A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

by

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CO-PROMOTER: **Prof. Dr M.M. Nel**

DECLARATION

I hereby declare that the work submitted here is the result of my own independent investigation. Where help was sought, it was acknowledged. I further declare that this work is submitted for the first time at this university/faculty towards a Philosophiae Doctor degree in Higher Education Studies and that it has never been submitted to any other university/faculty for the purpose of obtaining a degree.

……. …….

M.J. Collender Date

I hereby cede copyright of this product in favour of the University of the Free State.

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M.J. Collender Date

DEDICATION

I dedicate this thesis to my wonderful family, who offered me unconditional love and support throughout the course of this thesis.

Particularly to my loving parents, both of whom believe in diligence, dedication, science, and the pursuit of academic excellence - there is no doubt in my mind that without their continued support I could not have completed this process.

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be motivated and encouraged to reach your dreams.

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ABET	:	Adult basic education and training
AEB	:	Adult basic education
ADD	:	Attention Deficit Disorder
CE	:	Continuing Education
CEU	:	Continuing Education Unit
CEUS	:	Continuing Education Units
CME	:	Continuing Medical Education
CPD	:	Continuing Professional Development
CVA	:	Cerebral Vascular Accident
ETD	:	Education, training and development
EPOC	:	Effective Practice and Organisation of Care
GBRSA	:	Gesondheidsberoeperaad van Suid-Afrika
HPCSA	:	Health Professionals Council of South Africa
HRD	:	Human Resource Development
NGO	:	Non-Government Organisation
NPO	:	Non-Profit Organisation
NQF	:	National Qualification Network
NRF	:	National Research Fund
OTA	:	Occupational Therapy Assistant
OTASA	:	Occupational Therapy Association of South Africa
OT	:	Occupational Therapist
OT-BOARD	:	Occupational Therapy Board
PDP	:	Professional Development Plan
RPL	:	Recognition of Prior Learning
SA	:	South Africa
UFS	:	University of the Free State
VPO	:	Voortgesette (voortdurende) Professionele Ontwikkeling

SUMMARY

Key terms: Adult education; adult education perspective; adult education principles; Continuing Professional Development (CPD); Delphi process; Mixed-methods design; model for CPD; needs analysis; Occupational Therapy.

In this research project, an in-depth study was done by the researcher with a view to compiling a model for Continuing Professional Development (CPD) in Occupational Therapy in South Africa from an adult education perspective. The Health Professions Council of South Africa (HPCSA) encourages CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also of improving competence and ultimately the performance of the health professional with an end benefit to the patient/client.

The problem that was addressed is the lack of a model for CPD in Occupational Therapy in South Africa. The overall goal of the study was to make a contribution to the effective and efficient implementation of the CPD system for occupational therapists in South Africa through identifying the CPD needs of occupational therapists and ultimately supporting health care in South Africa through education. The aim of the study was to develop a model for CPD in Occupational Therapy. It was, therefore, necessary to determine the needs for CPD of occupational therapists registered with the HPCSA with regard to content, cost, time, CPD activities, learning situations and mode of delivery in order to improve the effectiveness and efficiency of CPD programmes for the therapists if necessary.

An embedded mixed-methods design was used – a design in which one data set provides a supportive, secondary role in a study based primarily on the other dataset. The methods that were used and which formed the basis of the study comprised a literature review, and – as the empirical study - a questionnaire survey and a Delphi process.

The purpose of the literature review was to provide a background in order to develop the questionnaires and the context for the research problem, to establish the need for the research and to indicate that the researcher was knowledgeable about the area. The literature review focussed on CPD from an adult education perspective. The

purpose of the questionnaire was to do a needs analysis of CPD for occupational therapists and to determine the effectiveness of CPD activities concerning the acquisition of new skills, knowledge and professional behaviour. The development of the questionnaire was also structured in such a way as to provide both quantitative and qualitative responses from the occupational therapists. The purpose of the Delphi technique was to evaluate the criteria that could be used to compile a model for CPD. A modified Delphi process was used. Three rounds of the Delphi process were required in the present study. The panel of experts were requested to rate, rephrase and comment on the statements.

The premises and points of departure for the development of the model were outlined in addition to the benefits. The needs to be addressed by such a model received attention, together with the academic and administrative aspects for the compilation of the model. Challenges regarding the delivery, as well as recommendations made with regard to the model were provided.

The study was done to make a contribution to the continuous effective and efficient implementation of the CPD system for occupational therapists in South Africa, through identifying the CPD needs of occupational therapists and ultimately supporting health care in South Africa through education. The study could also serve as a directive for higher education institutions, for not all undergraduate and post-graduate programmes and curricula are necessarily built on adult learning principles. It might especially be the case in professional disciplines that the findings of the study could help bridge shortcomings in this regard.

The researcher is of the opinion that the research made a contribution to new knowledge. By developing the model the identified gap is bridged. The sound research approach and methodology ensured the quality, reliability and validity of the research. The completed research can form the basis for a further research agenda. Introduction of the model will encourage CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also improving competence and ultimately the performance of health professionals with an end benefit to the patient.

OPSOMMING

Belangrike terme: Volwasse-onderwys, volwasse-onderwysperspektief; volwasse-onderwysbeginsels; Voortgesette Professionele Ontwikkeling (VPO); Delphi-proses; Gemengde-metodeontwerp; model vir VPO; behoefteontleding; Arbeidsterapie.

Die navorser het tydens hierdie projek 'n in diepte studie uitgevoer met die oog daarop om 'n model saam te stel vir Voortgesette Professionele Ontwikkeling (VPO) in Arbeidsterapie in Suid-Afrika vanuit 'n volwasse-onderwysperspektief. Die Gesondheidsberoeperaad van Suid-Afrika (GBRSA) moedig VPO-verskaffers aan om leeraktiwiteite aan te bied wat in ooreenstemming is met onderwysbeginsels en groter leerderbetrokkenheid, met die oog daarop om nie net nuwe inligting in te win of kennis by te werk nie, maar ook om vaardigheid en eindelik die prestasie van die professionele gesondheidswerker te verbeter, met 'n eindvoordeel aan die pasiënt/kliënt.

Die probleem wat aandag geniet het, was die gebrek aan 'n model vir VPO in Arbeidsterapie in Suid-Afrika. Die oorhoofse doel van die studie was om 'n bydrae te maak tot die doeltreffende en doelmatige implementering van die VPO-stelsel vir arbeidsterapeute in Suid-Afrika deur die identifisering van die VPO-behoeftes van arbeidsterapeute en uiteindelik ondersteuning van gesondheidsorg in Suid-Afrika deur middel van onderwys. Die oogmerk met die studie was om 'n model vir VPO in die Arbeidsterapie te ontwikkel. Dus was dit nodig om, indien nodig, die behoeftes rakende inhoud, koste, tyd, VPO-aktiwiteite, leersituasies en vorm van aflewering vir VPO vir arbeidsterapeute wat by die GBRSA geregistreer is, vas te stel ten einde die doeltreffendheid en doelmatigheid van VPO-programme vir terapeute te verbeter.

Daar is van 'n ingebedde gemengde-metodeontwerp gebruik gemaak – 'n ontwerp waarin een datastel 'n ondersteunende, sekondêre rol speel in 'n studie wat primêr op die ander datastel gebaseer is. Die metode wat gebruik is en wat die grondslag van die studie gevorm het, het bestaan uit 'n oorsig – as empiriese studie – 'n vraelysopname en 'n Delphi-proses.

Die doel van die literatuuroorsig was om 'n agtergrond te verskaf ten einde die vraelyste en die konteks vir die navorsingsprobleem te onwikkel, om die behoefte vir die navorsing te bepaal en om aan te dui dat die navorser oor kennis beskik ten

opsigte van die veld. Die literatuuroorsig het gefokus op VPO vanuit 'n volwasse-onderwysperspektief. Die doel van die vraelys was om 'n behoefteontleding te doen van VPO vir arbeidsterapeute en om die doeltreffendheid van VPO-aktiwiteite rakende die aanleer van nuwe vaardighede, kennis en professionle optrede te bepaal. Die ontwikkeling van die vraelys is ook sodanig gestruktureer om sowel kwalitatiewe as kwantitatiewe response van arbeidsterapeute te verskaf. Die doel van die Delphi-tegniek was om die kriteria wat gebruik sou kon word om 'n model vir VPO saam te stel, te evalueer. 'n Aangepaste Delphi-proses is gebruik. Drie rondtes van die Delphi-proses is genoodsaak in die huidige studie. Die paneel kundiges is versoek om die stellings te evalueer, herbewoord en om daarop kommentaar te lewer

Die veronderstellings en vertrekpunte vir die ontwikkeling van die model is, bykomstig tot die voordele, uiteengesit. Die behoeftes waarin deur so 'n model voorsien moet word, het aandag geniet, tesame met die akademiese en administratiewe aspekte wat met die saamstel van die model gepaardgaan. Uitdagings ten opsigte van lewering, sowel as aanbevelings ten opsigte van die model, is voorsien.

Die studie is uitgevoer om 'n bydrae te lewer tot die voorgesette doeltreffende en doelmatige implementering van die VPO-stelsel vir arbeidsterapeute in Suid-Afrika, deur die identifisering van die VPO-behoeftes van arbeidsterapeute en eindelik om deur onderwys steun te verleen aan gesondheidsorg in Suid-Afrika. Die studie sou ook kon dien as rigtinggewend vir hoëronderwysinstellings, aangesien nie alle voorgraadse programme en leerplanne noodwendig op volwasse-onderwysbeginsels geskoei is nie. Dit mag veral in professionele dissiplines die geval wees dat die bevindinge van die studie sou kon dien om die leemtes in hierdie verband aan te vul. Die navorser is van mening dat die navorsing 'n bydrae gelewer het tot nuwe kennis. Die gaping wat geïdentifiseer is, is deur die ontwikkeling van die model oorbrug. Die deeglik begronde navorsingsbenadering en metodologie het die gehalte, betroubaarheid en geldigheid van die navorsing verseker. Die voltooide navorsing kan die grondslag vir 'n verdere navorsingsagenda vorm.

