being or to organizational goals.

Each ray has a separate scale to cater for the different measurement techniques applied to the different phases of the cycle. Any one of the rays in isolation would not accurately indicate an individual's proximity to the ideal impact of CPD on professionalism. And neither can there be one linear scale on which to measure PDV. Measuring PDV is a far more complex process than

⁻

Most organizations in this study do not currently measure these three distinct categories of results, but simply measure results generically. It is, however, important to retain the three rays on the model to correctly represent those that do, and to signify the potential for this valuable distinction as a future development to many existing schemes. Because of the general absence of this distinction, the tables in Chapter 3 do not include each category of results separately; instead, measurement schemes at the results stage are given a general score included in the table. On the mapping diagrams in Chapters 3 and 4, however, variations are shown where this distinction is made.

this. Measurement of PDV in general can be gauged through combining the measurements of each phase of the CPD cycle. In theory, measurement along any one of the rays is a type of micro-measurement that contributes to the overall macro-measurement of PDV. But this contribution will not necessarily be additive or consistent. For example, higher levels on reflection may contribute more to overall macro-measurement of PDV when they are combined with higher levels on planning, than when they are combined with lower levels on planning.

For each ray, we have specified five main PDV measurement levels, marking significant points in the progressive accuracy of the measurement system. These levels have different significance for each phase. The criteria for each phase of the CPD cycle are detailed in Chapter three.

The general significance of each level, however, is this:

Input
 Input/output frontier
 Output measurement of increasing sophistication and accuracy

The transition from input to output measures is illustrated on the model by the inner circle. The outer circle represents the "frontier" of CPD measurement: the most sophisticated output measurement system that can currently be envisaged by professional bodies. This circle marks the potential of measurement schemes in the current environment.

It is crucial to emphasize that the model is not representative of an individual's CPD output or their PDV, nor is it representative of the value of the professional body's CPD scheme as a whole. It is an indexing tool for the effectiveness of CPD measurement systems.

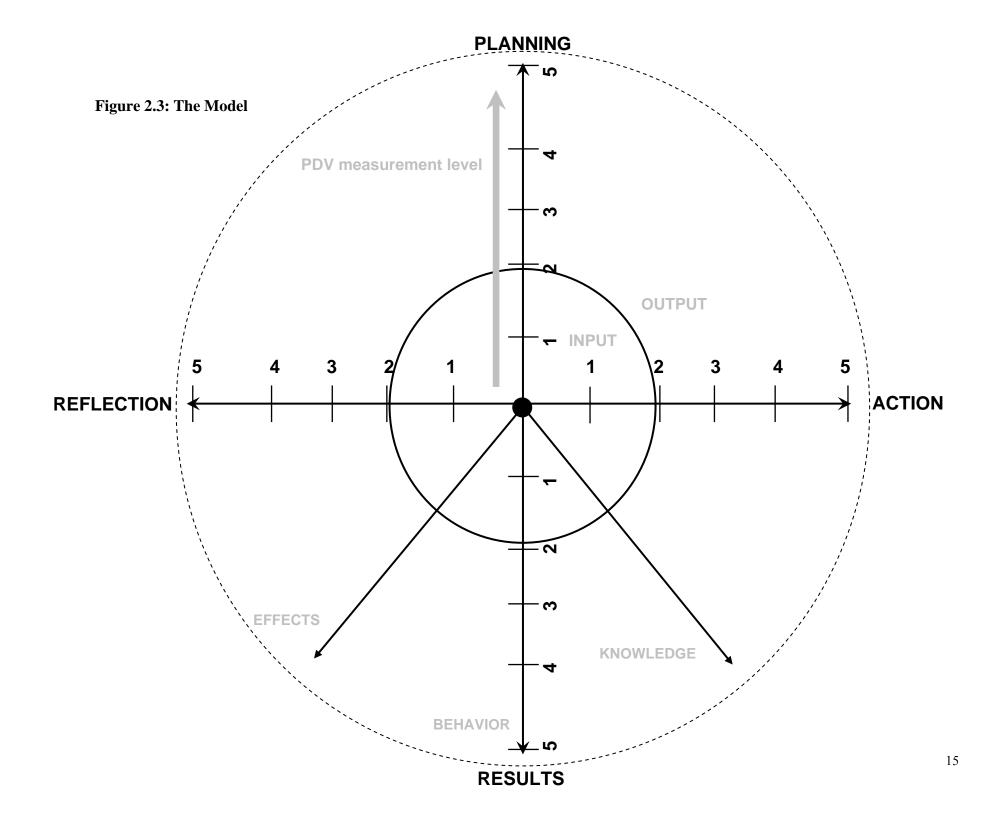
2.7 Using the Model

In the next chapter, the information gathered from the case studies will be illustrated on the model of CPD measurement, by plotting the position of each case study regarding their measurement of planning, action, results and reflection on each "ray" and joining up the points to form a web-shaped diagram. The position on each ray will be determined by the potential of the measurement system to accurately identify a specific PDV.

Because there is a great deal more to the measurement of output than simply the type of measurement technique (self-assessment for example), the position of a measurement system on the scale will encompass all aspects as well as contributing and supporting factors to the measurement that increase its accuracy and effectiveness. Case studies were scanned for any features that would affect how accurately CPD would be measured. All of these considerations were then pooled and allocated specifically to planning, action, results, reflection, or generally: the latter being factors which either applied to the CPD scheme as a whole or could apply to two or more phases of the cycle.

.

This will depend on the quality of the activities generally offered, and their general accessibility, as well as how closely they can be matched to the needs of individual professionals at particular stages in their careers, or at stages in their professional development.



Chapter 3 Mapping the Cases

3.1 PDV Measurement Scale: What the Levels Mean

3.1.1 *Limitations of the scale*

Figures 3.1 to 3.4 show the thinking behind the PDV scales for each phase of the CPD cycle. Several limitations should be kept in mind when reading these scales. Firstly, points on the scale are illustrated by using the techniques found in the 15 cases analyzed in this research project. Eventually we would prefer to identify different points on the scale by clear principles. A particular reason why building on so few cases yields only a rough measure is that what is indicated on the scales are not stable points, in the sense that the building of one step on earlier ones need not follow the same order for all professional bodies. Some professional bodies may begin the planning support with a simple tool that asks individuals to review their role. Others may begin straightaway with a detailed competency framework for the profession. Still others may, in future we suspect, begin with an online system, rather than using the online system as the "icing on the cake" (as it seems to have been for a number of our cases). The technology of output-based CPD measurement systems is changing rapidly, particularly in the area of online recording and monitoring, as well as the areas of online planning tools and course examinations.

We believe that more research is needed to provide a principles-based scale. The scales described below are crude, not only because they are based only on the techniques found in the cases, but also because the identification by techniques itself will be crude. This would be so even if we had more cases to draw from. There are several reasons for this. First, the "real" PDV measurement will, in the end, depend on how the technique is applied. Different techniques may be thought of as occupying a range on the scale rather than a specific point. Second, some of the measurement techniques are enough by themselves to justify the position where they have been placed in the hierarchy, while others must be combined with (or in a sense, rest upon) other techniques lower down the hierarchies. Simply put, audit of CPD on the results scale is needed to get you up to at least a level 3 and will, by itself, do so as long as there is something to audit. Online planners on the planning hierarchy, by themselves, do not provide much of an indicator of a high level of PDV in planning, unless they rest on a detailed competency framework.

One aspect of the model that we may speculate upon from our general knowledge, rather than from direct observation of the cases, is how to identify level 1 on the reflection scale and level 1 on the planning scale.

Level 1 reflection would involve reflecting only the quality of a CPD activity as an event, rather than any explicit connection of the activity to PDV. An example would be the "happy faces" exercise³ that those running events or short courses often use to gather feedback on their own performance and other aspects such as the quality of the acoustics or the catering. We regard these as input aspects upon which individuals are asked to reflect or evaluate. Whether the food was good or the sound system adequate can relate to whether anything was learned, or whether practice may be affected by attending the event. However, the connection is as an input. Examination of the happy faces sheets is not intended to lead to reflection on the PDV of participants; rather it is to reflect on what might be regarded as the PDV of the organizers of the

.

Happy face to record good aspects of the activity, sad face for bad aspects, thoughtful face for suggestions as to how the activity organizers can improve, etc.

event. Nevertheless this sort of exercise is not completely devoid of PDV for participants—we would not rate it at level 0 PDV, because carrying out the happy faces exercise may encourage participants towards reflection as part of their attendance at a CPD activity, even if they are not directed to reflect on the activity's contribution to their PDV. A happy faces exercise that does not direct participants to evaluate the contribution of the activity to their learning or practice may include such information. However, without clearly asking for such information, the mere completion of a record of the happy faces by particular individuals cannot be used as evidence that those individuals did in fact reflect on aspects of the activity that affected their PDV.

Similarly, planning exercises that are focused on how one can schedule attendance at CPD activities—how they may fit into one's diary in terms of other work or family commitments, or how one may logistically attend activities at different locations—would be rated as only level 1 on the planning scale, and within the input circle shown in the model. As with level 1 reflection, level 1 planning concerns planning in terms of CPD inputs rather than in terms of PDV achievement. It does indicate some experience with planning, and such skills could be directed specifically towards PDV in future. In addition, a planner that emphasized logistics could also be used by enterprising professionals to fill in deficient competencies, and to guide professional career development. Nevertheless, evidence of mere use of such a planner, without inquiring more deeply into whether it is being used in this manner, is of very limited use in identifying PDV.

Another aspect of the model worth pointing out is that the action phase scale is limited to values from 0 to 2. The scale is entirely within the input circle. Measurement of action or activities is by definition measurement of inputs. This does not mean that outputs cannot be inferred from inputs, but there is no direct evidence of outputs. If the range of activities that the professional body allows is limited to ones which have been carefully accredited, then it is more likely that higher levels of PDV will result. However, the technique of measuring by inputs cannot identify such higher levels of PDV; they can only be inferred indirectly. On the other side of this coin, the results scales do not show values between 0 and 2. One can be at level 0 if no results are measured, but as soon as any results are measured, that measurement must appear at level 2 or above, i.e., output, hence not within the input circle on the model.

3.1.2 *Input, output and combination approaches to CPD measurement*

An example of a pure input approach to CPD measurement can be found in the case of a professional body that collects and monitors records of registration for CPD activities. No examinations are conducted at the end of activities, and no evaluations are collected. However, in such cases, the activities that could count as CPD activities are often limited to those accredited by the professional body. A variation on this pure input scheme would be one where some proportion of the required CPD hours could be achieved through self-reporting of reading or other informal activity. Some detail may be required in order to show that the reading was done (for example listing what was read), but the individual reporting would not have to demonstrate that anything was learned from that activity. A points system could be established that gives greater weight to different activities, such as allowing a higher number of points for giving a presentation at an event than for only attending.

The model indicates combination systems if the star or radar diagram traced on the model contains some elements that are beyond the output circle and some that are within it. One

example is a system precisely like the ones described above, but where there is a required and monitored reflection form that specifically asks participants to reflect on the learning and/or behavior, and the practice or organizational effects of the CPD activity. If this is particularly sophisticated then it is possible for the shape to be strongly pointed at the reflection phase. Similarly, a scheme with a strong planning element that is tied to competency frameworks will still indicate a combination system if, for example, it does not require evidence of learning, behavior, or practice results, and fundamentally measures CPD participation by hours.

Finally, a pure output system requires evidence at each of the planning, results, and reflection phases of the cycle. It would not necessarily require any measurement of hours put into CPD.

3.1.3 *Planning scale*

The tables in this section of the paper crudely illustrate the general elements of a CPD measurement technique that are appropriate for each PDV measurement level. The listed principles are derived from pooling of all of the elements of measurement systems revealed in the case studies. An explanation, referring to findings in the case studies relating to the scale, is given below.

Figure 3.1 Measurement Scale for Planning

2 | Goals set

Assessment of needs

Planned activities/ timescale

3 Structured review of role and expectations

Loose competency framework

4+ Detailed competency framework with different areas for type of competency, or specific to certain roles

Online planner

Linking point allocation to different competencies

Prioritization

Individualization

Generally, among the case studies, a comparatively high standard of PDV could be discerned at the planning phase of the CPD cycle, due to the relatively common introduction of complex competency frameworks and online planning tools. A broad spread of PDV measurement levels among the case studies was also observed for planning, allowing a progression from level 2 to level 5 to be established as shown above.

A common basis for structured planning systems demonstrated by the case studies is a robust competency framework, giving members not only an idea of what they should be aiming for, but also the choice to tailor CPD to their specific needs. This also ensures that (a) any learning goals are relevant and worthwhile professionally, and (b) those goals are set in the context of what is expected by the public and other stakeholders. A competency framework may therefore be regarded as the first step in improving a planning system that simply asks its members to establish learning objectives. It will provide the potential for a planning system to achieve a PDV measurement level of 3 and above. It is however possible to have a competency framework, and yet remain below a level 3 PDV measurement level, as in the case of Case X where there is a loose competency framework. But the plan in Case X only consists of a statement of goal and learning need. Furthermore, it provides little guidance and support to help members determine these goals and understand the framework. It would be relatively easy for an organization such as the subject of Case X to achieve a higher level of PDV. Already having a competency framework already in place, that organization needs only to tighten it up, perhaps by dividing it into categories to make it more comprehensive and user-friendly, and to provide guidance to members on how to develop learning objectives using the framework. After a professional body puts a comprehensive competency framework in place, its PDV measurement level can be increased by adding complexity to that framework and categorizing it. The more detailed a competency framework, the more scope for individualization, and hence relevance of CPD for the individual.

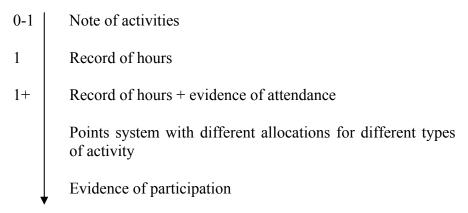
A higher PDV measurement level was also assigned for the provision of guidance and examples, and for the requirement of an analysis of role and an explanation for learning needs.

Generally, an online planner was the feature that placed some organizations at PDV measurement level 4 or above, as it makes the planning process easier and more accessible for the individual, and usually has some tool that suggests appropriate learning activities for selected learning objectives. It can also have the capability to aid the assessment of learning results.

The detail of the plan was another key dimension in assigning a PDV measurement level, with the lowest level assigned to organizations that merely state a learning objective, and the highest (for which CIMA serves as an example) assigned to those who (a) broke down role into key responsibilities and the consideration of various stakeholders, as well as (b) prioritized learning needs and considered learning style (as featured in the ACCA unit route plan).

3.1.4 Action scale

Figure 3.2 Measurement Scale for Action



Action is an interesting phase of the cycle in terms of measurement. It can only be measured by inputs. Because input gives limited indication of PDV, input measurement of action can only score between 0 and 2 on the scale (2 resembling the transition to output measurement). The most sophisticated input measurement of action can only score a maximum of just below 2 PDV measurement level.⁴

Whether action measurement can never indicate output is debatable, particularly if CPD is intended as a means to support the personal and professional development of individuals.

For example, the completion by an individual of the required amount of input hours and compiled a full portfolio of registration documents or attendance certificates, likely indicates that the individual has a professional attitude towards CPD, from which we could infer that they are developing themselves, and that by monitoring these pieces of evidence, the professional body is supporting this development.

In addition, we may see that a portfolio of records indicates the likelihood of an impact on PDV, particularly if the professional body accredits CPD activities, and therefore guarantees their quality to some extent.

There is, however, a certain circularity to this argument. For the portfolio to provide evidence that individuals are taking care of their professional development, we must also believe that those individual professionals have emerged from meeting initial professional qualifications with the right sorts of attitudes towards their own professional development. We must believe that they have actually attended the listed activities in a more active sense than merely being registered or even actually showing up. They must not show up to the provided activities without attending to them. They must not fall asleep, or answer their emails, or make telephone calls at such activities. They must take them seriously. Presuming that they will take them seriously is to

-

This may cause the mapping to look unbalanced, but it was decided to retain the structure of the model as it signified the intransitive position of action measurement within the input realm of measurement, and also retained the balance and simplicity of the model.

presume one of the main things that the portfolio is intended to demonstrate: integrity and a proper professional attitude towards their personal and professional development.

This may sound pedantic, but one must remember that PARN has been informed of many incidents of abuses of input-based measurement systems. In some circles, the extent of such abuses has led to a cynical attitude towards the whole idea of CPD. It threatens to bring CPD into disrepute. Some individuals do not carry out their obligations and responsibilities. The problem seems to be that most input-based systems are only backed up by monitoring attendance only by requiring attendance certificates. One of the cases did go much further and developed an CPD audit system to support such inputs, checking to find out if people really did attend. Issuing certificates at the end of activities only to those who stay to the end is another way of increasing the likelihood that such certificates indicate at least some PDV.

There are subtle differences in the PDV measurement value of action measurement. A simple documentation of activities undertaken will rate lowest, as this provides very little indication of PDV. Measurement of hours ranked slightly higher, as it gives a very indirect indication of PDV based on the assumption that more time spent on CPD equals a higher PDV.

Action measurement can rate between 1 and 2, moving towards output, by requiring some sort of evidence to support the basic input measures observed at level 1 and below. This type of evidence can vary. An invoice confirming payment for a seminar, for example, adds almost nothing to the accuracy of PDV measurement, and hence scores barely above PDV measurement level 1. If however evidence of participation is required, e.g. a participation certificate issued after completion of activities carried out within the seminar, or notes taken during an activity, this evidence indicates that more was done than simply attending, thus giving a more valid measurement of PDV.

Another way to achieve a score closer to level 2 is by assigning points that vary with the type of activity. If more points are given for an activity that is likely to produce a higher PDV, then the system is getting closer to measuring the impact of CPD, although this is still based on a broad assumption that certain activities will have a higher PDV for everyone.

3.1.5 Results scale

Figure 3.3 Measurement Scale for Results

2 Vague allusion to usefulness / impact of learning in unstructured manner

Provision of general questions to aid self-assessment

Result assessed informally against learning objectives—i.e., whether or not they have been met

A more thorough structure to self-assessment with guidance and direction

Criteria for different levels to look for during self-assessment

Audit of self-assessment

4 Objective scoring in combination with self-assessment

4+ ♥ Objective assessment methods

Peer/client appraisal

Objective statistical benchmarking (nationally)

Mixed assessment techniques tailored for different aspects of CPD

Professional bodies may see the results phase as the most important phase in terms of their reputation and public accountability. Some professional bodies have undertaken a pioneering effort to hone result measurement to ensure competence and accountability. Though the cases demonstrate a broad distribution of PDV measurement levels at the results phase (spanning the full range of the output scale), there is a noticeable concentration of measurement systems around level 2.

Level 2 generally indicates that results have been vaguely self-assessed against learning objectives, that is, without clear assessment criteria, simply stating whether or not these objectives have been met. The level of these scores varies around level 2, but the differences are so subtle and vague that it is difficult to sort them into any valid or clear hierarchic order.

Systems whose PDV measurement levels are concentrated around Level 2 could be identified as the systems implemented by professional bodies that have recognized the importance of measuring results as part of an effective output-based system, but have not yet made a point of honing that measurement system.

There could be various reasons for this:

- Professional bodies simply may not be aware of the potential for more accurate and objective measurement techniques;
- There is a lack of money, staff, or time to implement higher-level measurement; or
- Members are adverse to the idea of being assessed or having their competence questioned.

Bringing in objective assessment techniques for CPD results is certainly a resource-intensive endeavor. Case Y has spent a great deal of time and money creating its many objective assessment techniques. CPBC only offers a selection of objective techniques, such as practice audit and peer review, if a member has been unsuccessful in self-assessment. In this situation, the individual must make a substantial monetary contribution to subsidize the cost of practice audit. Paying CPD auditors income replacement and travel expenses to visit the particular practice are the most substantial costs involved.

Because of the undeniable cost associated with the objective measurement of results, it is common for CPD managers to shy away from trying to develop sophisticated results measurement, because they see objective assessment as the only option and they consider this too expensive. But measures can be taken to objectify self-assessment to make it a more robust form of assessment, and to push the PDV measurement level up to level 4. Objective measures only begin to come into play at the very top end of level 4.

A clear frontier marks the distinction between the group of systems at level 2 systems and above. To achieve a PDV measurement level of 3 or above, some criteria for self-assessment should be established, as well as some sort of audit or sign-off of the self-assessment.

Level 4 is characterized by features that "objectify" self-assessment, such as (a) a clear and comprehensive set of criteria for self-assessment, (b) high level audits of the self-assessment by trained CPD auditors, and (c) a requirement for specific examples to back up the self-assessment. All of these factors add to the robustness of self-assessment, hence improving its accuracy and ability to detect genuinely high PDV.

Level 5 signifies another barrier, the movement away from self-assessment. A system that implements successful objective methods of assessment will score a PDV measurement level of 5. Also contributing to achieving a higher level of 4 or 5 is a distinction between the different types of results (knowledge, practice, and results), and ultimately different assessment techniques to suit each type.

3.1.6 Reflection scale

Figure 3.4 Measurement Scale for Reflection

- 2 Open-ended reflection with little or no structure or guidance
- 3 Structured review of situation/role

Group reflection

4 Question templates

Questions linked to competencies

Audit of reflection records

Reflection is typically the most difficult phase of the CPD cycle to measure, as it is often a relatively personal and subjective endeavor. The thought process is generally challenging to capture. A recorded output of reflection may not capture the reflection undertaken by an individual, purely because their writing skills are not geared towards this type of exercise. Individuals are often unsure of what to record as their "reflection" and, similarly, assessors are unsure of how to go about evaluating someone's reflective piece of writing. In educational literature, different levels of reflection have been identified that are said to represent higher thought processes and critical analysis, and could be used as assessment criteria for reflective prose (see Appendix A).

None of the case studies examined used such criteria, and therefore measurement of reflection was generally of a low standard. Four out of the nine cases that measured output at the reflection phase have a measurement system that scored level 2, the lowest PDV measurement level on the scale. Such a score represents the provision of a section of a CPD record in which to write a reflective paragraph, but no guidance on content or structure to assist individuals. An open-ended reflective paragraph, without clear direction, cannot reliably distinguish between different PDVs, and cannot identify higher level performance, hence its low PDV measurement level.

In the absence of assessment criteria for reflection, the way to achieve an increased PDV measurement level is by providing structure, direction, and guidance. This at least provides more assurance that individuals are going through the correct types of thought processes, and focusing on relevant issues that will have an impact on their PDV. By checking that the relevant steps have been taken, it can be inferred indirectly that the reflection phase of the cycle will have a higher PDV.

A PDV measurement level of 3 represents some move towards a structured approach to reflection, for example by providing reflective question templates. Auditing of the reflection will also increase the PDV measurement level, as it will verify whether or not an individual has addressed the key issues. Another factor that will increase the PDV level of reflection is group reflection. It is argued that reflecting with others stimulates thought and makes the reflective process ultimately more effective.

Level 4 generally represents a combination of more detailed reflective question templates, audit of records of reflection, and group reflection. None of the cases generated a PDV measurement level above 4. Perhaps this could be achieved by implementing some kind of marking criteria for levels of reflection, as noted above.

3.2 The Cases

The mapping of the case studies will consist of four parts:

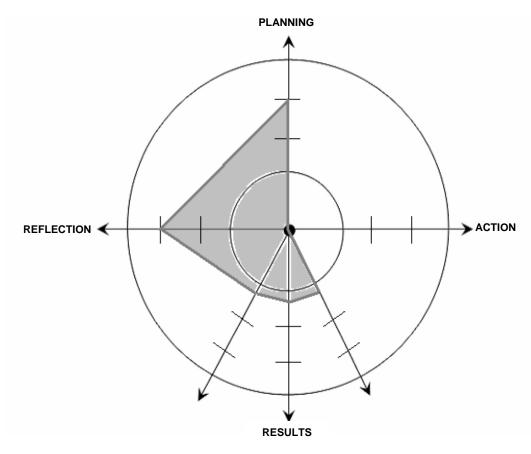
- (a) A summary of the case study, the full version of which can be found in appendix C;
- (b) A table illustrating the main features of the case study's measurement system at each phase of the cycle;⁵
- (c) A diagram of the case study mapped on the model; and
- (d) A table clarifying the PDV measurement level allocation of the case study.

Part b does not appear for case studies where the measurement system is purely input-based; the information in these cases is in part a.

3.2.1 Chartered Institute of Management Accountants (CIMA)

CIMA recently implemented an output-based CPD scheme involving a six-phase CPD cycle and competence landscape. A selection of records are audited to ensure completion of each phase of the cycle, but the quality of each record is generally not assessed. CIMA believes that it is important to give the individual the autonomy to self-assess, and to trust them as professionals to do this honestly. In the future however, CIMA would like to develop some quality standards from which members could benchmark themselves.

PLANNING	ACTION	RESULTS	REFLECTION
Prior to the official "planning" phase of the cycle, members are required to define their role, and then break it down into key responsibilities. They then assess where they are in terms of that role. They must consider the perspectives of various stakeholders, and assess whether or not they are meeting the stakeholders' needs. CIMA provides an online planner involving a "competence landscape," where members can identify gaps in their competence, and work out ways to best address these gaps, keeping in mind their particular job roles.	CIMA used to have an hour-based input measurement system, but saw this as a restriction to development, so currently have no measurement at this phase of the cycle.	The results phase is measured indirectly by reflection on the activities undertaken.	Reflection is seen as a "quality check point," where members look at what they have done, the effect it has had on various stakeholders, and whether or not it was successful. CIMA is developing a set of reflective question templates that involve individual reflection, as well as reflection in dialogue with a peer. They also phase workshops for group reflection.



Phase	PDV Measurement Level	Reasons for Level
Planning	4	Competence framework
		Online planner
		Define role
		Deconstruction of role into key responsibilities
		Assessment of learning needs
		Consideration of various stakeholders
Action	0	No measurement
Results	2-3	Results are considered during reflection, but there is no formal recording, structure, or assessment system specifically for this phase
Reflection	4	Reflective question templates
		Individual reflection and reflection in dialogue with a peer
		Workshops for group reflection
		Consideration of various stakeholders

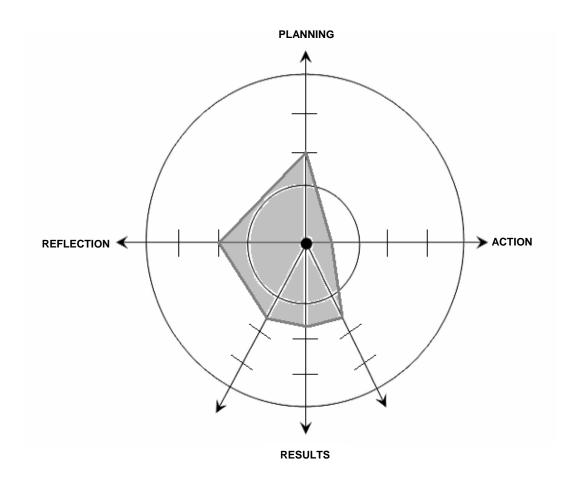
3.2.2 Construction Industry Council (CIC)

The CIC is an umbrella body that advises other professional bodies in the sector on their CPD schemes. It has developed a recommended CPD model, based on the CPD cycle, which measures outputs. It recommends the use of an appropriate framework of competencies or skills from which individuals can build their development plan. CPD measurement in the recommended scheme is by self-assessment against the development plan. Third party audit of CPD records is optional if practitioners require objective demonstration of their learning.

The CIC is aware of a certain resistance to output-based measures among practitioners, and recognizes the need to keep any output scheme simple to ensure that it will appeal to practitioners.

PLANNING	ACTION	RESULTS	REFLECTION
Before the planning phase, members do a structured review of where they are now in terms of their personal and professional experiences, and record that as a profile of areas where they are competent, and where they are not. Members also analyze their future needs by taking into account current and future job and career requirements. This analysis identifies priority areas for CPD which are recorded as profile needs. Members then identify the most appropriate activities to meet their profile of needs.	The member notes a detailed record of the development activities.	The development record shows intended objectives, what objectives actually occurred, and with what consequences. In the "assessment" phase of the cycle, members measure their results against their development plans and assess whether they have achieved their desired competencies. If they wish their CPD records to be audited, members must present a portfolio demonstrating their learning. This is then mapped against the criteria in the standards.	Reflection is evident in both the review and planning phase of the organization's cycle.

Phase	PDV Measurement Level	Reasons for Level
Planning	3	Competence framework suggested Structured review of situation Development of competence profile Priority areas identified and needs profile developed Consideration of current and future job/ career needs
Action	0-1	Note of activities
Results	2-3	Self-assessed against learning objectives set out in plan. Independent CPD audit optional.
Reflection	2-3	Evident in planning (Structured review of situation Profile of competencies)



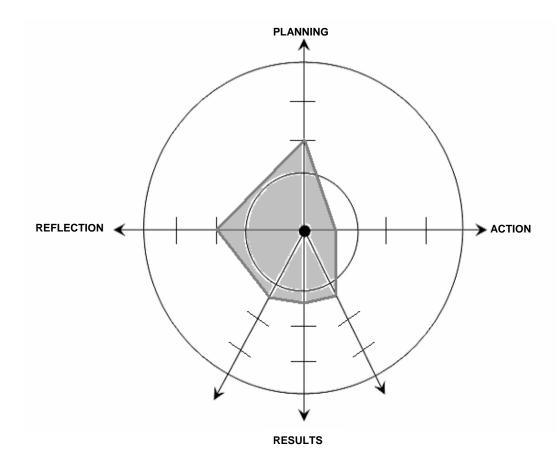
3.2.3 Royal College of Psychiatry (RCPSYCH)

RCPSYCH is unique among the professional bodies interviewed for this research, in that its CPD output measurement is done within peer groups. Planning, reflection and results assessment are done within these groups, and there is still an input requirement of 50 hours per year.

The College provides no detailed structure or guidance regarding the content of peer group sessions, but members are given direction. They are asked to think about their CPD in terms of knowledge, skills, attitude and social skills, and to look at four levels of practice, ranging from basic skills common to the profession to specific specializations.

One form summarizing the peer group discussion must be submitted to the College and a random selection is audited. As the College currently has limited resources for CPD, it does not have the capacity to assess these forms in any great detail.

A 4 1 1 · · · C T 4 501 D· 1	
At the beginning of the year, the peer group meets to discuss educational objectives and to develop a plan. Members must think about their objectives in terms of four levels and "domains." The only guidance given about the peer groups is that the group should challenge individuals' plans. The next policy will include guidance on objective setting.	Members reflect on the results of their CPD within peer groups. Group reflection has had a positive reaction from members who feel it is an effective method. No question templates/ objectives for the discussion.



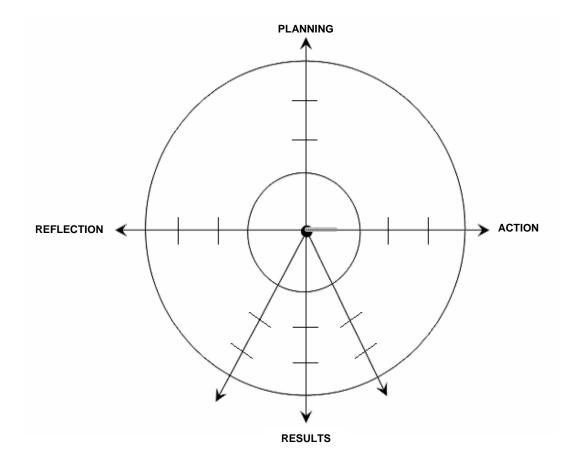
Phase	PDV Measurement Level	Reasons for Level	
Planning	3	No competence framework	
		Not submitted to organization	
		Lack of structure and guidance	
		Learning objectives developed	
		Through four levels of practice (general & specialist skills)	
		Through four domains: knowledge, skill, attitude and social skills	
Action	1-2	Hours + audit	
Results	2-3	Discussed in groups	
		No formal structure/ assessment system.	
Reflection	3	Group reflection in regular peer groups	
		No templates	

3.2.4 The Southern African Institute of Chartered Accountants (SAICA)

SAICA runs a mandatory CPD scheme that is input-based and requires 120 hours of CPD over three years, at least 50 per cent of which must be "verifiable." Members have the option to follow an output-based approach. However, as there is little available information or guidance, there is a very low uptake of this option.

The Institute is planning to move towards a fully output-based scheme, and are very interested both in developing a competency framework and in establishing accreditation of employer development schemes.

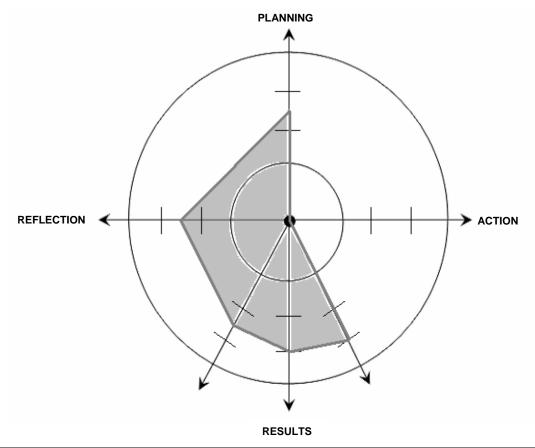
PLANNING	ACTION	RESULTS	REFLECTION
No information provided to members. Proposed development of competence framework	Input—120 hours over three years—distinction between verifiable and non-verifiable. Online log.	Optional—no guidance.	No information provided to members.



3.2.5 Pharmacy Council of New Zealand (PCNZ)

PCNZ implements an output-based scheme based on the CPD cycle and a detailed competence framework. The results phase of the cycle is self-assessed using a numeric "Outcome Credit Scale" that has three levels based on increase in knowledge and change in practice. Members must provide specific examples to validate the assigned credit. The CPD records are audited to a high degree by CPD auditors who are provided with a great deal of training and support.

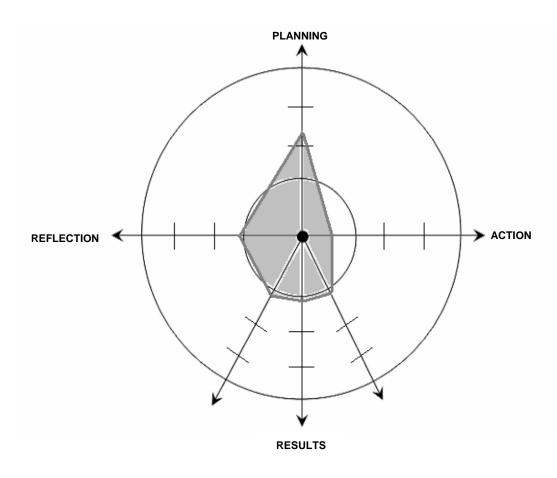
PLANNING	ACTION	RESULTS	REFLECTION
Highly detailed competence framework centered around seven professional standards. Examples of activities suitable for addressing various competences are given in the guidance. It is mandatory that a plan be completed, but it is not audited.		Outcome credit scale: Three levels to self- assess the results of CPD. Members need to think about new learning gained and change in practice. Members must provide specific examples to justify their scores. Scores, along with the evidence to back them up are audited to a high degree. Examples of the type of required evidence are provided.	Statements of reflection are made, and assessed by CPD auditors. Template questions are provided in the guidance.



Phase	PDV Measurement Level	Reasons for Level
Planning	3.5	Complex competency framework.
		Example documents.
		Mandatory but no audit of plan.
Action	0	No measurement.
Results	4	Outcome credit scale with three levels for robust and clear self-assessment.
		Specific examples must be provided to justify score.
		Examples of each level provided.
		High level CPD audit.
		Trained & paid CPD auditors.
Reflection	3.5	Reflective statements.
		Assessed by auditors.
		Question templates.

3.2.6 Chartered Institute of Public Relations (CIPR)

The CIPR operates a combination CPD scheme involving input measurement by hours, as well as a certain level of output required at each phase of the CPD cycle. The scheme is generally voluntary, but mandatory for certain levels of membership. CPD records are audited, but only for evidence to justify the number of hours claimed for the input requirement; the quality of the output is not assessed.



Phase	PDV Measurement Level	Reasons for Level
Planning	3	Competency framework
		Four strands/ themes to be addressed
		Learning objectives
		Must address how they intend to measure success
		One page development plan
Action	1	Hours + evidence

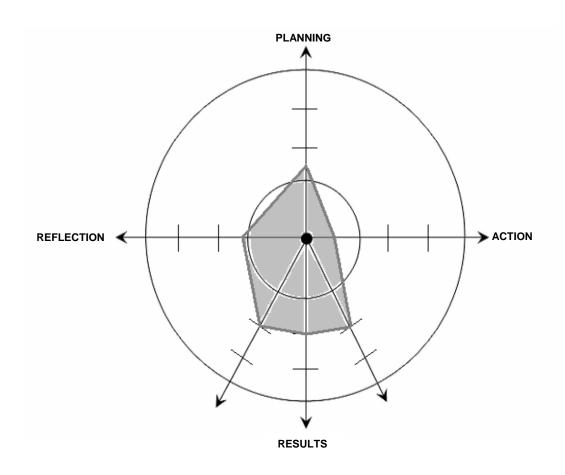
APPROACHES TO CONTINUING PROFESSIONAL DEVELOPMENT (CPD) MEASUREMENT

Results	2	Structured general questions for self assessment/ reflection
		No link to plan
		No audit of output
Reflection	2	Members are asked to write a reflective paragraph which is not assessed.

3.2.7 *Case X*

Case X moved from an input to an output-based CPD scheme several years ago and, at the request of members, retained a numerical element in the measurement. The organization implements a standard points system, where one hour of study equals one point. In addition to this, members self-assess the results phase of CPD by using a numerical "effectiveness index," assigning themselves a score between 0 and 1 depending on how effective the CPD has been for them. This then is multiplied by the standard points. The criteria for assigning a score is currently very vague, and individuals interpret it in different ways. The other phases of the cycle are addressed in a basic format with little guidance. In the near future, the organization hopes to improve the level of available guidance, and to introduce a mentoring scheme. A sample of online records is audited.

