Chapter One

THE RESEARCH PROBLEM

1.01 INTRODUCTION

The exploration of learning experiences is central to this proposed study - in particular those experiences or events which are relevant to accountants in their professional practice.

To become and to continue being a qualified, practising accountant involves a total learning process made up of many learning opportunities. Learning during formal training and non-formal continuing education is constantly supplemented by the informal learning experiences which abound in those environments and in the daily practice of accountants.

The satisfactory completion of formal, initial accountancy training signifies merely that a certain stage of professional education in that field has been reached - a pre-requisite for admission to membership of the professional accounting associations. One requirement for retention of membership is an ongoing commitment to participation in continuing professional education (CPE). This provides the setting for organised participation in learning experiences of a pre-determined character. Acknowledged also, but undocumented, are the benefits to be obtained from such CPE participation where informal learning experiences ensue from social interaction, reading, research and reflection, at a professional level. Of at least equal importance, and also undocumented, are the informal learning experiences afforded by the workplace environment, where business and social interaction between both professionals and their public afford similar opportunities and benefits.

THE RESEARCH PROBLEM

1.02 Statement of the Problem

The problem is that learning in practice appears to be acknowledged but not researched. This study proposes to explore accountants' own perceptions of learning in practice.

1.03 Context of the Problem

Over recent years there has been considerable emphasis placed upon education and training of adults, where government, business and professional associations look to CPE

for the management and implementation of specialised education and training as a means of establishing, maintaining and advancing the skills and abilities of those concerned.

One of the assumptions arising from the reliance upon CPE as it is currently structured is that it caters, to a significant degree, for the learning needs of professional participants - in this case accountants - simply by requiring their attendance at a number of organised CPE courses, lectures and seminars which contribute towards the accumulation of a specified minimum number of 'CPE hours'. Although acknowledged, there is little recognition given to the learning which takes place at all times during professional practice. The reason for this may be that the nature and value to accountants of this informal learning may not be fully understood, even by accountants themselves, or that it may be of such a diverse nature as to resist productive analysis.

1.04 Purpose of the Study

The purpose of this study is to gain an understanding of how professional accountants perceive their learning in practice.

More specifically, the completion of a number of tasks, incorporating questions focused on research objectives, is required to arrive at a point where 'perceptions' can be explored in a more uniform rather than random manner, and that exploration be described in a meaningful terms.

1.05 The Research Objectives

Specific questions are posed in the study which focus on the research objectives -

Firstly, to identify

- 1. Occurrences involving learning in practice as 'demand events' or as 'learning events';
- 2. The frequency of these events;
- 3. The areas of knowledge, skills and/or attributes involved in the events;
- 4. The sources of demand events;
- 5. The initiators of learning events;
- 6. The strengths or deficiencies in knowledge/skills/attributes exposed by demand events;
- 7. The sources of strengths revealed;
- 8. Deficiency correction measures taken;
- 9. Settings actual/preferred for acquisition of knowledge/skills/attributes;
- 10. Reasons for choices involved in the above responses.

Secondly, to identify

- 11. Event order of importance to the participating accountants;
- 12. A selected event known to occur outside the study time-frame;
- 13. Discoveries about daily learning opportunities;
- 14. Areas of learning in practice which require (more) attention;
- 15. Desired changes to ways of learning in practice;
- 16. Aspects of learning in practice requiring emphasis to cope with change;
- 17. Accountants' own 'perceptions' of learning in practice;

Thirdly, (18.) to allow opportunities for in-depth discussion between each participating accountant and the researcher concerning matters arising from the individual nature of the accountant's responses.

1.06 The Research Tasks

The tasks are:

1. To construct an instrument, based on and supported by the literature, to be used by the participating accountants to assist with the recognition and recording of their accounts of learning in the practice of accounting.

2. To have the accountants record their responses on this instrument.

3. To construct a framework, based on and supported by the literature, against which to organise the responses.

4. To explore the responses in terms of the framework and of the areas of the Literature Review which were seen to be relevant to the study.

5. To develop a structure of meaningful statements resolving the exploration into the principal elements of the accountants' perceptions of their learning in practice.

6. To consider the elements as a means of answering the research question.

1.07 The Research Question

How do professional, practising accountants perceive their learning in practice?

1.08 Significance of the Problem

There is a need to *know*, not just to assume, how a group of individuals, with identifiable characteristics, learn - in this study how accountants learn, both as individuals and as members of a profession, with the perceptions of learning being closely linked to the processes of learning. The results of the study suggest a new concept of 'Continuing Professional Learning' (CPL) as distinct from 'Continuing Professional Education' (CPE). The relative qualities of 'learning' and 'education' are discussed more fully in the literature review, at 3.02.03. However, as the literature does not appear to reveal any specific research on accountants' perceptions of their learning in practice, it is aniticpated the findings of the study will

- reaffirm and add to the existing knowledge on how adults learn, particularly in the work situation:

- identify similarities, differences or exceptions relevant to learning in the accounting environment;

identify those learning experiences and learning processes which are seen by accountants to be of most significance to them in their professional environment.
identify those factors in the accounting environment which are perceived to have significant influence on the learning of professional practising accountants.

As the findings could also indicate that significant professional learning experiences occur in the daily practice of accountants, and that the types of experiences could vary significantly with size and locality of practice, the contribution made by this source of learning to the professional skills of the accountant could be influential in determining future CPE policy.

1.09 Limitations and Delimitations of the Study

The scope of the study is limited by a number of factors, both concerned with the nature of the study and with factors which are particular to this study.

Limiting factors are the nature of the study as an 'exploration', the nature of the participants in a predominantly qualitative enquiry and the nature of the accounting environment which places constraints upon the participants. In particular, the factors refer to the size of sample, the variables, the levels of expectations and generalisability of conclusions which may be drawn.

The chosen sample of accountants is not large, or random, or representative, but selected for the purpose of exploring for features of learning about which perceptions are formed. While the participants chosen do, intentionally, display several combinations of characteristics, this diversity is acknowledged, but only serves to provide opportunities for the offering of diverse responses for further insight into the study topic. The participants are individuals, speaking for themselves, reflecting their own ideas and impressions of their learning experiences in the accounting environment. As such, they are expressing views which emphasise their individual differences rather than their membership of a professional group. From this diversity, inferences are drawn which both acknowledge the individual differences and also relate them to how an identifiable group of people may be shown to learn. The six participating accountants have similar characteristics, with similar opportunities for learning and are from similar practices in one geographical location.

The accounting environment, as discussed later, is a working environment with priorities for the individual accountant which vary according to the influence of a number of factors. Amongst these are the accountant's level of responsibility, the size of the accounting firm the accountant represents and the requirement for compliance with many legal and ethical standards. Each and all of these have significant bearing on the quality, type and extent of learning experiences available to and taken up by the participants in this study. These variables are acknowledged, at 4.02.10, but are not 'controlled' in the study.

Given that the study involves the exploration of human perceptions, the Naturalistic Enquiry method chosen, and discussed in more detail in the Literature Review, at 3.04.02, places limitations on the extent of quantitative analysis achievable. Rather, the emphasis is upon the interpretations given to events which exist as constructions in the minds of people and which can only be studied in idiosyncratic fashion. The study can expect to be no more than meaningful for those who are involved, (Guba and Lincoln 1982), and thus is not generalisable to accountants as a whole. The conclusions drawn are limited to reference to the participants, but may have a more general application given other circumstances.

1.10 *Preview of the Chapters*

The following chapters develop the elements of the research question - namely, the profession, the accountant, learning and perception.

Chapter Two establishes the setting for the study by presenting an overview of the accounting profession. It outlines the historical and technical developments which contributed to the evolution of the profession, the granting of charters to the first professional associations in Britain and the subsequent recognition given to similar bodies in Australia. The factors which contribute to the substance of an accountant, such as background, training and professional roles and responsibilities, are examined in the light of the research question.

In Chapter Three, the review of the literature focuses, firstly, on adult learning as it relates to professionals in their practice. In particular, the relevance of the distinction between 'learning' and 'education' for this study precedes an account of capabilities, categorised as 'knowledge, skills and attributes', applicable to the accounting profession. The factors which influence adult learning, such as motivation, receptivity, experience, behavioural/cognitive concepts, learning styles, modes and settings are discussed in terms of the professional, practising accountant. Secondly, the selected method of enquiry, the Naturalistic Enquiry method, which acknowledges the features of learning in a professional environment by adults, who display a variety of characteristics, is summarised in terms of the researcher and the participants. Instruments to assist with the study are based on the precepts of the literature and form part of the Methodology in the next chapter.

Chapter Four is concerned with the methodology, the research design and its implementation, incorporating objectives and related tasks to be completed by the selected sample of participants, to satisfy those objectives. To achieve this, the instruments used in the data collection and processing procedures are detailed, at 4.02.07, and consist of the survey instrument and two frameworks for examining the survey responses - one, according to the learning process in the practice of accounting, and the other according to the accountants' perceptions of self and others in their accounting environment. The criteria for selecting the sample participants, the variables and ethical considerations relevant to that sample, and the procedures involved in dealing with the resultant data form the latter section of the chapter.

Chapter Five presents, and offers interpretations of, the data collected from the participants in accordance with the instruments. The three stages of presentation of the data acknowledge the transition from the predominantly quantitative to the predominantly qualitative nature of the data. Where both are in evidence, the quantitative data are displayed in diagramatic representation of the computer analyses, see Appendix C, followed by the qualitative data and the interpretations. The summary of the chapter

considers the implementation via the instrumentation, from 5.19.02 to 5.19.06, followed by reflection upon the interpretations in accordance with the Literature Review and the Research Design, from 5.19.07 to 5.19.09.

Chapter Six restates the purpose of the study, comments upon the procedures followed to carry out the research, and presents the major points of accountants' perceptions of their learning in practice, resulting from the study's exploration. Recommendations for further similar study conclude the chapter.

Chapter Two AN OVERVIEW OF THE ACCOUNTING PROFESSION IN AUSTRALIA

2.01 INTRODUCTION

"The great thing in this world is not so much where we are, but in what direction we are moving." Oliver Wendell Holmes

As a background to understanding how accountants perceive their learning in practice, this chapter provides an overview of the accounting profession in Australia - from its origins, to where accountants and the profession are today and in what direction they appear to be moving.

The evolution of the accounting profession, via historical and technological developments in accounting procedures, provides the setting for the development of the accountant as a professional. The face of professionalism presented to the community invites response from those who form part of the accounting environment. What is the public perception of accountants? What are their rôles in the community? What are the important issues facing accountants in the performance of their professional duties to the community? How are these issues to be resolved?

Solutions may be sought through learning. The significant issues with which the accountant must deal in practice are reflected in the message of urgency being delivered by those at the forefront of the accounting profession, as discussed at 2.06.02, - the urgent needs to recognise and adapt to change, to take a broader view, to be forward thinking, to plan not just to keep the status quo of survival, but to succeed and to lead.

2.02 THE EVOLUTION OF THE ACCOUNTING PROFESSION

Both historical and technological factors have contributed to the evolution of the accounting profession. A brief acknowledgement of their influence precedes an outline of the development of the accounting profession in Australia.

2.02.01 Historical Development

To accept the definition of accounting as proposed by Farrell (1988:3) that "accounting is what accountants do", is also to acknowledge that what they do must necessarily change over time with the changing pattern of human existence. The change frequently is

in response to both accounting and community needs adapting to circumstances and to the increasing responsibility for provision of accounting information.

The development of the rôle of accountants is represented by changing responsibilities, reflecting the need for changing objectives (from one to five, see below), and may be traced from early times when the owner of assets was 'accountable' only to him/herself, and when nothing more than 'counting' was required. When assets grew beyond personal memory and management, those delegated to assist the owner became 'accountable' to the owner/management in quantifiable terms for the accurate recording of the information. Thus there was need for those responsible for the accounting to employ a reliable and consistent method of recording increasingly complex information.

Although the first known and published extant book by Pacioli, in 1494, explained the double entry accounting procedure which was already in use, it also signified the beginning of a new phase of responsibility, and a new title, for those who were, in 16th and 17th century England, being called accountants, or "accomptants" (Chambers 1924:32). A consequence of double entry accounting was the development of the concept of a balance sheet, where a decrease in one item signified an equal increase in another or in a combination of other items.

A significant test of this accounting responsibility, to balance assets and liabilities via the balance sheet structure, came with the Industrial Revolution of the late eighteenth century, with its large depreciable assets, long-term investments / liabilities / valuations, and the emergence of elements in the accounting totality which were not immediately quantifiable - such as environmental and social costs (Gibson 1992:38; Farrell 1988:16). In addition there were now responsibilities to both the present and the future of the entity and its community over a span of time exceeding one lifetime. Thus the preservation of the accounting equilibrium came to encompass additional skills involving judgement and decision-making based on knowledge of the past, assessment of the present and prediction of the future.