Die inwerkingstelling van die model sal VPO-verskaffers aanmoedig om leeraktiwiteite te voorsien wat ooreenstem met volwasse-onderwysbeginsels en groter leerderbetrokkenheid, met die oog daarop om nie net nuwe inligting in te win of kennis by te werk nie, maar ook om vaardigheid en eindelik die prestasie van die professionele gesondheidswerker te verbeter, met 'n eindvoordeel aan die pasiënt.

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

In this research project, an in-depth study was done by the researcher with a view to compiling a model for Continuing Professional Development (CPD) in Occupational Therapy in South Africa from an adult education perspective.

Adult learners have specific needs and characteristics for which provision has to be made in the designing of continuing professional development programmes.

The Health Professions Council of South Africa (HPCSA) encourages CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also of improving competence and ultimately the performance of the health professional with an end benefit to the patient/client (HPCSA 2009:4; HPCSA 2011:4). The CPD system is based on trust. The HPCSA believes that health professionals will commit themselves to meeting the requirement for continuing education in the belief that both they and their patients/clients will reap the benefits of ongoing learning and personal and professional development (HPCSA 2009:4; HPCSA 2011:4).

Ethical practice of health professionals requires consistent and ongoing commitment from all concerned to lifelong learning, and the updating and development of the knowledge, skills and ethical attitudes that underpin competent practice. This perspective protects public interest and promotes the health of all members of the South African society.

CPD is a continuous process outside formal graduate training that allows individual health professionals to maintain and improve standards of practice through the development of knowledge, skills, attitudes and behaviour (WFME 2002:31).

Andragogy is the study of adult learning theory. CPD is underpinned by andragogical concepts and those associated with reflective practice. These relationships are well-documented in the literature. Examples include descriptions of the importance of adult learning theory and its application to practice (Aspland 1996:139-149). Influential work thus far, for example, on experiential learning (Kolb 1984), learning styles (Honey & Mumford 1992) and reflective practice (Merriam, Caffarella & Baumgartner 2007) have contributed to the current understanding of the way in which adults learn in the workplace and apply that learning to their practice. An example of these adult learning concepts is offered by Kolb (1984), who argues that learning is a naturally occurring phenomenon and that the ability to learn is a proactive skill that allows educators to influence and shape our learning environment.

This study can serve as a directive for higher education institutions, for not all undergraduate programmes and curricula are necessarily built on adult learning principles. It may especially be the case in professional disciplines that the findings of this study could help bridge shortcomings in this regard. Aspects of adult education should be incorporated into post-graduate programmes.

The aim of this first chapter is to orientate the reader to the study. It provides background to the research problem, followed by the problem statement - including the research questions, the overall goal, aim and objectives of the study. These are followed by a demarcation of the study and highlights the significance and value of the study. Thereafter a brief overview of the research design and methods of investigation are presented. The chapter is concluded by a lay-out of the subsequent chapters and a short, summative conclusion.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

According to Fawcett and Strickland (1998:29), since the early part of the last century, the Occupational Therapy profession has experienced enormous growth and has seized opportunities for the advancement of the discipline. Previously met challenges (such as role autonomy, establishment of educational programmes, accreditation and

certification standards, and getting Occupational Therapy recognised as an essential service by role players and legislators) provide an important base for practitioners engaged in changing and innovating service delivery models. Occupational therapists are often over-extended and pulled in many directions as a balance is sought between payment, staffing, role boundaries, outcomes, and ethical issues. Assuring own professional competence, as well as that of those for whom one may have supervisory responsibility, is an issue that compels them to assume accountability for their actions.

As from 1 January 2007, every health care professional registered in South Africa was required to accumulate 30 Continuing Education Units (CEUs) per twelve-month period. Each Continuing Education Unit (CEU) will be valid for 24 months from the date that the activity took place (or ended, in the event of postgraduate studies) after which it would lapse. This means that practitioners should aim to accumulate a balance of 60 CEUs by the end of their second year of practice, and thereafter top-up the balance through additional CPD events as each consecutive 24-month validity period expires (HPCSA 2006(a):1). The new programme incorporates a number of major shifts from the old. These include allowing for a hierarchy of CPD activities viewed from a developmental perspective, with learning structures at three levels of activity. Firstly non-measurable outcomes (such as conferences); secondly measurable outcomes such as interactive skills workshop evaluation of the outcome; and thirdly activities associated with formally structured learning programmes such as postgraduate degrees and diplomas (HPCSA 2006(a):3).

Penalties for non-compliance could include practice-under-supervision, suspension, or being struck off the roll of practitioners. As an incentive, every health care professional received a bonus of 30 CEUs from the onset (HPCSA 2006(b):2). Practitioners may obtain all their CEUs at one level or a number of CEUs across different levels, depending on personal circumstances, individual learning needs and fields of interest. As was pointed out above, CEUs will be credited to the practitioner for two years from the date of accrual. The number of points to be collected per annum is 30 and will be valid for a period of two years. The purpose of this is to reach and maintain a level of 60 CEUs at all times.

The latest (January 2011) HPCSA document (HPCSA 2011:5) pertaining to "Continuing professional development guidelines for the health care professionals" re-confirms the requirements of the 2007 guidelines (HPCSA 2009:5) and states that at least 5 CEU's

should be for ethics, human rights and medical law (of which at least 10 CEU's at the end of their second year of registration, should be for ethics, human rights and medical law in order to reach and MAINTAIN a level of 60 CEU's at all times).

All eight categories of health professionals (including occupational therapists) must adhere to the official CPD guidelines for the health care professions (HPCSA 2009:1-19).

Some occupational therapists, however, are still unsure about the role and value of CPD. Adv. Boyce Mkhize, Registrar and CEO of the HPCSA, emphasises that these practitioners need to be encouraged to embrace the Continuing Professional Development philosophy so as to allow them to keep abreast of the ever changing trends and equip themselves with the latest information to allow them to conquer challenges their patients might bring to them (HPCSA 2006(a)).

One of the ways to motivate professionals might be to take their professional and adult learning needs into account and develop and offer relevant CPD programmes of quality that are based on sound adult education theory and principles, including focussing on content, learning situation, using the latest technology and mode of delivery.

In as far as CPD is concerned a further issue that was identified is that occupational therapists wish to pursue CPD activities, further training activities, relevant courses, post-graduate studies and so forth; however, very few or no suitable or clinically-relevant programmes (opportunities) are offered to address their needs and to afford them the opportunity to expand their scope and enhance their knowledge and skills in order to make a more meaningful contribution to their profession in general and more specifically to their field of practice.

1.3 PROBLEM STATEMENT AND RESEARCH QUESTIONS

The problem that was addressed is the lack of a model for CPD in Occupational Therapy in South Africa.

No recent (or any) study concerning a needs analysis for occupational therapists in South Africa could be traced as far as CPD is concerned. Research on the designing of effective learning for occupational therapists as adult learners is limited. Searches on

the NRF's website and the Nexus Database System (information regarding South African dissertations) did not produce relevant dissertations or research on Occupational Therapy with a view to compiling a model for CPD in Occupational Therapy that is based on an adult education perceptive. However, a number of dissertations/theses were found on CPD in other professions/disciplines. Examples of such scholarly work on CPD include the following: A needs assessment survey amongst diagnostic radiographers (Scholtz 2000); Factors that facilitate perspective transformation in continuing professional education (Mistri 2002); Needs and opportunities for post-graduate education and training programmes for the Optometry profession (Kriel 2003); CPD for educational psychologists (Schütte 2004); Needs of general practitioners for CPD in South Africa (Castleman 2004); Influence of CPD lectures on referrals in the medical profession (Rammile 2006); Integrating scholarship and CPD in the natural sciences at a South African university (Frick 2007) and A model to manage CPD for the alumni of a private higher education institution (Castleman 2007). The researcher also searched the Cochrane Library, Cochrane Effective Practice and Organisation of Care (EPOC) Group data-base, MEDLINE, EMBASE ERIC and Best Evidence Medical Education database to identify relevant articles.

Some sections in the dissertations/theses and articles were informative and helpful and are acknowledged and referenced as such.

In conclusion, there seemed to be no recent scientific assessment of the needs of occupational therapists in South Africa that could form the basis for a model for CPD in Occupational Therapy with regard to content, learning situation and mode of delivery, etc. that is based on adult education theory and principles.

In order to address the problem stated, the following research questions were addressed:

1. *How can CPD be conceptualised and contextualised from an adult education perspective, as the theoretical framework of the study?*
2. *What are the CPD needs of Occupational Therapy practitioners practicing in South Africa; what factors influence CPD; and what is the perceived effectiveness of the various CPD activities offered by providers?*
3. *What relevant criteria, based on the needs of adult learners and the principles of adult education, can be used to compile a model for CPD in Occupational*

Therapy in South Africa and how should the model for CPD is composed in order to be conducive to the development of occupational therapists as lifelong adult learners?

The research was carried out and completed based on these three research questions. The findings of the research will serve as the foundation for compiling a model for CPD in Occupational Therapy in South Africa from an adult education perspective.

1.4 OVERALL GOAL, AIM AND OBJECTIVES OF THE STUDY

1.4.1 Overall goal of the study

The overall goal of the study was to make a contribution to the effective and efficient implementation of the CPD system for occupational therapists in South Africa through identifying the CPD needs of occupational therapists and ultimately supporting health care in South Africa through education.

1.4.2 Aim of the study

The aim of the study was to develop a model for CPD in Occupational Therapy. It was, therefore, necessary to determine the needs for CPD of occupational therapists registered with the HPCSA with regard to content, cost, time, CPD activities, learning situations and mode of delivery in order to improve the effectiveness and efficiency of CPD programmes for the therapists if necessary.