PLANNING	ACTION	RESULTS	REFLECTION
Members are required to state a goal and a learning need. This is left entirely up to the individual. There is a loose competency framework, with different areas relating to the Health Professions Council categories. Members must identify which category they are addressing.	Members must record the learning activity by simply stating what it was, and each hour spent on a learning activity is given one point. All types of activity receive the same point weighting.	Members rate the effectiveness of the activity by assigning it a value of between 0.0 and 1.0. This value is then multiplied by the points to give a "CPD value." There are vague guidelines for the assignment of "effectiveness," but the system is susceptible to abuse. There is no distinction between different types of results, so the effectiveness rating could relate to learning or behavior, or to something else. There is also an "evaluation" section in the record, where members write a short paragraph about the results of the learning activity.	There is a box for members to write an open-ended reflective paragraph.



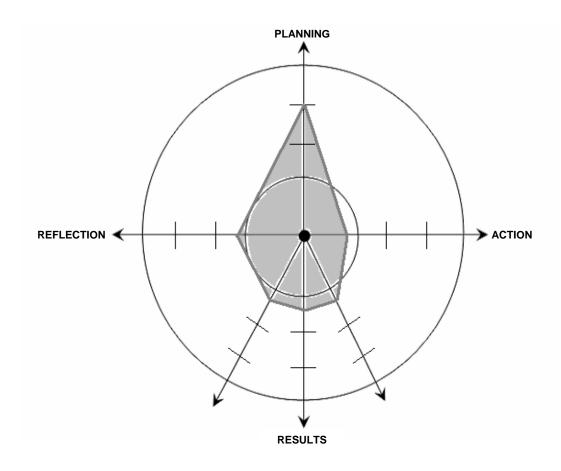
Phase	PDV Measurement Level	Reasons for Level
Planning	2/3	Loose competency framework Goal and learning need identified Little support in developing goal
Action	1	Set points based on hours
Results	3	Criteria for self-assessment scoring Effectiveness of learning judged Audit The criteria are vague Lack of guidance
Reflection	2	Open-ended reflective paragraph Lack of guidance No assessment

3.2.8 Association of Chartered Certified Accountants (ACCA)

The ACCA offers three CPD routes, but this analysis is based on its main "unit route." To accommodate its international membership, the ACCA implements a primarily input-based CPD scheme, but have moved away from a mere points-gathering exercise by insisting that CPD be relevant to a member's role. Despite the input-based nature of this scheme, output is certainly addressed, and ACCA has implemented a "professional development matrix," an online planning tool that assists members in analyzing their job roles and prioritizing learning needs. They also self-assess their results by comparing them with the development plan. Although the CPD cycle is not explicitly followed, details of the cycle are provided in guidance for members. CPD records are audited to ensure that development activities are relevant to a member's role.

PLANNING	ACTION	RESULTS	REFLECTION
ACCA uses an online tool called the "Professional Development Matrix," which takes members through the process of looking at their job role profiles and identifying the competencies that they need for these roles. Development plan involves prioritizing elements of their job roles that need attention, and addressing any emerging areas. Each element is rated in terms of priority (lower, maintain, or increasing). Members can also determine their personal learning styles to assist them in selecting appropriate activities. Members then identify targets, what	Input—40 hours per year; at least 21 of which must be "verifiable," which means the activity must meet the following requirements: 1. Was the learning activity relevant to your career? 2. Can you explain how you will apply the learning in the workplace? 3. Can you provide evidence that you undertook the learning activity? This is reviewed by the organization.	Members should compare the results of their activities against their development plan, and assess whether they have met their objectives.	Examination of role as part of planning phase.

in, what they think it will achieve and what they think the results will be.	will achieve and what they think the results			
--	--	--	--	--



Phase	PDV Measurement Level	Reasons for Level
Planning	4	Competency framework
		Online planner
		Analysis of job role
		Assessment of learning needs
		Prioritization
		Consideration of learning style

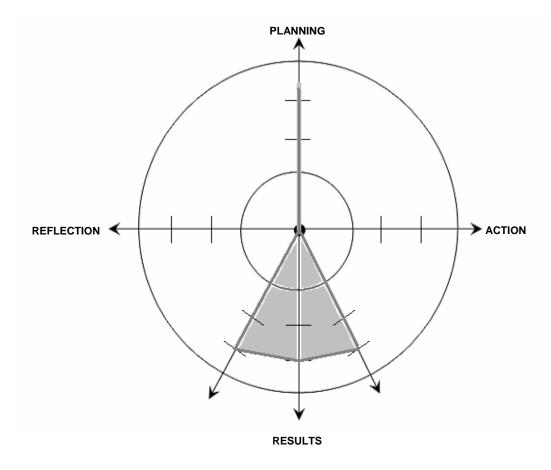
APPROACHES TO CONTINUING PROFESSIONAL DEVELOPMENT (CPD) MEASUREMENT

Action	1-2	Hours + audit for relevance of activity
Results	2-3	Compare results against development plan and self assess whether or not they have met objectives.
Reflection	2	Examination of role

3.2.9 The Institute of Information Technology Training (IITT)

The IITT Skills Tracker is not a classic CPD scheme, as it only addresses the planning and results phases of the cycle, focusing entirely on competence. It does, however, employ a highly developed output measurement tool based on a complex and granular competency framework. Each competency is assigned a hidden weighting by the Institute to objectify self-assessment of results. During the self-assessment, members assign themselves points from three categories: competence, ability, and experience, for which there is a clear set of criteria. This point assignment is multiplied by the hidden weighting to produce a competence profile. Self-assessment is signed off by a peer.

PLANNING	ACTION	RESULTS	REFLECTION
All-embracing competency framework with over 400 competencies. Members chooses what elements are required for their roles—clear and visible framework making selection straight-forward. There is a matrix behind the framework that involves a complicated metrics scheme		Self-assessment by assigning a value that is multiplied by a "hidden" weighting assigned by the organization to the particular competency that is being addressed. The hidden weighting avoids manipulation of the system. Members can assign three types of points to themselves, each with different weightings: "competence," "ability," and "experience" points. There are clearly identifiable criteria for each point level to objectify self-assessment. A calculation of all these factors gives a total score for each competence addressed, and builds a competence profile.	A certain level of reflection is implicit in the results phase.

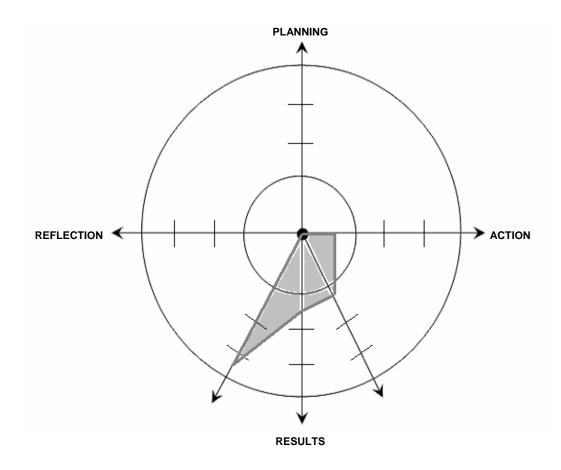


Phase	PDV Measurement Level	Reasons for Level	
Planning	4+	Complex competency framework	
		Objective weighting of competencies in each category	
		Role relevance	
		User-friendly	
		Online	
		Huge choice allows for individual tailoring	
Action	0	No Measurement	
Results	4	Self-assessed by assigning value that is multiplied by hidden objective competency weighting	
		Three types of points	
		Clear criteria for point allocation	
		Peer sign-off of scores	
Reflection	0	No Measurement	

3.2.10 *Institut der Wirtschaftsprufer in Deutschland E.V. (Germany)*

Wirtschaftsprufer runs an input-based CPD scheme where members must complete an average of 40 hours per year, totaling 120 hours over a three-year period. To ensure that members meet those requirements, the organization carries out practice audits, which involve checking on the extent that CPD requirements are met. During these audits, CPD records are not checked, but the quality of work at the practice is. If a deficiency is found, there is further investigation, which involves interviewing practitioners to gauge their professional knowledge and looking through invoices and attendance sheets. Wirtschaftsprufer is not currently considering a move to broader output measures and questions the validity of such measures.

PLANNING	ACTION	RESULTS	REFLECTION
No plan	Input—40 hours per year. Need to provide evidence of attendance to prove those hours—for example invoices or attendance papers.	Compulsory peer reviews which are inspections not of the CPD records of individual accountants, but of the quality of the product—the actual audit engagements themselves, to ensure they have been carried out correctly. During such inspections, accountants may be interviewed to gauge their level of professional knowledge. It was however admitted that it was difficult to determine knowledge level from such conversations.	No reflection

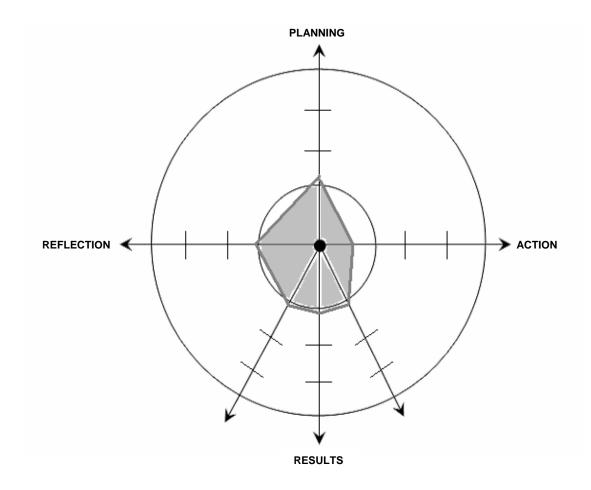


Phase	PDV Measurement Level	Reasons for Level
Planning	0	No measurement
Action	1-2	Hours + evidence
Results	4 (practice effects) 2 (behavior) 2 (knowledge)	Practice audit Behavior part of practice audit Conversations to gauge professional knowledge
Reflection	0	No measurement

3.2.11 Institution of Civil Engineering Surveyors (ICES)

ICES currently implement a voluntary output-based CPD scheme based on the CPD cycle. Members submit a development plan and a CPD record that details activities undertaken, and includes an unstructured reflective element. ICES audits a sample of CPD records, and acts if it is clear that a member hasn't taken it seriously or has failed to meet objectives.

PLANNING	ACTION	RESULTS	REFLECTION
Members fill out a CPD plan, where they lay out their development goals, what activities they intend to do to meet those goals and set deadlines for the activities. It should also include details of how they intend to measure whether or not a development goal has been met. This document is however, not mandatory.	This organization ceased using a points-based input measurement system. In the "CPD record," members fill out the activities they have undertaken, and how long they took.		The CPD record has a "reflective element" where a member evaluates the learning process. They write such things as whether it was of any use. The institute does not measure this.



Phase	PDV Measurement Level	Reasons for Level	
Planning	2-3	No competence framework	
		Assessment of needs	
		Development plan with learning objectives	
		Voluntary	
Action	1	Hours + description of activity	
Results	2	CPD record notes if the learning was of use.	
Reflection	2	Reflection section in CPD record evaluating the process	
		No assessment	

3.2.12 College of Pharmacists of British Columbia (CPBC)

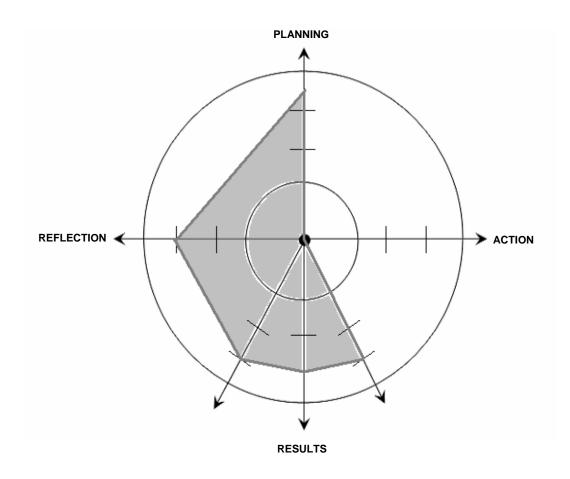
Registrants of the CPBC can choose whether to undertake a knowledge assessment or a learning and practice portfolio, which involves output at each phase of the CPD cycle. The portfolio involves developing Desired Practice Outcomes as part of the planning phase. These are then submitted to the College for approval and feedback before the individual moves on to the next phase of the cycle. Results are self-assessed in an Evaluative Narrative Statement that is highly structured through detailed guidelines and a check list of issues to be considered. The portfolio is audited by trained assessors who are given clear assessment criteria. The College is experiencing some resistance to adopting the portfolio option. Registrants perceive it to be time-consuming and vague, although the College itself endorses the benefits of the portfolio over the knowledge assessment option in terms of the development of the individual.

Registrants who are unsuccessful in their chosen option during this phase must enter "phase two" assessment, where they have the option to repeat the knowledge assessment or the portfolio, but in addition have the choice to undergo a practice audit or a practical exam. These options are not available in the first instance due to their cost, and members who fail initially and must enter "phase two" are required to pay for these secondary assessment techniques.

The learning and practice portfolio option is used for the mapping as it addresses all phases of the CPD cycle.

PLANNING	ACTION	RESULTS	REFLECTION
From the reflection phase, identify broad areas of focus for CPD. Next, define three Desired Practice Outcomes (DPOs) or goals, linking them to specific roles/functions in the competency framework. Identify strategies to achieve these goals. Guidance notes and examples provided for each phase of the plan. DPOs are sent to the College for approval and feedback and can be continuously	Activities are documented and discussed in the results section.	An evaluative narrative statement is written, examining how far objectives have been met and how. It is an openended prose exercise, but there is a checklist of questions that must be addressed, and clear criteria of what issues to include. Includes knowledge, skills and practice and client outcomes. At least two pieces of evidence must be produced to confirm the statement, one of which must be "direct" (the criteria	Complete a detailed self-assessment form, rating current abilities according to various competencies. Clear, structured, and directed form with scoring system. Review the summary of results and identify needs.

revised throughout	for which are given).	
the cycle.	Audited by highly	
	trained CPD auditors.	



Phase	PDV Measurement Level	Reasons for Level
Planning	4+	Assessment of competencies.
		Competence framework.
		Submission of <i>Desired Practice Outcomes</i> (DPOs) for approval and feedback before action.
		Linking of DPOs to specific competencies.
		Guidance and examples provided throughout.
Action	0	No measurement
Results	4	Prose assessment of meeting objectives. Clear criteria with check-list of questions to be answered.

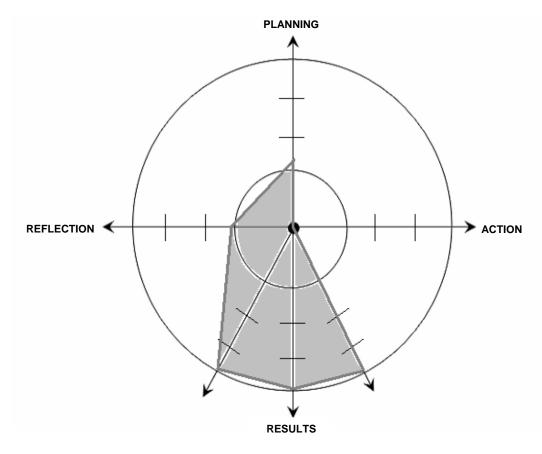
APPROACHES TO CONTINUING PROFESSIONAL DEVELOPMENT (CPD) MEASUREMENT

		Specific examples must be provided to justify statement
		High level audit of results records.
		Trained CPD auditors
		Distinguishes between knowledge, skills and practice and client results
Reflection	4	Detailed self-assessment questionnaire.
		Set reflective questions linking to competencies.
		Scoring system creating summary for further reflection.

3.2.13 *Case Y*

The scheme implemented by Case Y is a recertification scheme rather than a CPD scheme. It therefore focuses primarily on the equivalent of the results phase of the CPD cycle. It utilizes a combination of highly advanced techniques of output measurement. As well as self-assessment, it implements objective measurement techniques, including exams to test knowledge results, peer and client assessments to measure behavioral results and practice effects, and statistical analysis of records compared with national standards. A computer system combines data from these measurements to produce a summary report on which the practitioner reflects and identifies learning needs.

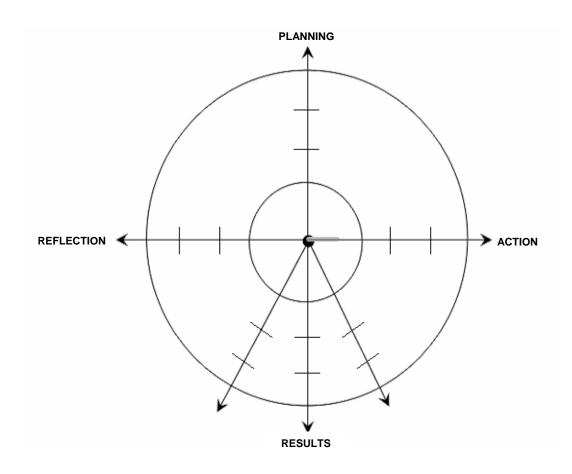
PLANNING	ACTION	RESULTS	REFLECTION
Members must set goals based on identified knowledge gaps. A development plan is written.		Case Y uses multiple forms of measurement, including self-assessment as well as objective techniques. The measurement of knowledge, performance and practice/organization effects are approached in different ways to suit the type of result. Knowledge: medical knowledge tests. Practice: Performance improvement modules with multiple assessment techniques: peer and patient feedback surveys; self assessment. Results: Patient medical records against national standards. Linked to pay-for-performance incentives.	Members are given a feedback summary of the combined results of the various measures in place. They reflect on this information to identify areas for improvement. This phase is implicit, and not measured or assessed by a third party.



Phase	PDV Measurement Level	Reasons for Level
Planning	2-3	No competence framework
		Learning goals are set from gaps identified from previous feedback
Action	0	No measurement
Results	5	Objective assessment techniques
		Self assessment
		Different assessment techniques to suit knowledge, practice and results.
		Peer assessment
		Patient assessment
		Effects assessment and statistical analysis
Reflection	2	Review of feedback report

3.2.14 Institute of Certified Public Accountants of Singapore (ICPAS)

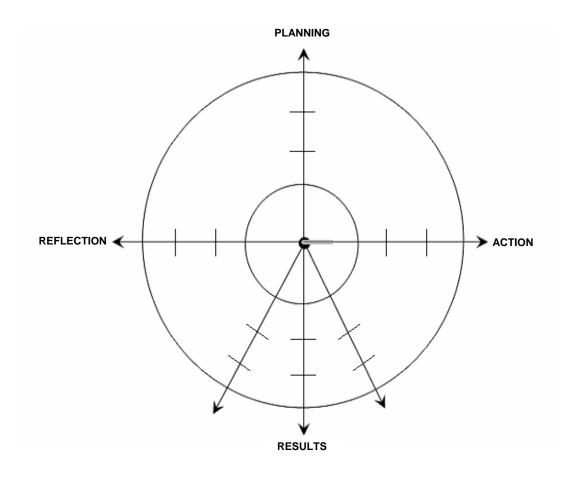
ICPAS runs an input-based scheme, where practicing members are required to achieve 40 hours of CPD per year and non-practicing members are required to achieve 60 hours over 3 years. The scheme is split into structured (i.e., formal learning such as courses) and unstructured (e.g., reading) CPD, with the organization providing guidance on this distinction.



Phase	PDV Measurement Level	Reasons for Level
Planning	0	No planning
Action	1	Hours-based measurement
Results	0	No results assessment
Reflection	0	No reflection

3.2.15 Institute of Certified Public Accountants of Kenya (ICPAK)

The ICPAK CPD scheme is mandatory, requiring members to complete 25 hours of structured and 15 hours of unstructured CPD activity per year, which is averaged over a three-year period. Members are required to fill in a CPD record at the end of each year, stating the seminars attended that count towards the 25 hours of structured activity. If the learning activity is set up by the Institute, there is no need to produce evidence of attendance, participation, or output, as attendance is logged automatically. If the activity is externally organized, some sort of evidence of attendance is required of the member, such as a certificate.



Phase	PDV Measurement Level	Reasons for Level
Planning	0	No planning
Action	1	Hours-based measurement
Results	0	No results assessment
Reflection	0	No reflection

3.3 Scoring Process

Set out below is a collection of the PDV measurement levels attributed to each participating professional body at each phase of the CPD cycle, and the particular reasons why that specific level was thought by the research team to be appropriate. The PDV measurement levels are in no way concrete, and are to be thought of as crude, illustrative guides to facilitate benchmarking.

The tabulation enables quick comparison and reference.

Planning

Score	Rationale	Case
4+	Complex competency framework	IITT
	Objective weighting of competencies in each category	
	Role relevance	
	User-friendly	
	Online	
	Huge choice allowing for individual tailoring	
4+	Assessment of competencies	CPBC
	Competence framework	
	Submission of <i>Desired Practice Outcomes</i> (DPOs) for approval and feedback before action	
	Linking of DPO to specific competencies.	
	Guidance and examples provided throughout.	
4	Competence framework	CIMA
	Online planner	
	Define role	
	Deconstruction of role into key responsibilities	
	Assessment of learning needs	
	Consideration of various stakeholders	
4	Competency framework	ACCA
	Online planner	
	Analysis of job role	
	Assessment of learning needs	
	Prioritization	
	Consideration of learning style	
3-4	Complex competency framework	PCNZ
	Example documents	
	Mandatory but no audit of plan	

Score	Rationale	Case
3	Competency framework	CIPR
	Four strands/themes to be addressed	
	Learning objectives	
	Must address how they intend to measure success	
	One page development plan	
3	No competence framework	RCPSYCH
	Not submitted to organization	
	Lack of structure and guidance	
	Learning objectives developed	
	Through four levels of practice (general and specialist skills)	
	Through four domains: knowledge, skill, attitude, and social skills	
3	No competence framework	CIC
	Structured review of situation	
	Development of competence profile	
	Priority areas identified and needs profile developed	
	Consideration of current and future job/ career needs	
2-3	Loose competency framework	CASE X
	Goal and learning need identified	
	Little support in developing goal	
2-3	No competence framework	ICES
	Assessment of needs	
	Development plan with learning objectives	
	Voluntary	
2-3	No competence framework	CASE Y
	Learning goals are set from gaps identified from previous feedback	

Results

Score	Rationale	Case
5	Objective assessment techniques	CASE Y
	Self-assessment	
	Different assessment techniques to suit knowledge, practice and results	
	Peer assessment	
	Patient assessment	
	Effects assessment and statistical analysis	

Score	Rationale	Case
4	Self-assessed by assigning value that is multiplied by hidden objective competency weighting Three types of points Clear criteria for point allocation Peer sign-off of scores	IITT
4	Prose assessment of meeting objectives Clear criteria with check-list of questions to be addressed Specific examples must be provided to justify statement High level audit of records Trained CPD auditors Distinguishes between knowledge, skills and practice and client results	CPBC
4	Outcome credit scale with three levels for robust but clear self-assessment Specific examples must be provided to justify score Examples of each level provided High level audit of records Trained and paid CPD auditors	PCNZ
3	Criteria for self-assessment scoring Effectiveness of learning judged Audit of records The criteria are vague Lack of guidance	CASE X
2-3	Discussed in groups No formal structure/ assessment system	RCPSYCH
2-3	Self-assessed against learning objectives set out in plan Independent audit of CPD records optional	CIC
2-3	Compare results against development plan and self-assess whether or not they have met objectives	ACCA
2-3	Results are considered during reflection, but there is no formal recording, structure or assessment system specifically for this stage	CIMA
2	Structured general questions for self-assessment/ reflection No link to plan No audit of output	CIPR
2	CPD record notes if the learning was of use	ICES

Reflection

Score	Rationale	Case
4	Reflective question templates Involving individual reflection and reflection in dialogue with a peer Workshops for group reflection Consideration of various stakeholders	CIMA
4	Detailed self-assessment questionnaire Set reflective questions linking to competencies Scoring system creating summary for further reflection	СРВС
3-4	Reflective statements Assessed by CPD auditors Question templates	PCNZ
3	Group reflection in regular peer groups No templates	RCPSYCH
2-3	Evident in planning (Structured review of situation Profile of competencies)	CIC
2	Members are asked to write a reflective paragraph which is not assessed.	CIPR
2	Open-ended reflective paragraph Lack of guidance No assessment	CASE X
2	Reflection section in CPD record evaluating the process No assessment	ICES
2	Review of feedback report	CASE Y

3.4 Observed Routes to Various Levels

3.4.1 Planning

Three out of the ten cases that measured output at the planning phase of the cycle scored PDV measurement level of 3, but all reached this level by different means.

CIPR reached a PDV measurement level of 3 primarily because it had a competency framework, but did not go beyond level 3 because of a lack of other supporting features. RCPSYCH achieved this level because although it does not have a competency framework, it (a) does state four levels of practice that address the types of skills required at different levels of experience, and (b) alerts even the most experienced professional to the basic skills they should possess. It also gives four domains—knowledge, skill, attitude, and social skills—all of which should be addressed, guiding the individual in molding their learning objectives. These levels and domains serve the same function as a competence framework. In contrast, CIC does not have a competence framework, or anything similar: it achieves a level of 3 by the detail of the plan: the development of a competence profile, prioritization of needs, and consideration of present and future role and career needs. If this organization were to implement a competence framework, it would achieve a level 4 PDV.

The observed features of PDV measurement level 4 were more uniform. CIMA and ACCA both shared the following features: competency framework, online planner, analysis of job role, and assessment of learning needs. They also both implemented interesting features that put them ahead, again associated with the detail of the plan. In CIMA's case, these features are the deconstruction of role into various responsibilities and the consideration of various stakeholders, and in the case of ACCA, prioritization of needs and consideration of learning style.

To achieve PDV level 4 requires the addition of features that add to the detail or individualization, as these features imply that more thought must be put into the plan, and therefore that such plans can identify higher levels of PDV among members.

Although IITT does not possess as many details of this type, the magnitude of its competency framework and the scope for individuality it allows leads us to place it above CIMA and ACCA, and for it to reach a PDV measurement level over and above 4. It is presently at the cutting edge of planning in terms of PDV, at least among the cases examined for this project.

CPBC also scored beyond a level 4. This can be attributed to the level of detail and the guidance involved in the planning phase. As with IITT, there is a direct link between planning and specific competencies. The facility for early submission of Desired Practice Outcomes for approval and feedback, and the capability therefore for revision and development of these objectives, contributes most to the high score. It does so because it again signifies a high level of tailoring and individualization in the plan, making it more likely to be beneficial. The assessment of plans prior to any activity, and the re-submission after revision shows a dedication on the organization's part not only to identify, but also to increase the PDV of the planning phase of the CPD cycle for an individual.

3.4.2 Results

The route from a low level to a high level at the results phase has been shown to involve various common features identified as: (a) a clear and comprehensive set of criteria for self-assessment,

(b) high level audits of the self-assessment by trained CPD auditors and (c) a requirement for specific examples to back up self-assessment. Although PCNZ and CPBC, having almost identical features, had obviously both reached level 4 in a similar way in these respects, both organizations achieved this level by measurement systems that in another respect are very different. The CPBC implements a written prose approach to results assessment, while the PCNZ uses a numerical scale. This is an important distinction, because it has been argued that more scientific or mathematically minded individuals may prefer the numerical scale (despite these specific cases being related to the same profession). There is a numerical marking scale behind the narrative statement in the CPBC system, although the format of the output record that members fill out is very different from the PCNZ's. This example of two very different routes to the same PDV measurement level demonstrates that a professional body can take either route, depending on what it perceives to be most appropriate for its members, and .

IITT also scored level 4 through another route: (a) by refining and developing its scoring system and competency framework to involve a complex metrics scheme, and (b) by assigning objective weightings to be combined with the more subjective self-assessment scores. This complexity and detail, coupled with a move towards objectivity, provided the features needed for this system to be assigned a PDV measurement level of 4.

The objectivity that gave IITT a level of 4 is magnified in the Case Y measurement system, which scored level 5 by implementing fully objective measurement techniques such as peer and patient assessment, and statistical analysis of results compared with national standards. Level 5 is reserved for the use of such methods, which can reliably and objectively yield a valid PDV measurement.

3.4.3 *Reflection*

The research shows that there are two main routes to achieving a PDV measurement level above what appears to be the general standard of an open-ended, unstructured paragraph. One is to introduce reflective question templates to guide individual reflection; the other is to implement a group reflection facility. PCNZ achieved a level of 3 by implementing the former, and RCPSYCH by the latter. Both organizations achieve a level of 3, but by completely different means. Neither reached level 4, but using CIMA as an example, it can be seen that if each of them implemented the other's features and introduced a combination of structure and group reflection, this higher level could be achieved.

Of the two cases from the research that scored a PDV measurement level of 4 at the reflection phase, CIMA has taken the combined route mentioned above, but there are other routes to achieving this high level. CPBC scored a level of 4, but does not facilitate group reflection. Instead, it gained kudos through the self-assessment questionnaire, which guides individuals through a thorough reflection of their current practice, and relates these questions to specific competencies in the framework.

Again, these two routes demonstrate that a combination of them would result in a higher PDV measurement level.

Chapter 4 Profiles and Paths

4.1 **Introduction**

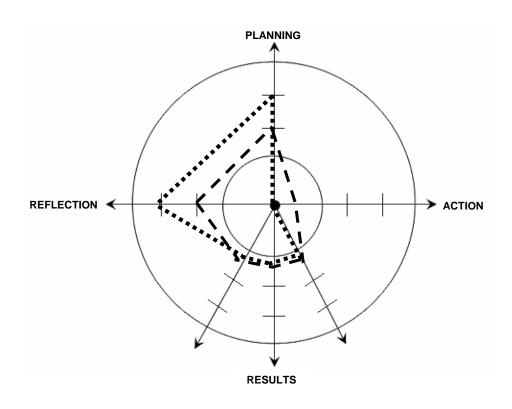
The model developed in Chapter 2 has two primary purposes: (a) to allow professional bodies to "see a picture" of their CPD measurement systems as a whole, and (b) for them to be able to benchmark their system against others easily. In Chapter 3, the first of these purposes was demonstrated; the second is developed in this chapter. As noted in Chapter 1, CPD has varying purposes, and different profiles have been found among the case studies that clearly demonstrate some of these different purposes. We have only used 12 of the 15 cases to demonstrate different output measurement profiles in this chapter, because 3 cases used input measures only.

The first profile described in section 4.2 concentrates fairly equally on reflection and planning of CPD. The second profile in section 4.3 concentrates primarily on planning. Section 4.4 shows the third profile, which is skewed towards measurement of results. Section 4.5 notes two cases that did not easily fit the previous three profiles. One uses an early version of output measurement with a relatively low PDV measurement level. The other concentrates exclusively on practice and organizational effects. They are interesting cases, and may represent profiles that are common to other professional bodies, but the small sample of case studies does not allow us to decide if they are true anomalies, or if they are only anomalous in the context of the case studies in this project.

Where a distinction between regulatory and non-regulatory status is made, regulatory includes self-regulation.

4.2 **Profile 1: Supporting the Reflective Practitioner**

Organization	Sector	Country	Regulatory status	No. of individual members	Annual income
CIMA	Accounting	International	Regulatory	70,000	£32.8m
RCPSYCH	Medical	UK	Non- regulatory	12,000	£9.8m



A strong emphasis on the reflection and planning phases of the cycle, with less accuracy measuring at the result phase.

Both case studies associated with this profile have a liberal attitude towards (a) what contributes to CPD, and (b) the monitoring and assessment of records.

CIMA has broadened the activities that count towards CPD because staff (a) saw that such restrictions created a barrier to real development, and (b) wanted to promote the modern view of CPD as more than simply updating technical skills. According to CIMA, CPD should include a wide range of inter-personal skills, and a wide understanding of the business, of management

skills, and stakeholders. RCPSYCH stopped approving certain events for CPD, and now leave it up to individuals and their peer groups to decide how best to meet their developmental needs. Moving from an input to an output approach has widened the scope of what "counts" as CPD for these professional bodies. At the same time, the PDV of each CPD activity has, in effect, deepened for the individual, as they not only have a wider choice of activities to choose from, but they must also be responsible for making an assessment (in the broad sense of evaluation rather than formal assessment) that attests to the quality of the activity in stimulating reflection, undertaking planning, or attesting to results.

Both organizations provide members with a considerable amount of guidance and support to assist them through CPD, but they do so by very different means. CIMA has a detailed and robust CPD cycle, providing additional written guidance to help members move through the cycle. Members are given access to reflective question templates for individual use, as well as for use in dialogue with a peer. CIMA is also developing support for group reflection.

Although RCPSYCH is less developed in providing written guidance for reflection, the peer group system is fundamentally based on creating a positive and supportive environment for effective CPD. Generally, members have responded to the system in a highly positive way. Members are given clear guidelines about what to think about when planning and reflecting.

CIMA members are required to progress through each of the six phases of their cycle. RCPSYCH members only have to return one basic form to the college, recording the basic details of the peer group discussions. Members must, however, participate in at least two peer group sessions per year, one for planning, and one for reviewing or reflecting, therefore emphasizing these two phases of the cycle.

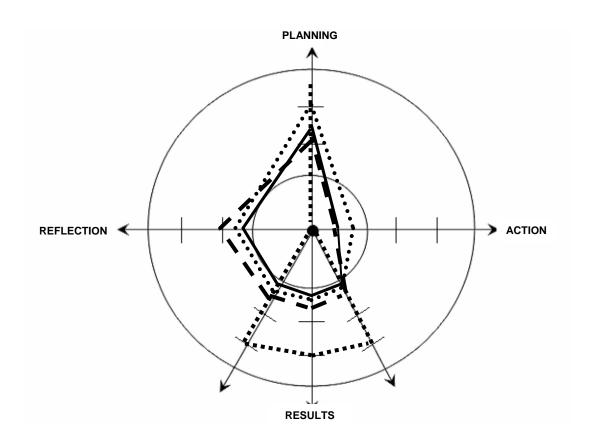
CPD records are audited in both cases, but interestingly in neither case are they audited for quality, Instead they are just checked to ensure completion of the appropriate phases of CPD. CIMA does not feel compelled to assess the quality of CPD records, as it has confidence in the integrity of its members, and operates on what it calls a "principle of trust." CIMA would consider assessing the content in the future, but only to provide benchmarks against which individuals could position themselves. On the other hand, RCPSYCH attributes its lack of quality assessment to insufficient resources for CPD, and would like to develop this further, given the opportunity.

No objective assessment is made of the results of CPD; measurement of CPD at the results phase is, in the case of CIMA, left entirely up to the individual. In the case of RCPSYCH, it is the responsibility of both the individual and the members of the peer group.

In the results phase of the cycle, both organizations emphasize and encourage the development of learning objectives. CIMA provides detailed guidance on how to do this, and RCPSYCH has realized that it needs to clarify and expand the guidance it provides on setting learning objectives. By reflecting on these projected learning results, individuals can assess their success in achieving those results. This self-assessment is perhaps less valid than an objective assessment of results, but seems to be the preferred approach of the professional body, given its preferences and priorities. In this profile, these preferences and priorities appear to be flexibility, ease of use and, ultimately, what is best for the individual's professional development, giving less emphasis to the accountability that is especially visible in profile 3.

4.3 **Profile 2: Planning for Professional Development Value**

Organization	Sector	Country	Regulatory status	No. of individual members	Annual income
CIC	Construction & Engineering	UK	Non-regulatory	N/A	£1.1m
CIPR	PR	UK	Non-regulatory	9000	£2.08m
ACCA	Accounting	International	Regulatory	128000 117000	£60m
IITT	Education &Training	UK	Non-regulatory	6000	N/A



Emphasis on planning with various levels at reflection and results phases, generally measuring action phase by inputs.

The scale of the organizations that build profile 2 are extremely varied, both in terms of number of members (6000-128, 000), and annual income (£1.1m-60m).

Interestingly, three out of the four professional bodies in profile 2 are non-regulatory, and ACCA, which has a regulatory function, performs this function through input measurement of hours; there is no regulatory function attached to the output side of their CPD scheme.

It follows therefore, (a) that the output model illustrated in this profile is most suited to those professional bodies without a regulatory function, or (b) that such an output model would not serve as a means to regulate members.

With the exception of IITT, the extreme in this profile, the profile 2 organizations do measure CPD by input at the action phase of the cycle. This could be due to the fact that in this profile, the results phase is generally measured by self-assessment against learning objectives. This type of self-assessment often faces criticism that it is subjective and therefore unreliable. Input measures therefore complement such an output system, by providing the objectivity and validation of CPD that is absent at the results phase. This hypothesis is further confirmed by the pattern emerging from the case studies in profile 2, that is, the relation between measurement of the action and results phases of the cycle. IITT, with the highest level of measurement at the results phase, has no measurement at the action phase; the CIC, with the second highest level of measurement at the results phase, has the lowest level of measurement at the action phase. The ACCA continues this pattern, having the highest level of measurement at the action phase and the lowest level at the results phase.

IITT, the most developed in terms of results measurement, does not measure CPD at the action phase of the cycle. Continuing the above discussion, the reason for this may be that IITT has developed a method of self-assessment of results that minimizes the subjectivity inherent in this type of measurement. By use of a detailed metrics and scoring system, as well as clear and detailed criteria for self-assessment, IITT claims to "objectify" self-assessment, making it a reliable form of measurement. Interestingly, the CIC, with the second highest level of measurement at the results phase, also gives clear specifications that guide self-assessment.

Where the professional body does not regulate the results of CPD, or where CPD participation is regulated by means of input measures, there is less need for the detailed audit of CPD output records. This is so because the onus for achieving a professional standard is placed more on the individual than on the professional body. The attitude towards monitoring and auditing of CPD records that is prevalent in these case studies also indicates this. The general attitude was that it was not the place of the professional body to judge competence or "test" members, which may be threatening to individual professionals; the professional bodies making up this profile want to keep members on side. They achieve this by performing less monitoring and auditing of CPD records, instead giving members the support they need to successfully measure their own achievements. The attitude of a profile 2 professional body seems to be that measurement at the results phase of the cycle is more about benchmarking for the individual. It gives them an opportunity to decide how they match up to standards, and if they have not been successful, not to punish them but to support them in determining the next steps in achieving their goals. Rather than judging competency, this profile simply establishes what competencies members should seek to achieve, and gives them the support and direction they need to achieve their goals.