If "accounting is what accountants do", according to Farrell, above, the definition of 'accounting' could now be said to be expressed in terms of objectives. In the Trueblood Report (1973), the focus is upon the objectives of financial statements. By contrast, the objectives, relative to this study, focus upon 'what accountants do'. It is suggested that there are four principal objectives in serving management, plus a fifth dedicated to the profession itself.

The objectives which reflect the accounting responsibilities are:

One, to record the past - every 'fact' is in the past: Two, to assess the present - in terms of past recorded information; Three, to assess the present - in terms of previous predictions; Four, to form predictions - from judgements based on present and past; Five, to serve the aims of the profession, basically two-foldto constantly strive for the preservation, enrichment and advancement of knowledge, and in so doing to preserve, enrich and advance the profession itself as a significant contributor to the balanced organisation of the world communities and their economies.

Only the first objective involves the skill of recording factual, quantifiable data; the second, third and fourth are concerned with judgemental and evaluative decisions about the "qualitative characteristics of relevance, materiality, reliability, freedom from bias, comparability, consistency, understandability, and the recognition of substance over form" (Trueblood Report, 1973) The fifth has a separate objective of serving the aims of the profession.

2.02.02 Technical Development

Technical development might be described as the means by which at least the first of the above objectives is able to be implemented, and is significant in assisting the promotion of the others.

The success of such implementation may be observed in the degree of ability to

- a) perform calculations with implied standards of accuracy;
- b) record the results of those calculations;
- c) interpret the results and draw inferences;
- d) recall the recorded results for future use, both factual and interpretive-inferential;
- e) transmit the deduced information and inferences for the benefit of others.

The word 'technical' stems from the Latin 'techna' meaning in its old form 'a trick or cunning device', and also from the Greek 'tekhnikos' meaning 'a method'. Hence the methods employed throughout the development of accounting have served to achieve the desired implementation. Technology must therefore, over the span of time, facilitate both mental and mechanical 'devices or tricks' for this purpose.

There is a history of numerous mechanical devices, as aids to calculation. The abacus, believed to originate from the Semites then transferring to the Aryans and Chinese (Chambers 1924:I:3), was followed by Napier's Bones of 1617, and machines by Pascal 1632, Moreland 1666, Leibnitz 1671, Mahon 1775, Hahn 1779, Muller 1784, Babbage 1812,1835, Thomas 1850, Felt 1887 and many others which lead to the development of accurate and relatively efficient calculating machines, such as those by Burrough's 1988 'registering accountant' machines and the National Cash Register Company's 'detail adders' (Chambers: 1924: II: 646). Of these, Babbage's 1835 concept allowed for the combination of arithmetic processes with decisions based on the results of computations. It embodied elements of sequential control with provision for branching, looping and storage - requirements similar to those of modern digital computers. Eckert and Manchly produced the first all-electronic digital computer in 1946, called ENIAC - Electronic Numerical Integrator and Calculator - which preceded UNIVAC I of the 1950s. The latter could handle alpha-numeric data, subsequent improvements to which, by von Newmann, allowed for self-modicication of programs as contained in Babbage's original concept. From the mid 1960s, miniaturisation techniques developed, the micro-processor and micro-chip emerged about 1971, and computer science evolved as another from of knowledge and basis for enquiry, (Cambridge 1990:289).

The effect of this technology on accounting has been enormous and relevant to the five objectives detailed earlier. Today's accountant is now far better able to 'record, assess, predict and serve' than ever before. Moreover, the accountant's performance is also under scrutiny as never before. The accountant must now look to ways in which that performance can be polished to respond to the ever-increasing demands made possible by the new technology, particularly in terms of accountability and responsibility relevant to the objectives, and over ever-increasing areas of expertise seen as being relevant to the accounting profession (Philp 1994:1; ICAA 1994:4).

2.03.01 THE DEVELOPMENT OF THE ACCOUNTING PROFESSION IN AUSTRALIA

The development of the profession in Australia is imaged almost entirely in the development of the professional accounting bodies, or associations, over the last century.

2.03.02 The Professional Accounting Associations

There are three major accounting associations in Australia -

The Institute of Chartered Accountants in Australia (ICAA) The Australian Society of Certified Practising Accountants - (AS)CPA The National Institute of Accountants (NIA)

The history of the three professional associations stems from Great Britain and the charters granted to Institutes in Edinburgh in 1854, Glasgow in 1855, Aberdeen in 1867, and to the 'Institute of Chartered Accountants in England and Wales' in 1880. (Chambers 1924:32). The Australian story is documented from 20th November 1885 when fifteen public accountants met in Adelaide to form the Adelaide Society of Accountants, now the 'Institute of Chartered Accountants in Australia' with the granting of the Royal Charter in 1928 for a membership of 688 accountants. In those intervening years as many as thirteen recognised bodies were formed. From these grew the present-day associations, the ASCPA in 1952, emerging from the incorporation of a number of smaller bodies, and the NIA, in 1923 in Melbourne, via a number of name changes from the Institute of Factory and Cost Accountants.

Both co-operation and competition over time have lead to each of the three sharing a market for accounting services, wherein each satisfies at once the same general area of demand, but where each also reflects a tendency to supply specific areas of the market, for example - specialised public practice, government accounting and teaching. While there is considerable co-operation between the three bodies, occasional attempts for over a decade from the late 1960s at further unification have not met with success (Farrell 1988:299). The ASCPA (CPA 1985:11023-27) records the first unsuccessful attempt at unification in 1969 and further proposals in 1975 and 1976, which culminated in the following pronouncement:

1982 Integration not to proceed. In a statement published in January 1982 the Society President and the President of the Institute of Chartered Accountants in Australia announced that final results of a poll of members revealed that Councils of the two bodies had not been empowered to proceed with integration. The joint statement registered the firm intention to "find ways in which greater co-operation can be achieved in the best interests of the profession and of the community generally".

Further negotiations at unification were commenced in 1989, resulting in the 1991 pronouncement that "An overwhelming number of Australia's professional accountants voted for one strong professional body but unification did not proceed". However, many individual accountants respond to the situation by becoming members of more than one association.

Together and separately, the professional associations play a major rôle in the conduct of the accounting profession in Australia. As the NIA Handbook (1995:1-2) explains, their 'Mission Statement' is 'To be an influential accounting organisation which provides members with services to meet their professional needs and represents that professional membership to commerce, industry, government and the community within Australia'. Similarly, the CPA (1994) adopted, from its Memorandum of 30th August 1952, its aim 'To support protect and advance the character, status and interests of the accountancy profession generally and particularly of accountants being members of the Society'. The ICAA (1994) aims 'To give positive leadership to the accountancy profession in Australia and create an environment in which Chartered Accountants provide the highest quality of professional service'. The accounting profession, therefore, represents a system, with all the parts working together for both individual and collective benefit.

2.04.01 THE DEVELOPMENT OF THE ACCOUNTANT AS A PROFESSIONAL

The American Association of Professors of Higher Education (1975:5) have suggested characteristics which are indicative of a profession, as listed by Brennan (1990:7):

- a) An organised body of intellectual theory constantly expanded by research;
- b) An intellectual technique;
- c) A close-knit association of members with a high quality of inter-communication;
- d) A period of long training;
- e) A series of standards and an enforced statement of ethics;
- f) Applications to the practical affairs of man(kind);
- g) Active influence on public policy in its field.

It is assumed, for this study, that a professional, practising accountant will reflect the characteristics indicative of a profession, as they would apply to a member of such a profession.

2.04.02 Factors Influencing the Accounting Career

The person who chooses accounting as a career is subject to a number of factors which influence the fulfilment of that choice, with professional recognition being sought at each of the two following stages. *Becoming* an accountant requires the completion of tertiary education and initial professional training; *remaining* an accountant requires an on-going

commitment to engaging in career-long learning and education, the latter being provided principally through participation in CPE and in-house training courses. Thus the person, who *becomes* and *remains* an accountant, is the product, not only of his/her personal background, but also of the education and training experienced, and is subject to the standards imposed by those who would regulate the profession and its members. The influencing factors are discussed in the following paragraphs.

2.04.03 Personal Background

Initially, family background may be a positive and decisive influence. Houle (1980:77) explains that "every member of a profession has a distinctive style of life-long learning influenced by an individual background". Studies in professional socialisation by Anderson and Western (Boreham 1976:5) indicate that in Medicine and Law it was frequently so that the child followed in the parental footsteps. An individual's background, as a product of the prevailing socio-economic climate, may also reveal conflict and pressures which influence not only the approach to, but also the opportunity to participate, in the desired occupation, (Grint 1991).

2.04.04 Educational Opportunities

A second factor relates to the availability of educational opportunities leading to the accountancy career path and to the determination of the optimum point in the education process at which to start specialist training. As Boreham states (1976:43), "a good deal of the community's resources are devoted to the preparation of young people for their work rôles" and it is in the interests of all concerned to see that such expenditure produces the best possible results. There are arguments for delaying specialist training - that an early focus would bias or limit the range of educational experiences to which a young person should be exposed, inferring that specialist training would be begun at the expense of equally valuable alternatives. Houle (1980:79) expresses the opinion that a deterrent to commencing early training is that most young people change their career plans. In Australia, it would be difficult to find specialist education opportunities for accountants at any stage prior to admittance to tertiary institutions and this would indicate that the accountancy career path commences for all professional, practising accountants in a similar manner.

2.04.05 Initial Training

The choice of tertiary institution at which to commence initial training is an influencing factor on the accounting career. Tertiary education is defined as being "at the level next above that provided by secondary education and which may precede, include or replace university, vocational or professional training"; higher education is defined as "beyond school, at university etc." (Oxford 1993:3259,1233). Preparation at the level prior to that which grants desired accreditation may merely involve the choice of subjects appropriate to the general area of study. Commerce, economics, business studies and communication skills subjects are recommended by the ICAA (ICAA *Straight Talk*, undated:2).

Appropriate tertiary training for accountants is conducted at Universities and Colleges of Technical and Further Education over a minimum of two years. Some examples of awards so obtained are described as a degree, a diploma or certificate in

..... accounting, accountancy, accounts (clerical), accounting studies, business, business accounting, business accounting/law, business management, business (professional management), business studies, business administration, economics, or financial management, etc.(DEC 1993:8).

The results of a survey on accountancy courses reported that they turned out graduates who were almost "social misfits" (Gibson 1994:10). Gibson explained in his light-hearted article in reply that he likes them like that - dull and uninteresting, lacking in self-confidence, not distracted by social demands and pressures and entirely able to concentrate solely on the client, not too well paid and not given to unnecessary talk - all he wants is one who can add up. On the other hand, Reich (1994:60) defines an economist as one who does not have the personality to be an accountant! Specialist training courses attempt to address this perception by providing opportunities for improving capabilities in such areas as 'Influence and Negotiation, Assertiveness, Customer Service, Lateral Thinking and Personal Effectiveness', (AIM 1994).

2.04.06 Career-Specific Training

A significant branch of tertiary training, for those wishing to follow a career allied to or incorporating accounting, is that provided by specialist organisations who offer what might be called 'career-specific' training, designed to meet their specific needs. Such an example is that available within the Australian Tax Office system.

An Overview of the Accounting Profession in Australia 2.04.07 Competency Standards for Accountants

A move to establish national registers of competence and qualifications has given rise to the formation of a 'standards framework' (NIA 1993:18) to permit the 'codification and recognition of competencies to permit comparisons between standards in various industries and sectors (to) provide an impartial benchmark for aligning credentials and other forms of recognition". Competency is defined as "the ability to perform the activities within an occupation or function to the standard expected in employment" (p.18). This approach to competence analysis is described by Brennan (1993:4) and Walker (1993:17) as "reductionist" and "reductionism", where job performance for professionals, including accountants, is dissected into categories which focus on the workplace - the workplace environment, performance descriptions and criteria, work rôles and functions, tasks and sub-tasks, elements of competency, range indicators for performance criteria - all of which build competency standards. 'Competency-based Training' is proposed to meet the requirements of the 'Competency Standards'. A warning is issued, "the body of knowledge underpinning the accounting profession must be protected and nurtured, and not allowed to become fragmented through preoccupation with individual elements whilst losing sight of the whole" (NIA 1993:19). 'The whole' could be described in terms of the five objectives of the accounting profession, at 2.02.01, being 'what accountants do'. While objective one, the recording of past facts, may be measured as a competency in performing that 'activity', objectives two, three and four, involving 'assessment' and 'judgement' become less measurable in terms of competency. Objective five, in striving to 'preserve, enrich and advance' both knowledge and the profession, would appear not to come within the range of activities which are measurable as competencies. It can be seen that over-emphasis of competencies related to objective one could well warrant the warning above, and that competency standards, involving 'competency based training', may not be appropriate to meeting the entirety of the objectives of the accounting profession, or to fulfilling the rôles of the accountant as discussed at 2.05.01.

2.04.08 Compliance

More so than in any other profession, the individual accountant is bound by requirements to *comply* - to comply with an ever-increasing range of laws and standards, for which the penalties of non-compliance, in some instances, can have serious career consequences. The conflict which can arise, and the ethical and emotional dilemma experienced, will be explored in this study in relation to the participating accountants in this study, who are at

top management level in small firms, as they describe their perceptions of their learning in practice.