1.4.3 Objectives of the study

To achieve the aim, the following objectives were pursued:

1. *Conceptualising and contextualising adult education and CPD via a literature study, in order to compile a theoretical framework for the study.*
   This objective addresses research question 1.
2. *Compiling a needs analysis of CPD for occupational therapists, identifying factors influencing CPD and determining the effectiveness of various CPD activities for the acquisition of new skills, knowledge and professional behaviour.*
   This objective addresses research question 2.

3. *Identifying a selection of relevant criteria for CPD in Occupational Therapy by using the literature study and questionnaire surveys, and then to Delphi (validate) these criteria with a team of experts.*
   This objective addresses research question 3.
4. *Compiling a model for CPD in Occupational Therapy in South Africa, with an adult education perspective – based on all the relevant literature cited, the findings of the questionnaire survey and the expert opinions on the selection of criteria submitted to the Delphi panellists as well as on the expertise and experience of the researcher.*
   This objective addresses research questions 1-3 in view of a holistic and scientific product.

1.5 DEMARCATION OF THE FIELD AND SCOPE OF THE STUDY

The findings of the study may be applied (after consultation and approval) in accredited CPD programmes by the HPCSA for occupational therapists in South Africa that is offered by accredited service providers.

- An Accreditor is a group or institution that is appointed by a Professional Board, once it has met the criteria set out by the HPCSA CPD Committee. The role of the Accreditor is to review and approve applications for the provision of CPD activities (within its profession's ambit) by organisations and individuals without accredited service provider status; to monitor these activities and to revise continuing education units (CEUs) allocated where the provider failed to comply with the rules and regulations of the CPD guidelines. Professional boards may delegate their responsibility for accrediting service providers to Accreditors with the mutual agreement of the Accreditor. The criteria and processes to be followed as well as the procedures for record-keeping are contained in the Criteria and Guidelines for Accreditors document (HPCSA 2009:1; HPCSA 2011:1).
- Accredited Service Providers are the profession-specific Higher Education institutions and departments, professional associations or formally constituted professional interest groups who meet the specified criteria and have been accredited by the Board or its designated Accreditor to present learning activities for Continuing Professional Development (HPCSA 2009:1; HPCSA 2011:1).

The study fits in the field of Higher Education Studies and deals with an adult education lens. Due to the application of the study in the field of Professional Development of Occupational Therapy, the study can be classified as being interdisciplinary.

Tight (2003:7) includes eight key themes or issues in his framework of research in Higher Education. This study embraces the 'Teaching and Learning' and 'Course Design' categories and may overlap with the 'Academic Work' category. Within the teaching and learning category, the subthemes of "student learning", "teaching in higher education" and "how to" genre are addressed – the latter refers to "literature that sets out to provide practical guidance and support on different academic roles and tasks" (Tight 2003:65). Within the course design category the relevant subtheme in the context of the study is "higher education curricula" and "technologies for learning". In the academic work category the relevant subtheme is "academic development" (read as professional development in this study), "academic careers" (read as professional careers in this study) and "academic roles" (read as professional roles in this study). The reason why the researcher includes the last category is the fact that academic work, academic career and academic roles do qualify for obtaining CPD points/CEUs.

The participants in the questionnaire survey in this study were the occupational therapists registered with the HPCSA on 1 March 2008. For the Delphi survey the participants were individuals who all have specific expertise in the field of higher education, Health Professions Education, Occupational Therapy and CPD.

In a personal context, the researcher in this study is a qualified occupational therapist and registered with the HPCSA. During the period after the completion of her Bachelor's degree she had the opportunity to interact with other health professionals during her community service year in a state facility. This was followed by locum work in private practice. After completing a Master's degree in Health Professions Education, she was exposed to international Occupational Therapy in the United Kingdom. She has gained wide experience in state and private facilities, nationally and internationally and also attended various CPD activities during these years – which led to an interest in professional development. After returning to South Africa she worked in Community Service Learning as co-ordinator of programmes and activities in Health Sciences and

there developed an interest in higher education, but with an emphasis on adult learning in professional contexts.

As far as the timeframe is concerned, the study was conducted between 2007 and May 2011, with the empirical research phase from 2008 – 2009.

1.6 SIGNIFICANCE AND VALUE OF THE STUDY

Until now, there was no model whereby occupational therapists specifically could be developed on a continuing basis. A model has been developed and designed in this study, with due consideration of the changing environment of education and training in South Africa and while taking adult learners' needs and characteristics into account.

As there seems to be no scientific assessment available of the needs of occupational therapists with regard to CPD, the value of the study will be realised in the contribution it will make via recommendations with regard to the content of programmes, learning situations, and the articulation of needs and programme objectives. Current CPD programmes are not necessarily satisfying the needs of therapists. By doing a needs analysis and then considering the results in terms of programme objectives, the compliance of occupational therapists to CPD will be supported and the attainment of CPD objectives enhanced. This will, in turn, have a positive impact on health care in South Africa.

Aspects of this research as far as adult education is concerned can also be of value to other higher education programmes.

1.7 RESEARCH DESIGN OF THE STUDY AND METHODS OF INVESTIGATION

1.7.1 Design of the study

A mixed-methods design was deemed mostly suitable for this study. Quantitative and qualitative approaches were used to complement each other; to provide a better understanding of the research problem; as well as to enhance the interpretability of the research findings.

The research is quantitative and qualitative in terms of the responses to the questionnaires by occupational therapists. The Delphi method that was used to develop the model is also both quantitative and qualitative in nature.

Babbie and Mouton (2001:49) point out that the quantitative paradigm brings a number of related themes to mind, which would include an emphasis on the qualification of construct - which is assigning numbers to the perceived qualities of things. Alternatively, quantitative research can also be defined as "a formal, objective, systematic process in which numerical data are utilised to obtain information" (Burns & Grove 1999:5). McMillan and Schumacher (2001:15) summarise this approach by making the following statement: "Quantitative research presents statistical results represented with numbers".

Mouton (1996:149) provides the following definition of qualitative research: "... studies that are usually qualitative in nature which is aimed to provide an in-depth description of a group of people or community. Such description is embedded in the life wills of the actors being studied and produced insider perspectives of the actors and their practices".

The open questions in both questionnaires (the questionnaire survey and the Delphi questionnaire) in this study had qualitative elements. Where quantitative and qualitative data complement each other, a mixed-methods approach applies (Creswell, Shape, Plano Clark & Green 2006:1; Johnson & Onwuegbuzie 2004:14; Yin 2006:41).

The mixed-methods researcher combines quantitative and qualitative strategies within a study by collecting both numerical and text data concurrently or in sequence (Ivankova, Creswell & Plano Clark 2007:260). In most of this study the qualitative data were subordinate to the quantitative data and was used to enhance the quantitative data. In Section E: Adult education, respondents had to give their opinion - as a mature, experienced person in a profession and as an adult learner - on factors influencing CPD and the effectiveness of programmes (cf. Chapter 3, 3.3.2.2). The qualitative data were analysed by the researcher. The data of the questionnaire survey were analysed separately and merged during the interpretation of the data.

Four basic types of mixed-methods are described in the literature, namely the embedded, explanatory, exploratory and the triangulation type (Creswell & Plano Clark 2007:67; Ivankova *et al.* 2007:63). The embedded type was used in this study.

The embedded type is used when one data set provides a supportive, secondary role. It means that both quantitative and qualitative data are collected, but one of the data types plays a supplemental role within the overall type. According to Creswell and Plano Clark (2007:67) this type of method is particularly useful when a qualitative component is embedded within a quantitative component.

The mixed-methods design followed in this study is described in more detail in Chapter 3.

1.7.2 Methods of investigation

The methods that were used and which formed the basis of the study comprised a literature review, and – like the empirical study – questionnaire survey and a Delphi process.

The research included a literature review, focussing on the conceptualisation and contextualisation of CPD from an adult education perspective.

The literature review was followed up with a questionnaire survey among occupational therapists in South Africa to do a needs analysis of CPD for occupational therapists and to determine the perceived effectiveness of CPD activities concerning the acquisition of new skills, knowledge and professional behaviour. The questionnaire is quantitative, but also included open-ended questions. The questionnaire was posted to the participants in the study.

In order to be able to identify the characteristics of preferred CPD opportunities and to explore possible relations among the variables in CPD, a quantitative approach (including open-ended questions) was applied. Aspects of descriptive research methodology were also incorporated, because of the approach to gather information on the needs of Occupational Therapy practitioners for CPD currently.

The target population was occupational therapists registered with the HPCSA on 1 March 2008. The sample design was a stratified sample utilising 400 subjects. This was used to ensure scientific correctness and a sample that would be truly reflective of the entire registered occupational therapy group. Data obtained was analysed by making use of the assistance of a statistician.

A Delphi survey was also used in this study to determine the relevancy, importance and usefulness of a number of criteria for CPD in Occupational Therapy. The target population was individuals who all possess specific expertise in the field of higher education, Health Professions Education, Occupational Therapy and Continuing Professional Development. The data obtained by Delphi questionnaires were analysed by the researcher. The open-ended questions were processed and interpreted by the researcher and the opinions and ideas of the expert respondents were used to adapt the formulated set of criteria for each subsequent round of Delphi. This process was repeated until 80% consensus or stability had been reached.

The aforementioned experts had to evaluate the criteria that could/might be used for a proposed model for CPD for Occupational Therapy. Expert rather than general or informal opinion is often sought in the development of educational policy, as decisions of this nature require critical thinking and reasoning. The Delphi technique provides a rigorous and systematic strategy in collecting and disseminating critical information (Clayton 1997:373).

The results from the literature study, the questionnaire and Delphi survey were used to compile a model for CPD in Occupational Therapy based on adult education perspectives.
The detailed description of the population, sampling methods, data collection and techniques, data analysis and reporting and ethical consideration are given in Chapter 3.

A schematic overview of the study is given in Figure 1.1.