The emphasis on the planning phase of the cycle highlights this support for members; having to make a detailed plan, considering various aspects that will affect the plan such as job role and stakeholders' interest, all urge members to really think about their CPD, and encourages them to strive for results and indeed be fair in their self-assessment of results.

A good plan, and more specifically a clear competency framework, gives professionals the opportunity to make the best judgment of their results in relation to their plan and learning objectives in the most effective way. Results measurement by self-assessment depend on a robust competency framework and plan; professionals need to know (a) what competencies to address, (b) why they want to achieve them, (c) how they intend to achieve them and why they think that method will achieve them, and (d) how they will know if they have achieved the desired result associated with the chosen competency.

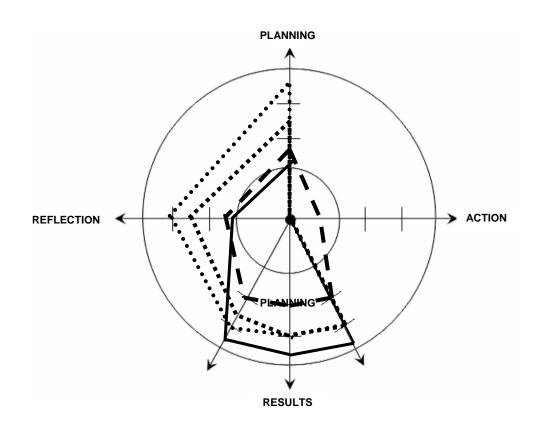
Competency frameworks

All of the case studies in profile 2 base their output scheme on a competency framework, and center the CPD process on setting learning objectives and then self-assessing how those objectives have been met. A competency framework is fast becoming the nucleus of an output-based CPD scheme, with many organizations developing a competency framework as the first step in implementing such a scheme. Not only does it show professionals what knowledge and skills they should have, it also makes them think about their CPD more strategically, and is also the essential tool for accurate self-assessment, by providing a reference point from which to measure success.

The detail and specification of competency frameworks can vary hugely, from just a few core competencies, to particular competencies for different roles and different directions. Some have sub-divisions for areas of knowledge or type of skill. IITT has an extremely detailed framework comprising over 400 competencies, which gives individuals the flexibility to tailor CPD exactly to their roles, knowledge gaps, aspirations, and interests.

4.4 **Profile 3: Measuring Results**

Organization	Sector	Country	Regulatory status	No. of individual members	Annual income
PCNZ	Medical	NZ	Regulatory	3000	NZ\$1.4 m
CASE Y	Medical	USA	Non- regulatory	11000	N/A
CPBC	Medical	Canada (BC)	Regulatory	4000	CAN\$ 4.97m
CASE X	Medical	UK	Non- regulatory	2400	£220 000



Focus on measurement at the results phase of the cycle, minimal or no measurement of action, and varying degrees of measurement at the planning and reflection phases.

Although not all the case studies that make up profile 3 have a regulatory function, it is interesting that they are all in the medical sector, where regardless of the actual regulatory function of the professional body, there is a huge emphasis on the broader regulation and accountability of medical professionals. Medicine is one area where the public relies on the competence of professionals, and where lack of competence has particularly dire consequences, of which the general public is well aware. In the U.S., competence and public accountability of individual practitioners is an especially sensitive issue, where members of the public choose their doctors, and do so on the basis of reputation and accountability.

With that in mind, it is particularly interesting to notice the obvious pattern in profile 3, where there is the greatest emphasis to the results phase of the cycle, and where the action phase of the cycle is the least advanced in each of the case studies (three out of four having no measurement at the action phase).

All four case studies make a point of measuring CPD at the results phase and go to great lengths to make this measurement as accurate, robust and significant as possible. Case X uses a relatively primitive self-assessment scale. This is replicated on a much grander scale by the PCNZ, which has a vast quantity of guidance for members, as well as a robust system for auditing self-assessment records (see case study for details). It is no coincidence that case X has a comparatively low income, which prevents it from objectifying and validating the self-assessment of CPD results to such an extent. Comparison between case X and the PCNZ demonstrates how income and resources can make a difference to the implemented scheme, even when the ideals behind the scheme may be very similar.

How results are measured varies within profile 3, with two out of four relying on a robust system of self-assessment, and one of these heavily auditing this output. Two of the organizations making up this profile combine self-assessment and objective methods of assessment, such as knowledge tests, OSCEs (practical simulations), practice audits and peer and patient reviews of performance. This marks a real leap in CPD measurement by output, and a move away from reliance on self-assessment and its associated problems.

With the measurement techniques as they are, action is not measured at all, except in Case X. Interestingly, Case X has the least developed method of measurement at the results phase of the cycle and indeed, the lowest income. It can therefore be inferred that there is a trade-off between measurement of the action phase of the cycle by inputs and measurement of the results phase by outputs. In professional bodies that have the necessary resources to perform objective measurement at the results phase, input measurement of action can be rendered obsolete. We believe that the public has more faith in a system that robustly assesses the actual results of CPD and the competency of practitioners.

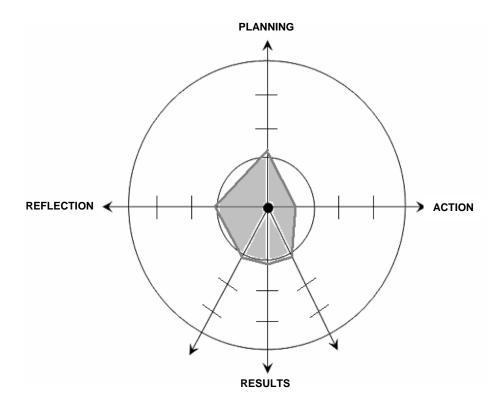
The level of planning and reflection in the cases that make up profile 3 varies quite considerably, Case X and Case Y having low PDV measurement levels at these phases. This observation could suggest that the organizations in profile 3 focus almost entirely on developing robust and objective measurement systems for the results phase. They therefore perhaps neglect the planning and reflection phases of the cycle. An objective method of results measurement perhaps should be weighed against the benefits of progression through a well-developed CPD cycle—resources can be spread only so far.

The Case Y scheme focuses almost exclusively on results, which may seem to negate the benefits of structure and support for planning and reflection and indeed the argument for using a CPD cycle at all. This focus can be attributed to the fact that the Case Y scheme primarily deals with re-certification. Introducing measurement methods such as this into CPD schemes more widely may pose a danger. As case studies have demonstrated, members do not like feeling that they are being "tested," or that their abilities are being questioned. Measurement techniques such as exams and practice audits do make professionals feel uncomfortable, and the Case Y organization has experienced some resistance to this.

CPBC and PCNZ seem to have all-round output measurement systems, where planning and reflection are not ignored, and where members are given the opportunity to think about their individual competence and development. But these two cases do not, however, neglect the robustness of measurement at the results phase; they base measurement on self-assessment, giving the members the autonomy and respect they want, but objectify the self-assessment by a robust auditing procedure of CPD records to ensure that competence is maintained.

4.5 Anomalies

ICES



Highlights the distinction between output-based schemes and output measurement schemes.

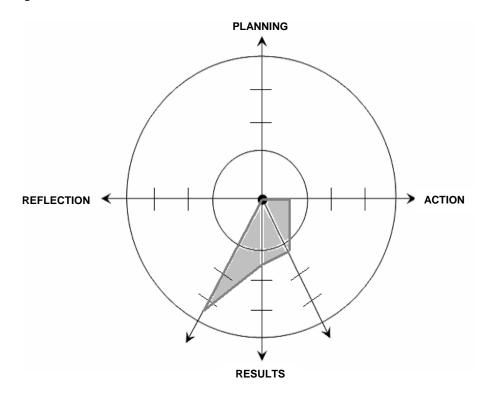
This case is not strictly an anomaly, as it could be described as fitting into either profile 1 or profile 2. The striking characteristic of the mapping of the ICES system is that although it has officially made the switch from input to output, the level of PDV demonstrated by the mapping process is very low indeed. Perhaps this is due to the fact that this output measurement system was developed six years ago. At that time, the system was considered extremely cutting-edge because it made the switch to output; it now appears to be outdated.

Due to the very recent adoption and increased sophistication of CPD output measures, the field is growing at a considerable rate, and the sophistication and complexity of systems is rapidly increasing. This leaves organizations like ICES, not so long ago at the forefront of the movement, lagging behind in the current climate.

Another possible reason for this position of the ICES scheme is its desire to appease members and "keep them on side." The voluntary nature of this scheme clearly indicates this way of thinking, as does the lack of formal audit of CPD records and the lack of defined competencies the individual will consider during the planning phase of CPD. It seems that the organization implemented an output-based scheme knowing that it was generally more effective, but feared that members would be discouraged from participating because they suspected they might be judged or "black-marked." ICES has therefore shied away from a structured measurement system.

Although there is no denying that this scheme is output-based (with four phases to the cycle, and encouragement to set learning objectives and assess whether or not they have been met), it is clear that this is not a robust system of output *measurement*.

Wirtschaftsprüfer



Focus exclusively on results, regardless of the learning process that leads to those results

The mapping of this case study produced a strikingly unique shape of output measurement. It illustrated a viewpoint that differs entirely from what has been shown through the case studies so far, and indeed, is unexpected in today's CPD climate.

The entire focus of output measurement for Wirtschaftsprüfer is the audit: not only of the results phase of the CPD cycle, but more specifically the results which have an effect on practice or organization. Interestingly, the results branch is typically the most difficult type of output to link to CPD. Such results may occur due to many factors, one of which may or may not be CPD. The only way to link the result to CPD is for the individual concerned to describe the learning process through the CPD cycle and to explain how the learning contributed to that particular result. Output at this phase of the cycle can indirectly indicate successful CPD, but without some sort of explanation of their connection, objectively speaking, the success of the CPD is no more than an inference.

With this in mind, it follows that Wirtschaftsprüfer has little concern for the impact of CPD specifically, but is instead more focused on measuring the standard of practice no matter how it was achieved. Rather than measuring the impact of the CPD from the bottom up—i.e., the

learning process and then its impact—Wirtschaftsprüfer looks at things the other way around. If the results are sound, then there is no further investigation of the quality of the CPD. Only when deficiencies in the product of an entire practice are found, is individual practice and knowledge assessed.

Actual CPD is measured by hours, and this unsophisticated input measurement system is a further indication of the lack of concern about evidence of CPD output other than the final results. There has been no move towards an output-based scheme, as only measurement of results or practice audits will satisfy the requirements of the regulatory function of this professional body.

This organization shares the objective with many other professional bodies, of ensuring ongoing standards for CPD, but it ensures the regulation of these standards from a collective approach of entire practices rather than on an individual level. This obviously links back to individuals to an extent, but this link is not tracked or validated by guiding or monitoring an individual through a structured learning process. The system in place, a practice audit, has little or no bearing on the learning process of CPD.

This case study is perhaps the antithesis of profile 1, as the focus is removed from the personal development of the individual completely, and the professional body instead measures the standard of the final product. The professional body in this case is concerned solely with results; the personal and professional development of individual practitioners is in this instance is considered the responsibility of the employer.

4.6 Conclusions

From the discussion of the definitions of CPD in Chapter 1, we would have expected to see a strong distinction in profiles between (a) professional bodies that regard CPD as primarily a matter for supporting the personal and professional development of professionals as individuals, and (b) those that regard CPD as primarily a way of supporting (even ensuring) that professionals are up-to-date and have maintained their competence. This is clearly shown by the distinction between profile 1 and profile 3 above. Those demonstrating profile 1 have taken a strategic decision to emphasize the cycle of CPD and in particular the link between planning, activities and reflection.

It does seem worth noting that although the sample is small, all the professional bodies demonstrating profile 3 are in the medical sector. There is certainly a public demand that medical practitioners demonstrate competence, a demand that seems to be more intense than in other professions. Government-sponsored demand for "evidence-based medical practice" reflects the sanguinity of those concerned with government regulation of medical practice towards the benefits of scientific methods. However, the term "evidence-based" is spreading to other fields. The development of league tables for educational institutions is a step in this direction.

Profile 2 has a distinct approach to CPD measurement—giving particular emphasis to planning and associated competency frameworks—was somewhat unexpected. However, returning to the definition of CPD given in Chapter 1, we note that (a) one of the three purposes of CPD was improvement and broadening of knowledge and skills, and (b) achievement by CPD of this purpose required planning by individual practitioners. If this is the primary aim of CPD, supporting future professional development by providing planning guidance and frameworks,

and by evaluating practitioner use of planning tools, becomes critical. We may speculate that this approach has been influenced by broad governmental education policy. This may also be regarded as evidence for the influence of the availability of certain well-specified techniques or tools. Planning tools and competency frameworks are tools that can easily be understood by individual professionals and communicated to important stakeholders. They also can easily be adapted to different professions. It is perhaps for this reason that the planning phase of the CPD cycle is particularly well developed compared with reflection in particular, which is regarded by some as an ambiguous concept. This is likely to change if new well-specified techniques or tools to support reflection are developed.

In this chapter, we have discussed the trends found in the features of CPD measurement schemes, and suggested explanations for these trends. In Chapter 5, we will discuss the more general issues that came out of the case studies surrounding and affecting CPD measurement.

Chapter 5 Analysis of Issues

5.1 **Introduction**

In this chapter, we deal with a number of issues of general concern for professional bodies in deciding what type of measurement system to adopt. First, we summarize the attitude to input and output-based approaches expressed in the case studies. In section 5.3, we examine different techniques for output measurement that those studies demonstrate. In section 5.4, we examine the standard approach to output measurement: self-assessment. And in the next section, we examine what many regard as the essential accompaniment to a self-assessment system: audit of CPD records. We also compare independent audit of CPD records with independent assessment and consider the costs of each. In section 5.6, we examine why professional bodies might strategically choose not to develop more sophisticated output measures. Finally, in section 5.7 we examine problems and possible solutions for professional bodies that cannot develop more accurate output CPD measures due to resource constraints.

5.2 General Consensus On Input vs. Output Measurement

All of the representatives interviewed regarded output-based CPD favorably. Only three of the fifteen organizations interviewed had an exclusively input-based CPD scheme. ICPAS and ICPAK were relatively unaware of output-based schemes, and knew very little about what was involved in implementing such a scheme. They both, however, were very open to the possible value of an output-based scheme, and were extremely keen to learn more and to find out the results of this research project.

The representative from Wirtschaftsprüfer was aware of output-based CPD, but his organization had no plans to implement such a scheme. This case revealed an attitude towards CPD that was oriented around performance of a particular firm, rather than the professional development of individual members. The organization does check the quality of audits, and as long as audits are up to standard, it believes that monitoring of CPD by hours is sufficient for its purposes.

SAICA and ACCA offer members the option of an input or an output-based scheme—whichever is more appropriate for the needs of the individual. However, the main scheme in both cases is based on inputs.

SAICA has a highly positive attitude towards output-based CPD, and officially intends to switch to a purely output-based scheme in 2009. However, given that its CPD scheme was only introduced in 2006, completion of this switch by then looks unlikely. Having experienced problems with compliance, it is currently researching reasons why a relatively low percentage of members are complying with the scheme. SAICA is, however, aware that this non-compliance may be due to people not understanding what they have to do, or to problems with online recording, which was recently introduced. SAICA believes that it is more important to get members on board with the simpler input-based scheme before attempting to convert to outputs. It still fully intends to adopt an output-based scheme, but is not sure when the membership will be ready for it. Although SAICA offers output-based CPD as an option, very few members choose this option. The SAICA representative felt that the guidance currently provided by the Institute is insufficient to educate people about the benefits of output-based CPD, or indeed, how to go about it.

ACCA also offers the option of output-based CPD, but doesn't itself operate it—instead, it accredits output-based employer development programs. Its main scheme—the "unit route"—involves CPD measurement by hours. Their reasons for this are not out of principle, but rather for practical reasons. Although UK-based, the majority of ACCA members are international. The organization recognizes that, in developing countries especially, professional bodies still rely very much on an input-based approach. Most regulators abroad still require a certain number of CPD hours, and the organization felt that it must keep in line with such regulations to meet the needs of the membership. A representative of ACCA pointed out that in countries without a predominantly UK-based attitude, many members were not able or philosophically ready to embrace output-based CPD. ACCA, and indeed its members, do see the need to include some sort of output in its CPD scheme. This can be provided by a requirement to complete a development plan, and to evaluate whether learning objectives have been met. This is an initial move in the direction of output, but when it comes to official measurement, input was considered a more practical option.

We observed generally positive attitudes towards the concept of output. A representative of case X was a perfect example of someone who was initially very skeptical about output-based CPD, but after seeing its implementation had experienced something of an epiphany, "I definitely see the benefits of output now, almost to the point where I wouldn't be bothered if we scrapped points all together. So I've done a 180 degree turn around over the past couple of years, and now I see the importance of the 'soft and fluffy.'"

We must caution the reader that the sample cases were chosen to illustrate different approaches to CPD measurement, and in particular to illustrate different approaches to CPD measurement by outputs, rather than to test the relative benefits of input and output approaches to CPD. Cases were chosen to demonstrate different approaches towards output measurement. However, it is notable that although the cases generally favored output measures (some very enthusiastically), some have retained input measures. They have done so because of (a) the current state of output measurement technology and, particularly, (b) the relative costs of the two types of measurement systems, even though they recognize output measures to be the ideal approach.

5.3 Different Techniques for Output Measurement

The case studies revealed seven different, broad techniques for output measurement. These are:

- (a) Qualitative statements / prose for explicit self-assessment
- (b) Questionnaires
- (c) Numerical scales
- (d) Formal examinations
- (e) Peer assessments/Peer group discussions
- (f) Client/patient questionnaires
- (g) Practice assessment based on demographic or other expectations

(a) Qualitative statements/prose for explicit self-assessment.

The standard technique for the measurement of CPD outputs is for members to fill out a form detailing their activities and what they have learned as a result. Often, the form has specific sections where members must demonstrate evidence of reflective practice and planning, often based around learning objectives derived from competency frameworks.

The usual "measurement" in such systems is self-assessment, where individuals look at what they stated in their development plan, and then evaluate if and how these objectives have been met. Individuals therefore measure to what extent the learning activity has been useful to them in their professional roles.

Although this sort of CPD record usually includes evaluation, the output itself is not measured, as a representative from ICES explains:

If someone has taken the trouble to evaluate their own learning, then it is pretty hard to then evaluate their evaluation, as it were, so we will pass them if we think they've sat down and thought about it ... we're interested in whether they've thought it through.

This sort of approach to CPD has several problems.

- Members often find it confusing—they do not know what is expected of them—detailed guidelines and examples of what is expected must be produced.
- Even if examples are provided, this raises further problems. PCNZ found that some
 members actually copied the content of the examples, trying to pass it off as their
 own work.
- People try to "see what they can get away with," in terms of how much detail they include in their records.
- It is time-consuming.
- The approach is difficult for people who are not good writers, such as those in professions that are more scientifically or mathematically oriented.
- It is difficult to determine a standard for audit of CPD records, at least until more clearly specified tools become available.

(b) Questionnaires.

None of the organizations interviewed used questionnaires to measure CPD output, but given the problems that ICES experienced with technique a), it was considering that option. Instead of providing the extensive guidance needed for technique a), ICES is considering more user-friendly questions in a primarily tick-box questionnaire format. These will guide members through an evaluation of CPD in a straightforward manner, avoiding any unnecessary confusion about what is expected from members. This makes the scheme more appealing. A representative from ICES stated: "If you ask people to think too much about their learning, I think you go into that grey area that they don't like very much. You've got to keep it very specific and very short."

Arguably, this is a retreat from technique a). The professional body is providing a more structured format that will provide less opportunity for professionals to think for themselves. A questionnaire can be more rigorous than a free-form format for self-assessment, and make it easier to (a) compare the returns of different individuals, and (b) identify progress of a single individual. Interestingly, CPBC uses a tick-box system in combination with technique a) to ensure that members are clear on what is expected.

(c) Numerical scales.

Several organizations interviewed had developed a numerical scale for members to assess or measure the output of their CPD. The output scheme of Case X involves an "effectiveness index." It still retains a standard points system, where the organization assigns one point to each hour of study, but also requires members to rate the effectiveness of their CPD based on the following guidelines:

- 0.0-0.1 very poor effectiveness; pretty much a waste of time and effort or not new or not relevant knowledge
- 0.2-0.3 quite modest effectiveness, but nevertheless of some benefit
- 0.4-0.5 an average degree of effectiveness; this should be a typical score
- 0.6-0.7 highly effective in satisfying the learning need
- 0.8-1.0 exceptionally effective; to be reserved for rare or profound learning experiences, or where a lot is learned in a very short time

This effectiveness value is then multiplied by the points determined by hours to give a "CPD value."

A main problem with this system, identified by Case X, is that people tend to give themselves effectiveness values of 0.9 or 1.0, regardless of the actual impact the CPD has had on them. Although it is in a more structured form than technique a), it is still subjective and open to abuse.

This problem is reduced by auditing CPD records, and by requiring evidence to justify the score assigned to any given activity. The motivation behind developing this system was to determine the specific skill set, or way of thinking, of the members of this profession. As the representative from Case X repeatedly pointed out, their members are scientists, and are not skilled in writing prose, especially reflective pieces. Members work with numbers, and using a scale such as this comes much more naturally to them than using technique a).

This scale system goes some way toward determining benchmarks or standards with a notional target of 15-20 points per year. This gives members something conceivable to work towards—a target such as this can be a motivator.

Another problem is that "effectiveness" is a rather vague term, and will mean different things to different people. At present Case X does not specify whether this is effectiveness in terms of new knowledge, or impact on practice. The representative in this case conceded that, at the moment, it could mean "either or both," and this distinction had not been clarified in the documentation made available to members. This presents a potential

disadvantage to such a scheme, in that members could rate an activity as highly effective, without it necessarily having any tangible impact on practice.

PCNZ operates a similar scheme, the "outcome credit scale," which is based purely on self-assessment, and contains only three levels. There are varied and more detailed criteria than for the scheme in Case X, and the audit is more detailed. Members are required to back up their scores with specific examples. PCNZ also require members to consider both increase in knowledge and impact on practice when assigning an outcome credit. The outcome credit scale only measures output at the "results" phase of the CPD cycle—for the other phases, PCNZ requires qualitative statements of output, as in technique a). It does not measure output at the planning phase, as this is believed to be implicit in the results phases.

(d) Formal examinations.

Knowledge examinations were the oldest part of the revalidation and recertification scheme for Case Y. In the past, it was really a continuing professional education scheme, rather than what is now considered CPD. However, formal examinations may be considered CPD if they are a part of the output measurement scheme rather than CPD as a whole. This is currently the case for Case Y, where the traditional examination is only one among several techniques used for the recertification. The technique of formal examination is of course common in formal assessments of learning or knowledge acquisition, particularly for CPD activities which are constituted as courses or modules that may "add up" to a diploma, degree, or other certification from a third party, such as a higher education institution. Some private suppliers of CPD also issue certification based on formal examinations that can be included in portfolios of CPD accomplishment.

(e) Peer assessments/Peer group discussions.

Case Y uses peer review in a standardized form, through questionnaires. The validity of this instrument for revealing PDV will depend on (a) the completeness of the questionnaire, (b) the proportion of direct peers consulted, and (c) how honestly and carefully peers fill it out. This last factor will depend on the seriousness with which this output measure is taken. This itself will depend substantially on the efforts of the professional body. RCPSYCH uses a rather informal technique of output measurement, by grouping members into peer groups where they discuss their development plans, and then evaluating whether or not they have met their learning objectives. Although there has not been any formal research, anecdotal evidence suggests that members like this way of evaluating CPD. They find peer groups not only valuable for support, but also find it a fruitful way of reflecting on what they have learned and how it has affected their practice. Peer review is most widely used for a range of activities in the academic world connected to career development (review of potential publications), as well as institutional assessment and accreditation. However, in other contexts, there is a danger that peer review for ensuring competency through CPD may be regarded as subjective and not disinterested. On the other hand, this form of assessment can be extremely important for the formative development of individual professionals.

(f) Client/patient questionnaires.

Case Y uses techniques that those unfamiliar with current CPD practice might expect were suggested by the label "output-measurement." One technique is a survey of patients, who respond by telephone or on the Internet. A primary problem with this method is that the sample of respondents is not random. There are biases. For example, it is up to the professional to distribute the questionnaires or inform patients of their availability on the Internet. Another reason for bias is because the technology for responding to the questionnaires excludes those without the necessary equipment or expertise to respond.

(g) Practice assessment based on demographic or other expectations.

All these techniques of output measurement focus on the individual. Assessment of practice performance as developed by Case Y focuses on the practice itself. How can a practice be assessed, and how can CPD activities be connected to that assessment? Beyond asking peers and clients, it is possible to develop standards for practices; however this route is fraught with difficulties. These standards are unlikely to cover all activities, as the work of professionals is complex and varied. Not all activities of the practices are assessed, and the extent of attention paid to those that are assessed will possibly be different, due to other demands of the practice. It may be that using certain non-comprehensive characteristics in the assessment will skew effort toward those CPD activities to the overall detriment of the practice. In addition, the measures themselves cannot be perfectly accurate, because the models for demographic features will be incomplete and are likely to be crude. In addition, there is the ultimate problem of assessing the connection between CPD and practice. That problem results from the fact that (a) changes in practice may have occurred for other reasons, or (b) new understandings arrived at from participation in CPD may have no immediate effect on practice. The effects must come in the long term, because some of the activities of CPD are intended to be preventative, or relate to dealing with situations that may arise infrequently.

Nevertheless, some benchmarks can be developed. For example, pharmacies, general practitioner practices, hospital departments, and dental practices can be judged by the incidence of certain diseases, or by the use of new techniques for testing or treating patients or clients. These measures can be set against demographic features of the clientele to determine expected levels of testing or treatments of disease or curing rates.

The efforts of Case Y to assess practice are supported by national statistics which are clearly very expensive to compile. In the medical field, such efforts can be supported by government agencies that, because of the importance of public health, sponsor the collection and analysis of the data needed to define national profession-wide standards. For such output measurement techniques to become more widespread, governments or other third parties must be convinced, in the public interest, or in the context of national competitiveness, to support the development of nation-wide practice standards for other professional practices.

Whatever the current difficulties of these techniques for practice assessment are, it must be emphasized that this is a new area of development, and it is likely that techniques will be improved in future, as long as the concern for CPD and for output measures persists.

5.4 Broad Approaches to Output Measurement: Self-Assessment

Most of the professional bodies in the case studies primarily used self-assessment to measure output. Some stated that this was the most resource-efficient, but many believed in self-assessment out of principle, i.e., that individuals should have the autonomy, and indeed be granted the trust, required to assess their own competence. As stated by a representative from CIMA, which works on a principle of trust: "That's one thing we took from the older ideas of CPD that were based around obligation and duty—we've had to say we trust people as professionals having gone through a certain amount of torture to get their professional qualification that they have that sense of responsibility and trust."

A popular opinion expressed in the interviews was that only individuals know exactly what is effective CPD for their roles—and the professional body, with such a diverse membership of people doing very different jobs, is not able to dictate what is useful for an individual.

In using self-assessment, however, it is preferable to establish standards against which members can assess themselves. Competency frameworks are commonly used to set standards to aid self-assessment. They allow members to set targets for themselves, and then assess if they have been successful in achieving them, rather than vaguely speculating if they have learned anything useful at all.

IITT has taken many steps to ensure the validity of self-assessment. Its system involves a complex calculation, where members assign a point score to each competency they are working on. They can score themselves in the categories of competence, ability, or experience, the value of which goes up in an ascending scale respectively. The score is then multiplied by the competence weighting, which is unknown to the individual. This hidden calculation system avoids any manipulation of the system and allows a certain objectivity to the self-assessment.

In addition, there is a robust and clear set of criteria for the self-assessment scoring, which the representative from Case X believes makes this method of measurement "semi-objective." By defining these criteria so well, IITT has avoided rigorous training of external assessors, hence limiting the resources required in this area. An opinion expressed in so many of the interviews was that the individual will gain nothing from a dishonest self-assessment. As the representative from Case X so eloquently put it, "OK, so self-assessment isn't the strongest mechanism in the world, but at the same time, if you put something different to what is real, then it's the equivalent of cheating at Patience [Solitaire]—it's yourself that's the loser."

Only one organization had actually moved away from self-assessment as a principal method of measuring output. Case Y uses a combination of self-assessment, patient records, patient and peer feedback questionnaires, and knowledge tests. The data is then processed and fed back to members, indicating whether they have met national targets in various areas. But with such a rigorous system comes expense—the content of the system has cost the organization over \$100,000 to date. There were also substantial costs in addition to the system itself.

As noted in the introductory chapter, CPD has different purposes. If the purpose is to support professional and personal development, then self-assessment is essential. Part of being a professional is to take charge of one's own development, as well as being trusted to do so. For many, professionalism is synonymous with reflective practice and therefore professionals must continuously reflect on (a) what they have learned, and (b) how that learning will affect their

behavior and their practice. Self-assessment in this sense is both a measure of CPD output and a CPD output in itself. If the purpose of CPD is to ensure achievement of specific competencies, then self-assessment is less important, and could be interpreted as a drawback to achieving clear PDV measurement. Arguably, it would be better to have independent verification of mastery of competencies and demonstration of these competencies in practice situations. However, if the purpose of CPD is to support overall professional competence, then self-assessment may still have a critical role.

5.5 Broad Approaches to Output Measurement: CPD Auditing, Auditors and Assessment

5.5.1 CPD audit and CPD output measurement

One way of reducing the drawbacks of self-assessment—of achieving a degree of objectivity with self-assessment techniques—is to combine it with an audit of members' CPD records. A CPD audit seeks to provide "reasonable" assurance that the record is free from material error. For example, financial statements are said to be true and fair in a financial audit if they are free of material misstatements. Presumably, the audit will be performed by someone who is independent and objective; that is, someone with no interest in the result of the audit or preconceived notions about it, and someone who is competent to make the required judgment. The audit is not concerned with judging the success of the firm, only that the information provided is a true and fair representation of the firm's financial information. For CPD, the person auditing would judge whether statements made in the professional's self-assessment are a true and fair representation of the achieved output.

Most professional bodies interviewed regarded audit of CPD records as necessary for verification and to ensure valid measurement. The rigor of these audits varied considerably. Some, for example CIC, thought self-assessment was sufficient, and thought that the onus should be on individuals to complete their CPD to a suitable standard. They did not, therefore, generally audit self-assessment, although members can request a third party audit.

All organizations that performed CPD audits audited only a sample of submissions. One organization targeted those carrying higher risk. Several organizations audited only a proportion of members at any one time, but ensured that after a full cycle of CPD the entire membership will have been audited at least once.

5.5.2 Resources Required for CPD Auditors

Resources required for CPD auditing varied. Case X, for example, only has four or five auditors who work as volunteers out of office hours. The CPD auditors are provided with training and guidelines, and spend about 30 minutes auditing each record.

PCNZ has a more advanced CPD auditing system, where auditors are elected and paid, performing CPD audits as well as doing their regular work. The CPD auditors receive considerable training, where they are provided with various examples, and are then asked to assess the learning. This gives them a clear idea of what meets the standards. Auditors also have a chat group, where they can present different scenarios and discuss (a) what sort of level they would require for the different outcome credit levels, and (b) what sort of evidence they think is acceptable. It is clear that a robust CPD auditing scheme requires a high level of resources. PCNZ is finding that the process is taking up more resources than first anticipated, but is

sensitive to the possibility that this is due to it being the first CPD audit and that it is the initial training of the CPD auditors that is proving most resource-intensive. In this case, CPD auditors are peers of those being audited and therefore have background knowledge, and some capability of making judgments based on experience. IITT also use peers to "sign off" members' CPD records.

The majority of organizations audited CPD records on a satisfactory/not satisfactory basis. They gave no further credit to those who had exceeded the level of "satisfactory." Organizations that have implemented a numerical scale for self-assessment, have established some levels of quality. It is the CPD auditors' job to ensure the validity of these levels. Those using qualitative self-assessment made little distinction between records, other than to distinguish between those that did and those that did not meet the requirements—which were often vague. Very few organizations interviewed had any notion of a scale of quality when it came to CPD auditing.

IITT uses different levels of competence to determine levels of membership—to move up a membership level requires a higher quota of points, and these points must be maintained or the individual will be relegated to a lower membership level. Case Y linked levels to pay—they have a pay for performance scheme, where members who meet certain performance (results) targets receive a monetary reward. It is, however, likely that this is perhaps not appropriate or feasible for many professional bodies.

5.6 Strategically Determined Directions for Professional Bodies

We can consider movements towards output measures by professional bodies in terms of our model in two ways: how far they go along each of the "rays," and how far they are along all four rays: is it necessary, or even desirable, to move along all four rays at the same rate, or can it be beneficial for a professional body to prioritize the development of a measurement system at just one or two of the phases of the cycle and therefore moved only along those rays? This section will investigate what strategic reasons there might be for professional bodies to choose not to develop more sophisticated output-based measures for all or specific phases of the CPD cycle. This involves a number of considerations.

5.6.1 External pressures

Pressures on professional bodies from government, the media and clients to demonstrate competence, or at least to demonstrate efforts to maintain competence, broadly pushes them towards output measures in general and, more specifically, towards a higher PDV measurement level at the results phase. If this pressure is the primary motivating factor, then planning and reflection become less important than results, and practice results become the most important of all. This pattern is complicated if the planning process is highly oriented towards a competency framework, and if reflection focuses primarily on how practice can be affected by CPD activities.

5.6.2 Purpose of CPD being directed to personal and professional development of members

If the prime strategic aim of CPD is personal and professional development, the process itself becomes more important, and the planning and reflection phases become critical. Results may receive less attention, not because they are deemed unimportant, but because they are not as important as planning and reflection.

5.6.3 Prescriptive and rules-based aspect of more sophisticated output measures may lead to compliance motivation rather than concern for PDV itself

Another element associated with the strategic aim of personal and professional development is whether the professional body should be encouraging and enabling members, or prescribing what CPD activities members should be doing. Encouragement and enabling suggests formative assessment rather than summative assessment⁶. Arguably, as one moves farther along the rays of the model, one moves towards requirements. If a professional body wants to measure CPD output more accurately, it follows that the individual will have to do more in order to make their output accurately measurable. This often means more work: what is expected in terms of professional development value becomes clearer, but also tighter, more rules-based. There is an argument that rules-based rather than principles-based compliance requirements can be counterproductive. CPD may not add value if the requirement to measure output is imposed for compliance purposes. Or, to put it the other way around, if what is required is prescribed in too much detail, people will not carry out what is expected of them to increase PDV, but will rather attempt to raise their ratings on the output measure of that PDV. They will follow the rules rather than the spirit of what is required. Problems associated with input measures, such as people ticking attendance boxes rather than actually paying attention and learning from CPD activities, can also occur with output measures.

5.6.4 Professional autonomy of members

Prescriptive, rule-based compliance requirements may be seen as posing the danger of going too far towards a certain kind of output measurement that may otherwise be seen as having high PDV measurement level. In general we have presumed that more guidance is better than less.

However, for many, an essential part of professionalism is that professionals act autonomously: that it is up to the professional to decide what services are appropriate to provide in any given circumstance.

This characteristic of professionalism in general can be applied to CPD: that it is up to professionals to decide on how to fulfill their requirements to keep up-to-date or to develop their professionalism. It is possible to maintain this autonomy, and still go some way along the rays of our model. Individuals need to plan and reflect on CPD, and they need to carry out CPD in ways that will lead to new knowledge and practice improvements. If the required new knowledge or the ways practices should be improved are not specified, then arguably, professional autonomy is maintained, even if the output of chosen CPD activities is assessed. However some CPD programs do provide competency frameworks and in some schemes the criteria for assessing CPD activities are so strictly laid down that many professionals believe that this will detract from the principle of professional autonomy.

83

According to IFAC Education Committee (IEP 3, 2004: 3), 'Formative assessment is ongoing, providing both teachers and students with information about current progress in order to support future learning.' 'Summative assessment provides information about the level of a student's performance at certain points in learning process, usually at the end of a course of study.'

5.7 **Economically Determined Directions**

Professional bodies must be diligent and pragmatic when determining what type of CPD measurement technique to implement, and do a thorough cost-benefit analysis in conjunction with a careful examination of the organization's mission, aims, and objectives, and consideration of how CPD will impact on these. There are levels of sophistication of measurement systems, as exemplified throughout this paper Through careful analysis, professional bodies should be able to gauge not only what is appropriate for the organization strategically, but also in terms of the current and projected availability of resources. A professional body can take many steps to move towards an output-based approach to CPD measurement without breaking the bank.

5.7.1 Self-assessment and limited audits of CPD records

Clearly, the easiest route towards an output-based CPD measurement scheme would be based on self-assessment. The simplest of these systems would require members to fill out questionnaires after CPD activities. These questions should relate to what value the CPD activity provided to support the members in improving their practice. Although this approach can provide a degree of support for individuals in their CPD, by itself it cannot ensure that those individuals are indeed keeping up their competencies. If the questions are sufficiently detailed, a small step towards supporting the ideal of ensuring competency may be achieved. However, for real credibility some form of CPD audit is needed, which can be expensive.

However, two strategies can be pursued to keep the cost of CPD audit down. First, a detailed tick-box or multiple-choice questionnaire could be administered. This would make CPD auditing relatively straightforward, and remove the need for substantial training of CPD auditors. It could also be checked electronically and online. The transparent audit criteria could be so many of the boxes ticked, and so many of the multiple choice questions answered.