For example, (NIA Handbook), NIA accountants must comply with:

- their professional association's Articles, By-laws, Regulations and Pronouncements.
- their professional association's code of Professional Conduct and Ethics.
- their professional association's CPE requirements;.
- competency standards as and when implemented.

In addition, professional accountants must comply with laws which can change daily:

- National Accounting Standards as set down by law;
- Corporations Law concerning the preparation of financial statements;
- Corporations Law concerning general principles of law;
- Taxation Law, Rulings, Pronouncements and Determinations;
- Tax Agents' Code of Practice and a National Tax Agents' Board (proposed).
- General Civil Law Statute and Case Law

The accountant has responsibilities and liabilities towards clients, colleagues and staff, the public, the professional bodies, the regulatory bodies and government.

2.04.09 Professional Recognition

As indicated at 2.04.02, professional recognition is sought both at the time of *becoming* an accountant and when *remaining* an accountant. Recognition at the first stage is concerned with the use to be made of the initial qualification. The three major accounting bodies each have criteria which must be met before admission to their respective associations will be considered. One criterion is the possession of the required tertiary qualification; other criteria are concerned with character, and completion of additional in-house qualifications over a probationary period. The member is then an 'Associate' of the professional body and has the status of a professional accountant. The second stage, concerned with *remaining* an accountant, allows for progression from 'Associate' through 'Member' to 'Fellow' designation. There is the requirement of a commitment to career-long learning and education, the latter being provided principally through participation in CPE and in-house training courses, (see 2.04.10).

Another option available to the person possessing a tertiary accounting qualification is to gain recognition by employment in an accounting capacity with a major organisation. The size and reputation of that organisation, and the level of work carried out, would

have considerable bearing on the person's right to assume the title of professional accountant.

Within the above situations there lies the implication that to be an accountant and to warrant professional recognition, is not only to be, but also to do what accountants do.

2.04.10 Continuing Professional Education - CPE

Career-long commitment to continuing professional education is required by the professional associations for the accountant to *remain* an accountant, that is, to ensure preservation and recognition of active membership as a professional, practising accountant. Foremost among the providers of CPE for accountants are the three major professional associations, as illustrated at 2.05.02, Figs. 1 and 2. Other members of the accounting environment who have reason to be involved in provision are those whose enterprises or interests would reap benefits. Such enterprises are to be found in business and in government. While each of these broad areas may assume responsibility for the provision of CPE within their particular sphere of interest, it is frequently so that the actual provision is 'sub-contracted' to 'independent providers', (Brennan in Dymock 1987:108). The professional bodies, while conducting the major portion of CPE courses themselves, may also at times engage the services of independent providers where, for example, there are constraints as to the availability of specialised facilities, such as computers, (NIA CPE 1992:30). The Australian Institute of Management lists almost two hundred types of courses, all of which are relevant to the wider skills required of accountants. The Australian Training Register has a current listing, updated constantly, of over ten thousand courses, seminars, workshops and conferences (not all for accountants!) available in Australia. Thus, continuing professional education may also encompass further career-specific training or specialisation. There is further reference to CPE at 3.03.11.

As acknowledged, the requirement that the professional accountant participates in CPE is stipulated by each of the accounting bodies. Where once, generally prior to the 1980s, participation was at the accountant's discretion, it is now mandatory that a specified number of hours per annum/biennium be devoted to CPE activities (Ohliger; Nelson; Farkas in Dymock 1987). Of concern to many writers, including Brennan (1990), is the effect of mandatory participation on 'accounting in practice' - in particular, the absence of evaluation of results of participation. As the situation is now, it is the 'hours' invested which grants compliance, and not the quality of the results of those invested hours.

Indeed Philp (1994:1), by asserting that the new ideas on accounting to which he refers "in most cases have not been taught at universities, but is (sic) a development of interactions of large quality corporations", is highlighting a possibly parallel form of CPE for accountants within the corporate workplace, a very fruitful and potentially relevant source of learning for accountants. Within the small accounting practice, such as those who are represented in this study, the equivalent is represented by the co-active learning opportunities which exist between peers and colleagues. Thus, the focus of this study, "accountants' perceptions of their learning in practice" is of considerable significance in complementing the provision of, and participation in, CPE.

2.05.01 THE RÔLES OF THE ACCOUNTANT IN PRACTICE

Accounting, by its very nature, is concerned with financial matters, with the major areas of involvement ranging from manufacturing, through financial services, service industries, retail, public administration, management, legal, insurance, information technology, industry, to travel / entertainment and employment, in descending order (NIA 1993:8). Thus accounting is closely linked to community activities, whether they be private, business or government. However, in a wider sense, the rôle of the accountant in the community is equally diverse, as evidenced by the advisory and promotional literature and leaflets of the professional bodies. Some indication of these rôles may be evidenced in the 'demand events' of the study. For example, accountants are asked to provide

-	advice to business	- investment advice	- superannuation advice
-	systems evaluation	- recommendations	- forecasts
-	education and training	- voluntary work	- legal submissions
-	reviews of legislation	- international representation	- liason with other bodies
-	development of standards	- promotion of profession	- business evaluation

It can be seen that each of the above areas involves the provision of services appropriate to the accounting profession and could be expected, but would appear not, to come within the ambit of competencies relevant to the accounting profession as proposed by the implementation of Competency Based Training, discussed at 2.04.07. It is anticipated that the participating accountants will also add perceptions of their rôles as accountants.

2.05.02 *The Accountant in the Community*

Part of the responsibility of a professional accountant in being an active member of a community is both to give and to take in balanced relationship. The accountant 'gives' benefits, in that the community uses the accountant, in his/her professional capacity, as a provider of accounting services and as a contributor to the effective functioning of each relevant entity in the community. On the other hand, the accountant also 'takes' benefits, by being a member of, learning from, or being associated with relevant entities, whose influence contributes to the professional circumstance.

The two following figures illustrate the reciprocal benefits which flow between the members of the accounting environment.

Fig. 1.





Fig. 2.



The relationship of the individual accountant to members of the accounting environment.

2.06.01 SIGNIFICANT ISSUES FACING ACCOUNTANTS

Apart from the compliance requirements outlined above, which could affect accountants' perceptions of their learning in practice, there are other matters which involve individual accountants and their learning, with repercussions for the profession as a whole. The accountant and the profession must look to ways in which performance can be polished to respond to the ever-increasing demands on accountants to demonstrate expertise in increasingly wider fields of professionalism.

2.06.02 Accounting for the Future

The message is one of urgency - to recognise the speed of change - to do something about it now - to make preparations for the future. The message comes not so much from theorists, but more from those in the mainstream of business, as explained in the following paragraphs. These people are where it is happening and can see first hand the effects of reliance upon data which is merely the record of past facts (2.02.01). Change may have already rendered yesterday's information of little value as a guide for tomorrow's actions. Today, change is the reality. For accountants, change applies to both

the complete socio-economic situation in which the accounting environment is placed, and specifically to the management of that environment. Learning in practice is a significant contributor to astute management.

The following comments are representative of larger, corporate, accounting firms and serve to highlight the little recognised differences between their 'learning in practice' and that which occurs in small partnerships and sole practitioners. The message proclaimed by the writers focuses progressively from the wider environment to that of the accountants at executive level, the perceptions of which will be explored in the comments of the smaller practitioners in this study as they seek for ways to deal with change via learning, merger and specialisation.

Nadler (1994:1) comments

In a world that seems to be getting crazier, it is more challenging than ever for people and organisations to adapt and thrive ... it is the fast rate of change going on everywhere in the world change which is needed and will improve all of our lives in the next century.

'Change' is described by Pollock (1994:7)

The world in which we do business isn't just being turned upside down, it's changing every which way at an accelerating pace ... The pace is picking up. The "tomorrow" we used to talk about was always five years or so down the track. Today, tomorrow is next week! The changes being thrust upon us are violent and constant. The management information systems we once centralised in head office for the sake of control now need to be decentralised and pushed down the line ... If we are going to meet the demands being hurled at us now - and those that will be thrown at us in the future - we have to become champions of change. Loving change, turnult and even chaos is becoming a pre-requisite for survival, let alone success.

The message of change in the accounting environment is delivered by Philp (1994:1):

I think we, as accountants, have lost the plot as far as servicing our "customers" is concerned. Management want information now and we have to be in the position to enable them to have financial and non financial information at their fingertips whenever they want it In world class companies ... no longer does accounting necessarily drive management's decision making process or assess(ing) whether the company is on target CEOs (chief executive officers) are increasingly relying on other non-financial data and the financial information is beginning to be only supplementary. Accountants have been too reactive rather than proactive to management ... the rate of change in ideas of the new style managers has been enormous throughout the world. Today's world class managers cannot wait for twenty, even twelve, even seven days for the accounting reports results of their companies. The modern chief executive wants to know how the business is progressing as it progresses. Sometimes, in sensitive areas, a day is a time-frame where accounting data will not be available soon enough.

The accountant of the future is seen by Philp (1994:pers.comm.) as "being a top user of automated systems with ability to give advice and looking forward to being proactive rather than looking back and reacting". The use of the term 'proactive' brings a word of caution from Senge (1992:20). He argues that it is frequently taken to mean solving problems "before they grow into crises", which is "reaction" to a situation. Rather, "true pro-activeness comes from seeing how we contribute to our own problems" (p.21). Whether to be termed re-active or pro-active, future actions could be based on issues seen as needs to be addressed.

2.06.03 Specific Issues

From the points raised in this overview of the accounting profession, it is seen that there is a need

- 1. To be proactive in the approach to learning in the accounting environment;
- For preparation to meet the future demands to be placed on the accounting profession, arising from advancement in technology, from greater ethical awareness and 'accountability' and from the increased complexities of law and international agreements (ICAA 1994:4);
- 3. To consider the increasing demand for services other than pure accounting, where the accounting is seen as a core subject allied with others such as law, communications, finance, taxation, management and entrepreneurial skills.
- 4. To consider the benefits of specialisation, topic-specific and/or industry-specific;
- 5. To keep abreast of technology;
- 6. To foster socio-economic climates conducive to professional development;
- 7. To embrace the benefits of learning in interactive business situations.
- 8. To consider the effect of unification / retention of separation of the accounting bodies on the accounting environment;
- 9. To foster learning opportunities appropriate to the stage of the accountant's professional development and needs;
- 10. To update the public's image of accountants.

The needs indicated above are focused on the longer-term. It is anticipated that the study may identify both long and short term needs.

2.07 SUMMARY

Together and separately, the professional associations play a major rôle in the conduct of the accounting profession in Australia, which, in turn, plays a part in the life of, and therefore has an influence on, every member of the community via the professional, member accountants. The nature and quality of that influence is the product of many factors. The accountant of today, as a professional displaying identifiable professional characteristics, is representative of historical and technological development relevant to the profession, and is one who is a product of personal and initial training backgrounds and of current professional practice.

The pursuit of the professional career involves *becoming* an accountant, via initial training, and *remaining* an accountant, with the latter requiring an on-going commitment to engaging in career-long learning and education, providing for the integration of the academic, professional and technological developments of the present era into the professional body of knowledge. For this study, the significance of the foregoing is that where professional, practising accountants - who are required to display identifiable characteristics, conform to recognised standards and fulfil particular rôles - are at the stage of commitment to education and learning for the purpose of *remaining in practice*, it is ironic that *learning in practice*, although acknowledged, is not generally accepted in satisfaction of the continuing education requirement. CPE is expected, or assumed, to provide all the education which is necessary for practising accountants to achieve their professional objectives.

While the recording of accounting information, (which is about facts already past), has long been the rôle of the accountant, there is now the requirement to infer, deduce, predict and advise on accounting matters which will involve the future. The increased demand on accountancy services and the increased pressure on accountants, due partly to this need to adapt to change for the future, to cope with complexities of law and to comply with evolving industry regulations and standards, require that the profession and the individual accountant consider the issues of importance which need to be addressed.

The focus of the issues is two-fold and reflects the aims of the professional associations firstly and introspectively, to ensure that the profession and the individual, professional accountant pursue the highest of standards - and secondly, and subjectively, to ensure that the image (and reality) of the professional accountant and of the profession, projected to the community, reflects these personal and collective standards.

Corporate accounting firms, whose workplace learning opportunities are significantly different from those of smaller practices, and whose corporate education policies have significant influence over the entire profession, are addressing various aspects of the situation by recognising the value of workplace interaction achieved by the povision of in-house learning opportunities and education courses, to the extent that a parallel or alternative form of catering for professional development needs is emerging. Members of smaller practices, such as those represented in this study, are experiencing, on a proportionate scale, similar benefits of interaction with their associates in practice, and are also experiencing the less desirable effects of corporate accounting policies being applied to smaller, country practices. Thus, continuing professional learning in practice is seen to assume an important and complementary rôle to that of continuing professional education, and there is need to recognise the differing learning requirements of large and small practices in the planning for professional learning.