FIGURE 1.1: A SCHEMATIC OVERVIEW OF THE STUDY

[Compiled by the Researcher, Collender 2010]

1.8 IMPLEMENTATION OF THE FINDINGS

This report containing the findings of the research will be brought to the attention of the Management of the Professional Board for Occupational Therapy as well as to the Committee responsible for CPD. It will furthermore be recommended that the model that was developed may be adapted to make it suitable for other Professions in Health Sciences as well.

The research findings will be submitted to academic journals with a view to publication, as the researcher hopes to make a contribution to CPD through this research study. The research findings will also be presented at conferences.

1.9 ARRANGEMENT OF THE REPORT

To provide more insight into the topic, the methods used to find solutions and the final outcome of the study will be reported on as follows:

In this chapter, Chapter 1, ***Orientation to the study,*** the background to the study was provided and the problem, including the research questions, was stated. The overall goal, aim and objectives were stated and the research design and methods that were employed were briefly discussed to give the reader an overview of what the report contains. It further demarcated the field of the study and the significance of the study for higher education and the professional development of occupational therapists.

In Chapter 2, ***Continuing Professional Development – an adult education perspective,*** the conceptualisation and contextualisation of adult education, learning transfer and professional practice, as well as CPD are discussed. Attention will further be given to the clarification of different concepts, adult development perspectives, adult learning theories, designing learning for adult learners, adult learning principles, strategies and technologies, educating educators of adults, learning transfer and professional practice, the purpose of CPD, Models of CPD, factors influencing CPD, criteria for effective continuing education and guidelines for CPD. This chapter will serve as the theoretical framework for the study.

In Chapter 3, ***Research design and methodology***, the research design and the methods applied will be described in detail. The data collecting methods and data analysis will be discussed. The Delphi technique, which was applied to gain ideas and opinions of experts on the research topic, will be described. This will include the way in which the Delphi questionnaire was constructed and the data processed.

In Chapter 4, ***Results and discussion of findings of questionnaire survey,*** the results of the questionnaire as data collecting method employed in the study will be reported and the findings discussed.

In Chapter 5, ***Results and discussion of findings of the Delphi process***, an exposition and discussion of the findings of the Delphi process will be provided.

In Chapter 6, ***A Model for Continuing Professional Development in Occupational Therapy in South Africa: An adult education perspective***, the model as the final outcome of the study will be provided, contextualised in higher education, and discussed in full.

In Chapter 7, ***Conclusions, recommendations and limitations of the study***, an overview of the study, conclusion, recommendations and the limitations of the study will be provided.

1.10 CONCLUSION

Chapter 1 provided the background and introduction to the research undertaken regarding the development of a model for CPD in Occupational Therapy in South Africa from an adult education perspective. The holistic model will serve as a possible framework and/or process for implementation which could be used to plan and design CPD programmes in Occupational Therapy.

The next chapter, Chapter 2, entitled ***Continuing Professional Development – an adult education perspective,*** will be a review of the relevant literature.

CHAPTER 2

CONTINUING PROFESSIONAL DEVELOPMENT – AN ADULT EDUCATION PERSPECTIVE

2.1 INTRODUCTION

Continuing Professional Development is a term that has become more prominent in recent years within the healthcare sector. The emphasis on lifelong learning, especially within professional practice, is a worldwide phenomenon. The meaning of CPD and its importance has gradually increased among all health professional groups as the demand for enhanced quality, efficacy and cost-effectiveness of service delivery has grown.

Professionals in all sectors need to keep abreast of the latest knowledge, skills, competencies and professional behaviour. Professionals as adult learners have different needs and as a diverse group necessitate special educational interventions. CPD should enable professionals to develop the qualities of self-directed, proactive and independent learning. By developing these abilities, the individual should be able to enhance their practice to the benefit of the patient and service provision.

In this chapter, CPD is conceptualised and contextualised from an adult education perspective. The following issues are dealt with, namely, the conceptualisation and contextualisation of adult education, learning transfer and professional practice as well as the conceptualisation and contextualisation of CPD from an adult education perspective.

For a schematic overview of the different aspects that will be discussed and that will constitute the theoretical framework to the study, see Figure 2.1.

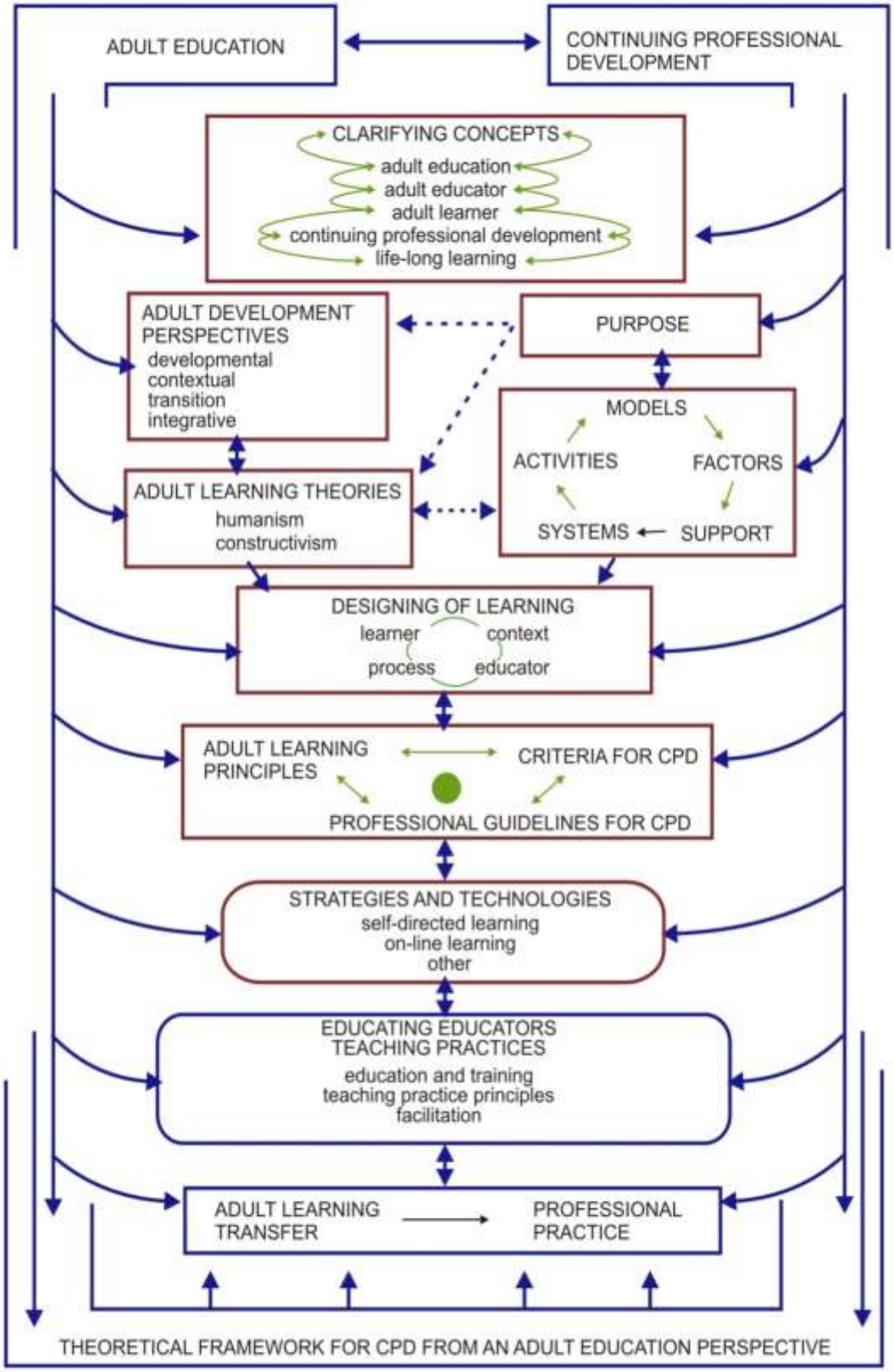


FIGURE 2.1: A DIAGRAMMATIC OVERVIEW OF THE DIFFERENT ASPECTS THAT WILL BE DISCUSSED

[Compiled by the Researcher, Collender 2010]

2.2 THE CONCEPTUALISATION AND CONTEXTUALISATION OF ADULT EDUCATION

2.2.1 Clarifying the different concepts

The adult education literature supports the idea that teaching adults should be approached in a different way than teaching preadults (adolescents and children). Adults have had more life experiences and are differently motivated in many ways. They are more self-directed in their learning and have a greater need to know why they should learn something than preadults.

The assumption that teachers of adults should use a style of teaching different from that used with children is based on "informed professional opinion; philosophical assumptions associated with humanistic psychology and progressive education; and a growing body of research and theory on adult education, development, and socialization" as emphasised by Collins (2004:1484).

Malcolm Knowles, who is considered the father of adult learning theory (Knowles 1970; 1980; 1984), used the term andragogy to describe the study of adult learning and distinguished adult learning from pedagogy, the study of how children learn. Initially, it was thought that pedagogy and andragogy were two distinct processes, but current theory sees the two processes on a continuum, with pedagogy on one end and andragogy on the other (Collins 2004:1485). What separates these two processes on the continuum is the quantity and quality of experiences the learners have when they enter the learning experience and the amount of control that the learners have over the learning process and environment (Pennsylvania Pathways: Professional Development:Online).

According to Feuer and Geber (1988:33) Knowles has gradually modified his position regarding the contrast between how preadults learn: "what he once envisioned as unique characteristics of adult learners, he now sees as innate tendencies of all human beings, tendencies that emerge as people mature".

The following concepts will be discussed, namely, adult education, the adult educator and the adult learner.