If the professional body is small, and if the audit is carried out only on a random basis on a small sample of returns per year, it may be carried out without great financial hardship for the professional body. This would allow the questionnaire to have a limited number of open-ended questions. However, for such a policy to have credibility, the criteria for passing a CPD audit, and the consequences of not passing, must be clear. For example, if what is learnt during the CPD activity can be applied to practice, the questionnaire could call for an example to support the claim that it has in fact been used in practice. The example here acts to verify the answer in the questionnaire, without which an individual may not pass the CPD audit. If the penalty is clear and consistently applied, this may reduce the need to audit a substantial proportion of returns.

5.7.2 Employer Development Schemes

Accreditation of employer development schemes, as an alternative to developing a system of output measurement within the professional body itself, can be another strategy to ease the financial burden. Many employers have such a scheme, which often involves peer review and assessment of knowledge and performance—the equivalent of CPD output. Professionals often have employer performance reviews and development schemes in addition to the CPD requirements of their professional body. Sometimes, this means completing two different types of recording or measurement for the same activity. By using an accredited employer

development scheme, professional bodies can be sure that members are completing CPD, but save on resources by not having to develop, assess, or administer their own schemes.

There are however, problems with this. Firstly, not all employers have development schemes, and if they do they may not meet the CPD requirements of a professional body. Alternative arrangements must be made for members in such circumstances. ACCA uses such a system as one of its CPD routes. For members who cannot, or wish not to, follow this route, there is a "unit route" that is input-based. It seems that by taking this approach, those who work for smaller firms or for themselves are unable to undertake output-based CPD, and are hence excluded from the benefits it presents. SAICA is considering this move as a first step towards output measurement. Because SAICA does not currently have the resources to develop an exhaustive output-based scheme, accrediting employers' schemes can benefit at least some of its members.

Secondly, the objectives of the employer may not be aligned with the objectives of CPD for the individual as a professional. An employer development scheme will embrace the needs of the current job, but may not fully take into consideration the long-term career aspirations of the individual. These aspirations may not be relevant to that particular employer, or to the job role. Although PARN has observed in the past a tension between the objectives of an employer and the objectives of CPD for an individual professional, none of the interviews for this project mentioned such a tension. For example, the representative from SAICA was of the opposite opinion: "My view is that what an employer wants of you, that's all to do with your career."

This chapter has outlined general issues relating to the types of measurement schemes. In the final chapter, aspects of all the information gathered in this report will be combined to draw some general conclusions and suggest ideas for further work.

Chapter 6 Summary of Findings and Ideas for Future Work

6.1 **Introduction**

In this concluding chapter, we pick up a number of issues. First, we reprise the advantages and disadvantages of general input versus output CPD measurement systems within the context of information gathered through this study. In section 6.3, we briefly consider whether a balanced approach to the different phases of the CPD cycle is best. Finally, we look at the future for output –based CPD measurement and focus on ideas for further research.

6.2 Input vs. Output: A Reprise

The information provided in the case studies allows us to revisit the general arguments for and against input and output-based approaches to measurement of CPD in only a limited way. This is because the cases were chosen to illuminate different approaches to output measurement, rather than success and failure of input-based approaches. The case studies did demonstrate a wide range of output approaches and techniques for measuring CPD, even though we believe that most have introduced only limited forms of output measurement. These primarily focused on self-assessment of planning and reflection, and gave only preliminary consideration to results.

The experiences of those we found in this situation have been generally positive, and several individuals working at professional bodies have themselves been converted to output-based measures as a result of their experiences. The cases clearly demonstrate that professional bodies can introduce output measures with good success and without prohibitive cost. Nevertheless, these schemes have not been a total success. Many still experience a low level of CPD record returns where such records are not mandatory.

A further general point about output -based measurement demonstrated by these cases is that audit of CPD records is important, but that if it is to serve its purpose of providing a degree of "objective" or "independent" information on the truth and fairness of self-assessment returns, considerable investment in resources is required. For output-based CPD measurement to be viable, and for it to achieve a degree of legitimacy, a combination of self-assessment and widespread audit is needed. Several professional bodies have shown that most of the high resource cost may be borne by volunteers. This still leaves the cost of coordinating CPD auditors and of training them to ensure consistent standards, a considerable cost if many auditors are required.

Another point relates to the great difficulty in taking the next step with output-based measurement: to measure results, particularly effects on practice or organization. Those few cases that have implemented measurement systems which focus on measurement at the results phase of the cycle, have faced high costs, and some dissatisfaction among individual members.

Overall, we may summarize the relative advantages of input and output-based approaches to CPD measurement as follows.

Advantages of the input-based approach:

• It is simple and therefore relatively easy for members to understand what is expected of them.

- It is relatively easy to implement, monitor, and administer. Although extra resources are required to implement any measurement system, recording inputs need not be particularly sophisticated, even for a points system, although points systems sometimes cause confusion among members.
- It does not present a substantial measurement cost burden.
- As it is the earliest approach, there are certain "network diseconomies" to switching away from it if one is part of a network that is still largely using input approaches. This problem was expressed by one case study organization, which found it difficult to move entirely away from an input-based approach because organizations in their group in other countries could not be pushed towards an output-based approach. The "drag" of this factor occurred because of the need for comparability, and the need to be seen to deal fairly with individuals in different jurisdictions, particularly as people move between jurisdictions. Arguably this could be regarded as a disadvantage in the long run.
- If the purpose of CPD is primarily personal development, the need for certification based on output-based measurement will be reduced—if CPD is only for personal development then there is no need to provide the outward message that output-based measurement gives, and therefore input measurement is often simpler and sufficient in such instances.

Disadvantages of the input-based approach:

- While it is relatively easy to monitor inputs, input-based systems have not been well monitored by some professional bodies. A poor reputation has developed in some quarters, not only for this measurement method, but for CPD in general.
- Although it is a simple system to operate, it is also rather easy to see how it can be abused. Because the forms of abuse are relatively homogeneous and transparent, this also contributes to the impression that CPD is not being taken seriously. For example, if someone falls asleep during a lecture, it is open for all to see. If someone gets a friend to sign in for them, the "conspiracy" can attract attention.
- It is well-ingrained in modern culture, where education is subject to frequent and seriously organized testing, and where certification is based on the results of testing, that mere attendance is not a good proxy for learning. This was not always so, and there are some instances where admission to an educational institution counts for something that is independent from merely passing the tests set by that institution. However, all education institutions considered to be of merit have such tests, and will not issue certification without their satisfactory completion.
- Even if the purpose of CPD is primarily personal development, it is useful to measure some sort of output so that individuals can monitor how well they are doing.

Advantages of the output-based approach:

- The most obvious advantage is that output-based approaches attempt to measure directly what CPD is intended to achieve.
- Output-based measures provide a means whereby individual professionals can monitor their own progress. They can be used as the basis for targets for further progress, as well as

- a measure of how far individuals have progressed over time. They therefore provide a way of monitoring progress in terms that are closer to the purpose of CPD, that is, PDV.
- They allow the professional or regulatory body to monitor progress of professionals. This can be used to support the ethical requirement that members keep up-to-date or keep up their competencies.
- Output-based measures can provide benchmarks for higher level roles within the
 profession, such as fellow status. Again, while input measures can be used for these
 purposes, output measures are more likely to be regarded as a real hurdle that encourages
 individuals to be worthy of such higher roles, and therefore to be acceptable to the wider
 membership.
- Output-based measures allow professional bodies to send signals to various stakeholders that the profession takes maintenance and development of competencies seriously. This is important for clients and the general public. Also, however, as CPD and output-based measures of CPD become more widely understood by the general public, CPD will arguably become more important for increasing the influence of the profession and for attracting good candidates to the profession. This has become, for some, a most important factor in recent years, due to the bad press professionals have received because of high profile cases of incompetence as well as lapses in professional ethics.
- There is an interesting argument in favor of output-based approaches over certain input-based approaches. That argument suggests that input-based approaches, particularly those based on a points system, involve professional bodies attempting to control output by allowing only certain activities to count towards CPD hours or points. Points systems can be more sophisticated, in that they can allow for a wider range of activities to count, because they allow some activities to count for less than others. However, with output-based measures and self-assessment, it is up to the professionals themselves to decide what has been of professional development value.

Disadvantages of the output-based approach:

- It is possible that the actual output-based measurement approach taken, particularly early in the process of conversion from an input-based system, provides little verification that PDV has been achieved.
- There are many different output-based approaches, reflecting in part different ideas regarding the purpose of CPD and its connection with PDV. This can be confusing to individual professionals when dealing with professionals in other fields. The model of CPD measurement we have developed here is complex, in part reflecting the different purposes of CPD, in part reflecting different phases of development in output-based measurement by different professions.
- Output approaches are improving. Early adopters may have to update their systems in future to take into account new developments and to keep up in the current environment. This will likely occur in phases, leading to an even wider range of practices among professions. This may make it difficult for clients and the general public to understand just what is being measured and how.

- The output-based approach promises much. Most output-based approaches cannot, however, deliver an accurate measure of certain ultimate purposes of CPD. On one hand, CPD cannot guarantee that professionals will be up-to-date. Many systems cannot even guarantee that competencies maintained or developed explicitly within a CPD framework will be satisfactorily executed in practice. Furthermore, there is as yet little systematic evidence that CPD does in fact lead to substantially improved practice. Although CPD measured by outputs may be logically expected to deliver better results than CPD measured by inputs, the gap between expected benefits from each system is likely to be less than the actual gap in achieved benefits. However, it is likely that the distance between these two gaps will be reduced in future as more professions gain experience with output-based measures, and as the overall quality of CPD activities improves with new technology such as online courses and simulation techniques.
- Related to the above point is the issue of relying on self-assessment. A number of professional bodies using output-based measurement, particularly at the reflection phase, have reported a concern that outputs are "subjective" and therefore presumably not clearly and verifiably connected to PDV. This need not be a problem, particularly when self-assessment is combined with a serious CPD audit system or a secondary assessment system involving peers or clients. Also, detailed questions and guidelines for scoring outputs can reduce some of the subjectivity as well as making it easier to audit CPD records consistently. However, it currently is a problem for most professional bodies adopting output-based systems, because self-assessment returns are as yet insufficiently supported by guidelines and scoring systems, and are not frequently audited or evaluated.

Many of the disadvantages of output-based systems are not inherent in such systems, but rather reflect the early state of their development. Costs of output-based measurement systems are likely to fall with further developments in online software. Costs of the auditing of CPD records are also likely to fall as expected standards become better established and more experience is gained with training of CPD auditors. Most significantly, we believe that techniques of practice appraisal are likely to improve, as we discuss in the next section.

Along with improvements in the supply of output-based measurement techniques, we believe that the demand for such systems will grow significantly as pressures on professional bodies to provide evidence of continuing competence and to maintain professionalism grows both from professionals themselves and from other stakeholders.

6.2.1 Dealing with the critique of output-based measurement from scientifically-oriented practitioners

The criticism that one cannot accurately measure outputs, particularly practice effects, can be a powerful one. Any measurement system can be criticized as not accurately measuring what you actually want to measure, if what you want to measure cannot be controlled under laboratory conditions. How can one be assured, even if practice improvements are observed, that they result from CPD rather than from other factors? The answer to this is three-fold:

(a) Measurement of CPD is a moving target. It is only recently that professional bodies have been trying to measure CPD by outputs, particularly practice effects. There is some experience with measuring practice performance as part of initial qualifications based on

placements and apprenticeship schemes, but these experiences are not precisely relevant to assessing CPD effects on seasoned practitioners. Still, methods are developing in electronic observation techniques, and familiarity of peers and clients with evaluations and reviews.

- (b) Some of the problems of particular measurement methods can be alleviated by using multiple methods of measurement. We have described various measurement methods along each of the "rays" of our model. i.e., review of self-assessment, peer review, client/patient review, technical audit, and assessment.
- (c) To be seen to be supporting professional competence, it is important to go down this route even if we have so far made only limited progress. It is important to be seen to be taking on the problem, even if it is not solved. Some professional bodies wish their CPD schemes not only to actually support their members to maintain, improve, and broaden their knowledge, skills, and competencies, but also to be seen to do so, to reassure stakeholders that members can be trusted to be competent professionals. Those professional bodies must make serious attempts to measure CPD by outputs, particularly at the results phase of the cycle. The only way these arguments can be countered in the end is for the technology of output-based measurement to improve and this requires an active community of professional bodies working on developing such techniques.

6.3 Is a Balanced Approach Best?

A balanced approach could be said to implement a measurement scheme that achieves a similar PDV measurement level at each phase of the CPD cycle. We do not believe that it is prudent to judge this approach at this stage. Different professional bodies will emphasize different purposes of CPD, and this will, as noted in Chapter 1, have consequences on which CPD measurement system is appropriate. If the purpose of CPD is mainly personal and professional development, then it may be that a system skewed towards planning and reflection is all that is required. In that case, resources should not be expended on results measurement. If the purpose of CPD is mainly maintaining competence, and ensuring that competence is being maintained, then output measurements on results, particularly practice effects, are paramount. Going far along the PDV measurement dimension for planning and reflection will be less important to achieve the purpose of competence. However, if the purpose of CPD is the development of future knowledge and competencies, we believe that a balanced approach would be "best."

It may be argued that encouraging professionals to reflect and plan their CPD is important, even if the emphasis is strongly placed on results. Similarly, results are important even if the emphasis is placed on individual professionals taking responsibility for their CPD. The CPD cycle is intended as an integrated process, and outputs measured by planning, results, and reflection could be said to complement each other in the overall achievement of PDV. One way of distinguishing these arguments would be to emphasize the importance of a balanced approach to output-based CPD measurement in the long run, but that given limitations on resources, experience, and technology, a skewed approach, based on what the professional body feels is the most important purpose, may be more realistic in the short to medium term.

6.4 The Future of CPD Measurement and Ideas for Further Work

6.4.1 Introduction

In the near future, we expect that more professional bodies currently using input-based measurement methods will move towards limited output-based approaches. Certainly, the identification of the simplest output of participation in activity, and evidence of planning and/or reflection, is relatively cheap now. Many models of guidance planning documents and guiding questions to be answered as part of reflection on CPD can be adapted from others, hence using minimal time and resources.

Several aspects of CPD measurement and support may well be developed in the near future, such as development of (a) better and clearer guidelines and tools for measuring reflection, and (b) a widely accepted standard for assessment or evaluation element to audit CPD records. These issues and others are considered in the context of ideas for further work in this final section.

6.4.2 Specific output-based measurement issues for subsets of the membership

Adjusting CPD measurement to specific circumstances found in subsets of the membership can improve the quality of output-based measurement, and improve the overall PDV of CPD. Some professional bodies have developed schemes that target CPD to particular subsets of their membership. We have not pursued the details of these CPD schemes and how they affect and are affected by output measurement schemes. They could be pursued in future for the following subsets of the membership (among others):

- Type of learner
- Job role
- Phase of career
- Sector—some more comfortable with writing or scales, depending on the skill set of the profession.

6.4.3 Regulatory Impact Analysis, the public interest and decisions on output-based CPD measurement schemes

At a recent IFAC meeting, use of regulatory impact analysis (RIA) was considered to:

- allow IFAC to communicate what it considers to be "in the public interest," and why;
- to balance and trade off the needs of various stakeholders and the costs and benefits of various actions;
- to receive input from the public on their views, and to incorporate this information in decision-making; and
- to be transparent about the decision-making process that was followed and the rationale used in making a decision that is in the public interest. (Agenda Item 6.2.1 IFAC Board Meeting, September 13-14, 2007)

It was not the purpose of this report to feed into such an analysis, but the model and the distinct profiles outlined in Chapter 4 could be used as options to feed into a decision making

process on recommended CPD output measurement schemes, or at least on guidelines suggesting the circumstances under which different output-based measurement schemes would be recommended.

6.4.4 General development of the model and testing for robustness

The model has been developed based on theory, limited case study evidence, and a fairly sanguine attitude towards how it can be developed in future. It is therefore both somewhat overspecified and at the same time rather crude. The model is somewhat over-specified, in that we have indicated fairly precise steps along the PDV measurement scale for each of the phases of the CPD cycle. For example, we have presumed that to reach level 3 and higher for the planning phase, some sort of competency framework is needed, and the more detailed that competency framework is, the higher the level of PDV measurement. However, it is unlikely that we have examined all ways of reaching a level 3 or higher PDV measurement for planning with the 15 Case Studies of this project. It may be that other cases use other forms of planning tools that are not competency frameworks, but are rather frameworks based on personal characteristics or professional capabilities. Instead, we may find that competency frameworks are a specific example of a wider, more generic set of planning tools that we have not identified. In this sense, we may say that the scale discussion in Chapter 3 should be treated as a thought-provoking example, which may well be supplemented by broader and more generic terms as more cases are added to the analysis.

The model is also rather crude compared with its potential, in two senses. First, we have limited ourselves to only five points along the PDV measurement scale for each of the phases of the CPD cycle (except for the activity phase, which can only reach level 2 in our model). The scale may be extended as more examples are found. Secondly, although we have indicated that an examination of the cases in detail shows that there is more than one way of moving up the scale, the number of different routes we have found is clearly limited by the small number of cases considered.

To develop the model further, more precise information, and information from a wider set of cases, should be gathered. This could lead to:

- A more detailed and more robust set of scales along each of the rays of the model. At the moment, we have only specified a few steps along each ray, and a few ways of moving towards the identification and measurement of higher levels of PDV. More precise questions need to be asked on a consistent basis to more professional bodies.
- Clearer specification of overall profiles, and greater confidence in their robustness, or the disclosure of other profiles.

The research methodology used here was solely to contact those responsible for CPD and CPD measurement at professional bodies. No attempt was made to contact individual professionals to get their perspective on output-based systems. Also, we did not contact other stakeholders, such as peers, clients, and employers. The latter two groups are particularly important judges of the value of CPD. It would be interesting to see if there are correlations between (a) attitudes of clients and employers towards the value of CPD in engendering trust, confidence, and a willingness to pay for professional services or salaries on the one hand, and (b) levels on the scale of each of the CPD phases and different profiles of CPD schemes using our model on the other.

A further aspect of the model that could be developed relates to the interpretation of the measurement scales at each phase of the CPD cycle. We began with the presumption that these scales represented the extent to which measurement schemes were detecting output of CPD. After preliminary criticism of this, we decided to label the scale "PDV (professional development value) measurement level," as this was a term that could be used to denote measurement of what the output of CPD was generically, that is, all the different purposes CPD could be thought of as serving (as discussed in Chapter 1). However, using the term PDV measurement level suggests that higher level output-based measurement schemes are higher in two different senses, as noted in Chapter 2. First, higher level PDV measurement systems are able to discern the achievement of higher level of PDV, that is, they are able to identify and provide evidence that can be relied upon to demonstrate achievement of higher PDV outputs than lower level systems. For example, input-based measures can tell us little directly about the PDV of CPD at all. Use of crude output-based systems, such as ones that simply require professionals to reflect on the value of their CPD activities, would make it difficult to distinguish higher level, critical reflection, particularly if the system only uses self-assessment, audited only to determine if a minimum level of reflection was expressed. Secondly, higher level PDV measurement allows a finer distinction of achievement of outputs from a member's CPD; that is, it makes it easier to distinguish different output achievements from CPD according to the degree of PDV.

This distinction between the range of PDV that can be discerned, and the fineness of the distinctions among different levels of PDV that an output-based measurement scheme can detect needs further analysis and empirical support. This is likely to require a different research methodology than we have pursued.

Two further related issues suggested by the model would also require further research. First is the issue of how far one can go in identifying higher levels of PDV on each ray of the model. Have we identified the current limits of what output-based CPD measurement schemes can achieve? Can we identify characteristics of better schemes than those that can be found today, in terms of identifying higher levels of PDV? Secondly, what is the relation between higher level PDV measurement on individual phases of CPD, on the individual rays of the model, and the overall PDV measurement level of the entire measurement scheme? This issue was raised in Chapter 2 merely as a topic that requires further research.

What research procedures could be pursued to develop the analysis in ways discussed above? One approach could be ethno-methodological, whereby researchers actually take on the role of individual members, progressing around the CPD cycle and producing whatever is required to demonstrate output. Another approach would have researchers follow individual members closely as they carry out their CPD, and follow the output measurement scheme of their professional bodies, and as their practice develops over a substantial period of time.

Instead of developing the model, the work begun with this project could be developed by producing tools associated with the model. In the conclusion to Chapter 4, we noted that output-based measurement of the reflection phase of the CPD cycle were less developed compared with the planning phase (at least for the cases in this report). We speculated that this may be due to a lack of well-specified techniques currently available to guide or monitor reflection, compared with planning tools and competency frameworks. The identification of more cases using different reflection output measures and deeper analysis of those cases could lead to

development of such tools. Also, an information/education pack could be developed for smaller or newer professional bodies, or for professional bodies in countries where there is little experience of output measures for CPD. Some of this would involve repackaging some of the experiences of the case studies from this project, but to produce useful tools, further cases and a deeper questioning of procedures for developing output measurement systems are needed. More detail on problems encountered and how they were overcome is also needed.

6.5 Final remarks

It is clear that this project is the first step in examining current practice and the potential of output-based CPD measurement, and all the issues connected with it. The beginning of this paper noted that literature on the measurement of CPD was sparse, and we feel this project has at least made a strong start at filling that apparent gap in current knowledge. A great deal of information and insight has been gained as a result of this research. We hope this will not only give those at professional bodies an idea of what is out there, and how their CPD measurement system can be benchmarked in a broad context, but that it will open the door to further research into this area. The current climate is changing fast, and there is a great deal to be learnt.

Appendix A

Literature Review

A.1 Introduction

Section A.2 begins with a brief analysis of where literature to support a study of output-based measurement of Continuing Professional Development (CPD) may be found, and why we have had to cast our net widely to find such literature. We then provide background material on what CPD is, and report on an analysis of CPD definitions. Next we briefly examine the history of CPD and identify precursors and alternative labels for the phenomenon that the term CPD is meant to describe. We believe this background is necessary to appreciate that output-based CPD measurement is not a straightforward matter, not only because of the difficulty of so doing, but also because of controversy over what CPD is, what it is for, and therefore what the outputs of CPD are or should be. Much material in these sections draws on literature focused not on CPD, but rather on general controversies in education philosophy and on the identification and value of professionalism on society.

In section A.3, we move on to review literature both directly dealing with CPD and dealing with models of training, education and professional development. This literature will be drawn upon to organize and evaluate our findings on the possibilities of output-based CPD measurement. In particular we introduce the concept of the CPD cycle in this section. The UK Construction Industry Council (2006: 23) states that using a CPD cycle is the first step to an output-based approach to CPD measurement. CPD based on such a cycle has multiple elements. This means ideally a system of measurement should be developed for each phase of the cycle separately as well as for the cycle as a whole.

The next three sections are structured around the four phases of the CPD cycle: planning, action, evaluation of learning and reflection, detailing what is involved in each phase and why it is important, what outputs could be measured, and examples and evaluations of methods and tools of measurement. These aspects of CPD will be used as the basis of the model of output-based CPD measurement which is presented in Chapter 2.

A.2 Background

A.2.1 Paucity of literature on the measurement of CPD

Literature on output-based CPD measurement is sparse and mostly concerns the purpose and importance of CPD, rather than the diffusion and evaluation of techniques specifically to measure CPD. An exception is publications from the Professional Associations Research Network (PARN) which originated in the UK but now operates in several countries (at the time of writing including Australia, Canada, Ireland and Kenya). PARN carried out a series of comprehensive surveys of professional bodies in the UK, Ireland, Canada and Australia between mid 2006 and mid 2007. These surveys included questions about CPD policies and programs as well as explicitly asking if CPD was formally monitored and whether it was measured by inputs or outputs. Information from these surveys is presented in Appendix B.

One reason for the lack of substantial literature on CPD measurement is that CPD is a relatively new phenomenon, at least where CPD is conceived of as an activity that ought to be measured at

all. Arguably, professionals have always continued to seek out information about new developments in their area of expertise after they have qualified. For centuries, traditional professionals—lawyers, doctors, theologians—have read journals and attended gatherings at which they could learn of what others in their field are doing. However, the idea that such activity should not only be provided by professional bodies, but that there should be an explicit policy of formal CPD that could be monitored and measured, only began to take hold during the 1980s. Nevertheless, it is now common that professional bodies have an explicit policy regarding CPD. PARN found that around 2/3 of professional bodies have CPD policies in three of the four countries surveyed in 2006/07, and that in the UK 85% had a CPD policy (Friedman and Mason, 2007: 23).

For many, CPD has not been compulsory. In the UK, as programs emerged in the 1980s and 1990s, CPD was primarily either voluntary or obligatory. With voluntary policies it was completely up to the individual professional to decide what to do, how much to do, and how often to carry out CPD activities. With obligatory policies it is regarded as a duty of a professional in that field as with other professional obligations specified or at least implied in the code of ethics for that profession. If voluntary, there is little incentive for professional bodies to monitor and measure the take up of CPD other than to improve courses. If obligatory it is difficult to operationalize unless a serious breach becomes obvious. The obligation to keep up one's competence is similar in these cases to the obligation in codes to be diligent or to act with fairness or integrity (see Friedman et al., 2005 for an analysis of codes of UK professions). However, for regulatory bodies and a few traditional professional bodies, CPD was compulsory from the outset (Rapkins, 1996).

The idea of systematically measuring CPD outputs is an even newer phenomenon. The standard method of monitoring CPD has been to specify input requirements, for example so many hours per year or a minimum of so many hours on average over a longer period. Compliance can be measured either through attendance records generated by CPD events, or through self-recording by members. The presumption behind input-based requirements and measures is that as long as professionals are carrying out a certain amount of CPD, it will be valuable. PARN has found that many professional bodies still specify CPD requirements by inputs only, even in countries with a relatively long tradition in CPD (Friedman and Mason, 2007: 32-35). The idea that CPD should be measured by outputs has come late in the history of CPD.

Currently, there is only a small and fairly marginal academic community concerned directly with CPD, although this is changing. In part, this lack of interest from academics is due to the fact that CPD has emerged from the "bottom-up": It has been developed by professional bodies in response to pressures they and their members have felt to demonstrate that professionals are carrying out their obligation to maintain expertise. This is an obligation which has always been implied in the notion of professionalism, but which has only recently been the subject of specific policies. Academic interest in education philosophy and practice that could be associated with CPD has generally been focused on either the ordinary citizen or the disadvantaged. Concepts such as adult education or lifelong learning are seen as ways of creating learning societies or of countering disadvantage. Professionals would not be explicitly considered within this purview.

Much academic literature, particularly from the sociological perspective, has been critical of earlier claims for the value of professionalism to society and has concentrated on the monopoly

aspects of traditional professions since the 1970s. While this academic literature may have influenced those running professional bodies to develop CPD policies (although this is unlikely); this literature primarily questions the value of the professions altogether, rather than focusing on improvement of professional practice. The recent emphasis on CPD among professional bodies could be regarded as a way of the professions "fighting back" against the academic and neoliberal criticism that professionalism is merely a label to justify monopoly and status privileges in society.

CPD could be treated by academics in education departments or schools of education at universities and colleges, however the focus of these institutions is teaching and educating teachers. The vast majority of research work coming from these institutions concerns aspects of teaching techniques, learning by young people and the running of schools. If they are interested in professionalism, it is typically the professionalism of teachers. A little of this has been developed based on learning focused on higher education, and we find that a major work being used to develop CPD programs, and which we will outline in detail below (Kolb, 1984), comes from this tradition. Some educationalists have turned their attention to adult learning. This has been a fairly quiet, specialized area of study until recently, but since then a literature has been developing under the labels of training, lifelong learning and work-based learning. However, these subjects continue to be at the margins of interest for national academic educationalists.

Another place where academic interest in CPD could develop and lead to more literature on the subject are the burgeoning business schools and departments of management; however their interest in the past was almost exclusively in private-sector organizations. This has been changing and the second (public sector) and third (non-profit) sectors have received attention. However, interest in third sector organizations has largely been confined to distributing charities and campaigning organizations, rather than professional (or trade) associations. The former appear in journals with Public Administration or Public Management or Public Policy in the title for government agencies, and journals such as *Non-profit and Voluntary Sector Quarterly* and *Non-profit Management and Leadership* for the third sector; the latter appear in journals with "evaluation" in the title. These studies focus on the general running of such organizations, on governance and management, as well as the impact of their programs. In addition there is a more generic management literature on management education, training and management development which comes close to CPD, though again generally from the context of its contribution to organizational development, rather than professional development.

During the research process, searching for the term "CPD evaluation" produced useful literature, though most of it came not from professional bodies but from training and education providers who wish to measure learning (among other factors) to ensure their training was a success and to identify areas for improvement. Therefore literature relating to the measurement of learning was found predominantly in the context of the evaluation of training programs. By looking at a whole evaluation process, one can identify what should be measured and how to measure it. Guskey (2000) states that evaluation is "the systematic investigation of merit and worth." This seems to hone in on exactly the problem at hand: how do we establish merit or worth from CPD activities?

A.2.2 What is CPD?

CPD is not a simple concept. It has arisen from a number of different traditions, different trends in education and different views of what it means to be a professional. Here we begin with definitions of CPD and then give background to CPD by examining different labels for CPD. In 1986 the UK Construction Industry Council (CIC) developed the definition of CPD that is most commonly used in the UK today:

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

Friedman et al. (2000: 39-40) found that 68 of 102 professional bodies they surveyed reported that they had a CPD policy, and 55 or 81% of those with a policy published a definition of CPD. Of these 55 professional bodies, 22 used the same definition as that developed by the UK CIC. Friedman et al. (2000) broke down the 55 definitions into 9 components, 6 of which were contained in the CIC definition and 3 were from some of the other definitions (see Table A.1).

These indicators of key differences of opinion concerning CPD definitions are:

- For some, CPD is an inherently systematic or planned activity, whereas for others how much CPD is carried out, how frequently, how continually and how premeditated the take up is (either in terms of a pattern of activities carried out, or their form or content) a personal and voluntary matter. For the former the role of the professional body is to place a structure onto professional development activities for the membership; for the latter it is an enabling role only.
- Some emphasize different benefits and beneficiaries resulting from individuals carrying out CPD in that they appeal to:
 - positive material interests of individual practitioners (support for career development);
 - negative concerns that professionals must keep up their competence or suffer consequences; and
 - professional aims of practitioners in terms of wider social benefits of CPD.

Most definitions recognize a clear distinction between two different capabilities that CPD is meant to support. Both

- skills, knowledge, understanding or expertise; and
- personal qualities, attitudes, potentialities.

However, it is in relation to the object of CPD that differences in definition have particularly important consequences for CPD measurement. Which of the following is the object of CPD?

- to fulfill technical or scientific plus professional duties;
- to achieve higher level performance;

Most of this subsection is based on material found in Friedman et al., 2000.

- to fulfill responsibilities and tasks or duties;
- to allow professionals to take on new roles; and
- to improve career prospects and support career progression?

For the last two of these there is also an underlying tension between whether CPD should support new roles and career progression for professional employees within their current organization, or support their movement to new employers.

Table A.1 Components of Definitions of CPD

Definition component	Professional bodies using CIC definition	Professional bodies using other definitions	Total
1. Context of CPD	0	1	1
(rapid technological and organizational change)			
2. Nature of CPD (lifelong learning, educational or professional activity)	0	26	26
3. Organization of CPD (organized in a planned or systematic manner or that it can be structured according to identified goals)	22	19	41
4. Nature of the value added to capability (topping-up of skills forgotten or lost since initial qualification; allow professionals to "keep up" their original skills or knowledge areas in the light of new developments and techniques—to maintain competence; learning new things now considered important for professional and personal performance)	22	30	52
5. Nature of capability to be supported (skills, knowledge, understanding or expertise. Or personal qualities, attitudes, potentialities)	22	32	54
6. Link capability to object (necessity, as required, or as ensuring. Or less strictly as enabling, encouraging, assisting or allowing)	22	16	38
7. Object (technical or scientific plus professional duties; higher level performance; responsibilities and tasks	22	27	49

or duties; new roles; career prospects; career progression)			
8. Effective period (professional life, economically active time, or life regardless of age or seniority)	22	17	39
9. Range of beneficiaries (practitioner, employer, the profession, society as a whole)	0	10	10

A.2.3 Precursor and alternative labels for CPD

The term *recurrent education* was defined by the OECD in 1973 as "the distribution of education over the lifespan of the individual in a recurring way" (Jarvis, 1995: 30). From the mid-1970s it was supported in the UK by the Association of Recurrent Education. For some, behind the call for recurrent education was the radical belief that a specified amount of full-time formal education during one's lifetime was a moral right which could be used to redress not only educational inequality, but also occupational inequality (Gould, 1979). For others it was a more limited or even conservative approach to implementing lifelong education, given that it focused on formal education (Cantor, 1974). While recurrent education is still important in the form of policies on paid educational leave, particularly in Scandinavian countries, the idea of recurrent education waned during the 1980s.

Adult education is another general term. This can refer to:

...any education process undertaken by adults, whether liberal, general or vocational, and located in the spheres of adult, further or higher education or outside the educational framework entirely. (Jarvis, 1995: 22)

However, adult education carries specific negative connotations in the UK; implying an indulgent, self-centered activity, unconnected with social purposes or activities; frivolous and with little concern for quality. Given these connotations it is not surprising that those involved in adult education have eagerly embraced other labels.

Lifelong education or Lifelong Learning (LLL) has perhaps the most influential label associated with CPD. The main tenets of this philosophy are that education should: involve learners as actors in their own learning; foster the capacity of people to be active learners, rather than passive recipients; lead to democratization of society; and improve the quality of life (Cropley, 1979: 101-104). Early in the 20th Century Dewey (1916: 51) claimed that, "The inclination to learn from life itself and to make the condition of life such that all will learn in the process of living is the finest product of schooling." He believed that education is the major foundation of a rich life and that these foundations can be made at any phase in life and then built upon.

Dewey has been particularly influential in the USA, while in the UK there has been a strong tradition of worker education and general self-improvement and group learning from the nineteenth century onwards. Many of the new professions of the nineteenth century arose out of societies for group learning or "learned societies". The model of lifelong education was adopted as an ideal by UNESCO. The Faure Report (1972: xxxiii) suggested that education prepares

people for a society which does not yet exist but which may do so within their lifetime. As such it is essential for the development of human beings. Behind the call for LLL is the view that the world is continually changing. Therefore learning is never complete. Furthermore, the world changes because of the ideas and actions of people, which are altered by learning. Learning is cumulative and the achievement of higher levels of LLL leads to a society that can increasingly be called a learning society.

However, renewed emphasis on LLL (as distinct from lifelong education) as a route to improve the social condition through the improvement of individuals has been contested (Lengrand, 1979; Suchodolski, 1979). LLL emphasizes individual development and individual responsibility and this stress on individualization has been seen as one of the key processes of the "risk society." According to Beck et al. (1994:13) increased risk and uncertainty in society requires increased "reflexivity" on the part of the population. Individualization within the risk society is defined as the "...disembedding and re-embedding of ways of life by new ones in which individuals must produce, phase and cobble together their biographies themselves." Individuals become responsible for formulating their own identities and life courses which leads to an expansion of risk situations through lack of co-ordination. Reflexivity refers to the individual's self-confrontation with the effects of a risk society, to reflect not only on established ways of thinking in order to improve performance, but also to question the need for performance, and to question not only how but also why certain things are done. LLL is an important part of this process—shifting the focus from education in institutional structures to individual participation and learning. There has been a change in emphasis from provision to learners to learning, from inputs to outputs. A greater emphasis is placed on individual self-reliance to cope with change and individual responsibility for employability and skill development (Edwards et al, 1998). Hake (1999), following Giddens (1991: 81), remarks upon the "structural necessity" of reflexivity or the "all-prevailing institutionalization of reflexivity;" the application of knowledge in all aspects of social life that is characteristic not only of the risk society, but an essential condition of survival.

Continuing Professional Development may be seen only partially as an application of Lifelong Learning to professionals. What CPD shares with LLL is the emphasis on individuals taking an active role in determining what they need in order to develop professionally. However, most professional bodies have a CPD program as well as a simple policy towards doing CPD and specifying how much to do. Many professional bodies provide activities and materials to be used for CPD themselves or they have an accreditation scheme by which they determine what could "count" as legitimate CPD. In this sense there is coordination at the individual professional body level, rather than the individual professional level of what LLL in the context of CPD means. Arguably what is missing is coordination among professional bodies as to what should be counted as CPD. However, PARN has found that there is increasing evidence that those running and working in professional bodies are willing to learn from each other.

Continuing Professional Education (CPE) emerged in the late 1960s and was documented by research and consultation papers produced throughout the 1970s. Among them there was research into continuing legal education (Ormrod Report, 1971); continuing education for GPs (Acheson, 1974); and for the building professions (Gardner, 1978). Different professions used

For professionals this may be likened to the idea of ethical competence as a necessary complement to technical competence (see Friedman et al. 2006).

slightly different terms. The engineers referred to "continuing formation" (Cannell 1982), the doctors referred to "continuing medical education" (Rogers 1982) and the DES (Department of Education and Science) initiated INSET "in-service education for teachers". The UK Government indicated support for CPE in its 1981 White Paper, A New Training Initiative from which the Professional, Industrial and Commercial Updating Program (PICKUP) was introduced in 1982. This was designed to increase competitiveness in the UK, through funding short courses and customized company training programs provided by further and higher education.

Currently some countries and some professions use the term CPE to indicate the same thing as what others call CPD, while for others, CPD and CPE are distinguished along the lines discussed in the previous section (that is, between personal and professional development controlled by the professionals themselves and more formal educational objectives).