The further issue of Competency-based Training, defined earlier as 'the ability to perform the activities within an occupation or function to the standard expected in employment', evokes warnings for the accounting profession, where reductionist procedures would tend to emphasise the parts, to the detriment of the holistic concept of the profession. Thus, competency-based training, may not be appropriate to meeting the entirety of the objectives of the accounting profession, or to fulfilling the rôles of the accountant, which do not appear to be adequately represented in the competencies. Of particular relevance to the accounting profession is the requirement to *comply* with an ever-increasing range of standards and laws, for which the penalties of non-compliance can have serious career consequences and lead to ethical and emotional dilemma. Always at stake is the question of retension of membership of the profession.

While the overview of the accounting profession has provided comments on a wide range of matters relating to the profession, it is suggested that learning in practice forms a significant part of all aspects of the profession, with this study providing a link between the features of the accounting profession and the accountants' perceptions of their learning in practice, to be explored in the following chapters. Chapter Three

Review of the Literature REVIEW OF THE LITERATURE

3.01 INTRODUCTION

The Review of the Literature focuses firstly on adult learning as it relates to professionals in their practice - in particular accountants, as individuals and as members of an identifiable group of professionals. The narrowing of focus is from the general to the specific - learning - as applicable to an individual, who is an adult, in professional practice, as an accountant. The literature reflects this narrowing of focus, by providing a wide range of material on adult learning in general, but considerably less on the learning (as opposed to 'education') of individual accountants. A brief review of the concepts of learning, education and knowledge lead to a detailed review of groups of adult learners, and their approach to learning as a result of behavioural-cognitive factors, motivationreceptivity, learning styles-modes and individual characteristics given opportunity for expression in a variety of learning situations. The nature of this 'expression' is considered in terms of perceptions in relation to the individual in the context of the accounting environment.

Secondly, the Review explores the means of capturing the contributions of the participating accountants in a way which enables their subsequent interpretation as a learning experience, and the means of recording and interpretation of results to give substance to an exploratory study. The resultant frameworks, or instruments, devised from and supported by the literature, to assist in implementing the objectives of the study are detailed at 4.02.05-07.

3.02.01 LEARNING IN THE ACCOUNTING ENVIRONMENT

Learning in the accounting environment represents a particular application of the general principles of learning. There are references by writers such as Boreham (1976), Houle (1980), Cervero and Scanlan (1985), Cervero (1988), Dymock (1988) and Brennan (1990), to professional education / learning, but one only (Brennan) in which the accounting profession is discussed - and this in relation to Continuing Professional Education (CPE).

Thus, this review takes the general principles of learning from the literature, and where appropriate, applies these to the circumstances of the accounting environment.

3.02.02 Learning

There are several definitions of learning relevant to this study. Cronbach (1963:71) states that "learning is shown by a change in behaviour as a result of experience". Harris and Schwahn (1961:1,2) separate learning into a *process* which emphasises what happens during the course of a learning experience in "attaining a given learning product or outcome; and as a *function* which emphasises certain critical aspects of learning such as motivation, retention and transfer". While others, such as Gagné (1965:5), and Hilgard and Bower (1966:2), again refer to learning as involving *change*, Skinner (1968:10) adds the feature of *controlling* and *shaping* behaviour. Bruner (1966) emphasises learning as "competency development" and Maslow (1970:150) views learning as "the full use of talents, capacities (and) potentialities".

Smith (1982:34) offers the opinion that "the term 'learning' defies precise definition because it is put to multiple uses. Learning is used to refer to (1) the acquisition and mastery of what is already known about something, (2) the extension and clarification of meaning of one's experience, or (3) an organised, intentional process of testing ideas relevant to problems. In other words, it is used to describe a product, a process or a function".

While each of these interpretations is evident in this study, in a general sense, further detailed enquiry is needed to arrive at a more finely-tuned definition. The following two sections will consider 'Learning and Education' and 'Learning and Knowledge'.

3.02.03 Learning and Education

To differentiate between *learning* and *education* and *knowledge* is of marked importance in this study. The literature frequently uses the terms loosely, often interchanging one for the other with the reader left to infer any distinction if one is intended.

Boyd, Apps, et al.(1980:100-101) state that "*Learning* emphasises the person in whom the change occurs or is expected to occur. Learning is the act or process by which behavioural change, knowledge, skills and attitudes are acquired", whereas ... "*Education* is an activity initiated by one or more agents that is designed to effect changes in the knowledge, skill and attitudes of individuals, groups or communities. The term *education* emphasises the educator, the agent of change who presents stimuli and reinforcement for learning and designs activities to induce change".

For this study, *learning* emphasises the individual and the individual's perception of the learning event. With reference both to Smith and to Boyd, above, it is concerned with the acquisition of knowledge, skills and attitudes (or 'attributes'), but not their mastery (which may infer measurement of learning ability and use of knowledge).

3.02.04 Learning and Knowledge

The literature refers frequently to the 'acquisition of knowledge' but less so to what is actually acquired. There are some references to 'types of knowledge', (e.g. Cervero 1988:55), from which the point emerges that "forms of knowing can be learned but cannot be taught" and that "what the learner does is more important than what the teacher does" (p.56). Knowledge as the result of research is discussed by Long (1983:24,25); Blank (1982:94) refers to skills to be achieved in the performance of "knowledge tasks", while Cervero (1988:55) discusses "practical" and "procedural" knowledge, which would seem to indicate expertise in action, or 'know-how', as an expression of behavioural change. There are few references which can be used to explain more specifically the relationship between learning and knowledge in the terms of the learning situations in this study, focusing as it does on professional accounting knowledge, and being concerned with expertise in accounting, as acknowledged by Zuber-Skerritt (1992:40). The Institute of Chartered Accountants in Australia (ICAA) defines the qualities (knowledge, skills and attributes) which it believes the Chartered Accountant "should ideally possess to enable him or her to perform well and to service clients successfully in the year 2000 and beyond" (ICAA White Paper 1994:4). These qualities, which form an integral part of the survey instrument are listed as:

□ ACCOUNTING SKILLS, including the ability to analyse financial data; knowledge of taxation, audit services, information systems, capital markets and professional ethics; and in-depth knowledge of one or more specialised accounting areas.

□ Excellent COMMUNICATION SKILLS, endowing the accountant with the ability to listen effectively; empathise with the client's business needs; obtain, organise and use information from a variety of sources; write clear reports; present, discuss and defend views through both the written and spoken language; and to communicate with people from different nations, cultures and socio-economic backgrounds.

□ Top NEGOTIATION SKILLS, including an understanding of the power, tactics and limitations of the negotiation process.

□ Well developed INTERPERSONAL SKILLS, enabling the accountant to motivate and develop others, delegate tasks, resolve conflicts, demonstrate leadership, manage people and to interact with diverse groups of clients.

□ INTELLECTUAL ABILITIES conducive to logical deductive and abstract thinking; identification and solving of problems; the handling of ethical dilemmas, and forward thinking.

□ MANAGEMENT and ORGANISATIONAL KNOWLEDGE giving the Chartered Accountant a good understanding of the activities of business, government and non-profit organisations; business culture; marketing; group dynamics and resource management.

□ PERSONAL ATTRIBUTES, including morality, integrity, energy, motivation, persistence, compassion, judgement and a commitment to life-long learning.

The acquisition of knowledge, as discussed at the beginning of this section, can now be seen to encompass three main areas, termed 'knowledge', 'skills' and 'attributes' (or 'abilities'). For this study, 'knowledge' is taken to refer to *technical* knowledge, for example, as applicable to the *facts* of taxation and law, and is separated from the ICAA's heading of 'accounting skills', which are taken, for this study, to indicate skill in the *procedures* relevant to accounting.

3.03.01 ADULT LEARNERS

It could be said that the participants in this study are firstly adults, secondly professionals and thirdly accountants, each being a category of the preceding goup. However, the classification of adult learners has occupied many writers who have identified learners according to a number of individual characteristics and groups of identifying factors.

3.03.02 Characteristics of Adults as Learners

The characteristics of adults as learners are documented by Cross (1981:235-237) to indicate the effects of personal and situational variables on learning, and inferentially on learning styles. Personal characteristics are identified as being 'physiological' involving aging, 'sociocultural' involving the phases of life through which one passes and the 'psychological' or developmental stages. The situational characteristics are identified as 'part-time versus full-time learning' and 'voluntary versus compulsory learning'. Analyses, such as that by Jarvis (1983:61), relate results of studies into general adult participation, which are compatible with the variables selected by Cross. Of these variables, only the psychological / developmental stage and the voluntary / compulsory learning situation have relevance for this study.

Grotelueschen (1985:35) explains "(professionals) ... are more homogeneous ... they resist some traditionally key discriminating variables ... (especially) the level of formal education ... (and) occupational status, both of which display relatively little variability

when they are compared with the adult population in general." It may be inferred that the professional sub-group of accountants narrows this range of variability even further, in relation to vocational learning. Houle (1980:133,134) also found that professionals were more interested in advancing in their present job (more established in their careers) and had a narrower range of interests than did the general range of learners surveyed, but that "the pattern of learning activity undertaken by professionals was far more complex". It is anticipated that even with the small number of accountants participating in this study, there will be evidence of the 'range of variability' and the 'pattern of activity' demonstrated. To assist in accommodating this complexity in a form suitably manageable for use with the accountants in this study, a diagram of the learning process in the accounting profession was devised, see 4.02.07, where pro-active, re-active and coactive elements, as defined at 3.03.04, combine with motivational elements and with situational elements to illustrate the learning change.

3.03.03 Factors Influencing Adult Learning

While accountants are presumed, from the above comments of Grotelueschen, to display a comparatively narrow range of variables, and therefore less individuality, there still exist other factors which influence the way in which these accountants learn as individuals.

The combination of all these factors together form the individual's learning style. Among these factors are motivation and receptivity, the role of experience in the learning process, and behavioural and cognitive concepts, which are discussed in the following sections.

3.03.04 Motivation and the Occurrence of Learning

Why adults learn - what is their motivation to learn? - is a question of great complexity (Wlodkowski 1985:44), but for the purposes of this study can be reduced to two broad reasons: described as a means to an end, or as an end in itself, in the study of legal professionals by Nelson, (1993:25,38). As Houle (1980:24) comments, "If learning is eagerly sought, its burdens are light and its rewards great". Depending on the reason, learning may be initiated as the result of a perceived need - arising from either the accountant's own self-appraisal (perhaps a desire for self-betterment), or from an external appraisal of the accountant's situation (perhaps a compliance requirement to retain membership). Bearing in mind the distinction between 'needs' and 'wants' made by Jarvis (1983:233), a need may be defined as a 'gap' or a 'discrepancy' between present

and desired status (Brennan 1988; Knowles 1990:128). The word 'need' is on occasions equated with 'motive': Long (1983:183) describes Maslow (1970) as forming a list of "universal motives" which is then called "his heirarchy of needs". Motives are not needs, but may spawn perceived needs. Further, (p.183) there is reference to Diggins and Huber's description of motivational energy as 'drive, need, motive, goal, wish, desire, purpose, and intention'. Cameron (1988:25) identifies six methods for identifying learning needs of which only two - 'intuition' and 'self-assessment' - are used by the learner.

Houle (1961) identifies learners by motivational type - "goal-oriented" (satisfying defined objectives), ... "activity-oriented" (seeking the nature of activity as opposed to content) ... and "learning-oriented" (learning for learning's sake), where the three goals are seen as three overlapping circles. A 'sub-group' is those identified according to reasons (motivation) for participation in educational activities (Nelson 1993:22).

The setting of this study suggests a more practical orientation, where exploration of the accounting workplace is concerned with three collateral motivations for learning, noting the distinction this study makes between *learning* and *education*. The first two are closely allied to Boshier's concept (1973:256) of "deficiency-motivation" and "growthmotivation", or the 'means to an end / end in itself classification above. The first stems from demands made upon the accountant in the course of his professional work to demonstrate a satisfactory level of ability in knowledge, skills and attributes to those who are concerned with such standards, as at 2.05.02. Learning accomplished as a result of demand motivation could be classed as 're-active' learning and approximates one aspect of Houle's goal-orientation. The second motivation for learning stems from the accountant's own initiative and desire to learn, which may be either goal-oriented or learning for learning's sake. In this study, this learning is termed 'pro-active' learning. The practicalities of the study's small accounting workplace may, or may not give recognition to Houle's remaining 'activity-oriented' definition. Rather, there may be emphasis placed upon an alternate, third motivation, newly-named for this study as 'co-active' learning, where learning is generated as a result of interaction between peers and colleagues at a professional level.

To explain this study's position in relation to the literature above, it is important to consider the discussions of other researchers. In particular, Nelson (1993:22-40) refers to and summarises several participation studies involving members of the health/medical profession (for example: Bennett 1968; Sovie 1972; Dickinson and Clark 1975; O'Connor 1979; Richards and Cohen 1980; Dolphin 1983; Thomas 1986). On the one

hand the discussions indicate strong linkages between motivation to learn and actual participation in educational activities, but also indicate other non-educational motives such as 'relief from boredom and frustration', 'relief from routine', 'attendance as an integral part of professionalism' and 'a change of pace from routine', (p.40). Long (1983:105) explains further that activity-oriented individuals take part in education because they find in the circumstances of learning a meaning that has no necessary connection, and often no connection at all, with the content or announced purposes of the activity. By contrast, reasons for learning, as opposed to education, are explored in this study.