2.2.1.1 *Adult education*

According to Van Rooy (2001:2) the *education of adults* refers to the process of promoting and improving all the types of learning with which educators of adults and their learners may be involved. Adult education also refers to the learning activities engaged in by adults in either a formal or non-formal educational setting for the purpose of effecting personal change and growth. It, furthermore, also refers to the field of academic study that examines the discipline of adult learning and the delivery of learning programmes for adults and it is part of the collective term Education, Training and Development (ETD).

Knowles (in Jarvis 2004:45) defines *adult education* or andragogy as the "art and science of facilitating adult learning". It refers to adults, not because of their chronological age, but because of the responsibilities they have in society. According to Scholtz (2005:14) it is therefore a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about change in knowledge, attitude, values and skills.

Merriam and Brockett (1997:8) define *adult education* as the "activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception defines them as adults". From this general definition, the field of Adult Education generally professes to serve the broad purposes of social justice, individual self-development and workforce preparation and advancement for individuals and organisations (Elias & Merriam 1995:43).

The various forms of adult education are adult basic education, general education and development, continuing education, corporate training and university education. Freire (1999:64) states that the fundamental goal of adult education is to be "problem-posing": which ultimately enables learners to be "critical thinkers".

According to David Stein (2006:32), Associate Professor in Workforce Development and Education at the Ohio State University, Columbus, adult education was recognised during the past World War II era as an area of study focussing on adult learning primarily in home, educational and community settings. Over the past fifty years the study of adult education has remained, but the academic entity known as adult

education has lost its unique identity. Stein (2006:32) expresses the opinion that graduate programmes in adult education are going under the rubric of workforce development; the meaning and boundaries of adult education are becoming problematic.

Stein (2006:33) further distinguishes his view of adult education from the standpoint of others that embrace it as knowledge transfer or a programme for those who have achieved a chronological age or stage. He makes a distinction between those who teach adults and those who engage in adult education. He argues that knowledge transfer is necessary, but frames adult education projects as "inquiries concerned with understanding how adults come to ask questions concerned with understanding what for, why and whose purpose might be served by engaging in a particular learning or teaching activity". Adult education as an informal system should be the means by which adults acquire wisdom through critical thinking more than being used as the term to describe acquiring occupational skills.

Brookfield (1985:46) argues that adult education is to be distinguished from adult training, in which a set of previously defined skills, knowledge and behaviour are transmitted to trainees in a manner previously defined by the trainer. For a training course to be regarded as adult education it would have to have a willingness to consider alternatives to the prevailing or organisationally prescribed norms governing professional behaviour.

According to Hayes and Flannery (2000:18) adult education should be less about job training, personal enhancement or dealing with adult life transition and more about thinking, naming and acting in the world so as to bring about positive social change. The place of adult education in the learning of an adult is to confront, challenge and change perspectives. Adult educators support, through their instruction, giving a voice to the marginalised, sharing knowledge creation, building on the daily life experiences and providing an opportunity through the learning process to assist adults in confronting the realities of the workplace, their communities and the larger communities which influence and shape their daily lives (Hayes & Flannery 2000:18).

According to Beder (1989:41) adult education embraces four purposes, namely, helping adults change their social conditions, adjusting to societal and technological shifts by obtaining knowledge and skills, promoting better problem solving skills to deal

with life's challenges and promoting participation in the civic domain as critical thinkers and actors. Learning seemed to be a means rather than an end.

English (2005:91) is of the opinion that adult education may be a tool for revealing, challenging and expanding the opportunities for adults to understand hidden messages and values in state and institutionally sponsored learning opportunities. Adult education should not be used to fit adults to the social order but to trouble the order to change the social order so as to reduce or eliminate inequalities – a social justice perspective.

Adult education projects include education for social and political movements (English 2005:91), education for challenging inequality (Heany & Horton 1990:95) and education for promoting democracy – improving civic life (Stein & Imel 2002:96). The agenda of adult education is to help adults learn to see and act upon the inherent contradictions and hidden messages of postmodern society.

According to Edwards and Usher (1998:83; 2001:274) the focus of lifelong learning has shifted from humanitarian to economic objectives. It is taken for granted that lifelong learning could enhance employability in an uncertain, risky job market. People need to acquire knowledge and skills endlessly, since knowledge and skills change so rapidly. Nothing lasts permanently. The condition of lifelong learning is similar to the postmodern description of the condition of knowledge. Kang (2007:207) states that the discourse of lifelong learning potentially expands the theoretical explanation of adult education beyond pedagogical applicability, because there are many more things that we can learn in our lives than are taught at an educational setting (Kang 2007:207).

The emergence of human resource development (HRD) in the 1980s, which generally emphasises the workplace-side of adult education, has forced many adult education professionals to re-examine their field and, in some instances, re-examine their affiliation with the field (Jacobs 2006:21).

Although sharing many of the same historical roots and perspectives about adults and adult development, adult education and human resource development diverge in some critical ways.

Human resource development can be defined as the process of improving organisational performance and individual learning through the human

accomplishments that result from employee development programmes (Jacobs 2006:21). From this definition, human accomplishment, as opposed to adult learning *per se*, is the driver to achieve organisational outcomes. That is, learning is critical, but not always necessary for the desired human accomplishments to occur. This perspective contradicts the foundational perspectives of adult education: what is often lost in this perspective are the individual's sense of control over learning goals and decision-making about what should be learned in the first place. From an adult education perspective, HRD often appears to be overly functional and purposeful, imbalanced towards the needs of management and for some promoting the view of individuals as merely being "cogs" in a global capitalist grand scheme (Jacobs 2006:21).

In this study ***adult education*** is defined as the process of promoting and improving systematic and sustained learning which educators of adults and their learners are involved in, either in a formal or non-formal educational setting, for the purpose of bringing about change in their knowledge, attitudes, values and skills.

In the context of this study it refers, furthermore, to the process whereby health professionals (e.g. occupational therapists) are assisted to maintain and acquire new and updated levels of knowledge, skills, competencies and ethical attitudes that will be of measurable benefit in professional practice as well as to enhance and promote professional integrity, with the ultimate beneficiary the patient or client.

2.2.1.2 *The adult educator*

According to Cooks, Hackney, Jackson, Stevens and Zumwalt (2002:118) diversity as it relates to teacher-learner interaction can be categorised as four areas that impact on the humanistic educational process, namely:

- Adult educator/adult student interpersonal relationships as they apply to the instructional process;
- The effect of spirituality on the adult educator/adult student relationship;
- Interaction between the adult educator and adult student in a counseling setting, and finally;
- The effectiveness of adult educators in evaluating programmes for a diverse adult student population.

These authors (Cooks *et al.* 2002:18) research a humanistic approach to adult education.

The learning environment with its psychological and social aspects is greatly influenced by teacher-student interaction that is embedded with intricacies of power, influence and control. A psychological learning environment is defined as creating a climate in which both learners and teachers are able to engage in genuine exchange. According to Merriam and Brockett (1997:150) it recognises that learners do not come with a "blank slate", rather, they come with a range of life experiences – some of which can serve as possible learning resources and others (such as pressures, difficult work situations and domestic concerns) that can detract from learning.

The social environment is defined as centring on the culture of the teaching-learning setting. This is where it becomes essential to recognise the importance of factors such as race and sex in relation to how adult educators work with learners. Merriam and Brockett (1997:150) state further that the social environment is central to discussions of critical approaches to adult education because it emphasises the place of social context in the adult learning environment, rather than the individual's response to the environment; and, shows how diversity impacts teacher-student relationships that take place in this psychosocial environment.

It is important to recognise that diversity problems in the various forms of adult education (adult basic education, general educational development, continuing education, corporate training and university education) are associated with patterns of segregation, beliefs of white supremacy, issues of minority inferiority, inequitable distribution of resources, discriminatory pay practices, sexism and classism, in order to understand those who are different from ourselves (Cooks *et al.* 2002:119).

It has become clear that much of the work of redefining adult education and building a new, productive system rests on the shoulders of the adult educator. The adult educator must create an environment where everyone involved can do their best. This includes the developing and fostering of co-operative relationships and recognising and dealing with differences.

Cooks *et al.* (2002:121) describe the effect of spirituality on the adult educator/adult learner relationship. There are three aspects that facilitate spiritual growth and

informal learning in adults (educator and learner) and English (2000:29) summarises these as:

- A strong sense of self – "spirituality develops from a strong sense of self, without which we would have little inclination to move into the world".
- Care, concern and outreach to others – "A fully integrated spiritual person reaches beyond his or her self and acknowledges the interdependence of all of creation, appreciates the uniqueness of others, and ultimately assumes responsibility for caring and being concerned about other humans and the natural order".
- The continuous construction of meaning and knowledge – "Through the process of living everyday life we find relevance and meaning in our encounters with others and in our involvement in daily activities".

Enos (1997:29) describes the interaction of the adult educator and student (adult learner) and emphasises that counselling the adult learner is a critical component in adult education. The adult learner wants to be included in all phases of his or her education. The instructor is the partner, helper and facilitator. The humanistic approach to counselling and education focuses on personal growth with the student taking responsibility for his or her own development.

Three typical role-definitions of an adult educator (from a humanistic perspective) are:

- Teacher as Content Expert.
  The adult educator must be a master in the field. According to Tiberius (2001:1) adult educators' beliefs are shaped by their worldviews. It is diversity of Worldviews that guides the way adult educators think and instruct. There should be respect for the ethnicity, gender and age of the learner.
- Teacher as Skilled Performer.
  Teachers who assume the skilled performer role deliver information to mould their students and their primary responsibility is using skilled performances to make learning happen (Tiberius 2001:1).
- Teacher as Mentor.
  According to Daloz (1998:371) mentors support their students; they call out their inner voice, provide appropriate structure, express positive expectations, advocate and explain, challenge their students and provide vision.

One of the major questions that seeks to be answered as it relates to adult education in a culturally diverse society is, "How well are adult educators understanding and addressing the needs of a multicultural population?" This question can only be answered through rigorous evaluation of existing adult education programmes, including minimally the following key elements: definition of terms and evaluation criteria, programme accessibility and availability, and selecting evaluation participants" (Cooks *et al.* 2002:119).