The term continuing professional development is likely to have been coined by Richard Gardner, who was responsible for developing continuing education for the building professions at York University in the mid-1970s (Todd, 1987). Gardner was looking for a label that emphasized his belief that there is more to continuing education than course attendance. It should embrace informal, or incidental, learning which can be achieved as part of actual practice. CPD was chosen because it did not suggest a divide between education and practice; along with pure education, CPD included "a full professional life, good practice generally, career advancement, increasing capacity and well-earned profit (or its equivalent)." In addition, CPD implied "positive learning strategies for individuals, practicing organizations, [and] individual professions" (Gardner, 1978: 2-3). CPD was intended to provide continuity with the view that professionals would normally continue to keep themselves informed of developments in their field after qualification, but that this would be made more explicit, more formal and possibly more quantified and therefore more public through CPD.

It has been shown that the term CPD draws on a number of different educational philosophies and traditions. It draws on a long tradition of viewing education as being associated with personal development that should be undertaken by and available to all. A second theme from these earlier labels is that LLL represents active learning—that individuals should take charge of their own learning. As LLL aims for a learning society, so CPD may be thought of as a way of professional associations becoming *learning* societies as well as *learned* societies.

A.3 CPD Components and CPD Measurement

A.3.1 *Introduction*

CPD has traditionally involved professionals attending conferences or seminars almost randomly, as Newby (2003: 6) puts it, "going to conferences we just happen to hear about or that cover an area we happen to be interested in." His reflects the general opinion among professional bodies that this may hone skills or knowledge in a particular area, but it lacks the "continuing" element of continuing professional development. For CPD to be truly effective, each session needs to connect with and build upon previous sessions. Planning has therefore become an integral feature of modern CPD, allowing professionals to decide what sort of CPD is suitable for their long-term needs, and to see how each session affects their overall objectives. As noted above, most professional bodies with CPD definitions included the clause that it be organized in a planned or systematic manner, or that it can be structured according to identified

goals (Friedman et al., 2000: 39-40). This would imply that without including some form of planning in a scheme, professional bodies would not be adhering to their definitions of CPD. Schön (1983) popularized another critical element of professionalism which has been incorporated by many into their CPD programs: reflective practice.

A.3.2 The CPD cycle

Even by involving planning of, or reflection on, each CPD activity, a scheme could nevertheless be ignoring the systematic or continuous element specified by professional bodies' definitions of CPD. For their definitions to "ring true," planning and reflection need to be integral to CPD as a whole, and the CPD cycle has therefore been implemented into many professional bodies' CPD schemes to ensure this happens. The CPD cycle incorporates planning and reflection as elements equally important to actually attending events. By incorporating a CPD cycle the disjointed CPD of the past is transformed into a continuous and meaningful process which is perpetually revised by drawing on prior sessions and experiences. It is thought by supporters of the CPD cycle that this process will develop professional practice holistically.

The CPD cycle as has been adopted by many professional bodies was inspired by Kolb's (1984) theory of cycles of learning (Lester, 1999; Friedman et al., 2002). Kolb developed a theory of experiential learning in which reflection was central. He identified four phases in the cycle of learning:

- 1. Concrete experience (doing/having an experience);
- 2. Reflective observation (reviewing/reflecting on the experience);
- 3. Abstract conceptualization (concluding/ learning from the experience);
- 4. Active experimentation (planning/trying out what you have learned).

Clara Davies (accessed 19.03.07) comments on the Kolb cycle:

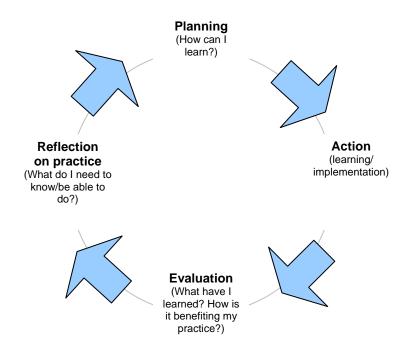
The learning cycle suggests that it is not sufficient to have an experience in order to learn. It is necessary to reflect on the experience to make generalizations and formulate concepts which can then be applied to new situations. This learning must then be tested out in new situations. The learner must make the link between the theory and action by planning, acting out, reflecting and relating it back to the theory.

Kolb (1984:4) also suggests that the process of experiential learning is the link between the conflicting schools of thought on CPD: personal vs. organizational benefit. He says:

The experiential learning model pursues a framework for examining and strengthening the critical linkages among education, work and personal development.

Many professional bodies have adapted Kolb's cycle into a more user-friendly tool for members (e.g. The Energy Institute, The UK Institute of Management Consultancy, The Association of Accounting Technicians (AAT), The Royal Pharmaceutical Society of Great Britain (RPSGB)).

Figure A.1
Example of a CPD Cycle
(adapted from RPSGB "A Journey Round the CPD Cycle," 2004: 7)



A.3.3 Input and output measurement: A brief overview

Input

The recording and measurement of CPD has traditionally been done by inputs: the amount of hours spent doing CPD, or the number of points or credits accrued corresponding to participation in CPD events. Members usually have to build up a certain number of hours from a list of approved courses and activities. A typical example of such a scheme using hours as inputs is the ACCA's 2005 CPD scheme (accessed 16.05.07), which states that all holders of practicing certificates are required to do at least 35 hours of CPD per year, of which 21 hours must be spent on acceptable, structured courses. There are strict guidelines detailing what sort of activity can contribute towards CPD, and how much time can be "claimed" for each activity, for example, "an evening seminar commencing between 4pm and 5.59pm may constitute no more than two hours CPD."

An example of using points or credits as inputs is the American Society of Industrial Security (2007), which has recently adopted the "Continuing Professional Education (CPE)" credit scheme whereby one credit is awarded for one "instructional hour," which must last at least 50 minutes. A similar scheme, implemented by the International Association for Continuing Education Training (IACET) and the American Society for Training and Development (ASTD) uses the "Continuing Education Unit (CEU)." The IACET states:

The CEU was created to:

- *Provide a standard unit of measure,*
- Quantify continuing adult education and training activities, and
- Serve the diversity of providers, activities and purposes in adult education. (IACET, accessed 16.05.07)

One CEU is granted for ten hours of participation in "organized continuing education/ training experience under responsible, qualified direction and instruction." There are detailed criteria and standards relating to the organization, the development and the evaluation of the learning program.

An interesting approach to CPD measurement, implemented by the British Academy of Audiology (BAA), is the idea of a CPD "value" which is a unit incorporating the standard input measurement of one point for one hour of study, and an "effectiveness index." Individuals decide how effective the CPD was for them and then assign an effectiveness value from the scale which is then multiplied by the input points to give the "CPD value" (BAA, 2006). The Association for Project Management (APM) employs a similar system whereby members calculate the points given to a CPD activity by multiplying the APM rating of an activity by their personal value attributed to that activity (APM 2006). Although these schemes are based on input, they have introduced at least the notion of value or results to CPD measurement, indicating deviation from (and dissatisfaction with) a purely input-based measurement scheme.

Output

PARN found that use of output measures for CPD was rising quickly among UK professional bodies and that a substantial number were using output measures for at least some categories of their members in the other countries they surveyed (see Appendix B). The AAT in the UK conducted a consultation regarding their move to output-based CPD, and 60% of respondents agreed that it is better to measure CPD by results while only 27% thought it was better to measure by number of hours (AAT (2), accessed 16.05.07).

There are various outputs of CPD, and deciding which one(s) would be most useful to measure, and would give the most accurate and revealing results, is no easy task. A professional body has to identify the object of CPD before attempting to decide which output would be most appropriate to measure. As noted above Friedman et al. (2000:39-40) found that not only were there multiple objects of CPD stated in professional bodies' definitions, but that they were often conflicting (see Table A.1).

Grant (1999: 217) identifies two further sources of difficulty with measuring results in a medical context:

- 1. Lack of development of measurement methodology: appropriate methods of results measurement are not available;
- 2. Complex expert clinical practice cannot be easily broken down into component parts and therefore measurement of the quality of practice as a whole is difficult, and may be impossible.

Grant also suggests that even output measures will not necessarily be useful in assessing competence of professional practice. Interestingly, she states that: "effective education does not always lead to changes in performance" (Grant, 1999: 216). She points out that CPD often simply confirms that the professional has the required capability—there is no measurable change in competence or practice, the only change would be in personal confidence. If this is the case, then any attempt to measure change in knowledge or behavior without initial learning goals may well be a pointless exercise. One individual may have demonstrated a high change in skills or knowledge, but still not be as competent as an individual who was competent to begin with, and who has therefore not demonstrated a change in output due to CPD.

A.4 Planning and CPD

A.4.1 Why do it?

Planning ensures that an individual knows in advance what they are aiming to change. In order to achieve goals, specific targets need to be set in a structured manner (www.pd-how2.org/2_1.htm). Once the goals have been set, success can be measured against these predetermined learning objectives, after the CPD has taken place. Planning makes evaluation easier because one can think about how to assess/measure whether the goals have been met, prior to the event. Guskey (1998: 3) emphasizes the importance of planning evaluation:

It's designed to give those involved in program development and implementation a precise understanding of what is to be accomplished, what procedures will be used, and how success will be determined. In essence, it lays the groundwork for all other evaluation activities.

Another advantage of formal planning, according to the UK Institution of Electrical Engineers and Technicians (IET) (accessed 09.05.07) is that writing plans down makes people feel more committed to their goals and hence increases the chances of real change due to CPD.

A.4.2 How is it done?

Personal Development Plans (PDPs) are a common method of recording the reflection and planning phases of the CPD cycle. www.ukcle.ac.uk interprets PDPs as a process as well as a product of reflection mirroring the phases of the CPD cycle: the act of developing a PDP being an example of reflective practice. A PDP will typically consist of a list of objectives, an action plan for achieving those goals and room for comment, feedback and reflection on the results of the action plan. This reflection will then influence the next round of objectives. This creates a cyclic process, and Freed (2003: 9) points out that planning makes the whole process of CPD continuous. Newby (2003: 6) states that PDPs turn CPD into a proactive process in contrast to the reactive process of attending conferences on an ad hoc basis which has occurred in the past. The Professional Development Partnership suggests that a PDP should involve understanding future needs in terms of business needs, career/job goals and personal goals (www.pd-how2.org/2 2.htm). Newby offers three methods for generating PDPs:

- "buddy systems," where an individual is paired with a peer;
- mentors, similar to "buddy systems," but an individual is usually paired with someone of a higher standing in the profession;

peer groups.

...the college has elected to make PDPs the cornerstone of CPD, with those generated by peer groups becoming the arbiter of our educational needs and the sole evidence required to demonstrate participation in CPD... (Newby 2003: 6).

This notion of planning learning objectives is linked to the relatively common use of "competence frameworks" which employers often set for a particular job role. The Allied Health Profession project (2006) on demonstrating competence through CPD provides a good example of this. A competence framework would enable an individual to set learning goals according to the competencies required of them by their professional body.

Lockyer *et al.* (2005) conducted a study which aimed to assess course results by examining the congruence between statements of commitment to change (CTCs) and course objectives. They found that the use of CTCs aided reflection, as it encouraged participants to "reflect on a course in order to consolidate new information and commit to changes in practice." It was also found to be highly useful for evaluating outputs at a later phase. The study concluded that completion of CTC statements was more effective than other types of reflective statements in terms of learning objectives on the basis that there was found to be a higher congruence between course objectives and CTC statements.

A.5 Evaluation of Learning

Due to the paucity of literature on this subject directly related to CPD, this section focuses on training evaluation, which yields many interesting ideas in terms of measuring the output of the "evaluation of learning" phase of the CPD cycle.

A.5.1 *Training evaluation models*

Below is an outline of classic training evaluation models:

- Tyler's (1942) is the earliest evaluation model and is an objectives-based approach. It involves the following steps:
 - 1. Establish broad goals or objectives
 - 2. Classify these goals or objectives
 - 3. Define objectives in behavior terms
 - 4. Find situations in which achievement of objectives can be shown
 - 5. Develop or select measurement techniques
 - 6. Collect performance data
 - 7. Compare performance data with behaviorally stated objectives.

The framework of this model is helpful, but the evaluation does not go beyond the attainment of pre-determined goals. It is also focused on behavioral results, which are only one of several possible outputs of CPD. This model is also limited due to few suggestions of measuring tools.

- Metfessel and Michael (1967) expanded upon Tyler by suggesting more methods of data collection, but again their model was limited to behavioral evaluation.
- Hammond (1973) further expanded upon Tyler, adding extensive detail. By asking such questions, this early model began to develop an element of reflection.
- Stufflebeam (2001) developed the Context, Input, Process, Product (CIPP) model. This is more of a formative evaluation and a "systems model"—concentrating on the development of a training program rather than goals and results. It centers on decision making processes of policy makers and administrators. Methods of output measurement which could be relevant to CPD do not feature prominently in literature on the CIPP model.
- Scrivens (1991) wanted to avoid concentrating on pre-determined goals, because he believed that this sort of approach was blind to unintended and possibly hugely valuable results. "I began work on an alternative approach—simply, the evaluation of actual effects against (typically) a profile of demonstrated needs in this region of education... ...I call this Goal-Free Evaluation (GFE)." Although this seems to undermine the planning phase of the CPD cycle, it could be incorporated into another evaluation model so that predetermined goals were not eliminated completely, but ensuring that unexpected results had equal status within evaluation.

A.5.2 The Kirkpatrick model

Four measurement levels of training evaluation were identified by Kirkpatrick in 1959, and these remain the most commonly used model for training evaluation today. This model breaks down learning into manageable levels, the impact of which is measured uniquely for each individual level.

Level One: *reaction*, the most basic level, is described by Kirkpatrick as an evaluation of customer satisfaction (Freed, 2003: 2), its purpose being to determine whether the "learner" was happy with the training/CPD event etc. This level is easy and cheap to evaluate and is therefore commonly used.

Level Two: *learning*, measures increase in knowledge. Kirkpatrick (quoted in Freed, 2003: 4) defines learning as "what principles, facts and techniques were understood and absorbed by students." This level is often assessed by a test with right/wrong answers. It is preferable to do a pre-test, so that the real change in knowledge due to the training can be measured.

Level Three: *behavior*, measures the extent to which the learning has been used in practice, and how the knowledge gained has transferred onto every day work. It is the extent to which behavior changes occur due to training program attendance.

Level Four: *results*, measures the impact of the training on the organization. This depends on the type of organization, its aim and mission and ultimately its bottom line. If CPD impacts positively on the bottom line of an organization, a high level of success and extremely valuable CPD output is identified.

One of the most useful resources associated with the Kirkpatrick model was <u>businessballs.com</u>, with much of this material being provided by Leslie Rae. The website has a particularly useful section on Kirkpatrick, tabulating each level into evaluation type; evaluation description and

characteristics; examples of evaluation tools and methods; and relevance and practicability. As well as clearly explaining and giving practical examples of Kirkpatrick's model, Rae provides information about who is responsible for/involved with each phase of evaluation, and offers a spectrum of options as to how far to take the evaluation, from "do nothing" and "minimal action" right through to "total evaluation process." This demonstrates that not only are there different levels of analysis, there are also different depths of evaluation, opening up a wealth of options depending on the objectives of the CPD in question.

A.5.3 Variations on the Kirkpatrick model

Although most organizations that do some form of training evaluation currently use the Kirkpatrick model, there are many calls for it to be modified or updated. There are several variations of the Kirkpatrick model, two of which are discussed here: adding organizational change and support, and models based on Return on Investment (ROI).

Organizational Change and Support

Guskey (2000) adapted the Kirkpatrick model to be applicable to professional development in education. He inserted a new third level, in between "learning" and "behavior": "organizational change and support." This level takes into account the support the organization has given to the learner, the resources available, and how this has impacted on learning. More importantly perhaps for this investigation is the impact of the training on the organization and how, if at all, it affected organizational climate and procedures. Guskey alters the name of level four slightly, to "participants' use of new knowledge and skills." This broadens the category slightly to include impact of learning (which may not be demonstrated through specifically behavioral symptoms).

There has been a great deal of discussion about the final level of Kirkpatrick's model, which he himself does not elaborate upon in detail. By results, Kirkpatrick means the impact on the organization's bottom line. This is obviously specific to the organizational goals, and in the educational sphere, Guskey has interpreted "results" as "student learning outcomes." Guskey's final level is aimed exclusively at teachers' professional development, but he provides more detail and examples of this advanced level of evaluation than Kirkpatrick himself, and the main ideas could quite easily be tailored to the needs of various types of organization.

Return on investment

Phillips (1996) has developed a final phase of evaluation to go with the Kirkpatrick model which calculates the Return on Investment (ROI) of the evaluation process. This is a method of calculating if the training was worth the investment i.e. what monetary impact the training had on the organization.

Thus, the fifth level of evaluation is developed by collecting level four data, converting the data into monetary values and comparing them to the cost of the program to represent the return on training investment. (Phillips: 1996).

Phillips developed a formula for calculating ROI, as well as a process model. He identifies the need to isolate the effects of training before making the calculation, if it is to produce any useful results specifically due to the training in question. He puts forward methods to successfully isolate the results of training, such as use of controls and estimations of the impact of other

factors. Interestingly, Phillips includes management and technical support as well as organizational culture as "significant influences" in his process model, factors which Guskey felt were so significant as to warrant their own level.

According to Kearns (2004 [1]), ROI is compatible with the organizational results of level four, rather than with a fifth level. Without ROI, the Kirkpatrick model is not an evaluation model because it does not show true value. Value can only be measured through ROI calculations, or something like it. ROI may not seem like a feasible option for public sector or not-for-profit organizations, given that profit is not a measure of success, and therefore of value, for those organizations. However Kearns responds by stating, "Of course, the same rules apply to any non-commercial or public sector organization, but their definition of value will be the level of service they provide per pound spent" (Kearns, May 2004). However, the question then arises as to how "level of service" as a direct result of training should be measured. When discussing the difficulty of measuring soft skills, Kearns (June 2004) also makes the strong claim that only those skills which impact on organizational performance are worthwhile:

My skill improvement is only worthwhile if I put what I have heard to effective use in the organization. All learning should have a positive, tangible impact on business performance, otherwise it is worthless.

This statement highlights an attitude which is predominantly unrepresentative of CPD in professional bodies. Kearns is making this statement from a commercial or managerial point of view where training takes place to benefit an employer organization. CPD in the true sense of the term (i.e. applying to professional bodies) must incorporate the learning needs of the individual's professional status, and this will not necessarily have a significant impact on organizational performance.

Kearns discusses competence measures and distinguishes between activity measures (input); performance measures (output); and added-value measures (output). Activity measures correspond to the action/implementation phase of the CPD cycle; performance measures to the "behavior level" of the Kirkpatrick model; and added value measures to the "results level," with the latter two falling into the "evaluation" phase of the cycle. It is interesting that Kearns includes "activity measures" as they do not feature in other training evaluation literature. However, it is a vital phase of the CPD cycle and seemingly needs to be measured by input on this level—to ensure activity has taken place—even though Kearns believes this type of evaluation should be avoided.

There is currently an ongoing debate over whether ROI is actually useful or worthwhile. An exchange of papers, published on www.trainingzone.co.uk, began with an article by Kevin Lovell (Jan 2007) in which he puts forward an alternative, cheaper and simpler method to ROI. KnowledgePool has developed an online "Learning Outcomes" questionnaire which Lovell believes makes higher level evaluation a more realistic option than ROI for many organizations. The questionnaire asks questions about application of learning in the workplace, and focuses on quality, cost reduction and customer satisfaction. Lovell claims this self-assessment "cannot hope to match an in-depth evaluation using interview techniques and detailed analysis of business metrics, nor can it deliver hard ROI statistics. However it can provide L&D with valuable information about learning outcomes—often where none is currently available—and at minimal cost" (Lovell, Jan 2007).

Gary Platt (2007 [1]) responded to this article, questioning the validity and accuracy of self-assessment. He also claims that the questions asked will only address individual performance and not impact on business, which he states is supposed to be the function of these higher levels of evaluations. It is however highly dubious to suggest this of professional bodies.

Donald H. Taylor (2007) has argued that not only is ROI time consuming and complicated to calculate, but that "Apart from training professionals, nobody really cares about ROI." He states that "an organization can identify the value training has yielded, without doing rigorous ROI calculations." He puts forward instead the notion of a "business value proposition that relates directly to a perceived organizational issue."

A.5.4 Measuring tools and methods

To compare different measuring tools Meyer & Elliot (2003) suggest the following criteria be taken into account: time, money, materials, space, equipment and manpower. Rae (1986: 88) suggests that it is important to perform an assessment or measure of outputs not only after the training has taken place, but during the event, in order to ensure that not only did an individual attend, but that they did something useful. This can be achieved by peer observation, behavior analysis, or videotape (which could be reflected upon at a later phase). At each level of evaluation there are different ways of assessing or measuring the impact of the CPD. Rae (1986: 26) describes various assessment tools, such as knowledge analysis; observational analysis; interviews; questionnaires; and diaries. Assuming we use a Kirkpatrick-style model, different types of measurement will apply to each level.

Level one: reaction

The evaluation tool used for this phase of learning is usually what is known as a "happy sheet" or "reactionnaire," Trainees are asked how they enjoyed the course, trainer, venue etc; if it met expectations; and if anything valuable was learnt. The reactionnaire typically consists of tick boxes with sliding scales to denote satisfaction. This simple method is easy to tabulate and quantify.

Level two: learning

To measure increase in knowledge, Kirkpatrick suggests tests (including self assessment and interviews), with Guskey adding to that list simulations, participant reflection and participant portfolios. Kirkpatrick (see Freed, 2003: 4) suggests that knowledge should be measured by written tests and skills and by performance evaluation. Horton (In Freed, 2003: 5) discusses how online tests can be used to measure knowledge, and suggests simulations, role-playing and learning games as measuring tools for skills. For Rae (businessballs table), interviews and observation can also be used at this level. He emphasizes that methods of assessment need to be closely related to pre-determined learning objectives. This level can be assessed using learning objectives and/or a competency framework.

Level three: behavior

Kirkpatrick suggests observations, interviews, surveys and coaching as measurement tools at this level. Guskey (2000) adds reflection, portfolios, and video/audio tapes for observational

purposes. Rae emphasizes the need for staggered assessment of behavior over time. He also points out key performance indicators and states that online and electronic assessments are more difficult at this phase. Freed however disagrees and endorses Horton, who thinks online simulations are suitable at this phase.

Observation

Rae (1988: 87-95) gives detailed notes about what to look out for when assessing someone by means of observation. Did the individual achieve the task? How successfully? Did they analyze and define the problem? Did they test out ideas? He suggests it is useful for people working with them (line managers) to observe on a regular basis, as they can more easily pick up subtle changes (Rae, www.businessballs.com).

Hopkins (in Kuit et al., 2001) suggests some key elements of observation. He points out that there needs to be trust between the observer and the observed before the observation takes place. The focus of the observation needs to be clarified and the observer should have specific criteria on what they are supposed to be looking out for. This should be agreed by all parties prior to the observation. Hopkins also suggests various methods of data collection during observation:

- Open observation, recording everything that happens;
- Structured observation involving a tally on which the observer records each time a certain type of behavior occurs, or everything that is happening at pre-determined intervals;
- Systematic observation using published scales and data collection devices.

Self & peer assessment

Boud (1995, quoted in www.ukcle.ac.uk) defines self-assessment as: "involvement of students in identifying standards and/or criteria to apply to their work and making judgments about the extent to which they have met these criteria or standards." He identifies two phases of self-assessment:

- 1. Identification of standards and criteria:
- 2. The making of one's own judgments against those criteria.

Self-assessment can be used to facilitate the process of learning, as well as an assessment product (www.ukcle.ac.uk), and can be useful in prompting reflection.

Peer assessment involves professionals assessing the performance of colleagues, either by offering comments or in some cases attributing a quantitative score. www.ukcle.ac.uk suggests that peer assessment is also an excellent opportunity for reflection due to its focus on dialogue and shared interpretations.

Newby (2003) also endorses self and peer assessment, and suggests "360 degree" appraisal as a beneficial form. For this an individual receives views from everyone that works with them, whatever their hierarchal status in the organization. The appraised then offers their view on all the people by whom they were appraised, and this process occurs for each individual within the group—hence 360 degrees.

Grant (1999) suggests that objective forms of assessment are generally less useful in measuring CPD output. She argues that professional judgment (peer/manager) is a preferable means of measuring outcome, because a professional is able to address the assessment of the entirety of professional practice. This, according to Grant, is in contrast to objective measures which only assess "discrete, observable, and measurable entities such as specific competencies." For this reason, she states that such measurement does not give an accurate picture of professional practice, or therefore, the impact of CPD on practice.

Goal Attainment Scaling (GAS)

Abruzzese (1982) defines GAS as "one method of establishing an outcome oriented tool that presents behavior changes specifically related to a learning experience." GAS was originally developed in the context of mental health treatment, establishing whether pre-determined individual goals had been achieved, as a way of comparing treatment. Fleck and Fyffe (1997) suggest that GAS could be used as a way of measuring change in recommended behavior due to nurses' CPD. They suggest that not only is it a useful measurement tool, but that it fosters the skills of self assessment and appraisal of performance. The tool requires a detailed scoring system incorporating a set of graduated scales relating to professional issues and the assigning of weights to each scale to represent priorities for learning. From this, scores for learning outcomes can be calculated.

Level four: results

For measurement at level four, Rae (1988) suggests key performance indicators, such as volumes, values, percentages, timescales, ROI, and other quantifiable aspects of organizational performance. These include: number of complaints, staff turnover, attrition, failures, non-compliance, quality ratings, achievement of standards and accreditations, growth, retention etc.

The Pharmacy Council of New Zealand (2006) has implemented a CPD scheme which measures outputs using an "outcome credit scale." There are categories assessing

- relevance and usefulness to you;
- change in knowledge and behavior;
- results of CPD on patient safety;
- evidence for the above.

Depending on success, individuals receive 1-3 credits, and are required to obtain 12 outcome credits over 3 years. "The most significant advantage of the outcome credits concept is that it measures and encourages the true intention of CPD—actual benefit to practice in the workplace" Harries (2006: 190). Harries endorses the fact that it does not attempt to measure professional competence itself, which she argues is problematic.

The UK Institute of IT Training (IIT) has developed a "skills tracker program" (Steed, 2005). It has four elements: a competency framework; a requirement to specify evidence of performance, testing to manage self-assessment; and verification. Assessment is by means of self assessment, basic and advanced questioning techniques and workplace assessment. Colin Steed details the scheme, including the scoring techniques used to measure success.

In April 2007, the CIPD published a paper entitled: "The Value of Learning: A New Model of Value and Evaluation." This addresses the need to demonstrate and report on the value contribution that learning makes to the organization. It recommends a wide-ranging approach to establish learning value, involving:

- aligning learning processes and investment to organizational strategic priorities;
- using a range of methods to assess and evaluate the contribution of learning; and
- establishing the most relevant approaches to assessing and reporting on the value of learning for the organization.

The paper distinguishes between organizational priorities and the individual learner, with the former being considered in more detail. Four different approaches to assessing the learning value contribution are identified:

- 1. Learning function measures
- 2. Return on expectation measures
- 3. Return on investment measures
- 4. Benchmark and capacity measures

The CIPD has developed a model of value and evaluation in order to develop methods of assessing the value of learning reflecting distinctive organizational characteristics. It emphasizes the need for interaction between trainers and managers to keep learning objectives in line with organizational objectives.

(Level five: ROI)

ROI is measured using calculations, e.g. ROI (%) = Benefits—Costs x 100

Costs

(Phillips1996). This may be combined with balance scorecards to measure "people performance" or human capital (Kearns June 2004).

A.6 Reflection

A.6.1 Introduction

Reflection is thought by many to be integral to any CPD scheme; as Friedman puts it, "reflective practice is often viewed as the hallmark of professionalism" (2007: 74). Mezirow (1990) argues that reflection leads to "transformative learning." He states:

Perhaps even more central to adult learning than elaborating established meaning schemes is the process of reflecting back on prior learning to discover whether what we have learnt is justified under present circumstances. This is a crucial learning process egregiously ignored by learning theorists.

(www.teachingandlearning.info/learning/critical1.htm)

Of significance is Schön's (1983; 1996) contribution to thought on reflective practice for professional development. Schön (1996) attempted to change the nature of professional practice

by replacing technical rationality—the belief that professionals solve problems by applying specialist knowledge—with his new epistemology of professional practice, based on his concept of "knowing in action," and reflection. Knowing in action is a sort of tacit knowledge which is not available to the conscious mind, and cannot be verbally expressed. This epistemology also involves the concept of "reflection-in-action" as opposed to "reflection-on-practice." It is the former which Schön claims characterizes the work of professionals and is described by Moon (1999: 45) as reflection which occurs in association with action and knowledge in use. This has been extended by some to include "reflection-before-practice" (i.e. planning). (Friedman 2007: 80).

Referring to teaching according to Kuit et al (2001) reflective practice is:

...about the process of teaching rather than about a simple evaluation of teaching, questioning why we do something rather than how, and most important of all, learning by this process. This is a continual reiterative process, which can be visualized as an infinite line of connected loops with each loop representing a cycle of reflection.

A.6.2 Models of reflection

Schön's distinctions between knowing in action, reflection in action and reflecting on action are less accepted. There are other ways of classifying reflection. Kuit *et al* (2001) identify seven models of reflection

(a) The DATA method (Peters, 1991)

This method involves four steps:

- Describe
- Analyze
- Theorize
- Act

First, one should describe what was done and what happened, then analyze why a particular approach was used. Next, through reflection, consider whether the theoretical assumptions behind the initial decisions provide a full explanation of what happened. If they do not, then the process should be repeated with revised theoretical assumptions.

(b) The critical thinking method (Brookfield, 1987)

This method involves identifying a "trigger event" which is then appraised by recognizing the nature of the concern. From this the problem is defined. Through this method, alternative ways of approaching the situation are considered. A new integrated theory is then produced from reflection on the event and the implications of other possible ways of handling the situation.

(c) The experiential learning method (Kolb, 1984)

For details, see section A.3.2 above.

(d) The action research method (Hopkins, 1993)

According to Elliot (1981) this is "the study of a social situation with a view to improving the quality of action within it." Reflection in this method is on what the experience means, and what has been learnt from it. It is focused on matching practice with theory and adjusting theory until it accurately matches practice.

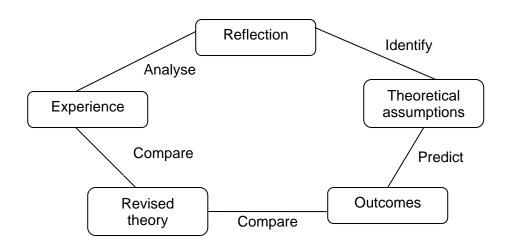
(e) The critical incident method (Brookfield, 1990)

A significant event in professional life is described to others and the question "why was the incident critical?" is asked. Assumptions of the professional about practice outcome before and after the event are discussed by the group, who develop a new set of assumptions. Then the process is repeated based on the new assumptions until the set of assumptions matches the reality.

(f) The concept map method (Deshler, 1990; Novak and Gowin, 1984)

This method is a visual representation of the meaningful relationships between concepts/topics. The concepts take the form of prepositions which are linked by verbs describing the relationship.

e.g.:



(g) The storytelling method (Mattingly, 1991)

Mattingly has developed the everyday informality of storytelling into a formal aid to reflection for professionals. A narrative is constructed explaining what has happened and why and what was expected to happen. It also details what the experience meant to the narrator and how it will affect future practice.

A.6.3 How to measure reflection

Reflection is inherently difficult to measure, assess or even prove. Ixer (1999) discusses the ambiguous nature of the term "reflection." He states: "Until such a time as we can state more clearly what it is, we may have to accept that there is no theory of reflection that can be

adequately assessed." He posits that reflective practice should not be assessed as a measurable skill available to standard assessment criteria. He emphasizes that we do not know enough about what reflection is to assess it fairly. He also suggests that we can assess reflection to the extent of determining whether or not it has taken place, but cannot measure it.

A.6.4 What should be measured?

We can distinguish different types of reflection from different degrees of reflection. We can reflect more and more deeply on things, we can also reflect on different things. Hatton and Smith (1995) established criteria which can be used to identify four different kinds of writing demonstrating different levels of reflection:

- 1. Descriptive writing: No reflection;
- 2. Descriptive reflection: An attempt to provide reasons based on personal judgment or literature read;
- 3. Dialogic reflection: A form of discourse with oneself—an exploration of possible reasons; and
- 4. Critical reflection: This involves giving reasons for decisions or events taking into account broader historical, social and/ or political contexts.

Meizrow (1981) identified seven levels of reflectivity: O'Connor and Hyde (2005) define these levels in more detail:

- 1. The act of reflectivity: awareness of a particular perception, meaning or behavior relating to the self or of a habit in relation to seeing/thinking/acting;
- 2. Affective reflectivity: awareness of how one feels about the way one perceives/thinks/acts;
- 3. Discriminant reflectivity: assessing the efficacy of one's perceptions/ thoughts/ actions and habits of doing things; recognizing reality contexts of situations and identifying immediate causes and relationships with situations;
- 4. Judgmental reflectivity: making or becoming aware of value judgments related to perceptions, thoughts, actions and habits;
- 5. Conceptual reflectivity: critiquing one's own awareness having become aware of something, such as questioning the concepts one uses to evaluate another person;
- 6. Psychic reflectivity: recognizing in oneself the habit of making premature judgments about others made on limited information, as well as recognizing the interests and anticipations which influence the way one perceives/ thinks/ acts; and
- 7. Theoretical reflectivity: awareness that a set of taken-for-granted cultural or psychological assumptions is responsible for the habit of making premature judgments and conceptual inadequacy.

A.6.5 Assessment/measurement techniques for reflection

Moon (1999: 60) discusses the process of using a written journal as a means for reflective practice, and describes other methods to represent reflection, including non-verbal techniques

such as drama and drawing. Various approaches to evidencing reflection as a skill or ability, a state of mind or an orientation to problem-solving are identified.

Concerning portfolios Snadden (1999) asks "can we assess their content by agreeing that participation and a set of personal objectives is enough, or do we have to formally assess them in a standardized way?" He suggests that portfolios are difficult to assess using standard assessment techniques because they contain personalized material with few points of objectivity. Also assessment is labor intensive due to the need for careful reading and sensitivity to the learners' personal objectives. Snadden (1999: 479) points out that there are currently no suitable methods to assess concepts such as professional mastery, performance in practice and continuing professional development. We have to make a "mental shift" and look beyond traditional methods of assessment if we are to assess such concepts accurately. Until this time, he says, "we will continue to struggle to measure the immeasurable, and may end up measuring the irrelevant because it is easier."

Rutter (2006) provides a guide for students to know what was required of them in terms of reflection. It focuses on making assessment criteria accessible to students. Rutter addresses the problem of someone who has excellent reflective skills but poor writing skills, and how to identify good reflection despite poor articulation in writing. He recognizes the difficulty of defining the learning outcome of critical reflection, but the paper identifies the main outcome as "identification and evaluation of the learning and development pertaining to future practice." People need to be trained in critical reflection, they cannot be expected to know how to do such an exercise—it will not come naturally to many, he says.

Kuit *et al* (2001) noted that diaries or logs must be used correctly as a means of data collection for reflection if they are to be of value. For example they should not include personal comments about colleagues (Beaty 1998 in Kuit et al., 2001). Chivers (2003) notes that keeping "reflection logs" will not be of long-term, sustainable value if people are only completing them nightly or weekly due to external strictures (e.g. course requirements). Only those who complete a log for the right reasons and actually reflect on it will see the benefit and incorporate the process into their routine.

Kuit *et al.* (2001) recommend formally identifying categories of what to observe in a diary and how these will inform reflection. Keeping a diary forces description of, and reflection on, everyday events but to properly do so may be time consuming. Logs can be used merely as a record of events which act as an aide to memory so that those events can be reflected on at a later date.

Chivers (2003) questions our usual conception of reflection as a solitary activity. Many workplace activities involve group or team interaction. He recommends reflection undertaken in a group or on a one-to-one basis and emphasizes the important role of managers. He highlights the lack of enthusiasm and expertise of managers when it comes to developing staff, and also points out that professionals usually only talk in this way to managers or peers, and reflect only when a serious (usually negative) incident has occurred. Chivers refers to Brooks (1999), who suggests that peer group reflection may not be successful because professionals are defensive about revealing weaknesses in a competitive work environment. However he reports: "My experience has revealed that this form of in-depth interviewing, conducted one-to-one by myself,

alone and in confidence, has not only been helpful but also has been a profound experience for those I have interviewed" (2003: 6).

In a similar vein, O'Connor and Hyde (2005: 293) identify two strategies of reflection: writing tools (diaries/logs, etc.) and group interaction. They point out that "A number of writers (McGill & Beaty, 1995; Platzer et al, 2000) have asserted that group processes and group dynamics can generate powerful insights and understandings into complex professional issues by means of sharing, support, challenge and feedback." They concluded that group reflection with the right organizational support is a very useful and effective method, but because it is so resource-demanding, it is often conducted in isolated chunks, rather than continuously throughout practice.

Appendix B

Evidence From Four Countries: Australia, Canada, Ireland and the UK

The Professional Associations Research Network (PARN) carried out several surveys of professional bodies covering a wide range of issues concerning their practice: governance, member relations, income and operations, initial professional qualifications and CPD, ethics and external relations. The first surveys were carried out in 2003 in the UK and in Ireland. The basic survey was updated and repeated between mid 2006 and mid 2007 in the UK, Ireland, Canada and Australia. There were minor differences in the surveys between countries to take into account differences in terminology and to highlight issues peculiar to each country, such as the federal systems in Canada and Australia. What follows is information concerning CPD and CPD measurement from the surveys.

B.1 The Surveys

Table B.1 shows the timing and response rates for these surveys. Roughly 90% of the questionnaires used in each country were identical to those undertaken in 2006/07, with some country-specific uses of language and a few country-specific questions. In addition those surveys contained roughly 85% of identical questions with those carried out in 2003. The database upon which the population of professional bodies was based was compiled from extensive searches of directories and websites in each country. Given PARN's history and extensive membership in the UK, the survey population used for the UK surveys is assumed to be closest to the actual population. However, as noted in PARN publications, the survey populations are presumed to be less representative of the actual population for smaller professional bodies and for new ones. Further descriptions of these surveys and results concerning a wide range of issues that describe professional bodies in those countries can be found in Friedman and Mason, 2004; 2007; Friedman with Afitska, 2007 and Friedman, Williams and Afitska, 2007.