To record reasons for participation in educational activities, several instruments have been devised, among them the 'Participation Reasons Scale' by Grotelueschen (1985:33), the 'Continuing Learning Orientation Index' by Sheffield (1964), the 'Reasons for Participation Instrument' (Burgess 1971; Grabowski 1972) and the Education Participation Scale (Boshier 1971;Boshier and Collins 1983; Morstain and Smart 1974).

However, this study is not concerned with participation studies as such, but with accountants' perceptions of their participation in their own learning, (Jarvis 1983:10), as and wherever it occurs in their professional practice, including 'participation' experiences. The 'occurrence' of learning therefore embodies both voluntary (self/other initiated) and involuntary learning events, which exist and should be apparent in practice. Long (1983:216) equates the voluntary to 'planned' (including continuing professional education) and expands the involuntary 'activities' to include "randomly acquired learning" and "serendititous nonplanned learning".

Thus the learning experiences to be considered in this study address a different range of learning opportunities than encountered in either the initiated or involuntary events alone, but are also restricted to professional accountants' perceptions of learning (intake) rather than measurement of learning performance (output).

3.03.05 Receptivity

While motivation may be conceptualised as a positive state of mind where the learner approaches a learning opportunity with a desire to learn - or with the positive intention of learning, recognition must be given to another, passive, side of motivation which could be described as 'receptivity' - a state of being ready to learn whenever learning opportunities might occur. Knowles (1990:18) explains that Thorndike expressed this from a behavioural viewpoint as a "Law of Readiness". In more formal situations,

Knowles (p.43) refers to Havighurst's "teachable moments". Knowles himself links readiness to life's developmental stages (p.60), inferring that maturation is a pre-cursor to readiness.

The factors involved in learning readiness, which create a state of being receptive (alert) to learning opportunities, would appear to emphasise the sensory modalities - auditory, visual and kinaesthetic - (Smith 1983:64), linked to experience in similar situations. However, the manner in which people react to new knowledge (or equally to an 'additional experience'), is that "it can be either accepted temporarily, rejected, modified or replaced" (Glaser 1984:100). This relates to the 'evaluation of experience' section in the learning process diagram, at 4.02.07. The question arises - at what point is new knowledge created? The answer would appear to be dependent upon a decision to adopt one of Glaser's four courses of action. The responses of the participating accountants may reflect such decisions made when completing the survey instrument. Cervero (1988:41) explains Dewey's (1933) and Schuell's (1986) comments that the new experience has no relevance without prior experience. This does not mean that nothing new can ever be learned, but that there needs to be an accumulation of experiences (i.e.repeat exposures to new knowledge) for it to be treated in the manner described by Glaser. The inference is therefore, that for learning to occur, there must be a state of readiness to learn and a bank of experience with which to compare the new experience.

3.03.06 Experience

Long (1983:49), reporting on a study by Pigg, Busch and Lacey, explains that there are four integrated stages of experience: 'concrete experience ... observation and reflection ... formation of abstract concepts and generalisation ... and testing implications of concepts in new situations'. These stages correspond to the 'co-active' element in the learning process diagram, at 4.02.07. Thus, to be an effective learner, the accountant must proceed through the stages of experience consolidation, experience accumulation and experience application. Schön (1983:138) augments this idea by stating that "through their past experience, professionals have built up a repetoire of examples, images, understandings and actions" upon which to reflect. Darkenwald and Merriam (1982:90) maintain that "adult learning to a large extent consists of accumulated experiences that influence problem solving strategies...", while Cervero (1988:41) adds that "earlier formed impressions ... may be a cumulative pre-cursor to the present learning experience". Long (1983:51) explains Flavell's comment that experience is seen as being of great importance in adult cognition; Lindeman (1926:10) claims it is "the resource of the highest value".

There is a warning from Knowles (1990:59), who cautions that "greater experience also has some potentially negative effects". He explains that people "tend to develop mental habits, biases and presumptions that tend to cause (us) to close our minds to new ideas, fresh perceptions, and alternative ways of thinking". Knowles (p.42) also comments upon the claim by Rogers that rejection of new knowledge may also occur when the learner perceives (involuntarily or otherwise) that its acquisition is 'inconsistent with selfconcept' or is a 'threat to the self of the learner'.

It would be anticipated that accountants, who are well established in practice, would rely on experience to a significant degree, for the performance of professional tasks. Those accountants, who are relatively new to practice and therefore lacking in experience, as discussed by Houle (1980:72) in regard to medical practitioners, would be exposed to situations in practice, for which they might not be able to find immediate solutions. Experience, thus, becomes an asset to be shared between professional associates, and passed from senior to junior associate. The extent to which the transfer of experience is accomplished also depends on the associates' existing levels of experience with that type of situation. Both the offeror and acceptor are enriched from the sharing of experience.

The manner in which accountants approach the learning process, particularly via exposure to the stages of experience (above), may be considered in relation to behavioural and cognitive concepts.

3.03.07 Behavioural and Cognitive Concepts

Five learning skills are defined by Gagné (1972:3,4) from the behaviourist school of thought: Motor skills, verbal information, intellectual skills, cognitive strategies and attitudes, each separate element of which is linked by learning through the formation of associations in response to external stimuli (Zuber-Skerritt 1992:43). The application of these principles to adult learning has been seen to be successful where "knowing and learning are defined as an accumulation of facts ... especially in those disciplines where factual knowledge is seen to be an essential part of professionalism, (e.g. in medicine, law, accountancy and the natural sciences)" (p.40). As she explains, (p.38), "behaviourists do not look within ... for explanation of behaviour ... the learner is presented with a ready-made system ... of stimulus and response". These skills are reflected in the ICAA's desired qualities of accountants, at 3.02.04, and in the study instrument.

On the other hand, cognitive psychology "focuses on the human mind: its memory, cognitive structures and processes of information storage and retrieval" (p.41), also potentially a significant feature in the accountants' learning. Cognitive concepts refer to the acquisition of knowledge (as opposed to behavioural change), (Cervero 1988:40), with one of the factors influencing this acquisition being the learner's cognitive structure (Zuber-Skerritt 1992:45,70). She explains that cognitive structures "are generally defined as knowledge stored in an organised way", which, according to cognitive psychologists such as Ausubel (1975:93), is more efficient for acquisition and retention of new material "if it is related to the learner's previous knowledge and concepts" (Zuber-Skerritt 1992:43).

An alternative theory, proposed by Kelly (1955), and leading to subsequent studies on action theory and action research, is his 'personal construct theory', described by Zuber-Skerritt (1992:56,57) as focusing "on the complete person as an active agent in his/her own right, not simply as a responder to stimuli ... (wherein) people... understand themselves and their environment by constructing tentative models ... and evaluating these theories against personal criteria". Others, such as Lindsay and Norman, Galperin, and Rubinstein are described by Zuber-Skerritt as linking interpretations of experience to reflection, internalisation and integration into the cognitive system. The significance for this study is that (learners) "are not seen as the passive receivers of knowledge, but the active constructors (or self-instructors) and interpreters of their experiences" (p.66).

Learning in the accounting environment can be linked to cognitive concepts, referring to the acquisition of knowledge, particularly relevant to technical skills, and to behaviourist concepts, particularly relevant to the development of interpersonal and negotiation skills, as discussed at 3.02.04. It is anticipated that the participating accountants will demonstrate skills relating to both cognitive and behavioural concepts, according to their individual learning styles.

3.03.08 Learning Styles

A 'learning style' implies a learner has a choice, particularly where 'action learning' theories are in place, providing scope for the expression of choice. A 'Decision Preference Analysis' (DPA) designed by Kable (1988) is described by Zuber-Skerritt (1992:48) as measurning "people's personal (psychological and motivational) preferences" with a range from "highy quantitative (to) highly qualitative". This allows for personal achievement and satisfaction to be attained by selecting activities /occupations /professions compatible with styles. This study will explore whether certain

participant accountants show distinct preferences for particular types of learning activities, with such preferences being closely linked to style. She suggests (p.49) that accountancy is quantitative and that history is qualitative. A Learning Style Inventory (LSI), designed by Kolb (1984), has been modified by others (e.g.Honey and Mumford 1986), to describe orientations to learning as "activist ...pragmatist ... reflector ... theorist".

Knowles (1990:246) maintains that "experience has shown conclusively that there is strong and direct correlation between a person's profile, their occupational profile and their learning profile" and links this with the tenets of brain dominance theory. Long (1983:73) explains 'hemispheric lateralization' research as indicating that the left side of the brain is active in an analytical and reasoning fashion; and that the right side of the brain operates in an artistic, intuitive, receptive and emotional mode. It would be reasonable to assume that accountants would have a learning style arising from a left-brain preference. The implication is that a mismatch occurs and learning suffers when the preferred learning style is at odds with the nature of the learning experience. While this may or may not become evident in the survey responses, it is nevertheless relevant should larger samples of participants be surveyed.

In summary, "A learning style can be defined as a person's characteristic ways of information processing, feeling, and behaving in and toward learning situations" (Smith 1983:60). It is acknowledged that, for this study, professional, practising accountants are seen to be more homogeneous, as discussed at 3.03.02, and therefore learning styles may appear to be similar rather than distinctive. The practical application of learning styles is discussed in the following section.

3.03.09 Modes of Learning

Three modes of learning in CPE, as defined by Houle (1980:31), are the 'mode of inquiry' - frequently the process by which a new idea or technique is created; the 'mode of instruction' - concerned with the dissemination of knowledge; and the 'mode of performance' - reflecting, via subsequent performance, the degree to which those ideas and techniques have been internalised (learned). Of these three modes, the first comes within the scope of this study, since it is the 'inquiry' mode (see note below), which is concerned with the learner's perceptions of the learning event; 'instruction' the second mode (involving 'education') is excluded; and 'performance' the third mode is admissable only so far as it relates to this study's concept of accumulating experience. The inquiry mode itself is only relevant here when the inquiry is the result of the learner's own

motivation to discover and prove the existence of some unsuspected knowledge. From Houle's own explanation (p.31), it would seem that a more likely title would be 'Modes of Education'.

[Note: the Oxford Dictionary (1993:1,1376) states that recent UK usage equates 'inquire' with 'investigation', and 'enquire' with 'ask' and that 'the distinction is not made in North America'.]

3.03.10 Self-Directed Learning

Self-directed learning is viewed, in this study, as a specific type of 'mode of inquiry', which is represented by the pro-active element in the learning process diagram, at 4.02.07. As Rogers (1965:5) comments, "even when the impetus or stimulus comes from the outside, the sense of discovery, of reaching out, of grasping and comprehending comes from within ... it is evaluated by the learner, he (she) knows whether it is meeting his (her) need, whether it leads towards what he (she) wants to know ... the element of meaning to the learner is built into the whole experience". Knowles (1975) defines it as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p.18). There are two aspects to consider in this study - the learning event which qualifies as a self-directed learning event and the characteristics of the self-directed learner.

For an event to be designated 'self-directed', Langenbach's (1988:150) explanation of Tough's criteria is accepted. It must reveal a significant strength of intention to gain certain knowledge and skill of a pre-determined nature as a result of the learner's own intentional actions or perceptions, and which is intended to be retained for more than very short-term benefit. In the accounting environment, length of benefit is relevant. It is necessary to consider both the content and process involved in the event. For example, of short term benefit is seeking to be fully conversant with (the content of) the latest tax rulings and determinations; of long-term benefit is becoming fully conversant with the long term procedures (process) of how the rulings and determinations scheme is designed to affect the accountant's clients.

Candy (1991:459) has compiled a composite list indicating the attributes, characteristics, qualities and competencies which a capable autonomous learner should possess. The feature headings listed below are representative of groups of extensive individual

capabilities suggested by many writers. and may be reflected in varying degrees in the participating accountants' survey responses.

- Be methodical / Disciplined Be Logical / Analytical Be reflective / Self-aware
- Demonstrate Curiosity / Openness / Motivation Be Flexible
- Be Interdependent / Intrerpersonally Competent Be Persistent / Responsible
- Be Venturesome / Creative Show Confidence / Have a Positive Self-Concept
- Be Independent / Self-Sufficient
- Have Developed Information Seeking and Retrieval Skills
- Have Knowledge About, and Skill at, "Learning Processes"
- Develop and Use Criteria for Evaluating

In summary, a test for relevance of self-directed learning in this study would consider whether, according to Knowles (1975), the accountant took the initiative in the learning process, (pro-active); whether, (according to Langenbach (1988), there was sufficient strength of intention to gain the pre-determined knowledge, and whether that knowledge was for more than very short-term benefit; and in so doing, whether the accountant displayed the characteristics of a self-directed learner, as described by Candy (1991). The application of such a test to the study responses may reflect, in varying degrees, the incidence of the elements of self-directed learning during the survey period and give an indication of the relevance of self-directed learning to learning in practice.