Paulo Freire (1999:64) claims that one of the fundamental goals of adult education is to be "problem-posing", which ultimately enables learners to be "critical thinkers". "If this goal is in conflict with the goals of adult education programme developers, then what is the real goal? Are these goals serving the people or are they politically motivated? The goals of the adult education programme should always cater to the needs of the people being served" (Cooks *et al.* 2002:124). Cooks *et al.* (2002:120) refer to four categories of adult learners: the goal-oriented adult; the activity-oriented adult; the learning-oriented adult and the undereducated adult.

In this study the ***adult educator*** is defined as an adult, a skilled person and content expert who moulds their adult learners with the view to make learning happen through mentoring, providing appropriate structure, expressing positive expectations and challenging students and providing vision. In the context of this study it refers furthermore to a professionally qualified educator, a health professional or higher educationist who is a subject expert, mentor and role-model, and involved in education (higher education, including clinical education) and training.

2.2.1.3 *The adult learner*

There is little agreement on a definition of adult learners. Dean (2004:2) and Merriam and Brockett (2007:4) describe the adult learner from a physical (biological) perspective, as a sexually and physically mature person.

According to Buchler, Castle, Osman and Walters (2007:128), Gravett (2005:7) and Merriam and Brockett (2007:5) adult learners can be classified from a legal perspective based on their chronological age, which is 18 years in South Africa, but in terms of legislative procedures a mature-age learner is 23 years or older.

From a psychological perspective an adult learner is someone who takes responsibility for their own life (Gravett 2005:7). She also distinguishes adult learners on the basis of a social perspective. Adult learners in this group also have other roles than studying full-time; for example having to support a family and being economically self-sufficient.

Merriam and Brockett (2007:4) are of the opinion that the contemporary approach in defining adults is to consider the socio-cultural view, indicating that we need to take the society and culture as well as the specific historical time into consideration. From another point of view, Dean (2004:3) notes that adults are a diverse group and that we need to treat them with respect for their autonomy, although some may in our opinion not always exhibit all characteristics of adulthood. Merriam and Brockett (2007:5) concur when they state: "Adults are not necessarily mature. But they are supposed to be mature, and it is on this necessary supposition that their adulthood justifiably rests".

In summary, according to Gravett (2005:7), an ***adult learner*** is a person who can be classified as an adult and who participates in educational activities. Merriam and Caffarella (1999:197) state that, in general, an adult learner will be somebody whose main life task is not related to education; and who has many roles, such as worker, spouse, parent, etc.

In this study ***adult learners*** are defined as learners that are adults by definition (23 years or older using the South African legislative description), who bring accumulated experience with them into educational events and their readiness to learn is linked to their life roles and life tasks. In the context of this study adult learners are professionally qualified in Occupational Therapy as occupational therapists, taking responsibility for their own life, with other roles than studying full time, but who also participate in continuing educational/professional development activities.

Occupational Therapy is a skilled treatment that helps individuals achieves independence in all facets of their lives. It gives people the skills necessary for independent and satisfying lives. Occupational therapists work with the disabled, the elderly, new-borns, school-aged children, and with anyone who has a permanent or temporary impairment in their physical or mental functioning. Occupational therapists help with rehabilitation of neuropsychological deficits including memory and attention as well as motor function, sensory function, and interpersonal skills (HPCSA 2010).

In summary, the concepts of adult education, the adult educator and the adult learner were clarified. These concepts were also contextualised and defined within the study to give the reader a clear picture of their relevance to the study [Cross-referencing to this section will be done in Chapter 6].

2.3 ADULT DEVELOPMENT PERSPECTIVES

With a view to understanding how adult education perspectives underpin continuing education and professional development, it is important to describe the various stages of adult development.

With her doctoral thesis, Massyn (2009) delivers scholarly work on learning design in different modes of delivery in an adult learning programme and provides a detailed discussion on adult development, learning theories and how to design learning for adults.

As background to this study, the researcher made extensive use of Massyn (2009) as one of her main sources.

Massyn (2009:113) states that the various adult development perspectives are important for an understanding of how adults learn, because the behaviour of adults is influenced to a large extent by their development. She bases her argument on the work of Knowles, Holton & Swanson (2005:220-221).

Massyn (2009:114) discusses four major perspectives and highlights prominent theories in order to clarify each perspective using terminology, for the various perspectives based on that identified by Schlossberg, Walters and Goodman (1995). The four perspectives are the developmental, contextual, and transitional perspectives, as well as the integrated approach, as identified by Merriam *et al.* (2007:305).

2.3.1 Developmental perspective

This developmental perspective – a popular perspective on adult development - regards adult development as consecutive stages that mark the individual's development. It is subdivided into age theories, stage theories, and constructive-development theories (Massyn 2009:114).

2.3.1.1 *Age theories*

Age theories focus on the transitional periods (tasks) that are linked to certain ages in the development of an adult. The most popular theory in this perspective is Levinson's life-task development model (Massyn 2009:115). According to this theory, a person's chronological age is used to characterise periods of stability and transitions. In periods of stability one creates and maintains one's life, while it is questioned in periods of transition (Merriam *et al.* 2007:307-308). Levinson identifies three main eras, i.e. early, middle and late adulthood. The stages follow a specific sequence and each stage is characterised by its own developmental tasks (Schlossberg *et al.* 1995:9).

According to Levinson's life-task development model, the population (the occupational therapists who have taken part in the questionnaire survey) in this research study falls in the later stage of early adulthood with most respondents in middle adulthood and only a few in late adulthood (cf. 2.3.1.1).

2.3.1.2 *Stage theories*

The central concept in stage theories is the resolution of crises in a person's life (Schlossberg *et al.* 1995:9, 11). The most influential theory in this regard is Erikson's theory on psychosocial development or identity development (Massyn 2009:116). Erikson regards the resolution of the crisis at each stage as influential in terms of how the individual will handle the stages that follow. If an individual can work successfully through a stage it can provide a certain measure of strength at that specific stage, while unresolved crises will result in a negative psychosocial outcome. At each stage the resolution of the crises will be critical in the development of the individual but the individual will be able to revisit and redefine previous issues at later stages (Massyn 2009:116). Erikson identifies three stages that specifically relate to adulthood, namely young, middle and late adulthood. Craig (1996:59) and Knowles *et al.* (2005:225) refer to young adulthood (19-25 years), middle adulthood (25 – 65 years) and late adulthood (65 years+).

The middle-adulthood stage (25-65 years) as described by the above-mentioned authors, may be relevant as the study population in this study falls in this stage - sometimes battling as professionals with the questions, 'what can I offer upcoming generations?', and, 'how can I ensure caring professional behaviour?' At the end of

health professionals' working life most of them will find contentment and satisfaction through their life's work.

2.3.1.3 *Constructive developmental theories*

Constructive developmental theories focus on the progressive development of individuals through the construction of meaning as they move through the various life stages (Massyn 2009:117). The process of progressive development, finding what new challenges entail, leads to more complex ways of understanding the world and increases the individual's awareness of their own abilities (Ross-Gordon 2003:46). Taylor, Marienau and Fiddler (2000:46) describe Perry's theory as an example of constructive-developmental theories. Perry's theory clearly indicates the progressive development of an individual in terms of their intellectual development. He points out that as adolescents move to adulthood, their thinking develops from regarding the world as dualistic (either right or wrong) to accepting various perspectives (multiplicity-relativism), but still without insight in the opposing viewpoints, to the final category of commitment where the individual accepts the responsibility that goes with the choices they make (Massyn 2009:117).

Healthcare professionals have to develop intellectually as individuals accepting responsibility for the choices they make – in their own life, but also in the lives of their patients. Occupational therapists, when they qualify, may not yet be in this final category of development; they might be for example only 21 years of age and still need to develop further as an adult. Adult educators must take this fact into consideration when planning CPD programmes as far as their role as adult educator, mentor and counsellor is concerned.

2.3.1.4 *Biological approach*

According to Massyn (2009:117) the biological approach deals with the change in the biological and physical make-up of an individual through interaction with the environment. This approach considers aspects like life expectancy, health and the deterioration of the senses and the nervous system, which influence adults' vision, hearing and reaction time as they get older. These changes are individual, but biological deterioration can be minimised with the assistance of technology, with little effect on learning.

The contribution of the developmental perspective to learning lies in acknowledging the impact of development on the life tasks of the adult, which, in turn, provides clues to their motivation (Massyn 2009:117). Knowles (in Merriam *et al.* 2007:308) regards developmental tasks as an indication of a "readiness to learn" that would cumulate to a "teachable moment" where adults will be motivated to learn given the challenge that their particular developmental stage presents. This is an important aspect to consider when planning CPD-programmes for adult professional learners.

2.3.2 Contextual perspective

The contextual perspective is based on societal (race, ethnicity, age, gender, etc.) influences on the development of an individual. This approach takes into account the expectations of society - which an individual should conform to certain social roles in that specific community; for instance, when certain life events should take place (Merriam *et al.* 2007:312-314). The focus is on the "individual and cultural events" in the individual's life, such as marriage, birth of a child, or death of a loved one (Merriam & Brockett 2007:144).

According to Neugarten (in Merriam *et al.* 2007:314), life events happen off-time or on-time. Events that happen off-time (when they are not commonly associated with a specific age/stage) result in a crisis that would not have been experienced as a crisis if it happened in-time (Massyn 2009:118).

From a contextual perspective of adult development, information on life events provides the adult educator with knowledge of the influence of certain life events on individuals and on their development and learning (Smith 2009:28-29). This perspective has to be taken into account to understand the needs of the learner during CPD-planning.

2.3.3 Transition perspective

This perspective views adult development as a process of opportunities for development and growth focussing on life events, expected or unexpected, that lead to change.