Table B.1 Summary of PARN Surveys of Professional Bodies

Country	Questionnaires Sent	Useable responses	Survey period
Australia	336	49	May-July 2007
Canada	406	75	Oct 2006-Jan 2007
Ireland	114	21	June-Dec 2006
UK	334	110	April-July 2006
Ireland	114	26	Sept-Dec 2003
UK	299	129	June-Sept 2003

B.2 CPD Policies and Compliance Requirements

Table B.2 shows the proportion of professional bodies that have a CPD policy and the type of policy according to compliance requirements. It is worth noting that the majority of professional bodies in all these countries have a CPD policy.

Table B.2 CPD Policies and Types of Compliance Requirements

	Australia	Canada	UK	Ireland
Have CPD policy	71%	66%	85%	67%
No reply	0%	4%	0%	5%
Base	49	56	110	21
Compliance type of those with policy:				
Compulsory	26%	54%	20%	43%
Obligatory	26%	0%	20%	7%
Voluntary	37%	24%	43%	36%
Mixed	11%	22%	14%	14%
No reply	0%	0%	2%	0%
Base	35	37	93	14

Penetration of CPD policies seems to have proceeded furthest in the UK. There are a number of reasons for this.

- It is possible that UK professional bodies are indeed ahead of those in other countries. There are claims that CPD as a concept originated in the UK (see Friedman et al. 2000).
- Newer professional bodies are less likely to have a policy.
- There is a correlation between size of professional body and having a CPD policy. CPD policies can be expensive to support because, to make them credible, a CPD program is needed. Even a voluntary program that is unmonitored requires formal guidance notes and some sort of helpline is likely to be expected by the membership. This is likely to be most important for explaining the slightly lower Irish result.
- Another consideration which may affect the lower Canadian result is that if a profession is represented by several professional bodies distinguished by the functions those bodies perform; a lower proportion of all the professional bodies in that country will have formal policies for any one of those functions. For example, when comparing the structure of the professional bodies "sector" in a country where self-regulation is the norm with one where there are different bodies performing the representation role and the regulation role: the proportion of all professional bodies which deal with disciplinary procedures and with policies on those procedures will be lower in the second country, because in that country

only half of the professional bodies covering any one occupation will have disciplinary procedures policies. This is the likely explanation for much of the difference in proportions of companies with a CPD policy in Canada and Australia compared with the UK. In Canada, for example, education is a provincial matter. Therefore a higher proportion of professional bodies at the provincial level have CPD policies.

There are wide variations in the proportions of professional bodies with different compliance policies between the countries. While only 20% of UK professional bodies and 26% of those in Australia have a compulsory policy towards CPD, the proportions in Ireland and Canada are roughly double those in the UK and Australia. In addition most of the mixed policies have an element of compulsion, that is, most of them are a combination of voluntary or obligatory CPD for some members and compulsory CPD for others, usually those at a higher level of membership.

Perhaps most striking is the variation in the proportion of professional bodies with obligatory policies towards CPD compliance. Obligatory policies had been most common in the UK in the early days of CPD. Obligatory approaches tend to centre around a statement in the associations' ethical code or code of practice which requests members to keep up to date with developments within their profession. They emphasize that it is the professional responsibility of the member to maintain and develop their competence. Sometimes a specific reference to CPD is made in the code.

Obligatory policies are more common in more traditional professional bodies, particularly ones that were formed in the first half of the 19th century (see Freidman et al. 2000). It is interesting that Canadian professional bodies do not recognize the term obligatory. None of those responding to the PARN professionalization survey of 2006 in Canada identified their policy as obligatory, though the term is used by some professional bodies in Ireland and more in Australia than in the UK.

Table B.3 shows changes in compliance policies towards CPD among a sample of professional bodies that responded to both the 2003 and 2006 surveys in Ireland and the UK. The table shows a clear decline in the proportions of professional bodies reporting obligatory policies along with a smaller rise in all other categories of compliance policies.

Table B.3 Changes in CPD Compliance Policies Between 2003 and 2006

	U	UK		land
	2003	2006	2003	2006
Having a CPD policy	92%	87%	80%	73%
No reply	0%	0%	0%	7%
Base	61	61	15	15
Compliance type of those with CPD policy				
Compulsory	14%	17%	33%	45%
Obligatory	32%	25%	25%	9%
Voluntary	36%	40%	42%	36%

Mixed	16%	15%	0%	9%
No reply	2%	4%	0%	0%
Base	56	53	12	11

B.3 Measurement of CPD: Inputs vs. Outputs

Table B.4 shows a wide range of proportions of professional bodies that formally measure CPD in the different countries. These vary between the lower proportions in Canada (59%) and in the UK (66%) to the much higher proportions in Ireland (79%) and Australia (80%). Interestingly in Ireland and Australia, none measured CPD purely by outputs. However in both those countries a high proportion reported a combination measurement scheme. The proportion that measure by inputs only was highest in Canada and lowest in the UK.

Table B.4 Measurement of CPD Participation

	Australia	Canada	UK	Ireland
Inputs	37%	43%	28%	36%
Outputs	0%	16%	20%	0%
Combination	43%	0%	17%	43%
No formal	20%	41%	34%	21%
No reply	0%	0%	0%	0%
Base	35	37	93	14

For those with an inputs system of measurement, Table B.5 shows whether the system is based on hours or points. We regard a points system as a little way along the "path" towards output measures in that points systems generally give greater weight to activities that are presumed to be more likely to lead to positive learning or practice effects. There are wide differences in emphasis on hours or points as input measures in different countries. Hours is the favored measure in the UK and in Canada. In Ireland points are more common than hours.

Table B.5 Basis for Input Measures of CPD Participation

	Australia	Canada	UK	Ireland
Hours	50%	75%	60%	36%
Points	43%	25%	24%	45%
Other	4%	0%	12%	0%
No reply	4%	0%	5%	18%
Base	28	16	42	11

The survey did not ask a question based on professional bodies stating that they used an output measure. Rather they were asked what methods they used for gathering evidence of CPD participation. We can interpret the results shown in table B.6 as providing evidence for output measures at two phases in the CPD cycle: planning and reflection. Evidence from records of activities can be regarded as either input or output measures depending on whether the records are of hours/points, or if the record of activities is linked to plans, reflections or results achieved.

Table B.6 Methods of Gathering Evidence of CPD Participation

	Australia	Canada	UK	Ireland
Record of activities	77%	89%	88%	86%
Evidence of planning	17%	32%	47%	36%
Evidence of reflection	26%	32%	39%	29%
No evidence	23%	8%	11%	7%
No reply	0%	0%	0%	0%
Base	35	37	93	14

Professional bodies in the UK were more likely to gather evidence of planning and reflection compared with the other countries. Relatively few Australian professional bodies gather evidence of reflection and particularly few gather evidence of planning compared with other countries.

We pooled all the observations across the countries in order to divide the data in different ways. We examined the distribution of CPD policies and measures by:

- Size (measured by number of individual members)
- Sector (using a simple 4 sector approach)
- Type of professional body (pure professional association vs. combinations of types of professional bodies).

Table B.7 compares the proportions of professional bodies that measure CPD by inputs or outputs by size of professional body.

Table B.7 CPD Measurement Philosophy by Size of Professional Body

Number of individual members	Inputs	Outputs	Combination	No Formal Method	Total	Proportion with formal method using either outputs or combination
0-500	38%	6%	13%	44%	16	33%
501-1500	39%	6%	23%	32%	31	43%
1501-5000	28%	11%	30%	30%	53	59%
5001-20000	37%	11%	14%	37%	35	43%
>20000	32%	28%	16%	24%	25	57%
No reply	32%	26%	16%	26%	19	56%
Total	34%	14%	21%	32%	179	51%

There is a fairly clear, but not very strong, relationship between size and having a formal measurement system. Only 56% of very small professional bodies have formal measurement systems compared with 76% of the largest size category with 63-70% of size categories in between. While the very large professional bodies are distinguished from the others by a higher proportion reporting using outputs as a measure, if we examine those using either outputs or a combination policy, the key difference is with the very smallest of professional bodies only. Those with more than 20,000 members reported roughly the same proportion using output or combination measures than those with 1501-5000 members.

It may be that those reporting using combination measures are thinking of different things and this may be size sensitive. For example, for some a combination measure may be an input system based on points while for others it may be that evidence of planning and/or reflection is included in an "hours" method, that is, the CPD requirement includes both some evidence of planning or reflection and a certain number of hours required per year or other time period. For others it may be that output measures are used for some categories of membership and input measures for others.

The pattern for measurement by outputs is even clearer by size with only 6% of the smaller two categories measuring by outputs, 11% of middle size categories and 28% of the larger organizations. If we compare the proportions of those with a formal measurement philosophy that use either outputs or a combination method, the pattern is somewhat different, with the size category of 5001-20000 substantially less than the smaller category of 1501-5000, and the same as those with 501-1500 members.

Table B.8 shows that the occupational sector breakdown we used did not produce a significant distinguisher between CPD measurement philosophies. Those in the health sector were most likely to have a formal measurement philosophy and those in the education, social, media and culture sectors were least likely. Of those with a measurement philosophy, more than half in both those sectors used outputs or combination measurement methods, (55% for health and 62% for

education, social, media and culture). This compares with 46% of those that had a measurement method using outputs or combination methods in both the other two occupational sectors.

Table B.8 CPD Measurement Philosophy by Sector

Occupational sector	Inputs	Outputs	Combination	No Formal Method	Total	Proportion with formal method using either outputs or combination
Health	34%	13%	28%	25%	53	55%
Finance, Law, Business and Management	39%	10%	22%	29%	51	46%
Environment, Engineering, Science, Construction and Transport	36%	18%	13%	33%	45	46%
Education, Social, Media and Culture	21%	17%	17%	45%	29	62%
No reply	0%	0%	0	100%	1	-
Total	34%	14%	21%	32%	179	51%

Interestingly the proportion of professional bodies using input vs. output measures did not differ according to the function of the professional body when we distinguished those that carried out a representative function compared with those who carried out a regulatory function. However, there was a difference in the proportions that reported combination methods and those that reported inputs. Of purely professional bodies, that is those with no regulatory function, only 8% reported measuring by inputs and 27% reported using combination methods, while of those with a regulatory function 32% reported using inputs and only 7% reported using combination methods. The proportions using output measures were the same, 35% for pure professional associations and 36% for those with a regulatory function.

Table B.9 shows no considerable correlation between income and output measurement, or income and either outputs or combination approaches. This is an interesting finding considering the widespread opinion that output systems take up a great deal of resources, meaning that only richer organizations can afford to implement them.

Table B.9 CPD Measurement by Income

Income in last financial year (GBP)	Inputs	Outputs	Combination	No Formal Method	Total	Proportion with formal method using either outputs or combination
<250,000	31%	10%	18%	41%	39	70%
250,001- 1,000,000	38%	12%	1%	32%	50	74%
1,000,001- 5,000,000	31%	19%	21%	29%	48	71%
5,000,001- 10,000,000	25%	17%	25%	33%	12	63%
>10,000,000	38%	19%	25%	19%	16	69%
No reply	36%	7%	29%	29%	14	60%
Total	34%	14%	21%	32%	179	70%

The information gathered from the surveys gives a broad perspective of some of the issues surrounding a professional body's choice of CPD measurement system. We can begin to build a broad picture of the profile of the type of professional body which might measure by input, and the type which might measure by output. This chapter addresses broad issues regarding the type of organization with regard to input, output or combination measurement techniques. However, the surveys did not go into any detail about the nature of the different approaches to measurement, or indeed motivations behind selecting one approach over another. This is the sort of information provided by the case studies.

B.4 Survey Questions: CPD

Section 5: Initial professional qualification and Continuing Professional Development (CPD)

	Regarding the initial professional qualification, is your organization? (Tick all that apply)					
	An awarding body		A body that accepts specific qualifications offered by others but neither awards or accredits them?			
	An accrediting boo	dy				
	Does the content of the initial professional qualification include any of the following? (Tick all that apply)					
	Profession-specific requirements		Client service			
	Generic managem	ent skills	IT			
	Ethics		International Practice			
	Inter-professional	team working	Other			
1	If other, please specify:					
- - -						
- - - -	· ·	e a Continuing Pro				
- - - - 286 1	Yes	re a Continuing Pro	fessional Development (CPD) policy			
- - - - 286 1	Yes Is the CPD policy?	_	No			
- - - - 286 1	Yes Is the CPD policy? Compulsory	Voluntary				
- - - - 986 1	Yes Is the CPD policy?	_	No			
- - - - 986 1	Yes Is the CPD policy? Compulsory Obligatory	Voluntary	No			
- - - - - - - - - - - - - - - - - - -	Yes Is the CPD policy? Compulsory Obligatory If mixed, please specify:	Voluntary Mixed e a monitoring syst	No			
- - - - - - - - - - - - - - - - - - -	Yes Is the CPD policy? Compulsory Obligatory If mixed, please specify: Does your organization have	Voluntary Mixed e a monitoring syst	Not applicable			
- - - - - - - - - - - - - - - - - - -	Yes Is the CPD policy? Compulsory Obligatory If mixed, please specify: Does your organization have members are participating	Voluntary Mixed e a monitoring syst	Not applicable tem for determining whether			

	Questionnaire sent to all me no compulsion to reply	mbers but Compulsory audit of all members' CPD records			
	Random voluntary audit of a members' CPD records	sample of Other			
	Random compulsory audit o of members' CPD records	f a sample			
	If other, please specify:				
Q90	Is CPD measured by?				
	Inputs	No formal measurement			
	Outputs	Not applicable			
	Mixed				
	If mixed, please specify:				
Q91	If measured by inputs is this based on?				
	A points system	Other			
	The number of hours comple	eted			
	If measured by hours, how many hours are required over how many years?				
	If other, please specify:				
002	Te 11				
Q92	If measured by outputs, please give details:				
	-				
Q93	Is participation in CPD evidenced by? (Tick all that apply)				
	Record of activities	Evidence of reflection			
	Evidence of planning	Not applicable			
Q94	Are online facilities used in the follow	ving ways? (Tick all that apply)			
	To deliver CPD	Other			
	To record CPD activities	No online facilities			
	To monitor CPD				
	If other, please specify:				

5	Was the online CPD system develop	ed?			
	In house	Externally			
6	Do you have sanctions against non-p	•			
	Yes	Not applicable			
	No				
	If yes, please specify:				
	Does your CPD program prescribe any specific competences that members must cover?				
	Yes	Not applicable			
	No				
	If yes, please provide brief details:				
	Has your organization made any changes in the area of CPD, as referred to in the questions in this section, in the last two years?				
	Yes	No			
	If yes, please specify:				
	Is your organization planning to make any changes in the area of CPD, as referr to in the questions in this section, in the next two years?				
	to in the questions in this section, in	the next two years?			
	to in the questions in this section, in Yes	No			

Appendix C

Case Studies

C.1 Methodology of Case Studies

Two dimensions were significant in selecting professional bodies to participate in case studies: interesting measurement techniques and international scope. Initial searches for appropriate professional bodies to interview involved identifying those organizations that stated they measured CPD by output in the PARN Professionalization Survey 2006 (Appendix B). To provide a balanced viewpoint, a selection of those with input-based systems was also chosen for further investigation. Web research was then conducted into these professional bodies, and a shortlist was created of those with interesting CPD measurement schemes. These organizations were contacted, and most agreed to participate. The PARN survey at the time of choosing cases only covered the UK, Ireland and Canada, and no organizations in Ireland or Canada reported using output-based schemes. Therefore in addition to survey data, interesting candidates overseas were identified through extensive web searches, from information provided by UK professional bodies and from contacts with various international accounting bodies provided by IFAC.

Throughout August and September 2007, telephone interviews were held with 15 professional bodies worldwide, across sectors including: Accounting, Medical, Construction & Engineering, and Information Technology. As well as the UK, interviews were held with professional bodies in Canada, Germany, Kenya, New Zealand, Singapore, South Africa and the USA.

Telephone interviews were conducted by the authors and were on average 45 minutes in duration. Two templates of questions were used: one for those with input-based schemes and another, more extensive set for those with output-based schemes. Interviewees were asked about their CPD scheme in general and their experience so far, whether or not they use a CPD cycle, and if so, the details of that cycle, methods of assessment/measurement (during each phase of the cycle where applicable), and competency frameworks. The questions for those with input-based schemes looked particularly at whether or not evidence was required, and if it was, the type of evidence required in addition to basic input measures. This was done to try and identify if an organization has been using some sort of output measure, without realizing it (see question templates in appendix D). Interviews were recorded and fully transcribed before being written up into case studies.

C.2 The Chartered Institute of Management Accountants (CIMA)

CPD has been mandatory for some time, and in 2006, the organization switched to a new output-based scheme. During this changeover, the importance of CPD was formalized and communicated: the organization needed to establish improved CPD to ensure the continued good reputation of the profession. The organization believes this is an incentive for its members to keep themselves up to date. The changes also emphasized the need for better understanding of CPD among members and so the professional body now concentrates on workplace development and role relevance, and is trying to break the opinion that CPD is narrowly focused on updating technical skills: "that's still the perception for quite a lot of people and it continues to be one of the things we need to communicate."

This broad perception of CPD follows the IFAC standard: a modern professional working in an organizational environment needs to have a wide range of interpersonal skills, a wide understanding of the business, of stakeholders and of management skills: "it wasn't good enough just being an expert in a technical area, especially for senior members. It was very much about being able to communicate with the other functions within the organization and that required more developed skills."

The organization has a very developed CPD cycle which involves six phases rather than the usual four. The phases are as follows:

1. "Defining"

A member defines their role as a professional in business, as well as any aspirational roles, therefore creating a duality in terms of looking at their current role performance, and looking ahead to their personal professional development. After defining their role, members then break down that role into key responsibilities to be maintained or improved as appropriate. The employer often has input into determining these responsibilities. This is because the organization did not want members to have to be filling in different forms for different sets of people. If the templates and processes at work fit with these phases, then they are valid.

2. "Assessing"

During this phase, the organization encourages its members consider whether they are meeting the expectations of various stakeholders in their role as a professional. At this point they should be looking for gaps in their competence, in terms of knowledge, understanding, skill or attitude, with a view to addressing them through future CPD. The organization provides an online CPD planner which helps members identify gaps in their knowledge, and work out how best to go about closing those gaps. They look at the competence landscape and identify the areas which are important to their particular role. They then assess themselves and the planner automatically suggests resources and ideas to help them meet that particular need.

3. Designing

The organization encourages members to design a professional development program around activities they perceive to be relevant to their role, satisfying key identified needs which are realistically attainable.

4. Action

This is the point in the cycle where members participate in the chosen learning activity.

The organization has found that having restrictions on the type of activity which can count towards CPD was limiting the productivity of CPD for the individual: "My personal view is that this has been one of the barriers that we've tried to remove because CPD is barrier-ridden. We wanted to try and bring down those barriers as much as possible, and this was one way of removing all those rather artificial frameworks around 'structured' and 'unstructured' and so on."

Having a minimum requirement of input hours to CPD was also seen as a barrier to real development: "If you have an hours-based scheme, people focus on getting their hours. It is not conducive to an ongoing professional development scheme because you may well achieve your 30 hours by February and then sit back and relax for the rest of the year."

5. Reflection

The organization believes that it is very important to set time aside to reflect skillfully. It regards this phase of the cycle as a "quality checkpoint," where people can see what they have done and the effect it has had on different stakeholders, and whether or not it was successful.

We didn't want a tick-box approach to CPD. We wanted people to be using the recording as a way of making things explicit and of checking the quality of their decisions and making different ones next time if they didn't make the grade.

The organization encourages, and is in the process of developing, support for group reflection. Over the past year they have been staging workshops where individuals, in groups of two or three, have had the opportunity to reflect on their developments. They are also given access to reflective question templates: one is for reflecting as an individual, and the other is in dialogue with a peer. This element of the scheme is currently being worked on, and will be strategically introduced in due course.

6. Evaluation

If the reflection phase is about looking at individual elements and activities, the evaluation phase is also considered to be a time when the individual looks back on their year as a whole and reflects: "evaluation is a true, fair reflection on their development. Not every single detail, but the key things that link into their responsibilities."

The organization encourages members to evaluate their actual development against their projected development results and gauge their success in meeting their targets. Any outstanding development needs that have not adequately been met should be brought over to the next cycle. They should examine their annual record and be satisfied that it is a true representation of their professional development over the course of the year.

Members in practice have had their CPD records monitored for around 10-12 years, but the monitoring of members in business is recent. A sample of CPD records of both members in business and in practice is now audited, with a higher percentage in the latter as the organization considers members in practice to be those closest to the public and therefore present more of a risk. They also direct monitoring towards those with more senior positions who hold more responsibility. If members are found not to comply, in the first instance they will be given more time and assistance, and only those who are found to be willfully non-compliant will generally go through the conduct process.

The organization makes a point of monitoring each phase of the cycle, to ensure full progression through the CPD cycle, by checking through the forms members send in, and

identifying any gaps in the cycle. The reflection phase is most often left out. If a gap is detected, the individual will be contacted and asked to complete the missing phase:

we don't really look specifically at what it is they've chosen to do, because that's up to them—and how do we know if it's right for them? But we do look for if they've done something and engaged with all elements of the cycle.

During the CPD audit, the organization does not strictly check for a certain set standard of quality in the records. They simply check that what is submitted is "reasonable": "I think if a member were to send in a piece of work that is clearly very shoddy, and for example, filled in one word for each of the areas, then we would want more detail and we would go back to them." There is at present no set standard, and what is considered to be "reasonable" is at the CPD auditor's discretion.

Assessing the content of the forms is something the organization will think about in the future, but with the exception of a few, including those who produce far too much, the standard is usually consistent. Recent research has however picked up on a difference in standard when it comes to the reflection phase of the cycle:

as you go through [the forms] there are quite concrete terms which come out and link in with the development ... [there are] often between one and three elements in each 'reflect' section which demonstrate that they've clearly been thinking about it."

CPD output measurement for members is done entirely by self-assessment. They are not considering moving to a more objective method—this decision is down to their principle of trust:

that's one thing we took from the older ideas of CPD that were based around obligation and duty—we've had to say we trust people as professionals, having gone through a certain amount of torture to get their professional qualification, they have that sense of responsibility and trust."

The organization believes it is very difficult to produce any quantitative measures from an international membership with a range of very different roles and responsibilities. It is far better to ensure that CPD is valuable to the individual than it is to accurately and objectively measure the output. They have no problem with relying on the individual, but agree that it would be useful to have some sort of benchmark from which they can assess themselves.

There is no set competency framework for accountants, but the organization has developed a "competence landscape" which is a range of competencies that members can measure themselves in. They are developing a short questionnaire for each competence so that members can reflect on their experience and levels of expertise. From this, they believe it is possible to develop levels across the membership that they can set as targets for themselves: "I think they're quite interested to see how they stand in certain areas against their other colleagues and peers."

C.3 Construction Industry Council (CIC)

In 1996, the Construction Industry Council decided to improve the sector's approach to development and recognition of competence: "One of the first areas we explored was CPD and we did that through European funding." They undertook the EUSCCCIP (European Project for the Use of Standards of Competence in CPD for Construction Industry Practitioners), the aim of which was "to find unifying or common factors ... we developed a model which all the European partners agreed and in various ways have adopted."

The outcome of the project was

essentially a fairly simple, cyclical model that focused on the use of outputs and more particularly standards as the hub around which CPD should focus. So we had a 4-phase cyclical model which suggested that people should review where they were now, identify where they wanted to be, plan how they could get there, carry out that process of development and then review where they got to and so the process continues. At the hub of that are standards which allow people to set targets against which they could measure their development.

The model proposed in the EUSCCCIP framework seeks to provide an outline specification based upon the contents of the best practice CPD systems and which can be applied by individuals, organizations, and professional institutions in the construction industries. The model does not seek to specify what topics should be covered by CPD, how much CPD should be undertaken, or how CPD should be delivered. Instead, the framework seeks to encourage designers of CPD systems to move away from those based on inputs, such as hours or points, towards outputs (achievements). The EUSCCCIP framework encourages a planned and reflective approach to CPD and provides a model for good practice.

Another area where the organization worked on CPD "was on the application of standards and identifying for individuals what they could do to plan and record their CPD in a structured way." The EUSCCCIP framework recommends that any system for CPD be enhanced by using an agreed framework of standards of competence (these might be National Occupational Standards, standards set by professional bodies, or profiles set by employers). These provide individuals with the necessary clear and objective reference against which to build their development. The framework is

a kind of multipurpose model and in terms of its monitoring..... how people might monitor CPD or be monitored, again, it was on a kind of spiral basis, if you can imagine the model itself being a circle, if you can imagine that then moving up to a spiral in terms of people policing it ... one could do it simply by policing oneself at one extreme, moving up to formal structured independent assessment of achievement at the opposite extreme.

More recently, CIC finished a joint project with the sector institutions, that aimed to convince them to move from an inputs to an outputs-based system. To challenge the institutions, the organization published a paper which set out a number of areas that the institutions might have wanted to consider in terms of CPD "in a more strategic way." Five targets were identified: developing output focused CPD, developing a common CPD framework, developing common CPD schemes, developing appropriate CPD provision, and developing mutual recognition. Some

institutions had already been moving in that direction and therefore welcomed these targets. "Others however, were rather skeptical and reluctant and so all we've been able to do really is to develop a best practice guide and advocate that this would be a way forward."

Under the suggested CPD system, the member begins the cycle with the reviewing phase: "the individual reviews and analyses and appraises where they are now and records that as a profile of areas in which they're competent and areas in which they are not competent." Again, this "recording" is based upon the key issue of standards and competence. Individuals review their personal and professional experiences in a structured way. This appraisal enables them to identify their interests and competences. Analysis of future needs takes account of current, future, job and career requirements. The appraisal results in a profile of the individuals' personal and professional competences. The analysis identifies the priority areas for their CPD development which is recorded as their profile of needs.

Once the individual has reviewed themselves and established a profile of competence and needs, they move on to the planning phase of the cycle. Here individuals identify the most appropriate learning and development activities and opportunities to meet their profile of needs: "So you plan what you've got to do, set that out in a simple plan with a timescale against it so that you can plot what you're going to do."

The next phase of the cycle is for the individuals to meet their development needs and achieve their targets. Individuals choose from a wide range or formal and informal activities available to them. Although most activities will be planned, individuals are encouraged to recognize and take advantage of opportunities which arise from day-to-day work experiences, unexpected challenges and professional contacts. During this phase of the cycle, the individual notes down a detailed record of the development activities undertaken. The record shows the intended objectives, what objectives have actually occurred and with what consequences.

The cycle then passes onto the assessment phase where the individual measures up their results against their development plan and assesses whether they have achieved their desired competences: "What were your targets? Have you met them? Have you moved on? Have you increased your competence, your knowledge, your understanding, whatever it might be? And you record that and then the whole cycle repeats again."

The individual then has the option of self-assessing their CPD. Here the member is looking to assess whether they have achieved the core competencies that they set out to learn in the planning phase: "where they're not going onto formal programs, courses whatever, then specifically speaking it's for them to be honest with themselves as honest professionals and say well have I met this target, am I more competent at doing this, have I understood this, do I know more about this now?" Neither the self assessment nor the members' reflections are necessarily monitored or assessed (Institutions are often concerned about the resourcing and effectiveness of the monitoring of members' CPD):

It is said that we are our own best judges. Certainly as a professional, if you have been trained to think in a professional way, in a methodical way, in an honest way, then you should be honest with yourself in terms of whether you can do or know X and as I say, if the specification is fairly clear, then that helps you to be more objective about measuring yourself and being honest with yourself....after all, Professionals sign up to

a Code of Conduct which has inherent implications about the currency of their competence.

As well as self assessment, members also have the option of having their CPD audited by a third party where proof of their learning has to be demonstrated:

if they're assessing themselves, then they're declaring that they have done these things and that's one thing. If they need to demonstrate it to a third party then it's a matter of producing evidence which is a very similar process to what happens when people demonstrate their competence for an NVQ: in other words you produce a portfolio of evidence of things from the workplace or from your development processes which are mapped against the criteria in the standards.

According to CIC's representative, the future of CPD depends on changing the mentality and practice of both individuals and organizations:

and that's not just with CPD, but everything we're trying to do in the Sector Skills Council. Because it's very much trying to move people towards a self responsible approach to their development, and people managing their own development and people seeing competence as something to strive for and maintain. So in a sense it's not just isolating CPD, it's trying to move the whole sector forward, CPD being one aspect of how the sector's skills and needs can be achieved.

The representative was of the opinion that moving away from a purely inputs-based approach may give the impression that more is being expected of members and the result may be a "turn-off" for many and lead others to leave the organization (then again, the existing "inputs" approach is also a turn-off, suggesting that CPD is a necessary "chore" to cover a minimum number of hours). Because of this, the scheme needs to be as simple as possible. One possibility would be for institutions to introduce a monitoring process on their annual renewal application form through which the member declares that they have undertaken their CPD. However, there are possible drawbacks in introducing tighter measures:

you start to move into the whole business of license to practice ... unless you are formally seen to be competent in a particular area, should you be given license to practice? I think that probably, as the institutions stand at the moment, [that is] a bridge too far. At the end of the day, all those institutions are in the numbers game and if you make the rules too hard then you don't get as many members joining or ... [staying] on as members.

Ultimately, individuals need to recognize that there is an advantage in structuring their CPD to benefit their personal career development, help meet the needs of their employer/work situation, meet the requirements of their professional body, and generally serve the enhanced performance of their sector.

C.4 Royal College of Psychiatry (RCPSYCH)

RCPSYCH is unusual in that it asks its members to form peer groups to discuss their CPD. At the beginning of the annual CPD cycle, the peer group has a discussion to decide what their educational objectives would be for the forthcoming year and dedicate a plan based on that. The peer group is essentially self-selecting and would normally consist of 3-6 individuals of whom

one would be the lead or coordinator. The group meets at various intervals throughout the year. It is the responsibility of the group to give educational approval to events that an individual member wants to attend. Instead of having approval from the organization for certain events, as in the past, it is now up to the peer group to decide what is best for an individual and their educational needs. Members still need to collect at least 50 hours of CPD per year in order to be in good standing with the organization.

The peer group system has been in place since 2001. There has not yet been any research or formal audit on how the peer groups work, but this is something the College would like to do in the near future. Anecdotal evidence based on general feedback is that members do like this way of doing CPD: they find peer group work to be valuable in terms of not only support, but also in terms of challenge, because peer groups provide an opportunity to reflect on what they have learnt from the event, and how it has changed their practice.

RCPSYCH does not stipulate how often the groups should meet, but does require that they meet at least twice a year—first to plan, and second to review. They have found, however, that groups generally like to meet far more often than this with some even meeting once a month. The groups are generally left to their own devices as to the shape and direction the discussion takes. The only guidance they are given is that they should be completely objective on what they are planning, and how it ties in with their NHS appraisal.

Although the peer groups are generally well received, some people have difficulty in establishing such groups—for example people working past NHS retirement age, those working in remote areas, or those with very specific specialties. The organization has tried to make it easier for these people by stating that groups do not have to be age, geography or specialty-specific. They also have a network of CPD regional coordinators who can help people in this sort of situation. Forming groups does however remain a problem for locums who move around regularly.

The College does not have observers at these meetings to see how they are going, but may review this. At present all the Regional Coordinators feedback on how their respective groups are getting on.

During a typical peer group session, members discuss their plans and reflect on what they have done. The organization has had difficulty getting over what exactly objective setting is, and so have decided to provide guidance on objective setting in the next policy statement.

There is no detailed guidance published about the expected content or format of peer group sessions (e.g. questions that they should ask each other), but they are given direction. They are asked to think about their CPD in terms of knowledge, skill, attitude and social skills, and to look at four different levels of practice, outlined as follows:

Level 1: "The Common Core"—Common to all practitioners

- attending postgraduate lectures for GPs and other local specialists
- discussing common problems with other practitioners
- initiating treatment in liaison with other medical specialists

Level 2 Common to all psychiatrists

• read about multi-disciplinary teams and their dynamics

- read articles on appraisal and supervision
- continue monitoring own performance with team managers
- Level 3 Common to all psychiatrists in the subspecialty (e.g. general adult psychiatrists, forensic psychiatrists, etc.)
 - ongoing reading of major journals and text books
 - continued monitoring of outcomes of in-patient and out-patient care
 - ongoing evaluation of clinical practice
- Level 4 Related specifically to the member's job
 - content dependent on the specific psychiatrist's role

They are not expected to set objectives around each of those levels every year, but just thinking about these levels can help people realize that they need to update their basic skills.

Some members find it difficult to distinguish between the different levels and domains, and the organizations' guidance on this is under review.

The College uses the SMARRT system: activities identified in a plan should be specific, measurable, achievable, realistic, resourced and time-limited.

It can be difficult for RCPSYCH to monitor in detail whether specific activities are in fact measurable. It expects this sort of issue to be raised by the peer group, and solved locally. The peer group are responsible for challenging an individual plan if they do not think it is possible to measure. The method by which an individual decides to measure their CPD is left largely up to them, so long as it is approved by the peer group.

Again, rather than formally recording the result of their CPD (what they have learnt, measuring the output and filling in a form) members discuss this within their peer group. The College supplies various forms to help facilitate the peer group discussion, in addition to the compulsory form which is required to be returned to the organization; it is up to the groups whether or not they use these.

Members do have to submit one form to the College, and this is audited. The audit process involves five steps:

- 1. The form is signed off by a member of the peer group
- 2. The information on the forms is inputted onto a computer system
- 3. The computer randomly selects a 5% sample

For those that are selected.

- 4. The organization writes to the individual whose record was selected, and ask them for evidence of any external activities undertaken.
- 5. The organization writes to the member of the peer group who signed the form, and asks them if the development plan was drawn up satisfactorily, whether the objectives set were relevant to that person's role, and as far as they are aware, whether they attended the activities they said they did.

As far as measuring CPD in terms of quality, this is deemed to be the responsibility of the peer groups and there is no central system for this.

At the moment, RCPSYCH has no scale of quality with which to assess the form that is sent in: it is simply either acceptable or not. The organization does not have the capacity at present to assess forms is greater detail. Given the resources, the organization would like to develop this further.

In the guidance material, there is a lot of material on performance review, which could be seen as an output measure of CPD in terms of application of knowledge and its impact on practice. However, performance review is something that is undertaken by the employer and not by the professional body.

C.5 The Southern African Institute of Chartered Accountants (SAICA)

The Southern African Institute of Chartered Accountants currently has an input-based scheme, which commenced in January 2006. Before that, there was a call for CPD declarations from members every year, but monitoring was haphazard because it was a voluntary policy: "I talk only as a member receiving one, but I only bothered to submit it because I had to do it for the audit where I was working anyway. Nobody really followed up with me as to whether it was done or not."

Recognizing this as inadequate, a mandatory policy was implemented. It is still an input-based policy, but it is structured in a way that allows those members who prefer output-based CPD to follow that approach. They must, however, be in a position to prove to the Institute that they set themselves requirements to deal with a competency deficiency. Although this flexibility exists, not many take up the output-based option. There are few available guidelines or instructions educating people about how an output-based approach works, and it is likely that this has something to do with the low uptake. The focus so far has been to establish and promote CPD in general—in its initial input-based form.

SAICA is currently researching output-based CPD in more detail, because the Board decided that the input-based system would be implemented first in order to get people on board, and then after the first three year cycle, they should move to an output-based scheme.

The organization has recently implemented an online system where members can directly log their CPD, but has experienced problems with compliance since then. This may be due to a lack of effective communication, which is generally done by email. "Maybe we have to look at other ways of communicating with our members because everybody's dealing with a lot of emails from all corners, and they don't really pay attention to them."

The current scheme complies with the IFAC IES7 standard of 120 hours over three years—SAICA requires that at least 50% must be "verifiable." They are also still grappling with the problem that many members still do not understand the difference between verifiable and non-verifiable CPD, and a lot of them still think that they physically have to go on courses in order to complete their CPD:

It's very difficult because most of the queries we get are people saying they don't have the time to leave their work environment—why should they be obliged to attend lectures and seminars. We try to get the message across to them that that's not the only way, that those are not the only activities you can take.

The organization is experiencing a problem with lack of compliance with the scheme in its current form. Roughly 30% of their members do not comply. There is a percentage of members who are no longer active in professional practice, who could apply for exemption, but since they have not all done so, this cannot be taken into account when assessing compliance:

I think for a lot of them it's the fixed approach they don't like. I think a lot of our members, especially the older ones, are thinking that we are questioning their professionalism, and a lot of members are sitting through training and not necessarily listening to it.

SAICA is currently carrying out a member survey to find out their views of the present system, because since they introduced the online system in September 2006 the numbers went down. They think it might be that if people do not easily understand the system, they may as well just give up: "...we don't know if that's the cause, or whether it's the system itself, or if it's a general trend." However, after a reminder in September 2007, the compliance improved. Currently the organization does not provide any information on reflection or planning, but is hoping to introduce it soon.

Regarding the proposed switch to output-based CPD, research is currently in progress to see whether it is viable or not: "We can't say now that we will definitely go with output, but if we decide not to, we'll have to convince our board why not. I think it's probably the best approach, but measurement is going to be the biggest problem for us."

The organization sees CPD as less of an issue with members in industry and commerce, whose employers ensure that they go through learning and development. As long as the professional body is happy with the process in place at the employer organization, then they are satisfied that sufficient CPD is taking place. However, they realize that with smaller employers, it is likely that there will not be a robust development scheme in place, and so the professional body needs to figure out a way of dealing with that.