3.03.11 Settings for Learning

For this study, the times and places, to be considered as settings in which learning takes place, are those which exist within the environment of the professional accounting practice. A number of writers, such as Coombs (1973), have discussed *education* in the terms "formal", "nonformal" and "informal" and it is useful, here, to summarise the meanings given by Coombs to these terms, so that comparative definitions, as settings, can be formulated to deal with *learning*, for the purposes of this study.

According to Coombs,

 \Box Formal education defines the heirarchically structured, chronologically graded system of schooling running from the primary grades through the university and including, in addition to general academic studies, a variety of specialised programs and institutions and technical professional training.

 \Box Nonformal education refers to any organised educational activity outside the established formal system that is designed to serve identifiable learning clienteles and learning objectives.

 \Box Informal education refers to the truly life-long process whereby all people acquire attitudes, values and skills, and knowledge from experience and the educative influences and resources in their environment. Generally, informal education is characterised as being relatively unorganised and unsystematic.

For this study, learning opportunities are taken to exist within three broad areas or 'settings' in the accounting practice - Formal, Nonformal and Informal - defined:

 \Box Formal settings are those where the learning opportunities are initiated by others. For example the attendance at a CPE course or complying with a requirement to attend a seminar.

According to Cervero (1988:88), universities and professional training organisations, employers and independent providers, with whom the accountant associates in the professional environment, provide opportunities for formal learning experiences. Brookfield (1986:166) explains that "(adult) learning in formal settings ... occurs generally under the direction of an educator or trainer who is working within an institutional base". One example of education provision, CPE, is defined by a number of writers, for example, Brennan (1990:2) who says, "put simply, it is the training of professionals after their initial, preservice training and induction or licensing into professional practice. Houle (1980:7) adds that a broadened concept includes "all efforts to provide learning for active professionals". Nowlen (1988:ix) describes the main ingredient of CPE as "the intensive short course organised with a view toward keeping professionals ... up to date". Brookfield (1986:171) offers "the provision of educational opportunities throughout a professional's life-span of work". Jarvis (1983:38,39) concludes his description of CPE by suggesting that 'education in the professions is as much a part of the study of education as it is an element in the professions". The National Institute of Accountants (NIA), within its CPE policy (Handbook 1995:4-37) is more specific: "(CPE) covers an on-going post-qualification programme of relevant structured and unstructured learning activities which contributes directly to the professional competence of a member".

A general concern is stated by Brookfield (1986:171) that the needs of the professions are not well-served by the aims of professional education. This is expressed by Brennan

(1990:142) who refers to serious doubt about the relevance of programs to needs and the lack of research on the quality of "output". More specifically, mandatory participation, as discussed by Dymock (1987), Cervero (1988), Brennan (1990), Lucardie (1993) and Nelson (1993), for example, may not be eliciting the desired results. It is anticipated that the value to accountants of CPE courses, whether voluntary or mandatory, will be shown to be in the ability to provide a forum for instruction in specific, technical matters, with fine-tuning of learning and quality of potential "output" being a matter for the individual.

The significance of these concerns lies with the relative value of the CPE experience to the learner - the more the experience fails to match the characteristics and needs of the learner, the lesser the value, the poorer the perception.

□ Nonformal settings are those which do not come under the description of 'formal' and are relevant to the accounting workplace, where the accountant decides upon the learning activities to be undertaken - for example, the decision by the accountant to study the implications of new superannuation legislation. This may be achieved by self-directed learning or may subsequently lead to the accountant's decision to engage in 'formal' learning. Further, a decision by the senior partners to discuss between themselves a selection of case studies for a specified purpose, indicates an intention to learn and leads to the generation of learning. Yet another example of learning in this setting is covered by the term 'mentorship', described by Houle (1980:112) as being among the most productive of experiences. In accounting practice, a colleague provides a harmonious environment where the protege is assisted to grow in the knowledge, skills and attributes pertinent to the profession (Candy 1991:184-185). Mentorship within the accountant's employment situation may be more formally structured in the early years of practice, subsequently developing into 'colleagueship' over time, enjoyed by all except perhaps "solitary practitioners and supreme heads of heriarchies" (Houle 1980:113). As part of a study conducted by Nelson (1993), solicitors in their first three years of practice were asked their preferred methods of acquiring the learning needed to conduct their practices. He says (p.88) "the most striking observation is that the two most favoured items are informal consultation with colleagues and self-study still more popular than structured CLE (continuing legal education) activities". In this study the participants' views on similar learning from interaction with colleagues and from selfstudy will be explored. As "the formal means of instruction ... will do no more than lay a foundation for later learning" (Houle 1980:86), it can be seen that nonformal learning will carry a long-term responsibility for a significant part of the total educational life of the accountant.

□ Informal settings are those where the learning occurs incidentally or spontaneously. For example, discussions with colleagues may unintentionally *generate* learning, as well may the accountant's simple reflection upon a series of events in practice, lead to a realisation that new learning has taken place (Schön 1987:40). The quality of learning which takes place in this setting is largely dependent upon the mental receptivity of the practising accountant and the perceived immediate usefulness of the experience (see 3.03.05 receptivity). It is frequently the case that the person with the receptive mind has the knack of serendipity, where learning opportunities come fortuitously at unexpected times and in often unusual ways. At the most informal end of the scale, the learning experience is automatically subsumed. Cervero (1988:48) notes that this important form of knowledge is often overlooked.

Thus, the definitions of the levels of formality of learning settings for this study may be summarised:

Formal settings are those where the learning opportunities are initiated by others, as in attendance at a CPE course or complying with a requirement to attend a seminar.

Nonformal settings are those which do not come under the description of 'formal' and are relevant to the accounting workplace, where the accountant decides upon the learning activities to be undertaken.

Informal settings are those where the learning occurs incidentally or spontaneously.

Although the three areas are separated above for the convenience of discussion, it is seldom that they are mutually exclusive in practice, as evidenced by Schön's (1983:54) reflection-in-action model. Indeed, each supports the other. As the literature explains, a pattern of learning activity may emerge involving all three, often viewed as a continuum, where the responsibility for the acquisition of knowledge shifts through a range of opportunities from formal instruction to self-directed learning. The process of learning may also be repetitive, as the learner may seek formal reassurance for the validity of knowledge acquired via self-directed means - or the learner, satisfied with the self-acquired knowledge may return to formal and/or nonformal opportunities as the next step in an ascending pattern of knowledge acquisition, experience building and behavioural change through the acquisition of enhanced skills and attributes.

3.03.12 Perceptions of Learning

To this point in the review, the examination of the literature has revealed how learning, as opposed to education, may take place, given the characteristics and styles of adult

learners as relevant to this study, and given the modes of enquiry and settings for learning which are similarly appropriate. This section of the study continues by considering the application of the term 'perceptions of learning' to the learning situation in two ways: firstly, the learner's perceptions of the learning taking place; and secondly, the learner's perception of him/herself and others in relation to the learning taking place.

The learning taking place in the setting of the professional practice is considered the reality, which exists as constructs in the minds of the accountants, (Guba 1988:81). These constructs may be termed 'perceptions', which are defined as "neurophysiological processeses, including memory, by which an organism becomes aware of and interprets external stimuli", (Oxford Dictionary 1993:2,156). More simply, Brennan (1988:2) states that "perceptions have to be noted as observations of some reality 'out there'". Taft (1988:59), similarly adds that there are many meanings (or interpretations) to be given to an observable event. Thus, the observation of the reality, and the initial interpretation of that event, form the first level of perception. Both Brennan and Taft comment further. Brennan (p.2) explains that perception is strongly linked to reflection upon the reality, with the result that the perceiver may produce an 'acceptable' assessment rather than that which is perceived "to be the real situation". Taft (p.69) refers to an "immediate meaning" based on accepted/traditional response, influenced by "preference" grounded in previous knowledge of unknown worth. It is this second level of interpretation which emerges as the 'articulated' (Jarvis 1983:124) perception.

The focus shifts from the learner's perception of the learning event, as above, to considerations of *self* and *others* in relation to the learning event. This association is described by Jarvis (1983:4, 10), as an "interaction between 'ego' and 'alter'", although the socialisation process, which Jarvis describes in this instance, is one of teaching and learning. Rather, in this study, the *focus* of perception is upon one of three elements - firstly, the *learning* itself, as in the above paragraph; secondly, the individual learner as *self*, who has characteristics and capabilities to bring to the learning situation; and thirdly, *others*, who influence the learner to respond in some way in the learning situation. Such influence is explained by Houle (1980:72) who refers to

... the complex relationships between practitioners and users of services...(where) much learning is acquired through introspection and an awareness of what activities are favoured or resisted in the immediate subculture in which the practitioner works. Another source of changed practice is the degree of stress placed upon the profession by the community.....

Where such influence, as described by Houle, has been brought to bear on the learning situation, Jarvis (1983:78) explains that, where the emphasis is on the learner,

the learner may need to re-create the equilibrium....(and that) the learner's response to the balance may not be mindless and mechanical but may emerge as a result of the individual reflecting deeply upon the situation before deciding how to act.

This study acknowledges that the exploration of the accountants' perceptions of their learning in practice may be based on the first or second, or both, levels of interpretation. It follows that there can be "no absolute standards for judging interpretations" in this situation,(Taft 1988:69). The study also acknowledges that perceptions of learning may include reflections about the characteristics and capabilities of the learner and perceptions of how the learner has responded to the influence of others in the learning situation.

3.04.01 RESEARCH MODES OF ENQUIRY

To explore 'how accountants perceive their learning in practice', there must be a method of enquiry chosen which is suitable for eliciting the desired information and for considering that information in the light of desired objectives. Two major paradigms serving disciplined enquiry are contrasted by Guba and Lincoln (1988:81), with the major decision, as to which to follow, revolving around "the assessment of fit to the area under study rather than to any intrinsic advantages or disadvantages of either" (p.85).

The Naturalistic and the Scientific (or Rationalistic) paradigms are seen to differ in the approach to phenomena and in the interpretation of phenomena. More specifically, the differences centre around "the methods, sources of theory, knowledge types used, instruments, design and setting"; and around the interpretation of reality, the relationship between enquirer and respondent, and the influence of variables on absolute statements affecting "generalizability, causality and value freedom" (p.85).

3.04.02 *Naturalistic Enquiry*

Guba and Lincoln maintain that "It is the general contention of naturalists that the axioms of naturalistic enquiry provide a better fit to most social/behavioural phenomena than do rationalistic axioms" and "naturalist assumptions are more meaningful in studying human behaviour" (p.81).

Given that this study involves the exploration of human (accountants') perceptions, certain elements of naturalistic enquiry are more appropriate for incorporation in the design of the study. As adapted from Guba and Lincoln, these may be grouped in two categories and summarised. The first category is concerned with the role of the researcher; the second deals with the data and the participants.

- a) Concerning the researcher:
- Relationship between enquirer and respondent inevitably involves interaction and the influence of one upon the other, with the less desirable aspects being minimised and the advantages maximised.
- Values affect the decisions of the enquirer about the theory, structure and implementation of the enquiry, all elements of which should be in harmony. Methodology should be as value-free as possible to minimise disharmony.
- Instruments of enquiry are preferably humans, who exhibit "insight, flexibility and responsiveness...can use tacit knowledge and simultaneously acquire and process information".
- Standards of credibility, transferability, dependability and confirmability are currently being developed, but can offer no more at present than that the study is meaningful to those participating, (see 1.06, item 5)
- b) Concerning the data and the participants:
- Settings are not contrived, but "natural" from which state the data are gathered, via the human instrument, to formulate theory.
- Design is emergent, from a broad initial base, as the enquiry unfolds, with each new step dependent upon the preceding.
- Methods leans towards the qualitative, without excluding the quantitative.
- Reality Multiple realities, existing as constructions in the minds of people, which can only be studied in idiosyncratic fashion. Interpretations given to events are the focus of interest.
- Statements develop into 'working hypotheses' of an individual nature, which may or may not be generalisable/transferable in similar contexts. Differences are at least as important as similarities.
- Knowledge implied, inferred in the form of intuition and insight is admissable then reducible to expressable form.

Causality - is not demonstrable - only apparent patterns of influence may be inferred.

The relevance of the Naturalistic Enquiry method to this study may be summarised in sequential form by taking into consideration following elements of the method - the natural setting in which the survey is conducted; the relationship between the participants and the researcher; the design of the research; the method of, and values incorporated in, the implementation; the instruments of enquiry; the realities, experienced and perceived, by the accountants; and the interpretation, by the researcher, of those perceptions, expressed as statements indicating apparent patterns of influence, so that the study will be meaningful to those participating.

3.05 SUMMARY

The principal concept in this study is 'learning', with the secondary concept being the perceptions of learning applied to accountants' learning in practice. The review of the literature, to examine the relevant body of knowledge, revealed wide-ranging information on both 'perceptions' and 'learning', less so on 'learning' (as opposed to 'education') in the professions, and even less on 'accountants' in these matters.