Schlossberg *et al.* (1995:26-28) emphasise that the focus is on the transition(s) that the adult is confronted with. Transitions are regarded as "anticipated or unexpected events or non-events that result in a change in relationships, routines, assumptions and/or roles e.g. marriage, not having a baby (non-event)" (Schlossberg *et al.* 1995:19).

Homes and Rahe (in Smith 2009:27) listed a number of life events that can lead to stress in an individual. Illness or stress can develop based on the number of stressful events that happen to an individual. It is important to note that it is not just the life event that leads to stress or anxiety, but that the meaning attached to it and the reaction to the event will determine the level of stress or anxiety (Massyn 2009:119).

The meaning attached to events, such as job insecurity, changes in health or behaviour of family or patients, changes in work conditions and quality of services, as well as increasing responsibilities, can influence the health professional and this may have an influence on him/her as adult learner and their learning and professional practice.

2.3.4 Integrative perspective

Massyn (2009:121) indicates that Taylor *et al.* (2000:10-11) point out that all adult development theories have four elements in common, namely interaction with the environment, differentiation and integration, a variable process, and the reframing of experiences. The environmental interaction indicates that development takes place in a social setting – how an individual assigns meaning to an event is influenced by the environment and culture. Differentiation and integration are similar to the concepts of the transition and stability phases. Taylor *et al.* (2000:11) indicate that disintegration provides opportunities for the learner to search for alternatives that can lead to integration. The variable process refers to the fact that although all individuals develop, it will not be at the same time for everyone. Development is dependent on experience and opportunities - so that the individual can challenge their existing frameworks (Merriam *et al.* 2007:314). The reframing of experience is the fourth element, which refers to how adults view their lives, and is formed during childhood and adolescence and influence how a person perceives and interprets experiences from the environment. Sometimes individuals reframe these experiences in such a way that they result in development (Massyn 2009:122).

Massyn (2009:122) states that the importance of adult development perspectives is that it provides the educator with knowledge of the life circumstances of adults that lead to a need for further learning, formal or informal. In some instances certain life events bring adults to the formal learning process. In other instances it is the learning process that helps the development occur (Merriam & Brockett 2007:143, Taylor *et al.* 2000:337).

According to Knowles *et al.* (2005:222) the challenge for adult educators is to understand development well enough to recognise which dimensions are most relevant to a particular group of learners in a particular learning situation. For this study it is the occupational therapists undergoing continuing professional development.

In summary, this section dealt with the various development perspectives and how it can be made applicable in CPD training for occupational therapists [Cross-referencing to this section will be done in Chapter 6].

2.4 ADULT LEARNING THEORIES

In this section the relationship between the learning theories (behaviourism, cognitivism and constructivism) and the adult learning theory (humanism) are discussed.

According to Massyn (2009:123) "behaviourists regard learning as changes in overt behaviour, while cognitivism is more concerned with the cognitive changes that take place when learning occurs. Humanism also takes this cognitive dimension into consideration, but focuses on the affective dimension. They reject the behaviourist notion that behaviour is determined by the environment, but supports the belief that human beings are in control of their own lives".

The most prominent theories of adult learning have humanism and constructivism as a foundation, and will be summarised from Massyn's (2009:125-140) exposition in her thesis.

2.4.1 Humanism

Humanism emphasises the development of the individual and a learner-centred approach-meaning takes place through interaction and reflection. Andragogy, self-directed learning and transformational learning will be discussed in relation to adult learning.

2.4.1.1 *Andragogy*

According to Knowles *et al.* (2005:68) and Merriam and Brockett (2007:136) the assumptions underlying andragogy, the study of adult education, are:

- Self-concept of the learner: An adult's self-concept is based on his/her ability to take responsibility for his/her decisions and life. Adults want acknowledgement that they can direct their own lives, and will withdraw in a learning situation that does not acknowledge their self-directedness. According to Knowles *et al.* (2005:6) adult learners can be insecure and facilitators need to support such learners to develop from being dependent to becoming self-directed learners. Occupational therapists as adult learners need to take responsibility for their learning and should be actively involved in the learning process, also in the CPD-learning situation.
- Prior experience of the learner: Adults bring their own experiences to the learning environment; their experiences provide individual differences and comprise differences in terms of background, motivation, needs, interests and goals. These experiences can have a negative influence where adults have preconceived ideas that require sensitivity when challenged. Occupational therapists as adult learners bring a vast array of experiences to the learning situation. These experiences determine their self-identity as described by Knowles *et al.* (2005:65).
- Readiness to learn: Adults develop a readiness to learn when they need specific knowledge or a skill to cope with certain situations in their lives. Developmental tasks associated with different life stages provide a rich source of information on the readiness of adults related to specific knowledge or skills (Knowles *et al.* 2005:67). Developmental stages of the respondents in this research study stretch over several ages or stages and they have a large base of specific knowledge, competencies and skills.
- Orientation to learning: Adults are more life-centred, or as Knowles *et al.* (2005:67) put it, task- or problem-orientated. Occupational therapists as adult learners are

motivated to learn if they feel that the learning can assist them in their lives – if they can see the practical value of the knowledge for themselves or their patients.

- Learners need to know: Adults first want to see the value of learning something before they will engage in the task (Knowles *et al.* 2005:64). Occupational therapists doing CPD as adult learners will be "relevancy-orientated" (Knowles *et al.* 2005:64) and will emphasise that the learning material must be applicable to their work or life roles.
- Motivation to learn: The most important motivators are internal to the individual and can include job satisfaction, self-esteem and quality of life (Knowles *et al.*2005:68). Occupational therapists do CPD as adult learners to keep up competencies and knowledge or to obtain new knowledge and skills with a view to better patient care.

2.4.1.2 *Self-directed learning*

Self-directed learning can be seen as the process in which adult learners take control of their own learning by identifying their learning needs, deciding on their learning goals, recognising the appropriate resources, implementing learning methods and strategies, and evaluating their progress (Brookfield 1995:2, Merriam *et al.* 2007:106).

Caffarella (1993:25-26) explains that self-directed learning is "self-initiated" and that the learner manages his/her own learning; that personal autonomy is assumed, as well as that the learning situation must be designed to provide more learner control.

Merriam *et al.* (2007:110) are of the opinion that self-directed learning can be seen as a process of learning; they divide the various models into three categories, namely linear, interactive and instructional models. Massyn (2009:128) argues that the linear models regard the learning process as a series of steps that the learner works through to reach goals in a self-directed manner, while interactive models do not see the learning process as well-planned and linear, but rather depending on certain factors like the opportunities in the individual's personality and the environment. The instructional models, on the other hand, integrate self-directed learning into programme and teaching activities, specifically aimed at formal settings.

Massyn (2009:129-130) explains two models regarding self-directed learning as follows:

- Garrison's model on the dimensions of self-directed learning. This model is an interactive ("collaborative constructivist") and multidimensional model based on three components: self-management (control), motivation (entering the task) and self-monitoring (responsibility) (Knowles *et al.* 2005:187). Self-management takes the social environment into account, which includes the learning materials and learning collaboratively. While motivation and self-monitoring both focuses on cognitive processes, motivation focuses more on the cognitive processes that will motivate the individual – not only to engage in self-directed learning, but also to complete the tasks. The adult learner has to take responsibility through critical and reflective thinking.
- Grow's staged self-directed learning model. This model is based on the assumption that not all learners will exhibit the same degree of self-teaching and personal autonomy and that in certain learning situations; some learners will need various kinds of support due to variances in competence and preferences. The educator can teach the learner to become more self-directed by matching the teaching style with the student's current stage (Knowles *et al.* 2005:187, Merriam *et al.* 2007:117-118).

2.4.1.3 *Transformational learning*

According to Massyn (2009:132) transformational learning approaches developed from constructivist viewpoints. She believes that dialogue and critical reflection are necessary for transformational learning, while social change is an outcome of transformational learning. These approaches also share three key concepts, namely experience, critical reflection and development (Merriam *et al.* 2007:144). Experience is seen as the starting point of the transformational learning process and is used in many ways to lead to critical reflection of the learner's assumptions. Critical reflection, in turn, is seen as the cornerstone of effective learning. In transformational learning, the outcome of utilising experiences and reflecting on these experiences would lead to individual development. Development is the growth of the individual through change, which is congruent with the humanistic viewpoint (Merriam *et al.* 2007:144-149).

Andragogy, self-directed learning and transformational learning focus on the idea in humanism of developing the potential of the individual. It is important to use adults' prior experiences, making learning relevant to real life and the importance of reflection in development. Massyn (2009:133) states that the three components are closely related to three other theories in adult learning, namely experiential learning, situated

cognition and critical reflection: from a learning theory perspective these three theories support constructivist principles and are important in adult learning. Two of these, experiential learning and critical reflecting, together with self-directed learning and meta-cognition have been said to be unique and exclusive to adult learning.

2.4.2 Constructivism

Learning occurs through the construction of meaning – an active process – and accentuates what students do in constructing knowledge. It is based on the experiences and prior knowledge of the learner as well as the context in which learning takes place. Critical reflection, situated cognition and experiential learning will be discussed in relation to adult learning.

2.4.2.1 *Critical Reflection*

Taylor *et al.* (2000:27) define reflection as activities in which the individual engages to explore his/her experiences in order to lead to new understandings and appreciations. It is the reflection on the experience that facilitates the learning (Taylor *et al.* 2000:26). Reflection is not only used by adults to visualise how to apply information, but also to form a holistic view of the learning content. Collaboration assists them in comparing their views with those of others (Dobrovolny 2003:2).

Two types of reflection, namely reflection-on-action (that takes place after the experience) and reflection-in-action (while you are in the experience) are described in the literature (Merriam *et al.* 2007:174). Of these two, reflection-on-action is used more generally in educational settings.

Merriam *et al.* (2007:145) describe three kinds of reflection, i.e. content reflection (thinking of the actual experience), process reflection (thinking about ways to deal with the experience) and premise reflection (examining beliefs, assumptions and values about the experience). Of these three only premise reflection, where one challenges long-held beliefs and assumptions, will lead to transformative learning (Merriam *et al.* 2007:145). Taylor *et al.* (2000:48) argue that critical reflection fosters an in-depth approach to learning.