Another element of the proposed output scheme would be the development of a "learning map" or competency framework. SAICA has been looking at a competency framework for chartered accountants and drawing from that to try and develop a learning map for all members. They are also hoping to hold focus groups consisting of members so that members can have input into what they think are appropriate competencies.

At the moment there are no audits to check the hours that people have assigned to CPD. At present SAICA does not have the resources to perform audits of CPD records. The proposed scheme involves CPD audits, but not at the individual level—the Institute will look at the scheme employers have in place. If individual members can show they are complying with their firm's requirements, the organization feels that should be sufficient for their purposes.

SAICA is optimistic that an output-based approach can be achieved in a cost effective and time efficient manner: "I definitely think this can be achieved. Most organizations actually have professional development criteria in place, and what we are trying to do is fall in line with what the employer actually expects from the member." They do not believe that there is a discrepancy between what the employer wants and what is best for the professional development of the individual: "My view is that what an employer requires of you, that's all to do with your career."

As for the pros and cons of both input and output-based approaches to CPD measurement:

The input approach is not measuring whether you're actually developing competencies relevant to your profession. You don't have a definite plan of what you're working towards, so you could just be attending training for the sake of attending training, but it wouldn't necessarily contribute to improving whatever you're doing. The other disadvantage is the fact that you are required to do so many hours, and people put up a resistance to that. And the other thing is the compulsory logging of CPD—a lot of people are complaining that they don't have the time to do it. So it's got a number of problems. The benefits of the input approach—it's easy for members to pick up how

many hours of training they've done, they don't have to assess whether they've actually met all the objectives ... so you can see why my cons outweigh the pros.

But if you go for the output-based approach, I think the big strength is that you can determine what you require and where you want to be, so you can set a path for yourself and then you can complete specific training which will allow you to meet those competency deficiencies. I think the biggest con there is the measuring and that's why this project is under way. I think it will still be a challenge, especially when you take into account that a very large portion of our members are entrepreneurial, working for themselves in small operations. To go and measure those people is going to be a bit of a task.

Having the support of an employer is a great advantage in establishing an effective measurement system, and SAICA envisages a hybrid scheme where there are two options:

For certain members it is easier for them just to log the CPD by input—for bigger organizations we can rely on the systems already in place to assess output. And then for the smaller organizations, we actually need to assess them and see how they are doing, which would be more of an output-based approach on our participants, and this would save on resources.

C.6 Pharmacy Council of New Zealand (PCNZ)⁹

In 1997, the Pharmacy Council of New Zealand first introduced a competency framework to assist new entrants to the register. It was looking to develop this into a competence assessment for everyone before it became a regulatory requirement: "The Council was quite forward-thinking in the mid-nineties to actually set competencies for the profession."

The Council's competency framework is highly detailed; it is a task-based framework centered around seven standards. The seven standards range from preparing products, to behaving in a professional manner, to providing primary healthcare. Examples of learning activities are provided in the guidance, detailing what one should do in order to meet a specific competence.

Every piece of learning that a member completes must relate back to the competency framework and, importantly, to the particular standards that they are working in. Only learning completed under a standard relevant to their particular role will count towards CPD: "the CPD you do has to be in the area that you work."

The individual, rather than the organization, decides which standards are relevant to their role (80% of members have a role which relates to all seven standards), but the CPD auditors are peers practicing in a similar area so they would be able to determine if the selected standards were appropriate: "they are much closer to the coal face."

The scheme was developed in 2001, and was piloted with 300 volunteers. At that time it involves a practice review and a learning plan. The volunteers filled out some demographics and carried out a self-assessment against the seven standards in the competency framework.

143

References to the Pharmacy Council before 2004 relate to its predecessor, the Pharmaceutical Society of New Zealand.

From this pilot, the Council decided that the first step was for members to develop learning needs: "It was all about assessing yourself, finding your gaps, assessing your practice and setting yourself up with two learning goals, and then later you would evaluate your learning." The pilot involved an intense review of every volunteer, with staff spending up to two hours going through the self-assessment. The process was, however, very informative in terms of using it as a gauge to determine whether the standards still affected the profession: "It was an opportunity for people to identify where their learning was and we wanted to see if this was going to be useful at all."

The results showed that around 60-70% of participants got their learning during this practice review. The sample was representative—the Council was fortunate that the volunteers consisted of a range of professionals. They also got a wide age range in the volunteer sample. One useful finding was that, with older people especially, many people found that by going through the standards provided in the competency framework, it gave them an idea of where to begin with identifying their learning needs. They made comments such as: "going through these standards has actually given me an idea of where to start. I knew I had to do some extra learning, but I never quite knew where to go." From the results of the pilot, the organization learned that providing standards was a good tool for self-assessment—it just needed to be more focused on what people were actually going to do with their learning.

In 2003, following some changes to the proposed scheme, PCNZ conducted a second pilot. This time people filled in a form similar to the one currently being used, but the pilot did not involve the outcome credit scale. At this point, the Council was still focusing on getting self-assessment right.

In the absence of the outcome credit scale, self-assessment was paper based and qualitative. PCNZ encouraged people to do their assessment with colleagues: "we thought that we might sign up a whole pharmacy and they could all help each other, saying 'what does this standard mean to you? Do you really do it?""

The scale was not a part of the 2003 pilot, but has become a mandatory requirement since then. Its development was a result of thinking about ways in which results could be measured. The main aim of the scale was to make professionals actually think about what they had done with their learning, and relate it back to the mandate of public safety. The organization wanted to get away from the ethos of the previous system, which had been to identify learning goals, and do them. There was no evaluation of how useful achieving those learning goals had been: "We wanted [members] to actually say, 'OK, I've done that learning, now what has it actually meant for me as a [professional], and how has this improved my practice or allowed me to maintain my practice?'"

By introducing the final step of reflection, members who thought that they could just go along to a course, or who just did something that somebody else had told them to do, were now forced to reflect and think about what they had actually done and how their learning that was useful to them in their professional role. PCNZ is now in the process of the first CPD audit. They have seen that many people stumble at the reflection phase, because they have not been able to justify how they have used their learning in practice.

Another objective was to give autonomy back to the members. There has been a lot of criticism that regulators would tell individuals what to learn, and what would be useful for them. "The

outcome credit scale was something that the individual can apply to their own learning, and say, 'OK, got my hand on my heart, this has had a significant impact', or 'this has had a minor impact' or whatever."

The role of the CPD auditor (who is a peer) is then to say, "I think that looks right", or "I'm not sure how this really relates, can you give me some evidence or tell me exactly what you mean by saying this had an impact on your practice?" The CPD auditors focus on reflection, action and results, and there is a clear grid that they follow when auditing and make comments on those three steps. As a result of the pilot, the organization decided not to assess the planning phase of the CPD cycle, although it is still mandatory that individuals complete a development plan. The Council decided not to assess planning: "We thought about what was important. With planning, a significant number of people had planned and then they hadn't been able to actually undertake the action that they had planned. And this was a concern for [members] in the early pilot." The action phase of the cycle now encompasses planning, but it is not concentrated on in the CPD audit.

One of the important elements in the CPD audit is the new learning gained. Many members will have a level of understanding of the various topics that they have set as learning goals, and unless they have specified what is new, it is very difficult to assess:

It's one of those crucial areas that the CPD auditors are looking at, for example, you'd expect more from [one professional] in terms of specialist knowledge ... than you would from [another] who would be OK with a general level. We need to know, what's new about what you've learnt? How is it different from what you knew before, and how was that learning applied in practice?

It is important that members identify separately on the form, what they have learnt and how it has been implemented in practice.

The results assessment is the method of recording output at the results phase of the cycle, but during the other phases, the output required on the record is more straightforward—just statements or short paragraphs of reflection. Some of the records do not include sufficient detail, and in order to get over that, the guidance in this area needs to be more robust.

One problem that has been identified with giving guidance, however, was that

the help that has been given has been a bit too constructive in some areas and we are now seeing that in the CPD audit. Some courses have been run with some prepared sheets detailing what could be your reflection, and what could be your action, what could be your outcome, and people have just copied them.

The CPD auditors involved go through training, where they are provided with various examples and then asked to assess the learning—this makes them aware of various issues and also establishes some "form" of standards and therefore what sort of examples should be provided to members for guidance on what is expected.

There is also a chat group for CPD auditors where they have the opportunity to present different scenarios to each other and to discuss the principles involved and how to apply these to the audit; for example, what sort of level would be required for a results level of 2, or what sort of evidence would be necessary in different situations.

PCNZ still has to work on setting standards. They are aware that a clear standard may not be evident from the first CPD audit, and that will be something they reflect on when they get all the results in:

We tried to avoid being too didactic and telling [the CPD auditors], 'this is what you should be doing'—we tried to open their minds up to the different issues and because they are peers of these [members] that they're auditing, they are the ones setting the standards rather than us, but obviously we're mindful of a minimum standard.

It has not been the Council's policy to specify exactly what is sufficient for a 1, 2 or 3—they have left it to the CPD auditors to determine what they set as the levels.

So far there have been several instances of people not being able to provide the appropriate evidence to prove the credit when asked:

Certainly one of the main issues with outcomes is that people stipulate how they envisage the learning they are doing is affecting their practice. There will be general statements in there such as, 'I am able to deal with queries regarding this medication', rather than giving specific examples.

One of the reasons for this may be that they have not come round to the idea that they need to leave a sufficient amount of time between the learning and the self-assessment to allow for a significant impact on practice.

The outcome credit scale was initially presented to the advisory group in 2003 as a five point scale, but the group thought that a five point scale would be too complicated: "there would be even more shades of grey than there are with a three point scale."

Because the first full CPD audit was only just taking place at the time of interview, it was too early to comment on the overall success of the program in its current form. One thing, however, has already become evident:

It would appear that around one half are asked to provide extra evidence—a lot more than we expected. That can tell us one of two things: that we weren't clear about what we wanted or that people haven't listened to what we said. I think it's probably a combination of both.

As a result of this, the CPD auditing process is taking up more resources than anticipated, but the organization is cautious that this could be attributed to the fact that this is the first time CPD auditing is taking place, and the initial training of the CPD auditors is taking a considerable amount of time. They had anticipated that each audit would take around 30 minutes, but at the moment, it is taking at least an hour. There are only six CPD auditors doing this on top of their other jobs, some of whom are full time. PCNZ pays these auditors for their time. They expect however, that the second and third runs will be much more streamlined.

C.7 Chartered Institute of Public Relations (CIPR)

In the past, the Chartered Institute of Public Relations operated a points-based CPD scheme but later changed to an hours-based system in which members are required to undertake 30 hours of CPD over the course of 12 months. The decision to change from points to hours was driven by practicality. CIPR felt that the individual would more quickly be able to calculate the number of

hours they had actually accrued over the course of the twelve months rather than having to go back and assess how many points equated to their activities and whether these activities were even relevant to CPD in the first place: "...because if you go on an appropriate training course, then you can easily see that it is three hours long if that's how long the course actually takes, and there is no need to get back to [the organization] and actually check that it counts towards CPD and how much it counts for."

The current scheme, which has been relatively stable for the past six years, is on the whole voluntary, but compulsory to certain areas of the membership. Members are provided with a guideline brochure which instructs them as to which activities constitute relevant CPD and which do not. They are then asked to fill out a one-page development plan and email it to the organization. The plan details the activities they intend to pursue over the course of the 12 month period, what they want to achieve, what they want to learn, what they need to do to achieve this and how they are going to measure success. All of these criteria are subdivided into the four strands; culture and society, media and communications, organizations and relationships, and professional skills and development. Although the organization does not allocate a set number of hours to each of these strands, they do require that members complete activities for all of these strands.

At the end of the cycle, members are then asked to complete and return the development record. Here they list which activities they have undertaken, how many hours these constituted, and what evidence can be provided to substantiate these claims. The development record also includes a category called "what did I achieve?" where members are asked to reflect upon questions such as "how did I make a contribution to the industry?" and "what did I learn and how has this increased my competency as a practitioner?"

The CPD auditing process involves members providing the Institute with evidence of the activities which make up their 30 hours. This may include things such as course attendance certificates, material from training workshops or brief synopses of such events or books that they have read. The quality of members' reflections and evidence are not measured; the Institute only assesses whether members have provided sufficient evidence to substantiate their claims. Therefore, although the organization asks members to write a small paragraph reflecting on what they have learned from their CPD, they do not measure this output as their current scheme only actually measures input: "you can't say if they've been staring out the windows at those particular courses but we can certainly say if they've been here."

CIPR is currently undergoing an overhaul of their CPD by establishing an online scheme, estimated to be in operation by Easter 2008. Although the change was not prompted by any specific problems with the existing scheme, it was thought that requiring members to fill in a CPD plan with their learning objectives at the start of the 12 month cycle could prove rather impractical for some members. Allowing members to change their plans as their learning objectives changed throughout the year is very important to the organization:

the new system will allow people to alter the plan as they go along ... I'm reticent to use the word 'plan' because it's just more the kinds of things that they'd like to do over the next twelve months and as they start to achieve those things they can fill it in and if they go in a different area, then they can alter that over those twelve months, so that's a difference as well."

Another area that would benefit from the new online scheme would be the provision of evidence, with members being able to upload evidence throughout the 12 months rather than just at the end:

I don't think I'm a cynic, but I think people tend to wait until the end of the twelve months and [they forget their previously completed CPD activities] ... in the new system they can say they went on this course, they can fill it in straight away and it's all fresh in their mind, and they can more accurately capture the learning objectives or development objectives and the evidence that they took from the course which I think is much better for people.

Overall, CIPR's CPD scheme is one that involves both inputs and outputs but only measures input in hours. Although members are asked to reflect upon what they have learned, the quality of these reflections is not assessed and the evidence they are asked to provide is only assessed in terms of the hours-requirement. However, although the CPD scheme is essentially input-based, it recognizes the benefits of an output-based approach, especially in terms of developing learning objectives:

individuals with regards to input tend to look at an event first ... they won't necessarily know [where] they want to go with their career. And so they are perhaps doing [the event] because it sounds interesting or even because a colleague has done it and it's a good course. And they'll do it and they might enjoy it, they might get a lot out of it, but they won't necessarily know why.

C.8 Case Study X

The initial CPD scheme for this organization was based on a ten year old CPD scheme imported from a previous incarnation of the organization. The old scheme was based on numbers: one CPD unit was roughly equivalent to one hour or study, with a notional target of 50 hours per year: "essentially it was just a point counting system, and input measuring system. The obvious downside of that is that you can just sleep at the back of the lecture hall and get CPD points". Unfortunately, with this sort of system, the worth or the impact on the service that is provided cannot be measured.

When the UK Health Professions Council (HPC) was formed in 2001, it provided extensive guidelines and workshops to explain CPD to the regulated professions under its umbrella. However, the HPC approach to CPD has been described as:

a touchy-feely soft and fluffy brigade, with reflective practice only for those who were good at creative writing—they'd be brilliant at CPD because it really just allowed you to express nothing and make it sound like something. That was my cynical view on this; I thought it was absolute rubbish unless you were good at writing novels!

The HPC required there to be a reflective element to CPD, but not that it should be exclusively qualitative. If an organization wanted to use points as well, they were free to do so.

In 2005 the organization in this case study held a consultation asking if members would like to retain some sort of point system, or quantifiable element to CPD: "The members' message came back loud and clear that [they] would like some form of numerical feedback". The organization decided to meet this demand by trying to develop a numeric system which represented a measurement of output.

Currently, the organization has a standard points system where one hour of study is equivalent to one point, but in conjunction with this, they have an "effectiveness index" which is a scale of values between 0 and 1 from which members rate the effectiveness of CPD for them as individuals, "with 0.5 being roughly what people consider pretty damn decent, 0.1 being a complete waste of time and 0.9 being 'wow'." A standard reference document is provided as guidance on how to attribute the appropriate value on the CPD index to a particular CPD activity. They also have a FAQ (frequently asked questions) document which attempts to preempt problems with regard to the index and use of the system as a whole. However, "one of the big misunderstandings, or abuses, of the scheme has been to give an effectiveness value of 0.9 or 1.0 for almost everything".

When asked whether the index was intended to refer to effectiveness in the context of change in practice or knowledge, the answer was "either or both"—this is not specified clearly enough in the documentation, and, perhaps due to this lack of guidance, "effectiveness" means different things for different people: "You can see what we've written in our documentation is very "woolly" and not well defined—we need advice about that". The organization would consider having different effectiveness indexes, and are tempted to fine tune the index accordingly. However, they are well aware of the benefits of keeping it simple.

In addition to the effectiveness index, which is really the "results" phase of the cycle, there is no reference to the other phases of the cycle, and nowhere for members to record output of these phases.

The organization believes they need to improve their advice, and hope to offer workshops and online tutorials that assist people in progressing around the CPD cycle. They believe that they have not promoted the cycle properly and so people have not been made aware of the cycle or its benefits.

The organization audits 20% of the membership each year, with the expectation that within a five year cycle, everyone will be audited. So far they have not applied any sanctions, but have instead offered advice to those who have not met the standards because they are simply not taking the scheme seriously, and are giving effectiveness values of 1.0 for everything.

There is an aspirational target of 15-20 points per year, but the organization does not believe that members should necessarily be sanctioned if they do not meet this target: "The role of the CPD auditors is not to act as the SAS, but rather to offer helpful advice ... the only people that are fooled if the member doesn't follow the rules is the member themselves." The point scores are used as a tool to provide feedback to members so they can see how they are progressing—the value is not used for regulatory purposes.

The organization now has an online system which can be accessed by CPD auditors who can look at the records without the members having to submit anything. Previously, the process of submission was a problem with the auditing of paper records. The member will now know when their record has been audited, as there is an "audit stamp," which is a little logo that appeared against each of the audited complete learning needs. When this logo is clicked, a separate panel appears containing the CPD auditor's comments, which are meant to provide encouraging and useful feedback. The CPD auditors remain anonymous and are provided with training. At present, because the CPD auditing process is new, there are only four or five auditors, who each spend around 30 minutes on each record.

In the future, as well as providing more documentation on the CPD cycle, the organization hopes to improve their online facility to allow documentation to be uploaded. They are also going to implement a mentoring scheme where they will offer members the option for people to have up to three mentors at a time, and allow them to access their mentee's CPD records online, which would facilitate mentoring at a distance. These new advances will cost the organization approximately £25,000 and they will attempt to fund this through sponsorship rather than getting the members to pay for it. Not included in this cost is any payment to the CPD auditors who currently work as volunteers, auditing out of office hours on top of their regular jobs. Each volunteer spends approximately three hours a week on CPD auditing.

Due to an imminent legislative change, CPD will soon become compulsory for all members, which means a huge increase in the number of records, and hence resources needed for CPD auditing.

Attitudes to CPD are changing: "I definitely see the benefits of output now, almost to the point where I wouldn't be bothered if we scrapped points all together. So I've done an almost 180 degree turn around over the past couple of years, and now I see the importance of the 'soft and fluffy.'" CPD now gives members a quantitative target to aim towards.

On members' reactions:

Some have taken to it like a duck to water ... for other people the reflective practice is not intuitive or obvious, and they feel uncomfortable with it, but the moaning and groaning is getting less as time goes on ... we've had a lot of positive feedback.

Some of the original documentation regarding reflective practice [was considered] complete nonsense, and I didn't like it at all. It's still open to abuse, and my criticism still stands that it's great if you're good at creative writing, but if you're a hard-nosed scientist who is very clumsy with that particular skill ... it would be less appropriate.

For the younger generation, it is thought that this will not be a problem, as modern degree courses have reflective practice as an integral part of the studies. It is the members who qualified years ago, those who have never been trained in reflective practice, who are suspicious of it: "but it will get easier and better because they're coming out of the BSc ... and they hit the ground running with reflective practice—it's a natural thing."

The organization's representative offered this advice:

Within the health sector, there is no choice, due to the demands of regulatory bodies, that reflective practice be part of CPD. The question is whether the organization wants to have exclusively reflective practice, or whether they want to include ... some form of quantification ... I think people like that, so I'd encourage organizations to do that, particularly if they've used numbers in the past, then you can convert to a clumsy form of output measurement.

C.9 Association of Chartered Certified Accountants (ACCA)

There are three CPD routes at the Association of Certified Chartered Accountants.

- (a) The unit route, in which a member is required to complete 40 relevant units of CPD each year, where one unit is equal to one hour of development. 21 units must be verifiable. The other 19 can be non-verifiable.
- (b) The approved employer route, in which ACCA recognizes employers who follow good practice for people development and meet the organization's criteria for approval. A focus upon competence and supporting individual learning and development is sought, as a result the organization allows members to achieve their CPD through their employer's development program.
- (c) The IFAC body route, in which the organization recognizes that some members also belong to another IFAC accountancy body (the other body also having to comply with IES 7) and may prefer to complete CPD through their other membership body's program, hence the member can follow just one CPD program, rather than having to meet different requirements.

As part of a CPD reform, ACCA consulted its global membership in a member wide survey and workshops about how they would like to see CPD developed. The feedback from the workshops indicated that members wanted to move away from measuring CPD by hours: "there's always been this approach to CPD which was about how many hours you do, that sends people sulky almost." However, the key message was that members wanted an international benchmark.

The Association has a flexible approach to participation, by offering three routes. However, members have largely selected to go down the "unit route"—an input-based approach to CPD measurement. Because their members work all over the world, they are sometimes in positions where they have to follow the rules of the local regulator, and particularly in developing countries, regulators still demand a certain number of CPD hours. The consultation revealed that developing countries still very much rely on the concept of an input-based approach. Taking this into consideration, the organization decided that at this point in time, it was essential that whatever output policies they implemented, they must also retain the input element, so that international members are able to comply with regulatory requirements. ACCA felt that it must continue to provide guidance and direction on input-based CPD. However, despite retaining one CPD route as input-based, the Association has encouraged a move from a mere points gathering exercise by requiring that any CPD undertaken is relevant to the individual's role.

ACCA's stance is that by insisting on relevance to one's role and verifiable CPD, they are "getting over this form over substance issue". By requiring that members must choose relevant CPD that has to be linked backed to their work, the organization believes that they will move away from the traditional view of input-based schemes, that "you have x number of hours to do but you don't really think about it, and at the end of the year you race to get your hours up, you attend things and just doze at the back or go into the corridor and make business calls."

ACCA monitors a sample of members' records to ensure that the CPD they are doing is in fact relevant. The monitoring provides feedback to the individual and provides ACCA with feedback on how they can strengthen their support to ensure that the issue of relevance really has been understood.

The Association—as a global body—is well aware that they have not adopted the same sort of approach as many UK-based professional bodies, and state that this is due to the fact that those organizations have more UK-based attitudes where they are more ready, and philosophically accepting of output approaches and a new system. Because growing numbers of ACCA's members are outside of the UK, they have to consider the culture and circumstances of those countries, and mentioned even very developed countries such as Hong Kong, still have a very "rules-based" approach to CPD.

ACCA's system provides an online tool called the professional development matrix (PDM) which takes members through the process of looking at their role profile and identifying the competences that they need for their role.

An interesting feature of this PDM tool is that users are given an exercise about different ways of learning, and they are presented with some conclusions on their preferred learning style which is most effective for them before matching a suitable activity to their chosen competence. After this phase of the process, they develop a plan which involves prioritizing elements of their job role which need attention, and addressing any emerging areas in their job role which are new to them. The next phase is to complete a development plan with targets, activities, predicted results and output. Although the "unit route" offered does not mandate different phases of a CPD cycle, it does emphasize planning, activity and reflection through use of the PDM tool and in its communications.

For ACCA, the primary objective of CPD is job competence. "If they can't deliver in their role, then potentially there is a risk for the employing organization and there's a risk for their clients if they can't carry out their role appropriately". Personal development is considered to be important, but not as crucial in the same way as competence: "I think they go hand in hand, but job competence is critical".

With competence as the main aim of CPD, the Association does not feel that it is appropriate to assess or measure this competence: "I don't think that a member body is at all at rights to say whether an individual is competent or not". ACCA feels that they would get no benefit from making such a judgment, and they suggest that peers, managers and clients are the ones who have immediate proximity to the individual member and are more at liberty to comment: "When their clients are saying they've (the member) made a mess of my finances, then the client is making a judgment on competence".

The organization also has an approved employer route, which they consider to be their output-based option for those who choose to go along that path. This option allows CPD to be provided through an approved employer, generally the employer provides for the member, evaluating their development needs, providing them with development opportunities and taking them through appraisal where their performance is reviewed on a regular basis. In this scenario, all development is focused on their job role and achievements.

ACCA sees its role not as judging competence, but as doing as much as possible to ensure that members understand the required competences for their role and that they work towards development and improved delivery. The organization's priority is to support its members through this.

ACCA is confident that its approach to CPD measurement is effective in the international climate, and this has been confirmed both by positive feedback from member satisfaction surveys, and from the high CPD return of 98% which they experienced in the first year of the program.

C.10 The Institute of Information Technology Training (IITT)

The current CPD system at the Institute of IT Training was implemented in 2003, and the incentive was to switch from an input to an output-based scheme. After holding consultations with various people and boards within the body, IITT's Skills Tracker was developed. A real driver for changing the scheme was that the Institute wanted to increase the visibility of the competency framework that they have in place. They had previously had all the material prepared, so it was simply a case of putting it online. By making the competency framework more visible, IITT can identify two main achievements: "One of the tenets of the Institute is that one of the biggest drawbacks of training is that people don't know what they don't know. You overcome that by making it very clear and visible what the competencies are."

As an organization, IITT feel that they cannot be too prescriptive about the exact roles that their members are actually doing, and to get around this, they have come up with an all-embracing competency framework where the individual chooses what elements are appropriate for their role. In addition to this, they have implemented a matrix behind the framework which involved developing a metrics scheme, which is based on EasyJet:

If you go on [their website] and you try and book a flight, it is very open as to what the price is, and very closed as to how it calculates that price. We decided that was a good way of doing it; being very open, very in your face about what your metrics are, but be very closed about the way in which those metrics are calculated.

The only way people could work out the system is by trial and error, putting in different scores. Each competence has a weight, and then members assess themselves along three dimensions: competence points, ability points, and experience points. All of these points are then multiplied by the weight of that particular competence. From this, a member builds up a profile of competence, ability and experience in each of their relevant areas.

The organization has based the system on self-assessment, but the self-assessment alone is not sufficient proof that CPD has been carried out to the required standard—it has to be proved by either a course certificate or a "sign off" from a manager or peer: "self-assessment isn't the strongest mechanism in the world, but at the same time, if you put something different to what is real, then it's about the equivalent of cheating at Patience [Solitaire]. It's you that is the loser."

The complex competency framework behind the program contains around 400 competencies. Although this may seem excessive, it is due to a very high level of granularity and specification:

Is it too granular? I don't believe it is, based on what we're looking to do here is make the detail of that very visible and for people to be able to say, well I'm good here but I'm not actually that good there, but I know someone over there that is pretty good at it, so I'll watch how they do it and learn from that. And that's the sort of reaction we're trying to develop through this.

IITT does not believe that it is important to provide training to those who sign off members' self-assessment. Most of the people doing this are already members: "they're within the community rather than outside the community ... I don't think ... our senior people [would be happy] if we bring that sort of thing in—they'd see it as an additional overhead without the value."

The Institute uses clearly identifiable criteria for self-assessment; for example, "I do this all the time without support from others." They believe that this measure makes the method "semi-objective." By defining the criteria so well, IITT has developed an alternative to rigorous training of assessors, hence limiting the use of resources in this area:

One of the key things for us in bringing in this scheme was that it should be consensual and it should be one that people intuitively just buy into and say it makes sense. And therefore we've tried to create what we think is a practical, consensual approach that adds value rather than trying to force things."

The weighting is driven by competence, and within that, there is a level of "competence," "ability" and "experience" points which add up to give a total for each competence selected. There is no minimum requirement for points in order to maintain membership, but in order to progress up the membership levels, certain point requirements must be met and maintained. For example, an affiliate—the lowest level of membership—does not have any prerequisites, but to progress to be an associate, you would need a certain number of competence points. To go up from associate to senior associate, you would need ability points on top of competence points, and to go onto full member, you need experience points on top of competence and ability points. If anyone drops behind the required number of points for their current level of membership, they will be forced to

drop down a level: "I think the rationale behind it was that if they start to over-focus on how to try and manipulate the system to get the maximum number of points, it loses its value."

The Institute has taken various steps to ensure that self-assessment is a valid method of assessment:

We've used it quite a lot through the Institute, and members generally quite like it. If you set it up the right way, I think that goal of saying that it is as effective as cheating at Patience [Solitaire] is a nice way of setting it and we certainly encourage senior members to roll it out to their people like that ... This is not a test, this is just to see how you are doing, and see if that shows you some different areas that you think might be interesting. And all of a sudden, the whole thing becomes much less threatening and therefore it's the sort of thing we can get people to buy into.

The Skills Tracker revolves around competence and does not encompass personal and professional development—they stick to role specific skills. So far they have not had any demand to include it, so have not really considered the option of implementing it: "It does what it says on the tin to be honest. And if we started straying into other areas, it would be difficult to maintain."

The main problem IITT has encountered is that people have not all been keeping up and maintaining their records on a regular basis.

We obviously encourage people to go back in there and maintain their skills as they go through. But there's something like 30-40% of the membership that aren't actually maintaining their records, and that's saying they're not seeing the value in maintaining it, and that's quite disappointing. It says we have to change the approach a little bit.

C.11 Institut der Wirtschaftsprufer in Deutschland E.V. (Germany)

Since 1993, Wirtschaftsprufer has had an input-based CPD scheme in place. Members must do an average of 40 hours per year, totaling 120 hours over a three year period. A representative described the scheme as a "simple directive that we put in place and that needs to be adhered to by all [members of the profession]." To ensure that members meet those requirements, the organization has an inspection which "it's not to be confused with a classical peer review, because it is monitored by an independent oversight board." Different firms visit one another to do a routine audit, and part of this audit is to check up on CPD requirements. During such reviews, the first priority is not to inspect the CPD records of individual accountants or to check that they have complied. Instead, they test the audit engagements themselves and when they find there is a lack of knowledge, they investigate further. They also talk to individuals in the firm to get an idea of their professional knowledge. The last source of evidence is found by looking through invoices and attendance sheets. The system is focused on making sure that the firm has carried out its audits properly, and maintains a system to monitor CPD requirements. Even small firms in this country are required to carry out compulsory audits or peer reviews. Larger firms are expected to carry them out every three years, and smaller companies, every six years.

When talking to individuals during these audits, the first thing they are asked is if they are aware of the CPD policy:

Sometimes I get quite interesting answers such as 'maybe' or 'I don't know'. And other times if I am investigating further, just to check whether a person has really attended a course, I ask them about the content of the course. So then I just make sure for myself that it just hasn't been a simple signature on a piece of paper, but that they've physically been there or attended an e-class.

It can be difficult to gauge whether the individual has learned from these CPD events: "you can't really tie learning to a specific course at all times."

The Institute requires that members keep a record of what they have done in terms of CPD hours, but it does not require that they keep any other sort of record of learning or reflection. However, larger firms tend to have a system in place which they use in the annual performance reviews of employees. Records of learning and progress are a standard part of such reviews.

The strictness of the requirements in this country tends to be dependent on the policies of individual companies, in contrast to more British type systems where it is more dependent on the individual's relationship with the member organization. Because of this, the Institute is more concerned with the quality of the audits they are doing. They only act when there is a risk due to deterioration in the quality of audits. As a result of this method, it is only the auditing skills of the accountant which are "tested"—no other aspects of the professional role of a chartered accountant fall under CPD. Other types of accounting work do not have the same CPD requirements as auditing. The system is really focused on the auditing rather than the auditor.

Wirtschaftsprufer has taken an interesting move, which opposes recent developments of many professional bodies. Instead of introducing a wider range of activities which can count towards CPD, they have limited it:

literature in any form does not count at all, because you can always say that you've read so many articles, but you can never really prove that. So we've taken out all the soft skills and the leadership skills—people tend to go there and then just assume that they are going to be granted CPD credits, which is of course wrong.

They would not consider asking for output evidence of such things in terms of a synopsis or other written document, as its validity could not be proved: "writing a synopsis can be done without even reading such things." They may however introduce testing at the end of e-learning modules. At another organization, they have introduced a system where, at the end of each e-learning module, there is a knowledge test, and depending on how many correct answers you give, you get a score. If this score is over 80%, CPD points are granted. This is only feasible however, with sufficient resources. A representative questioned whether or not a similar system in a paper-based format would be viable: "I've never come across a company that does testing by means of a formal written test and actually marks those things."

C.12 Institution of Civil Engineering Surveyors (ICES)

The Institution of Civil Engineering Surveyors used to run a completely input-based CPD scheme where members would record their activities in a booklet based on a system of points linked to hours. Members would be awarded half a point for an hours' reading, a full point for attending a seminar or 2 points for giving an hours' presentation.

About 6 years ago ICES reviewed the scheme and decided to change towards a system where the onus for planning and reflection was now placed on the member. The problem with the old scheme was that the organization was finding that the mature and more senior members were not submitting their records. After conducting a survey of the mature members, the results showed many of them not to be attending courses and believing that they were instead learning as they went along:

We thought the system had to reflect the fact that CPD isn't just going on courses but is learning in lots of different ways so we thought if we put more flexibility in and ask people to think about what they've learned first, and then think about how they learned about it second, and then whether it was of any use, we would get these older members involved and we'd get all kinds of learning.

Although the organization's current CPD is voluntary, they prefer to give the impression that it is mandatory so as to increase the uptake. As with other professional bodies, the number of records returned is not 100%, but they usually get a return of "about half".

The current scheme operates a CPD cycle that encompasses planning, learning, implementing and evaluating the results. The scheme works by first filling out a CPD Plan where the member lays out all of their development goals, and what activities they can undertake to achieve these goals, sets a deadline for these activities, and also details how they believe that they will be able to measure whether a development goal has been achieved successfully or not. Although the CPD Plan is not a mandatory document, the ICES prefers members to submit the form. The second document that completes the CPD cycle is the CPD Record. Here the member notes the development activity they undertook, where and when it was undertaken, and how long it took. The CPD Record also includes a reflective element where the member evaluates the learning process itself. If the member has gone on a course, they write such things as whether it was of any use, and if it was of a high quality and therefore of use.

Although the CPD Records do include a reflective element, the organization does not measure the output:

If someone has taken the trouble to evaluate their own learning, it is pretty hard to then evaluate their evaluation as it were, so we will pass them if we think basically they've sat down and thought this is what they want to achieve ... we're interested whether they've taken it seriously and whether they've thought it through.

The Institute usually audits a sample of around 100 CPD records. When they find that a member either has not taken the scheme seriously or fulfilled their objectives, they write back to them and give them suggestions and comments: "we see it as a learning process rather than a pass or a fail, so we're trying to help them improve their records and improve their learning so we can feedback in that sense, but we're not marking them." The ICES feels that this approach helps because it is usually the fear of members receiving a "black mark" that leads to them not returning their forms in the first place. Usually, about 5%-10% of the sample will receive such a letter.

Currently the Institute is not planning to measure by output; this may change in the future. There is a feeling among the organization's education committee that the onus on the individual may be too strong and that members "don't quite know what to do." Other professional bodies have tried to simplify the process by asking for a questionnaire to be filled out instead of asking for records.

"We thought they were quite useful, they were quite simple and it's a way of getting members to reply and tell us what they're doing." This is why they may incorporate questionnaires into their CPD scheme and have put this proposal to the committee. If the decision came to proceed with questionnaires, they would ask whether the member had planned their CPD, how much of it was preparatory CPD as opposed to development that was forced upon them by changing instrumentation and technologies, and how they went about it. If the proposal passes through the committee, the ICES would be looking to implement it straight away in the New Year.

A good example of where the Institute's scheme can become confusing to the member is in the CPD Plan. When asking members how they will measure a successful result, the organization only provides a very basic set of guidelines. A positive change could be made by introducing more user friendly questions and answers. It is again here that other bodies have made their processes a lot simpler:

we're selling the concept of CPD [whereas they are] selling 'this is good for you and your career and will help you develop' and I think ours stems from a more academic sort of view— 'this is what counts and this is what you can do.' Even talking about the CPD cycle, it sounds very academic and people switch off really.

The ICES currently does not specifically test competences through their CPD scheme and although they may move in this direction, there is resistance: "I think that's probably taking it a bit too far, it's like retaking your driving test every year so I don't think we'll quite do that. As a professional body we are trying to say well we've measured your competence, have you kept that up to date? So that is at the core of it." The main problem in taking this approach comes when members do not return their CPD records: "if they don't send the records back, do we then classify them as no longer being competent? I think it puts too much weight on it." This problem stems from the voluntary nature of the CPD scheme. A move to competence-based testing would be feasible if CPD was to be made compulsory, although it would probably prove difficult and problematic, even if it were beneficial in the long run:

We'd like to have the thing absolutely watertight and 100% returns, and the whole competency issue sorted and what have you, and we're working with that in mind but I think it's going to be a while before we get there. But I think everyone's in that position. Everyone tells me that off the record, that's the long term goal but no-one's actually doing that.

Even though the scheme is undergoing a review and possible development, the current scheme is effective: "I think it's an extremely helpful scheme, because it takes you through the cycle and because it makes you think about it." The problems tend to arise from the members who do not take part in the CPD scheme: "The ones that are not doing it, it's ineffective for them. I think if you're doing it, it's very good for you." Not only do people see themselves as being too busy, but many prefer the previous input-based format where the member simply wrote down every CPD activity they undertook in a booklet and included their points. "They didn't have to think about it. But what I think is happening now is that they think 'ooh there's a learning cycle and I've got to think about it and I've got to evaluate it and it's too much like hard work' ... it goes against the grain in some ways."

The ICES has received positive feedback from a survey about the tick-box style questionnaires being introduced: "If you ask people to think too much about their learning I think you go into that grey area that they don't like very much, you've got to keep it very specific and very short."

C.13 College of Pharmacists of British Columbia (CPBC)

The College of Pharmacists of British Columbia (CPBC) connects patients and pharmacists and protects public health by licensing and regulating pharmacists and their workplaces. They are responsible for making sure every pharmacist is fully qualified and able to provide the public with competent care.