To commence, it was necessary to establish a concept of 'learning', as the acquisition of knowledge, skills and attitudes (or 'attributes'), but not their mastery, in relation to those capabilities, which were the focus of ICAA recommendations. Knowledge is taken to refer to *technical* knowledge, and accounting skills are taken to indicate skill in the *procedures* relevant to accounting.

The review continued by examining the anticipated personal and situational variables, found to be 'psychological /developmental', 'part-time /full-time learning' and 'voluntary /compulsory learning', which the individual accountant might present to the learning process. It was found that the professional sub-group of accountants might narrow the range of variability even further.

The next stage of the review focused on motivation and receptivity, experience, behavioural and cognitive concepts, learning styles, and modes of learning incorporating self-directed learning.

Motivation was best described as a means to an end, or as an end in itself, together with receptivity as being in a state of readiness to learn. When expressed as part of a learning process, motivation was shown to combine with pro-active, re-active and co-active elements to illustrate the learning change. Pro-active learning referred to learning sought

of the learner's own initiative, re-active learning as a result of demand motivation, and co-active learning referred to learning generated as a result of associate interaction.

Interaction between associates was shown, not only to generate learning, but also to provide a forum for the exchange of experience, as an asset being shared between professional associates, and passed from senior to junior associate. The accumulation of a bank of experience was important, with the inference being that, for learning to occur, there must be a state of readiness and a bank of experience with which to compare the new experience. Thus, those who are well established in practice, would rely on experience to a significant degree, supplemented by new learning, and those new to practice would seek experience in addition to learning from other sources.

Learning, relevant to the acquisition of technical knowledge in the accounting environment, was shown to be linked to cognitive concepts, and to be linked to behaviourist concepts with reference to the development of interpersonal and negotiation skills. Thus the individual's learning style relates to the particular manner in which these concepts are balanced in the approach to learning situations, where new experiences, representing opportunitites to learn, can be evaluated and treated accordingly. Learning could be shown to suffer when the preferred learning style is at odds with the nature of the learning experience. The learning styles of accountants were shown, more likely, to be similar rather than distinctive, and would tend towards the 'mode of inquiry' for the creating of new ideas and processes, and to the 'mode of performance' insofar as it relates to the reflection upon events for the accumulation of experience. A specific mode of enquiry is that of self-directed learning, where it was shown that the learner must display certain characteristics in taking the initiative to acquire knowledge of a predetermined nature for more than very short-term benefit.

Next, settings for learning were examined and found to be classified according to degrees of 'formality' concerning 'education'. Since the literature did not make sufficient distinction between 'education' and 'learning' for the purposes of this study, it was necessary to establish a similar, but more relevant, guide to levels of 'fomality' applicable to learning settings, to be described as Formal, Nonformal and Informal.

Formal settings are those where the learning opportunities are initiated by others, as in attendance at a CPE course or complying with a requirement to attend a seminar. Nonformal settings are those which do not come under the description of 'formal' and are relevant to the accounting workplace, where the accountant decides upon the learning

activities to be undertaken. Informal settings are those where the learning occurs incidentally or spontaneously.

Finally, there was need to examine the literature to define perceptions, and to determine a method of exploring perceptions of the learning, which was to be experienced in taking up the learning opportunities. As shown, the perceptions exist only in the minds of people, who exhibit individual characteristics which have bearing on those perceptions. No matter how many persons take up the same learning *opportunity*, the *learning* experienced is just as individual as are the perceptions of that learning.

Two aspects of perceptions, being reflections upon observations of reality, were reviewed: firstly, the learner's perceptions of the learning taking place; and secondly, the learner's perception of him/herself and of others in relation to the learning taking place. The initial interpretation of the learning event formed the first level of perception, based on accepted/traditional response, and was subsequently seen to be influenced by personal preference grounded in previous knowledge of unknown worth. Thus, this second level of interpretation was shown to be the one more likely to form the stated perception.

The second aspect of perceptions was shown to relate to *self* and *others* and the learning event, where the individual learner, as *self*, brings characteristics and capabilities to the learning situation; and where *others* influence the learner to respond in some way in the learning situation. It was shown, that in an exploration of perceptions, no standards can be set for evaluating interpretations, either of the learning reality observed, or of the rôle played by *self* and *others* in that situation.

Finally, the review of the literature considered methods of enquiry appropriate to eliciting perceptions relevant to the objectives of the study. In preference to the Rationalistic method, the Naturalistic Enquiry method was examined and found to be more suitable for this study, when taking into consideration the elements of the method, now summarised in sequential form. The method acknowledges the natural setting in which the survey is conducted; the relationship between the participants and the researcher; the design of the research; the method of, and values incorporated in, the implementation; the instruments of enquiry; the realities, experienced and perceived, by the accountants; and the interpretation, by the researcher, of those perceptions, expressed as statements indicating apparent patterns of influence, so that the study will be meaningful to those participating.

With something less than a comprehensive body of knowledge on the learning of accountants to draw from, the review has attempted to identify an appropriate method of enquiry and to establish a base upon which to build compatible and harmonious structures relating to the particular aspects of accountants' learning and accountants' perceptions of their learning in practice. These structures or frameworks are to be found at 4.02.07 in the Methodology.

Chapter Four

METHODOLOGY

4.01 INTRODUCTION

The methods involved in this research, and the procedures followed in carrying it out, reflect its exploratory orientation, signifying that there is an intention to discover more about natural phenomena (the accountants' perceptions of their learning) rather than to confirm what is already known or suspected; ".... much can be learned from human subjects simply by asking for their perceptions" (Borg and Gall 1989:386). To this end, the researcher and the participants collaborate as 'discoverers' of unusual or unexpected data, while identifying characteristics of learning events occurring in practice. Collaborative research allows for "fundamental research to grow from modest questioning" (Broadfoot and Nisbet 1981:21), the results of which are intended to provide new insights and understanding about accountants' continuing professional learning (CPL). The naturalistic method of enquiry chosen, as summarised at 3.04.02, "involve(s) the participants in reflection on practices" (Kemmis 1988:46). According to Houle (1980:107), "The confrontation of these problems (read 'practices') is the most significant stimulus for continuing education (read 'learning') throughout the whole course of an active career".

This chapter consists of three parts, the research design, as follows, the ethical considerations, at 4.03, and the implementation, at 4.04. The design incorporates six tasks, at 4.02.04, which are required to be accomplished to satisfy the eighteen objectives, at 4.02.03. The instrumentation, for use by the participants in supplying the data, and for use by the researcher in interpretation of the data, is described at 4.02.05-07, followed by the identification of the sample participants selected from the population, together with the variables pertaining to the study's exploration, at 4.02.10. The implementation outlines the procedures involved in the data collection, processing and reduction in preparation for presentation and interpretation.

4.02.01 THE RESEARCH DESIGN

To enable the implementation of the research, the design must recognise and incorporate the tasks to be acomplished, provide means of collecting data, via instrumentation, so that the data will relate to the satisfaction of the objectives, and establish frameworks against which to organise and interpret the data for the purposes of the exploration. The research objectives are the first consideration in presenting the design.

4.02.02 The Research Objectives

The following restatement of the objectives, as listed at 1.05, now includes the specific requests posed to assist with the recognition and recording of the accountants' reflections about their learning situations in the practice of accounting. In particular, learning situations may be taken to refer to *occurrences* and *events*. An *occurrence*, in professional practice, has the potential to become an *event* for the purpose of this study. It does so when it is identified as being of significance as a *learning event* or a *demand* event. *Learning events* are pro-active events, where the accountant engages in self-initiated learning. *Demand events* are re-active events, where the accountant engages in learning in response to an external demand placed upon the accountant, as discussed at 3.03.04.

4.02.03 *Objectives and Related Requests (R):*

Firstly, the identification of:

1. Occurrences involving learning in practice, identified as 'demand events' or as 'learning events';

R. A brief description of selected *demand / learning events* experienced over the period.

2. The frequency of these events;

R. An estimate of frequency on a daily / weekly / monthly / less frequent basis - at the present / future and past stages of career.

3. The areas of knowledge, skills and/or attributes involved in the events.

R. A selection of one or more areas from: technical knowledge, accounting skills, negotiation skills, interpersonal skills, intellectual abilities, management abilities, personal attributes, or other specified areas.

4. The sources of demand events;

R. A selection of a principal source of demand, from: clients, associates (peers or superiors), professional association, other regulatory body, or other specified source.

5. The initiators of learning events;

R. A choice between: purely self-initiated learning, or a decision to learn arising from an external influence.

6. The strengths or deficiencies in knowledge/skills/attributes exposed by demand events;

R. An evaluation of self competence: adequate, adequate but incipient deficiencies revealed, more than adequate, or less than adequate.

R. A selection of one or more areas of knowledge, skills and/or attributes involved in the statement of adequacy.

7. The sources of strengths revealed; preferred sources of learning;

R. A selection of one or more sources from: clients, associates (peers or superiors), other specified persons, CPE courses, reference material (self-study), self-reflection, unplanned experiences, or other specified sources.

8. Deficiency correction measures taken;

R. A choice of 'none taken', or a selection of one or more remedial sources as identified at 7. above.

9. Settings actual/preferred for acquisition of knowledge/skills/attributes;

R. A selection of a setting from: Formal, nonformal, informal.

10. Reasons for choices involved in the above responses.

R. A reflection upon the factors involved which influenced the accountant to respond in the manner chosen. Discussion of this objective is contained within the consideration of each preceding objective.

Secondly, the identification of:

11. Event order of importance to the participating accountants:

R. A rating of events accompanied by a reason for the order of rating.

12. A selected event known to occur outside the study time-frame.

R. A description of the event as if it had occurred within the study time.

13. Discoveries about daily learning opportunities;

R. An appraisal of discoveries about learning in practice revealed by participating in this study.

14. Areas of learning in practice which require (more) attention;

R. An identification or areas of learning in practice perceived to be in need of attention.

15. Desired changes to ways of learning in practice;

R. An analysis of content / process or other matters concerning perceived, desired changes to learning in practice.

16. Aspects of learning in practice requiring emphasis to cope with change;

R. A comment upon the perceived need of the accounting profession to cope with future demands in a changing society.

17. Accountants' own 'perceptions' of learning in practice;

R. An open invitation for expression of 'perceptions'.

Thirdly:

18. The provision of opportunities for in-depth discussion between each participating accountant and the researcher concerning matters arising from the individual nature of the accountant's responses.

R. The collaboration of participants and researcher to discuss freely the perceptions arising from consideration of the responses.

4.02.04 The Research Tasks

The following restatement of the research tasks, as listed at 1.06, precedes the description of the instruments required to accomplish the tasks.

1. To construct an instrument, based on and supported by the literature, to be used by the participating accountants to assist with the promotion and systematic recording of reflections about learning situations in the practice of accounting.

2. To have the accountants record their responses on this instrument.

3. To construct a framework, based on and supported by the literature, against which to organise the responses.

4. To explore the responses in terms of the framework and of the areas of the Literature Review which were seen to be relevant to the study.

5. To develop a structure of meaningful statements resolving the exploration into the principal elements of the accountants' perceptions of their learning in practice.

6. To consider the elements as a means of answering the research question.

4.02.05 Instrumentation for the Research Tasks

Three instruments were found to be required to assist with the completion of the research tasks as detailed at 1.06, and are supported by an introductory guide for participants completing the study forms.

4.02.06 A Guide to 'Learning in Practice'

As a result of preliminary discussions during the trialling of a pilot instrument, it was felt necessary to offer a simple, brief, written explanation of the concept 'learning in practice' before asking the accountants to consider their 'learning in practice'. In a paper discussing the competency of Australian professionals, Brennan (1993:1) offers that "professionals appear to be very inadequate, or perhaps incapable of communicating, even at a very low level of sophistication, what it is they do as professionals in a global sense".

The guide, reproduced in Appendix B, and based on the Literature, outlines

- a) The distinction made between 'education' and 'learning' for the purposes of this study;
- b) The learning opportunities existing broadly in 'formal, nonformal and informal' settings;
- c) Learning 'occurrences' arising from interaction between the accountant and members of the accounting environment;
- d) The 'events' evolving from that interaction, being either 'demand (re-active) events' or 'learning (pro-active) events'. (The term 'co-active' evolved during the course of the study.)
- e) The recognition and value of unplanned or 'incidental' learning;
- f) The possible effect of the requirement to comply with CPE 'hours';
- g) The identification of learning events of significance to accountants.

4.02.07 The Instruments

The first instrument is constructed for use by the participating accountants to assist with the recognition and systematic recording of reflections about learning situations in the practice of accounting. It is based on the Literature, and in particular on a survey form by Brennan (unpublished), called "Refpro" ('The Reflective Professional'). It embodies the objectives and questions / requirements detailed above, see Appendix B, and contains four main sections - the first is a guide to 'learning in practice'; the second and third are forms for recording perceptions about 'demand events' and about 'learning events'; the fourth is a form for recording perceptions about 'learning in practice' as a review of the events already experienced.

The second instrument, Fig. 3, is a framework, called "The Learning Process in Practice in the Accounting Profession" for tracing the process of change, from the current situation to the eventual acquisition of new knowledge, skills and attributes. The path of change may take one of two directions, pro-active or re-active, depending upon the nature of the change agent - that is, a self-initiated 'learning event' or a 'demand event'.

The self-initiated event leads directly to new learning. The demand event takes a more involved route. A 'demand' requires a response - to demonstrate capabilities - which reveals a degree of adequacy to meet the situation's requirements. If there is a deficiency, the degree of deficiency is assessed; if there is previous learning and experience on the subject of the demand, the store of experience is evaluated in the light of the demand; if there is a new and additional experience, it is also evaluated as either being worthy or not worthy of acceptance as having potential for learning. As a practical example, some 'demand events' are highly promising in their potential for learning, while others consist of little more than 'knowledge transfer', this connotation depending upon the characteristics and approach to learning of the individual accountant. To some, 'demands' may be the sole stimuli for learning, while others may readily embrace self-initiated learning. 'Co-active' learning combines certain aspects of both the pro- and re-active elements, with the framework illustrating how all three are co-cordinated to bring about learning in a variety of settings and and from various sources.

Figure 3 is on the next page.

Fig. 3

The learning process in practice in the accounting profession.



The third instrument, Fig.4., is a structure for resolving this exploratory study into the principal elements of the accountants' perceptions of their learning in practice. The accountants' perceptions are influenced by factors in their accounting environment. This model may be compared with that of Jarvis (1987:25) illustrating change in the person.

Initially the structure recognises two main areas of perception: perceptions of *self*, (the individual accountant) and perceptions of *others*, (everyone else in the accounting environment), as discussed at 3.03.12. Self-perceptions are concerned with personal characteristics and capabilities; perceptions of others are concerned with the influence which *others* exert upon *self* in learning situations. An integration of the two areas of perceptions reveals how the participating accountants perceive their learning in practice.

Fig. 4 The individual accountant's structure of perceptions of learning in practice.

4.02.08 Delineating the Population

As the study is concerned with accountants' perceptions of their learning in practice, the sources of data must be accountants who are in the public practice of accounting, with 'public practice' indicating the status of 'professional accountant'. As the study is also exploratory and collaborative involving on-going interviews and discussions between participant and researcher, a sample was chosen which was considered most suitable for the implementation of the purpose of the study.

4.02.09 The Sample Selection

Criteria for selection recognised the nature of the study. It was decided that a number of between five and ten participants would provide adequate data and that the locations of practices should be in the one geographical area to be manageable for interviews and discussions. The area chosen was a large coastal country town in New South Wales, where entries in the yellow pages indicated there were nine partnership practices, several sole practitioners and two businesses operating as tax agents. Further enquiry revealed that two of the larger practices had merged, leaving eight partnerships, and that all but two of the sole practitioners either could not be contacted or in fact also worked for one of the partnerships. The tax two agents, by their own designation, were considered to be outside the description of 'professional practising accountant'.

The eight partnerships and two sole practitioners were approached to participate in the study. The sole practitioners declined, indicating that their time-available/responsibility level precluded them from participation, but also stated that they thought the subject of the study was particularly relevant to their situations. Of the eight partnerships approached, two declined as in each case one of the partners was on holidays. Each of the six remaining firms was represented by either a partner or a senior executive. This choice was at the discretion of the firms' principals following a brief verbal introduction to the nature of the study by the researcher. It is likely, but not confirmed, that the choice of representative was made on the same grounds which denied the participation of the sole practitioners.

4.02.10 The Research Variables

As discussed in the Literature Review, 3.03.02, writers such as Houle (1980) and Grotelueschen (1985) explain that professionals tend to display similar characteristics and 'resist some key discriminating variables'. Merriam and Simpson (1984:51) explain that due to the difficulty in controlling situations of human interaction, the methods used "necessarily must be modified in order to address research problems in education". This is particularly so in exploratory educational research where variables - such as 'independent, dependent, extraneous and intervening' (p.54) - which would otherwise be considered to explain differences observed in related data, do not readily assume such significance in this study. A further factor to consider is the part played by the researcher, discussed at the end of this section.

In this study, the narrow range of independent variables (being the selected characteristics of the six participating accountants) were: professional qualifications, years of experience since initial qualification, professional body and membership status, size and location of practice, age group and gender.

The dependent variables, arising from the independent variables, were firstly the selection by the accountants of workplace occurrences, which then became either 'demand events' or 'learning events'; and secondly, the 'perceptions of learning in practice' evolving from consideration of those selections.

Extraneous variables, which influence the dependent variables but are not easily identifiable, (Merriam and Simpson 1984:54), were the constraints placed upon the accountants' learning and perceptions of learning by influencing factors in the accounting environment. The principal factors were seen to be conflicting compliance requirements - for example, the information/advice prepared must satisfy a number of masters - and the management of the time-available / responsibility level factor, where a principal in the practice may have less time and more repsonsibility and a junior partner may have more time and less responsibility.

One class of intervening variable was observed during the study period, again relating to compliance. There are a number of taxation reporting deadlines to meet during the financial year, which vary according to the nature of the tax being levied, the nature of the paying entity and the degree of specialisation of the accountants' practices. Less specialisation in practice means more deadlines to meet, which means temporal distortion of perceptions, which means that for this study the distortion may become the recorded perception.

The part played by the researcher could be seen as another form of research variable. While Keeves (1988:636) suggests that the researcher should display a completely open mind on the subject, this tends to conflict with the concept of the researcher being a collaborator with the participant involving interaction and, by implication, change or influence, however subtle. The idea of "treatment variable" is proposed by Borg and Gall (1989:641), when referring to educational control/non-control groups, which can lead to a situation where results are caused by expectations (p.643). From the researcher's point of view in this study, it could be difficult to approach each new discussion in collaboration with each accountant 'value-free' because of the observations and comments from previous interviews. The researcher suggests that 'interaction variable' would be a suitable term to describe this situation.

4.03 ETHICAL CONSIDERATIONS

4.03.01 Research Ethics

Over recent years, there has been increasing recognition given to the rights of participants, whose contributions are used in research. Matters to be considered in the protection of these rights have given rise to the formation of a number of principles, of which those relevant to this study are summarised below. Borg and Gall (1989:84) advise that the researcher should consider the degree to which:

a) the study is ethically acceptable,

b) the participant will be exposed to risk,

c) the researcher retains the responsibility for ensuring ethical practice,

d) the researcher establishes a clear and fair agreement with the participants,

e) the methodology may use deception or concealment,

f) the participant has freedom to accept or decline participation at any time,

g) the participant is protected from discomfort of any nature,

h) the participant is kept informed and misconceptions removed,

i) anonymity is preserved.

4.03.02 Informed consent Form

Consent for the research was sought and received from the Advisory Committee on Ethics in Human Experimentation at the University of New England. A copy of the Informed Consent Form, for completion by each participating accountant, is at Appendix B.

4.04.01 RESEARCH IMPLEMENTATION

The implementation of the research is in three parts - the trialling of a pilot instrument for the collection of data, the use of the instrumentation for data collection procedures, including the discussions with the participants to complete the collection of data, and the initial data processing procedures.

4.04.02 Trialling the Instrument

A trial form was devised to assist with the recognition and recording of systematic thought about learning situations in the practice of accounting. When discussing this form with an independent senior-partner accountant from another geographical area, who selected and considered a number of demand/learning events, it became apparent that there was a need for a common understanding between the participant and the researcher about 'learning in practice' and that this should be in a simple, written form. A 'Guide to Learning in Practice', as described at 4.02.06, was developed to accompany the instrument. Thereafter only some minor adjustments to wording of the forms were required.

4.04.03 Data Collection Procedure

The study commenced with an introductory discussion with each of the participating accountants. The requirements of the study were outlined, preliminary questions answered and the forms left for the accountant to study in depth. These forms are reproduced in Appendix B.

The data collection forms consisted of:

- a sample two-page form for the recording of 'demand events';
- a sample two-page form for the recording of 'learning events';
- (more of each of these two samples to be copied as required);
- a two page 'review of events' form, to record comments and perceptions of the events.

Accompanying the above data collection forms were:

- a covering letter explaining the nature of the study, the procedures to be followed, the time anticipated for its completion, and an assurance of confidentiality;

- a guide to 'learning in practice';
- an anonymous 'professional details form';
- an 'informed consent' form to be signed.

If there were no further questions or explanations required, the accountant continued by completing the forms according to their interpretation of 'learning in practice'. The accountants were free to seek clarification of any point during the completion of the forms.

At an arranged time, the forms were collected with the intention that a brief discussion ensue at that point to highlight any particular item in the data. On three of the six occasions when the forms were collected, the accountants had been detained in interview with clients and the discussion was postponed to the scheduled in-depth interview at a later time.

In the time between collection of forms and subsequent discussion, the data and comments were transcribed onto computer for later treatment. The treatment was divided into two main sections: a) a computer analysis report of the independent variables (the selected characteristics of the accountants); and b) computer reports and transcriptions analysing and recording the dependent variables (the descriptions of the selected demand/learning events and the comments and reasons for the selections which give rise to 'perceptions').

A further interview / discussion was held at which the transcription of the dependent variables relating to that individual accountant was produced for consideration by the participant and researcher. Comments and emerging conclusions arising from the completed forms were analysed to ensure that the researcher arrived at a statement correctly reflecting the intentions of the participant. Only then could it be said that the data had been collected.

4.04.04 Data Processing Procedure

As indicated above, the treatment, or preliminary processing of the data took two forms, the first focusing on the selected characteristics of the six accountants, the second being a combination of computer analysis and transcription of the data provided by the accountants.

The second process, being the analysis and transcription of dependent variables outlined above, was necessary for a number of reasons. The first reason was one of practicality - the selections, comments, reasons and perceptions handwritten by the accountants would require reading many times during the study and this would be more easily accomplished if they were in computer printed format. The second reason was that the above notations could be presented, still word-for-word, but in a uniform manner. The method of computer entry employed permitted the responses of one accountant to be grouped together, or the responses of all accountants to a single question to be compared. In this way the situation is addressed, as outlined in the *Limitations*, at 1.09, where there is need to infer from an individual response how an identifiable group of individuals appear to

respond. A third reason for transcription was for ease of re-presentation of all, or selected, comments to the accountants who wrote them, when further discussions were required. The availability of multiple computer (and not personal) copies also assisted in this regard.

The computer program employed was one devised by the researcher specifically to meet the needs of this study, using the data-based Filepro applications development process. A summary of the programme is at Appendix D.

4.04.05 Data Reduction Procedure

The objectives of this study which relate directly to the data collected, are in two sections, 1 - 10 concerning the 'events', and 11 - 17 concerning the review and perceptions of those events. While Sowden (1988:518) suggests that data reduction consists of coding evidence by the use of key words or a numerical system which may result in the construction of a taxonomy or matrix, it is also acknowledged that "a further relevant aspect is the identification of important quotes that could be used in reporting the study". For this study, the data reduction is based on the key areas of the instruments at 4.02.07 with provision for the inclusion of illustrative quotations.

4.05 SUMMARY

The design of the enquiry had, firstly, to acknowledge the guidelines of the Naturalistic Method chosen, at 3.04.02, and secondly, had to meet the objectives of the study by incorporating a means of distinguishing the learning opportunities experienced, for the purpose of exploring the accountants' perceptions of their learning in practice. A systematic approach was required to aid the accountants in the reflection upon, and recording of, their involvement in learning experiences, with each succeeding step allowing for the expression of the accountants' increasing awareness of their learning in practice. The first instrument, at 4.02.07, was designed for this purpose.

Initially, the approach was concerned with specific learning experiences, or 'events' and introduced the concept of 'learning in practice'; the second step progressed to reflection about the total range of identified events, together with the inclusion of an 'extra' event, occurring beyond the survey time. Provision was made for comments in reply to questions of a more general nature on the subject, as well as opinions on allied matters to develop reflection. The third step allowed for discussion between participant and researcher to build a picture, for each individual accountant, of their perceptions of

learning in practice. It could be said, at this stage, "Let the exploration begin!", but, in fact, the beginning of the exploration commences with the identification of the first learning experience. As Guba (1988:81) declares, the design is emergent from the initial base, with each new step dependent upon the preceding as the enquiry unfolds, and with 'insight', translating as 'perceptions', being admissable as data and reducible to expressable form, (see 3.04.02).

Nevertheless, form and process were required to complete the exploration, so that the requirement that the study be "meaningful" to the participants, (Guba 1988:81), was satisfied. The second instrument, Fig.3 at 4.02.07, traces the process of change in the acquisition of knowledge, skills and attributes, while the third instrument, Fig.4, provides a framework to conceptualise accountants' perceptions of learning in practice.

The final step was concerned with the selection of the participant accountants, the implementation of the research design and attention to procedures involving the data in preparation for presentation and interpretation.