CPBC launched The Professional Development and Assessment Program (PDAP) in September 2003 as part of their legislated mandate to offer a flexible quality assurance program. PDAP provides an opportunity for registrants to demonstrate their knowledge, skills and abilities to meet the needs of their clients, as part of their responsibility as a member of a self-regulated profession.

The purpose of PDAP is to support the College's mission to ensure pharmacists provide safe and effective pharmacy care to help people achieve better health and to promote continuous learning and professional development. The program recognizes that pharmacists who commit to on-going professional development continue to enhance their practices and fair and valid assessments support the mandate of the profession to ensure public accountability. Inherent to PDAP is the Framework of Professional Practice (FPP), which provides a detailed, comprehensive description of pharmacy practice in BC and serves as the BC standards of practice.

All practicing pharmacists are required to participate in PDAP once every six years. As part of an ongoing 3-year cycle, the College selects one-half the registrants to participate in the Program. At that time, pharmacists complete a self-assessment based on the Framework of Professional Practice and select one of two assessment options to demonstrate that they meet the BC standards of practice. They choose either the Knowledge Assessment (KA), a 3 hour, open-book examination that serves as an indicator of pharmacy practice knowledge and problem-solving skills, or the Learning and Practice Portfolio (LPP). The LPP is a professional development tool that enables pharmacists to systematically:

- evaluate their practice outcomes and needs;
- link their professional development to the needs of their practice;
- plan, implement, and evaluate their professional development; and
- demonstrate how they continue to keep their knowledge, skills, and practice current.

PDAP consists of three phases. Participants who successfully complete one of the two assessment options meet the program requirements for the 6-year period. Participants who do not successfully complete one of the two assessment options move to Phase 2, which entails reassessment and the choice of selecting the KA, LPP, Practice Audit or Objective Structured Clinical Examination (OSCE). Participants who do not successfully complete Phase 2 move to Phase 3, which consists of individualized remediation and reassessment. The registrants are not charged any fees for phase 1, therefore cost has restricted the CPBC to only offering two options in the first phase; with 2000 pharmacists to assess every three years, the cost of running practice audits for even a quarter of that number would be logistically and financially problematic. Auditors are paid income replacement for the work they do for CPBC. Therefore the CPBC requires a phase two registrant to contribute \$500 towards the cost of the audit.

The LPP provides a user-friendly format, helping registrants to systematically plan, implement and evaluate CPD by linking it to practice. As part of the LPP requirements, members must first develop three Desired Practice Outcomes (DPOs). These may be submitted to the College for preliminary review and feedback which helps registrants revise or develop their objectives before proceeding. For the outcome assessment stage of the cycle, members self-assess by completing an Evaluative Narrative Statement in which they must describe if and how they met their DPO and how what has been learned has impacted their practice/patients. There are clear and specific criteria directly linked to the assessment criteria which must be addressed in order to complete the statement to the required standard. Registrants are also required to submit at least two pieces of evidence to verify achievements discussed in the Evaluative Narrative Statement, at least one piece of which must be "direct" evidence, i.e. actual work produced by the individual. There are clear criteria for what counts as evidence, and to confirm that it is valid, authentic and current.

The practice portfolios must be screened before they are assessed to ascertain that they have been filled in completely and include supporting documentation. The College trained a group of team leaders who led twenty assessors through the one week LPP assessment process. The assessors worked in teams which enabled discussion and resolution of issues. Standard setting and benchmarking exercises were used to ensure inter-rater reliability and consistency in assessment based on the published criteria. The assessors also consider the portfolios holistically in an attempt to modulate the scores. Portfolios were reviewed by 2 assessors and any discrepancies in scoring were resolved through discussion between the assessors.

The College published samples of DPOs and completed LPPs after the first round in order to demonstrate how to meet the standards. The CPBC is keen to show its members that CPD is not necessarily about what specific learning they do (i.e. CE units), it is more about how learning is applied to practice—the thought processes involved in progression through the CPD cycle. It was difficult for the College to get the message across that anticipated results in practice were not necessary in order to demonstrate that CPD had been completed successfully; CPD output does not necessarily have to be at the results stage of the cycle specifically.

Although the College feels that the portfolio option is beneficial for the development of individuals, there is a strikingly low uptake compared with the traditional KA option (200 compared with 1600), which does not show progression through the whole CPD cycle—it only measures knowledge outcomes. In spite of the development of resources and examples, the College continues to receive numerous questions and comments regarding lack of understanding of the portfolio criteria.

In the 2003 cycle, the College found that near the deadline for portfolio submission, around one third of those who had initially signed up for the portfolio option switched to the KA option. The main reason for this appeared to be that individuals had gotten behind with their portfolio, and two to three months would not provide enough time to plan, learn and evaluate outcomes:

... CPBC has identified that if a plan is sound, then the rest of the process is more structured, and therefore easier. It was evident that in the portfolios with strong DPOs, it carried on through the rest of the portfolio. When individuals know exactly why they are doing something, they can verbalise how they would apply their new knowledge or what they hoped to see, and then everything falls into place when it comes to their Evaluative Narrative Statement [outcome measurement].

This is the reason why the College strongly recommends early development and submission of DPOs, so registrants know they are on the right track and can be encouraged by that.

A survey revealed that people were spending between 20-100 hours on the portfolio option. The way the survey questions were structured did not reveal how much of the portfolio time was spent on work individuals would have been doing anyway. What was interesting from these results was that despite the fact that people chose the KA because of "ease, familiarity, convenience, time...," they actually spent a similar amount of time preparing for it.

Perhaps due to a lack of familiarity, some individuals seem to have a general difficulty understanding the portfolio approach, and the CPD cycle in principle, and are unable to see the obvious benefits it provides. The PDAP program structure includes a program evaluation phase; the current program is due to be reviewed and its future design is uncertain. This is unfortunate, as within the international community, the CPBC portfolio option is looked on as a forward thinking and pioneering model.

C.14 Case Study Y

The organization in this case study certifies practitioners within the medical sector in the USA, and covers around one third of all of those concerned with its area of specialization in the country.

The program being examined is not specifically a CPD scheme, although participation contributes towards CPD credit. The organization runs a recertification scheme which occurs every ten years. Although this is very infrequent in the context of CPD, a great deal can be learnt from the breadth and diversity of assessment and measurement techniques implemented by the organization.

Certification is an assessment process undertaken by registrants who elect special recognition for expertise in a particular area of practice. After initial qualification and licensing, certification goes over and above what is required in the registrant's general training.

The aim of recertification is to evaluate applicants in practice. It acts as a measure of quality for an individual practitioner, supporting provider recognition and pay for performance programs. The focus is on practice improvement once an individual is in the job—something which is not currently part of their initial training in the US.

The recertification process takes place every ten years and currently comprises four elements:

- 1. Valid license
- 2. Lifelong learning and self-assessment
- 3. Knowledge exam
- 4. Practice performance assessment

The knowledge exam has been part of the certification process since the establishment of the organization. This test remains a part of the initial certification, and is tailored for each recertification. The exam is a closed book multiple choice test where practitioners are asked questions based on practical simulations which primarily test the ability to process complex data, to use knowledge appropriately, and to demonstrate sound judgment: not just recall knowledge.

The specific subject matter of the test is designed by the organization's experts and chosen by the applicant based on their specialty area, their training and their desire for board certification in a particular medical subspecialty, and it is either passed or failed—beyond this a certain level of competency does not have to be demonstrated.

Part two is a consistent requirement to ensure that registrants are regularly participating in self-assessment of their state of knowledge so that lifelong learning can proceed efficiently and effectively. This requirement consists of periodic completion of rigorously developed self-assessment instruments, which stimulate evaluation of current knowledge, identification of knowledge gaps, review of literature, primary and secondary source material in areas where self-assessment suggests weakness, and verification through successful answers to questions which demonstrate that essential knowledge has been acquired.

Part four, practice performance assessment, is the most recent development in the recertification requirements, and the organization was the first amongst similar bodies to implement this phase in 2006.

The organization has developed Practice Improvement Modules (PIMs) as part of the practice performance assessment. PIMs are primarily web-based products which enable applicants to assess their practice. The PIM collects data from three sources: practice system assessment, a patient survey and a medical chart audit. By applying algorithms to this information, the PIM calculates performance rates for each individual for their measure of care, their patient sample and the services delivered by the practice. A performance report is produced for reflection, providing an easily understandable overview of the practice—a sample of what the patient sample looks like demographically and medically, and to some extent how well they are meeting national guidelines for patient care. This is novel for practitioners who are unaccustomed to reflecting upon their practice as a whole, within the dimensions of public health.

Following this, registrants have to demonstrate what they have learnt: they have to choose an area for improvement based on the data, and then they report back to the organization.

An interesting aspect of the PIM is the use of patient medical records to produce statistics of the performance of a particular practice, and indeed, a particular practitioner. As part of the PIM, each practitioner must pull data from medical records to produce a patient chart comprised of various salient clinical measures. This type of exercise enables practitioners to look at their population of service users as a sample, rather than a collection of individuals. By looking at the figures in this way it gives them the opportunity to reflect on their performance from a public health perspective, in the context of national standards and public interest and expectations.

This system is in need of refining. At present, practitioners may well be able to see how their practice scores in the context of public health and national guidelines, but there are no national performance standards for every specialty at an individual practitioner level, and no current requirement that they meet or even get closer to these standards in order to be recertified. The processed data is simply presented to members with which they ultimately can do what they want. However, the idea is that the applicant uses the data to reflect on their practice in the context of public health and plan improvements where they feel necessary.

Through this initiative, the organization is trying to address the current forces nationally, towards transparency, accountability and public reporting.

People are looking to the [the organization]) to say we need to develop standards that can demonstrate that an individual [practitioner] is of a certain quality.

The organization, with the help of other relevant bodies, may need to establish some minimum standards which all practitioners must achieve consistently if they wish to remain certified. Once these standards have been established, the next step for the recertification system is to develop personalization of the system, taking into account the strengths and weaknesses of a registrant in the relevant context determined by their specific patient mix. They then wish to link these identified weaknesses to learning opportunities in order to make it easier to address them. Ultimately this would give the organization the ammunition to continuously measure performance along these parameters, before and after learning activities, enabling them to see if the learning made a tangible difference in reality.

Another interesting feature of the PIM system is the innovative use of patient and peer surveys to assess practice performance. Surveys are distributed by doctors to a selection of patients and peers. The service users can respond to the survey via phone or internet to give input about the service at an individual level. There are several problems with this method, for example some patients cannot easily access the internet, and may have trouble with touch-tone phone options; surveys are often incomplete; the survey needs to be translated into more languages, and these translations should be more readily available. Another drawback is that the practitioner can select which patients he or she gives the surveys to, hence controlling the type of feedback to some extent.

Getting feedback from patients is however a valuable source of evidence for assessment and it tackles the issue of outside pressures such as public accountability.

Peer assessment is lower on the agenda, but there is a survey that goes out to ten of the registrant's peers (emulating a 360 degree review). However it was indicated that there was an interest amongst practitioners in peer feedback—especially as distinct from feedback they give themselves in the form of routine self-assessment, which is held in low regard by other practitioners

The patient and peer surveys are only a component of some of the PIM options, meaning that a registrant can go through the recertification process without being assessed by peers or service users if they so wish. The organization sees the advantages to making such external assessment compulsory, but needed to keep the recertification process viable for all practitioners, including those involved in research for example, who may not have direct contact with patients and who therefore would not be able to complete a module involving patient surveys.

The PIM system has taken ten years to develop and to date has cost the board over \$100,000. A great deal of time was spent with the committee to try to establish standards—the political negotiations surrounding the implementation of PIMs used up more time than the setting up of the PIM process itself.

The effort in negotiations required represents the resistance there was within the community to implement such a scheme. Practitioners are already required to complete large amounts of paperwork in order to satisfy regulations and many feel that they simply do not have the time to dedicate to self-assessment and performance reflection. In addition, practitioners feel as if their autonomy is being limited. They resent the idea that someone is questioning their competence

and having to demonstrate this competence. But this is something to which they must adjust in a society of growing accountability and public distrust.

Currently, the ethos surrounding this assessment system is voluntary and designed to self-correct deficiency rather than assuring standards of excellence. The organization is working towards establishing standards from which to benchmark in a move towards the latter way of thinking. Once such standards are established, the organization hopes to give a landscape of each physician, indicating their strengths and weaknesses to help identify areas for improvement.

The organization is endeavoring to balance their initial goals when the PIMs were first developed—to set standards of excellence, to promote registrant's self-assessment and accountability within the profession—with the need to respond to wider trends and outside pressures that call them to play a role in defining worker quality, for the benefit of the wider public.

The combination of assessment techniques is a great asset to this recertification scheme, addressing different types of learning with the appropriate type of assessment. The biggest drawback of the scheme at present is the lack of nationally agreed practitioner-level standards: currently there is no set standard for the PIMs which registrants must meet in order to be recertified, and the development of standards for this purpose is a work in progress.

C.15 Institute of Certified Public Accountants of Singapore (ICPAS)

The CPD scheme at ICPAS is input-based and has been running since 1995. It is mandatory for the full members of the organization and voluntary for provisional members, although it is strongly encouraged.

The scheme itself is split into structured (formal learning such as courses) and unstructured (i.e. reading) CPD. To complete the scheme, practicing members are required to achieve 40 hours of CPD per year and non-practicing member are required to achieve 60 hours over the duration of 3 years.

The Institute provides guidance for both the structured and unstructured learning. It also organizes conferences, seminars, discussion groups, in conjunction with other professional bodies, trade associations and academic institutions. There is also an e-learning platform for their members whereby there is a self assessment feature during the various phases of the modules, but this was not the case with all other regular courses. Instead of assessment, members obtain a certificate of completion. However, members have to complete a course evaluation form at the end of a course.

C.16 Institute of Certified Public Accountants of Kenya (ICPAK)

The current CPD scheme at ICPAK has been mandatory for ten years and requires that members complete 25 hours of structured and 15 hours of unstructured CPD activity per year, which is averaged over a three year period. Structured CPD is classroom-style learning activities, and unstructured CPD is activities such as independent reading or research.

Members are required to fill in a CPD record at the end of each year, stating the seminars attended which count towards the 25 hours of structured activity. If the learning activity is set up by the Institute, there is no need to produce evidence of attendance, participation or output, as

attendance is logged automatically. If the activity is externally organized, some sort of evidence of attendance is required of the member, such as a certificate.

In the case of the unstructured CPD activity, the Institute requires that the learning must be relevant to the job role, but do not require any evidence that the activity has in fact been undertaken. However members must submit a return stating what they did for the unstructured CPD activity.

ICPAK sends reminders to members to enhance compliance. The majority of the members do complete CPD, but there is a slight issue with them completing it on time. If however a member were not to comply, they lose the good standing status. Potential employers, other professional institutes etc seek confirmation from ICPAK about whether a member is in good standing. Those found not to be in good standing get unfavorable referee letters from the Institute.

This is a standard input-based CPD measurement system, but the organization is very keen to learn about output-based measures. At present, they are exploring ways of running a combination approach of both input and output-based.

Appendix D

Interview Templates

Output Questions

- 1. What is your role in relation to CPD?
- 2. Could you give me a brief history of CPD at xxxx?
- 3. Is your CPD scheme compulsory, obligatory or voluntary? (Is this the same for all member categories?)
- 4. Does your organization measure CPD by input or **output**? (Is this also the same for all member categories?)
- 5. How long has this particular system been in place?
- 6. (a) Does your CPD scheme involve the CPD cycle?
 - (b) What are the steps in the cycle?
 - (c) Is progression through the cycle monitored in any way?
 - (d) What do you think are the benefits of using the cycle?
- 7. Does your organization collect evidence of CPD activity? At which stages of the cycle?
- 8. Is this evidence assessed/ measured in any way?
- 9. (a) What element is assessed?
 - (b) What measurement tools are used?
 - (c) What are the criteria for assessment?
- 10. Do you use self-assessment? If so, is there a scale to rate CPD progress, or are the questions open-ended or even no questions at all, just an account?
- 11. What do you think are the pros and cons of using self-assessment?
- 12. Would you consider a more objective form of assessment or measurement of CPD outputs?
- 13. Do you require evidence of:
 - (a) Planning

What does this involve? General vague plan? Planning activities based on reflection/objectively determined competencies/personally developed learning needs?

(b) Reflection

Log, portfolio, group session, one-to-one interview—experiences of/ thoughts on each

(c) Learning

Test/ portfolio/ interview

(d) Implementation

Observation (one off—how long after/various intervals over time?)/ peer assessment/organization productivity/ customer satisfaction

Is it difficult to isolate the effects of CPD specifically?

- 14. Does your CPD scheme involve competency frameworks? If so, how is it determined how the competencies have been met?
- 15. Would you say that personal/professional development or competence is the main purpose of CPD for your organization?
- 16. What is the ultimate aim of CPD for your organization?
- 17. How would you gauge whether CPD has had an impact on X? (What would be a *valuable* outcome of CPD?)

General

- 18. So, using the input/output measurement scheme, what have been your experiences so far?
- 19. Have you encountered any major problems?
- 20. How effective do you think your approach to CPD measurement is?
- 21. How do you think it could be improved?
- 22. How important do you think it is to measure CPD? For what reasons?
- 23. Do you think it is important to measure by outputs?
- 24. What prompted you to switch to output?
- 25. How was the transition?
- 26. What was the members' reaction to the change?
- 27. Has it improved the quality of impact of CPD undertaken by your members?
- 28. What has the change meant for your organization, its members and the public?
- 29. Any advice for those considering the transition?
- 30. Pros and cons of input vs. output measurement?
- 31. Do you have any plans to modify your CPD scheme in the future? What?

Input Questions

- 32. Is your CPD scheme compulsory, obligatory or voluntary? (Is this the same for all members?)
- 33. Does your organization measure CPD by input or output?
- 34. How long has this particular system been in place?
- 35. Do you measure by hours or points?

- 36. HOURS: Does every type of activity count towards these hours?
- 37. POINTS: how are the points calculated?
- 38. Are there different allocations of points for type of activity? (e.g. of highest/ lowest to check for output).
- 39. Does the organization assign points, or do the practitioners assign the value of the activity for them?
- 40. Does your organization collect evidence of CPD activity?
- 41. YES: what sort ... go along the output questions line...
- 42. Are members encouraged to progress around a CPD cycle?
- 43. Does your CPD scheme utilize technological tools or the internet?
- 44. What kind of support do you offer for CPD?
- 45. So, using the input/output measurement scheme, what have been your experiences so far?
- 46. Have you encountered any major problems?
- 47. How effective do you think your approach to CPD measurement is?
- 48. How do you think it could be improved?
- 49. How has your CPD scheme developed over the past five years?
- 50. Do you have any plans to switch to an output based system? Why?
- 51. In the past have you ever thought of using outputs and decided against it? If so what were your reasons for doing so?
- 52. What are your reasons for measuring by input rather than output?
- 53. Pros and cons of input vs. output measurement?

Appendix E

Bibliography

Association of Chartered Certified Accountants, (ACCA) (2005) "Continuing Professional Development," www.accaglobal.com/pdfs/pi/pi chapter 08.pdf. [Accessed 16.05.07].

Abruzzese, R. S. (1982). "Critical Reviews: An Evaluation in Continuing Nursing Education" Southern Regional Education Board.

Acheson, H. (1974) "Continuing Education in General Practice in England and Wales," *Journal of the Royal College of General Practitioners*, 24, pp.643-47.

Allied Health Professions, (2003) "Demonstrating Competence Through Evidence of Continuing Professional Development," www.dh.gov.uk/en/consultations/closedconsultations/DH 4071458.

American Society for Industrial Security, (2007) "Professional Certification Board: Implementation of New CPE Credit System,"

www.asisatlanta.org/docs/CPE%20notification%20message%20to%20RVPS%202007.pdf [accessed 16.05.07].

American Society for Training and Development, (ASTD) "Continuing Education Units," www.astd.org.astd.education/continuing_ed_units [accessed 16.05.07].

Anderson, V. (2007) "The Value of Learning: A New Model of Value and Evaluation," Chartered Institute of Personnel and Development.

Association for Project Management (APM), (2006) "APM 4 Point Plan for Professional Development: Continuing Your Professional Development," http://www.apm.org.uk/WhatisCPD.asp.

Association of Accounting Technicians, (AAT) "How Our CPD Policy Affects You," [1] www.aat.org.uk/cpd/display/store4/item35385/ [accessed 16.05.07].

Association of Accounting Technicians, (AAT) "CPD Policy Review," [2] <u>www.orc.co.uk/casestudies/AAT_CPDpolicy-Review.asp</u> [accessed 16.05.07].

ASTD "Techniques for Evaluating Training Programs," www.astd.org/astd/resources/eval roi community/techniques.htm [accessed 25.04.07].

Barrow, S. (2005), "What Pharmacy Can Learn from the Approach Taken by Accountancy to CPD?," *The Pharmaceutical Journal*, 275, 17.12.05.

http://www.pjonline.com/Editorial/20051217/comment/spectrum.html [accessed 09.05.07].

Beck, U., Giddens, A., and Lash, S. (1994) Reflexive Modernization, Cambridge, Polity.

Bolton, G. (2005) Reflective Practice, London, Sage Publications.

Bonch, J. (2003) "Continuing Professional Development for Psychiatrists: CPD and Learning," *Advances in Psychiatric Treatment*, 9, pp. 81-83.

Boud (1995) quoted in www.ukcle.ac.uk

British Academy of Audiology, (2006) "The BAA Continuing Professional Development Scheme," www.cpd-audiology.org/pdfs/documentation/BAA CPD scheme-v5.pdf

Brookfield, S. D. (1987) [1] *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting.* San Francisco: Jossey-Bass Publishers.

Brookfield, S. D. (1990) [2] "Using critical incidents to explore learner's assumptions," In Mezirow, J. (ed.) (1990) Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning, San Francisco, Jossey-Bass, pp. 177–93.

Brooks, A.K. (1999) "Critical reflection as a response to organisational disruption," Advances in Developing Human Resources, Vol. 1, No. 3, pp. 66-79.

Businessballs.com, "Training Program Evaluation," [accessed 12.04.07].

Cannell, R.L. (1982) *The Updating of Professional Engineers*, Loughborough, Centre for Extension Studies, Loughborough University.

Cantor, L.M (1974) *Recurrent Education, Policy and Development in OECD member Countries,* OECD, Washington D.C.

Cheetham, G., and Chivers, G. (1996) "Towards a Holistic Model for Professional Competence," *Journal of European Industrial Training*, 20:5, pp.20-30.

Chivers, G. (2003) "Utilizing Reflective Practice Interviews in Professional Development," *Journal of European Industrial Training*, 27:1, pp.5-15. www.emeraldinsight.com [accessed 03.07.06].

CIPD, (2007) "The Value of Learning: A new model of value and evaluation" (1)

CIPD, (2006) "The Value of Learning: A Discussion Paper" (2)

CIPD, (2006) "Value of Learning: First Poll and Debate" (3) www.cipd.co.uk/helpingpeoplelearn/vllrngp1ll?cjjversion=printable [accessed 18.04.07].

Clark, D. "Learning Domains or Bloom's Taxonomy," http://www.nwlink.com/~donclark/hrd/bloom.html [accessed 12.04.07].

Construction Industry Council, (2006) (CIC) "Continuing Professional Development: Best Practice Guidance."

Cropley, A.J. (ed.) (1979) *Lifelong Education: A Stocktaking*, Hamburg, Unesco Institute for Education.

Davis, C., and Lowe, T. "Kolb Learning Cycle Tutorial," www.ldu.leeds.ac.uk/ldu/sddu multimedia/kolb/static version.php [accessed 19.03.07].

Deshler, D. (1990) "Metaphor Analysis," In Mezirow, J. (ed.) Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning, San Francisco, Jossey-Bass, pp.296-313.

Dewey, J. (1916) Education and Democracy, New York, Macmillan. [1]

Dewey, J. (1963) Experience & Education, London, Collier-Macmillan. [2]

Edwards, R. (1998) *Recent Thinking in Lifelong Learning: A review of the Literature*, Sudbury, DfEE Publications.

Energy Institute (2005) "CPD Cycle," http://www.energyinst.org.uk/content/files/cpdcycle.doc

Eraut, M. (1994) Developing Professional Knowledge and Competence, London, Falmer Press.

Faure, E. (1972) Learning to Be, Paris, UNESCO.

Fleck, E., and Fyffe, T. (1997) "Continuing Education: A Tool for Evaluation," *Journal of Nursing Management*, 5, pp.37-41.

Fraser, S.W., and Greenhalgh, T. (2001) "Complexity Science: Coping with Complexity: Education for Capability," *British Medical Journal*, 323, 799-803. www.bmj.com [accessed 09.05.07].

Freed, J. L. (2003) "Evaluation of online learning: design and implementation," Arizona, USA.

Friedman, A. (2007) Ethical Competence and Professional Associations, Bristol, PARN.

Friedman, A., Daly, S., and Andrzejewska, R. (2005) *Analyzing Ethical Codes of UK Professional Associations*, Bristol, PARN.

Friedman, A., Durkin, C. and Hurran, N., (1999) *Building a CPD Network on the Internet*, Bristol, PARN.

Friedman, A., Davis, K., and Phillips, M. (2000) *Continuing Professional Development in the UK: Policies and Programs*, Bristol, PARN.

Friedman, A., Davis, K., and Phillips, M. (2001) *Continuing Professional Development in the UK: Attitudes & Experiences of Practitioners*, Bristol, PARN.

Friedman, A., Mason J., and Afitska, N. (2007) *Distinguishing Australian Professional Bodies*, Bristol, PARN.

Friedman, A., Mason, J. (2004) *The Professionalisation of UK Professional Associations:* Governance, Management & Member Relations, Bristol, Parn.

Friedman A., Williams C., and Afitska, N. (2007) *Distinguishing Canadian Professional Bodies*, Bristol, PARN.

Gardner, R. (1978) *Policy on Continuing Education: A Report with Recommendations for Action*, York, University of York.

Giddens, A. (1991) Modernity and Self-Identity, Cambridge, Polity.

Gould, A. (1979) *Towards Equality of Occupational Opportunity*, Association of Recurrent Education, Discussion Paper 5, Centre for Research into Education for Adults, University of Nottingham.

Grant, J. (1999) "Measurement of Learning Outcomes in Continuing Professional Development," *The Journal of Continuing Education in the Health Professions*, 19, pp.214-221. www3.interscience.wiley.com [accessed 21.05.07].

Guskey, T. R. (1998) "The age of our accountability," *Journal of Staff Development, Fall*, 19:4, www.NSDC.org [accessed 20.03.07] [1]

Guskey, T. R. (2000) *Evaluating Professional Development*, Corwin Press, Inc. California, USA. [2]

Hake, B. J. (1999) "Lifelong Learning in Late Modernity: The Challenges to Society, Organizations, and Individuals," *Adult Education Quarterly*, 49:2, pp.79-90.

Hammond, R. L. (1973) "Evaluation at the local level" in B. R. Worthen & J. R. Sanders (Eds.), Educational evaluation: Theory and practice Belmont, California, Wadsworth Publishing Company Inc, pp. 157-170.

Harries, D. (2006) "Autonomy and relevance in Annual Recertification," *Pharmacy Education*, 6:3, pp.189-190.

Hatton, N., and Smith, D. (1995) "Reflection in Teacher Education: Towards Definition and Implementation," www.alex.edfac.usyd.edu.au/LocalResource/originals/hattonart.rtf [accessed 01.05.07].

IACET, "The Continuing Education Unit (CEU)," www.iacet.org [16.05.07].

IET; "Professional Development: Planning," www.iee.org/EduCareers/ProfDev/planning.cfm [accessed 09.05.07].

IFAC Education Committee (2004) Assessment Methods, IES 3, IFAC, New York

IFAC, (2004) "Continuing Professional Development: A Program of Lifelong Learning and Continuing Professional Development of Professional Competence," www.ifac.org [accessed 16.05.07].

Institute of Management Consultancy; "Continuing Professional Development (CPD) Policy," www.imc.co.uk/our_standards/cpd.php [accessed 17.05.07].

Ireland, A., and Mummert, A., with Moran, M. (2006) "Kirkpatrick's Four Levels of Evaluating Learning," www.iit.bloomu.edu/spring2006 ebook files/chapter9.htm

Ixer, G. (1999) "There's No Such Thing As Reflection," *British Journal of Social Work*, 29, pp.513-527.

Jarvis, P. (1995) Adult and Continuing Education, 2nd edn, London, Routledge.

Kearns, P. (2004) "From Trainer to Learning Consultant: Part 5: How Learning Consultants Can Use Evaluation Intelligently," *Training Journal*, www.trainingjournal.com [accessed 24.04.07]. [1]

Kearns, P. (2004) "From Trainer to Learning Consultant: Part 6: How Learning Consultants Become Performance Managers," *Training Journal*, www.trainingjournal.com [accessed 24.04.07]. [2]

Kirkpatrick, D. L. (2006) *Evaluating Training Programs: The Four Levels* (Third Edition), Berrett-Koehler Publishers.

Kolb, D. A. (1984) Experiential Learning, Prentice-Hall Inc., Englewood Cliffs, NJ.

Kuit, J. A., Reay, G., and Freeman, R. (2001) "Experiences With Reflective Teaching," *Active Learning in Higher Education*, 2, Sage Publications, p.128. www.sagepublications.com [accessed 22.05.07].

Larson, M.S. (1977) *The Rise of Professionalism: A Sociological Analysis*, Berkeley, University of California Press.

Lengrand, P. (1975) An Introduction to Lifelong Education, London, Croom Helm.

Lengrand, P. (1979) "Prospects of Lifelong Education" in Cropley, A.J. (ed.) *Lifelong Education: A Stocktaking*, Hamburg, UIE Monograph, 8.

Lester, S. (1999) "Professional Bodies, CPD and Informal Learning: The Case of Conservation," *Continuing Professional Development*, 3:4, pp.110-121.

Lockyer, J. M. *et al.* (2005) "Assessing Outcomes Through Congruence of Course Objectives and Reflective Work," *The Journal of Continuing Education in the Health Professions*, 25, pp.76-86. www3.interscience.wiley.com [accessed 21.05.07].

Lovell, K. "The Holy Grail of Evaluation?," www.trainingzone.co.uk [accessed 08/01/07].

Lumb, J. (2002) "Prepare Yourself For Mandatory CPD," The Pharmaceutical Journal, 268.

Malcomber, H. (2001) "Preparing a Personal Learning Plan: A guide for Ongoing Career Growth," Good2Great TM Associates, www.halmacomber.com/Preparing_Learning_Plan.html [accessed 09.05.07].

Mattingly, C. (1991) "The narrative nature of clinical reasoning," *American Journal of Occupational Therapy* 45, pp. 998-1005

Mayberry, E. (2005) "Kirkpatrick's Level 3: Improving the Evaluation of E-learning," www.learningcircuits.org/2005/may200

McGill, I., Beaty, L. (1995) *Action Learning, second edition: a guide for professional, management and educational development*, London, Kogan Page.

Meyer, M.K. and Elliott, V. (2003) "Training Evaluation: A Review of Literature," National Food Service Management Institute, University of Mississippi, http://www.nfsmi.org/Information/training evaluation lit review.pdf [accessed 2.4.08].

Metfessel, N.S., and Michael, W.B. (1967) "A paradigm involving multiple criterion measures for the evaluation of the effectiveness of school programs," *Educational and Psychological Measurement* 27, pp. 931-943.

Mezirow, J. (1981) "A Critical Theory in Learning and Education," *Adult Education Quarterly* www.aeq.sagepub.com [1]

Mezirow, J. (ed.) (1990) Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning, San Francisco, Jossey-Bass, pp. 177–93. [2]

Moon, J. A. (1999) Reflection in Learning and Professional Development, London, Kogan Page.

Newby, D. (2003) "Personal Development Plans: Making Them Work, Making Them Count," *Advances in Psychiatric Treatment*, 9, pp.5-10. www.apt.repsych.org/

Nichols, F. (2000) "Evaluating Training: There Is No 'Cookbook' Approach," www.home.att.net/~nickols/evaluate.htm [accessed 12.04.07].

Novak, J. D., & Gowin, D. B. (1984). *Learning how to learn*. New York, Cambridge University Press..

O'Connor, A., and Hyde, A. (2005) "Teaching Reflection To Nursing Students: A Qualitative Study in an Irish Context," *Innovations in Education and Teaching International*, 42. No.4, pp.291-303.

Office of Fair Trading (OFT) (2001) Competition in Professions, OFT, London.

Ormrod Report (1971) *Report of the Committee on Legal Education*, Cmnd 4595. London, HMSO.

PARN, "The Professionalization of Professional Associations 2006 Survey"

Peters, J. M. (1991) "Strategies for Reflective Practice" in R. G. Brockett (Ed), *Professional Development for Educators of Adults*, San Francisco, Jossey Bass.

Pharmacy Council of New Zealand, (2003) "Policy on Recertification for Practicing Pharmacists Under the Health Practitioners Competence Assurance (HPCA) Act," New Zealand.

Phillips, J. J. (1996) "Measuring ROI: The Fifth Level of Evaluation," *Technical Skills and Training*, Tennessee, USA.

Phillips, M., Cruickshank, I., and Friedman, (2002) A. Continuing Professional Development: Evaluation of Good Practice, Bristol, PARN.

Platt, G. "Holy Grail or Empty Vessel?," www.trainingzone.co.uk [accessed 05.02.07]. [1]

Platt, G. "ROI Is Not the Enemy," <u>www.trainingzone.co.uk</u> [accessed 03.05.07]. [2]

Platzer, H., Blake, D. and Ashford, D. (2000) "Barriers to learning from reflection: a study of the use of groupwork with post-registration nurses," *Journal of Advanced Nursing* 31 (5), pp. 1001–1008.

Rae, L. (1986) How to Measure Training Effectiveness, Aldershot, Gower.

Rapkins C.A. (1996) "Best Practice for Continuing Professional Development: professional bodies facing the challenge" in Woodward, I. (ed) *Continuing Professional Development: Issues in Design and Delivery*, London, Cassell.

Robbins, J. H. (2006) "Connoirship, Assessments of Performance and Questions of Reliability," Paper presented at the IAEA Annual Conference 2006.

Rogers, G.A. (1982) General Practitioners and Continuing Education: Aspects of Patient Management, MPhil thesis, University of Dundee.

Rothwell, A., and Herbert, I. (2007) "Accounting Professionals and CPD: Attitudes and Engagement—Some Survey Evidence," *Research and Post-Compulsory Education*, 12, No.1, pp.121-138.

Royal Pharmaceutical Society of Great Britain, (2006) "Continuing Professional Development: A Guide to Getting Started," London: var; 3 booklets, 1 examples sheet

Rutter, L. (2006) "Supporting Reflective, Practice-Based Learning and Assessment for Post Qualifying Social Work," *Reflective Practice*, 7:4, pp.469-482.

Schmalenbach, M. (2005) "Training Evaluation," <u>www.trainingzone.co.uk</u>, 31/01/05; [accessed 24.04.07].

Schon, D. A. (1996) The Reflective Practitioner, Aldershot, Arena.

SCOPME, (The Standing Committee on Postgraduate Medical and Dental Education) (1999) *Strategy for continuing education and professional development for hospital doctors and dentists*, London: Department of Health

Scriven, M. (1991) "Prose and Cons about Goal-Free Evaluation," *American Journal of Evaluation*, 12:55. www.aje.sagepub.com [accessed 26.04.07].

Shapland, J. (2000) *Showing You're up to Date: the Challenge for the Professional Today*, Keynote, CEDAR International Conference, Coventry.

Snadden, D. (1999) "Portfolios—Attempting to Measure the Unmeasurable?," *Medical Education*, 33, pp.478-479.

South African Institute of Chartered Accountants, (SAICA) "SAICA's CPD Policy and Strategy," www.saica.co.za/Displaycontent.asp?ContentPageID=678 [accessed 16.05.07]

Steed, C. (2005) "Staying Ahead in the Skills Race" IIT. www.colinsteed.blogspot.com/2005/11/staying-ahead0in-skills-race.html

http://www.learningtechnologies.co.uk/magazine/article_full.cfm?articleid=106&issueid=12§ion=1]

Stewart, J., O'Halloran, C., Barton, C., Rodger, J., Singleton, J., Stephen J., Harrigan, P., and Spencer, J. (2000) "Clarifying the Concepts of Confidence and Competence to Produce Appropriate Self Evaluation Measurement Scales," *Medical Education*, 34, pp.903-909.

Strivens, J (2006) "Efficient assessment of portfolios."

http://www.open.ac.uk/pbpl/resources/details/detail.php?itemId=460d156285141

Stufflebeam, D. L. (2001) "CIPP Evaluation Model Checklist," www.wmich.edu/evalctr/checklists [accessed 26.04.07].

Suchodolski, B. (1979) "Lifelong Education at the Crossroads," in Cropley, A.J. (ed.) *Lifelong Education: A Stocktaking*, Hamburg, UIE Monograph, 8.

Taylor, D. H. "Why training ROI doesn't matter," www.trainingzone.co.uk, [accessed 15.04.07].

Todd, F. (1985) *Planning Continuing Professional Development, Planning to Improve Performance*, York, NHS Continuing Education Unit, Institute of Advanced Architectural Studies, University of York. [1]

Todd, F (ed.) (1987) *Planning Continuing Professional Development*, London, Croom Helm. www.pd-hoe2.org/2 1.htm [accessed 09.05.07]. [2]

Tyler, R. W. (1942) "General statement on evaluation," Journal of

Education Research, 35, pp. 492-501.

www.ukcle.ac.uk; "How can I introduce reflective practice into my teaching?" [accessed 13.03.07].



545 Fifth Avenue, 14th Floor, New York, NY 10017 USA Tel +1 (212) 286-9344 Fax +1(212) 286-9570 www.ifac.org