2.4.2.2 *Situated cognition*

Merriam and Brockett (2007:156) point out that the three key elements of situated cognition are that learning and thinking are social activities; that the learner's learning and thinking ability are determined by the tools available in the situation; and that interaction in the learning situation determines thinking and learning.

According to the situated cognition approach, educators cannot assume that learning takes place through abstract lectures or that one can provide context-neutral information to learners. Neither can it be assumed that learning will be transferred to different settings. Learning needs to be contextualised in complex real-life settings and learners need to understand these settings. If educators wish to enhance transfer of learning, they need to stipulate these links to learners (Artess 2003:4; Massyn 2009:136).

2.4.2.3 *Experiential Learning*

Experience plays a central role in adult education (Knowles *et al.* 2005:197, Merriam *et al.* 2007:161). Gravett (2005:15-16) indicates that experience is used in various ways in adult education, for instance, in the beginning of the learning process by looking at prior knowledge, using experiences to link to and reflect on new knowledge, and also to create learning experiences where new knowledge could be tested, evaluated and adapted.

Kolb's model that focuses on experience is based on a constructivist approach, where learners construct knowledge through reflection on their experiences and interactions with others to create deep learning (Gravett 2005:14, Merriam *et al.* 2007:163, Taylor *et al.* 2000:23). Kolb (in Knowles *et al.* 2005:197) describes learning as the process whereby knowledge is created through transformation and experience. He further states that learning is a continuous process grounded in experiences (Merriam *et al.* 2007:161).

Kolb's model is cyclical and integrates four dimensions that are divided in two main categories by Taylor *et al.* (2000:23-24). The four approaches to learning (concrete experiences, abstract conceptualisation, active experimentation and reflective observation) are divided in two main categories, namely grasping experience (on a

vertical axis) and transforming experience (on the horizontal axis). According to Kolb (in Taylor *et al.* 2000:24), for learning to take place, the learner needs to work through all four dimensions of the cycle - it does not matter where in the cycle the learner starts. By implementing Kolb's model, educators can address individual differences, because various learning styles are accommodated in the learning process. Style variety creates awareness of the diverse responses of learners to their experiences.

Kolb and Kolb (2005:194) describe experiential learning as a holistic process – and not a product – that concerns the interaction between the learner and the environment. It is constructive in nature, and includes relearning as well as reflection, thinking and feeling during the learning process.

In summary, this section dealt with the adult learning theories, focussing primarily on humanism and constructivism [Cross-referencing to this section will be done in Chapter 6].

2.5 DESIGNING LEARNING FOR ADULT LEARNERS

To capture the different approaches and perspectives to adult learning, Merriam and Caffarella (in Kiely, Sandmann and Truck 2004:18) developed a conceptual framework to incorporate the most prominent adult-learning theories. This framework was expanded by Kiely *et al.* (2004:18) to include four areas (or lenses) relevant to adult learning (referred to as the Four-lens Model) (cf. Figure 2.2). Each lens provides a different perspective on adult learning; together they provide a holistic view of adult learning.

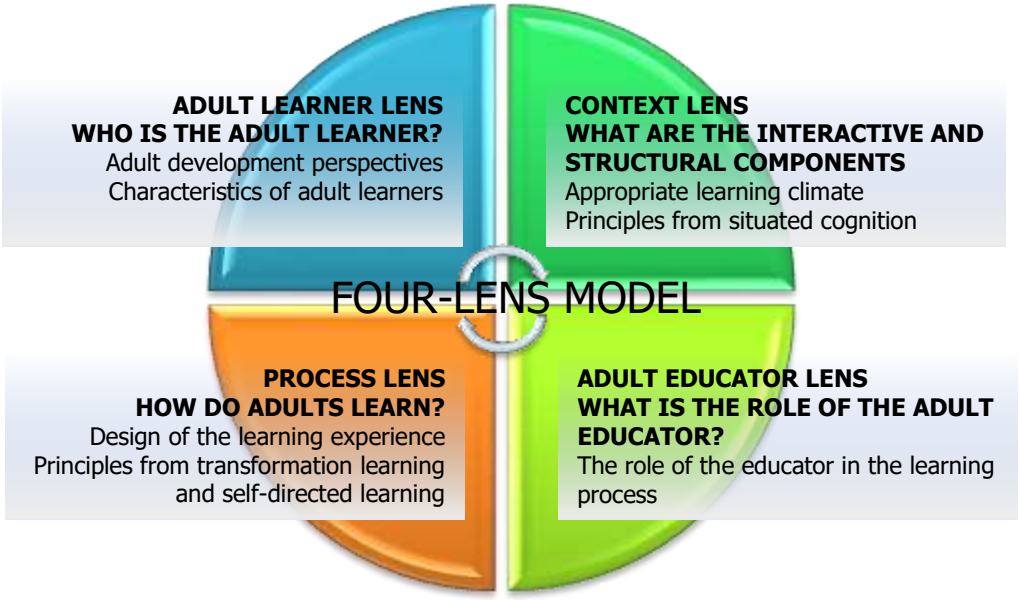


FIGURE 2.2: FOUR-LENS MODEL
Compiled by Massyn (2009:142) from Kiely *et al.* (2004:19)
[Adapted (schematic and graphic) by the Researcher, Collender 2010]

As indicated in the model, the four lenses represent the adult learner, the learning process, the context within which adults learn and the educator. The paragraphs below provide more detail on each of these lenses and give theoretical grounding to this study (Massyn 2009:142).

2.5.1 Adult learner lens (individual learner lens)

The focus of the lens is the characteristics of the adult learner. Consultation with adult learners – as self-directed learners – regarding their learning needs in respect of learning goals, resources, content and assessment, are necessary. Illeris (2003:13) notes that the characteristics that adult learners bring to the educational context sometimes differ from the ones that the programmes are designed for.

Characteristics of adult learners can be summarised as follows:

- The learners are adults by definition, meaning that they are autonomous, responsible, self-determined (directed) and goal-orientated (Gravett 2005:9; Ross-Gordon 2003:48). Gravett (2005:9) states that the ideal adult teaching-learning transaction will accommodate the learners' adult attributes, preferences and

psychological needs, as well as the adult educator's expertise and guidance. An adult-teaching approach that facilitates independence, responsibility and self-direction is necessary.

- The readiness of adults to learn is linked to their life roles and life tasks (Gravett 2005:10-11, Illeris 2003:13, Knowles *et al.* 2005:67). The adult learner will engage in organised learning if the learning is linked to some life-changing events (Zemke & Zemke 1995:31) as well as when problems, challenges and needs arise from their social roles or life tasks (Knowles *et al.* 2005:91). Adults enjoy applying what they learn in their life-worlds (Wlodkowski 1999:33) and experiencing the immediate usefulness of new learning (Vella 1994:128).
- Adults bring their life experiences to the learning situation (Gravett 2005: 9-10, Illeris 2003:13, Knowles *et al.* 2005:6). Galbraith (1999:18) states that adult learners bring prior educational experiences into the educational setting, including pre-set ideas of what it means to be a learner.
- Adults will be more inclined to deal with information that is meaningful to their lives, and if they are ready to learn (Illeris 2003:13, Kiely *et al.* 2004:20, Knowles *et al.* 2005:67).
- Adult learners exhibit an initial lack of confidence when returning to education (Ross-Gordon 2003:48, Knowles *et al.* 2005:65).
- Adult learners are more internally motivated than preadults (Kiely *et al.* 2004:20).

Gravett (2005:10) argues that it is essential to explore learners' views on and expectations of education, and to engage in negotiation with learners about the educational process. Course structures and procedures should be discussed with learners in order to foster interaction in the learning situation and establish a cooperative learning climate.

Massyn (2009:143) emphasises the importance of adding the dimension of the development of the adult and of the focus on personal development in adult education. From a transitional and integrative perspective on adult development, the life stages and life events will influence the development and learning goals of the adult learner, known in adult development literature as differentiation and integration. Adults will aim to reframe their experiences, which will lead to development.

Merriam & Brockett (2007:29) state that, from a humanistic point of view, the individual has a responsibility to reach their full potential through development and

growth. Although not all learning leads to development, certain learning processes do transform the learner (transformative learning). Self-directed learning has as outcome personal growth and autonomy (Pratt 1993:21). Growth towards one's potential is not only a humanistic responsibility, but also one of the purposes of adult education (Merriam *et al.* 2007:107 & Trotter 2006:12). Through the construction of meaning and reflection, adults develop and in the process change their viewpoints, which in turn results in growth (Taylor *et al.* 2000:18).

2.5.2 Context lens

Kiely *et al.* (2004:24) distinguish between the interactive and structural dimensions in adult learning: the interactive dimension refers to the relationship among learners, the social surroundings and the physical setting while the structural dimension is concerned with how relationships of power affect the ability of adult learners.

The interactive dimension suggests an appropriate learning climate in which learning will take place. Gravett (2005:43) adopts a very broad view of the learning climate (environment) and includes not only the learning climate of the physical learning situation but also refers to the traditional face-to-face situation and highlights aspects such as the layout of the classroom and ergonomics, which include air conditioning and the positioning of the overhead and data projectors.

According to Massyn (2009:144) the affective-social dimension refers to the psychological safety of the learners, where they feel trusted and respected. Knowles (in Pratt 1993:19) regards this psychological climate between the learner and educator as one of the cornerstones in the facilitation of adult learning.

Gravett (2005:43) argues that the intellectual climate should focus on providing tasks and experiences that challenge the learners, assuming that there is enough trust among the educator and learners to engage with and explore learning. Such a learning climate is characterised by respect and comfort, yet it challenges learners in a non-threatening way and ensures that the responsibility of learning is shared (Brookfield 1986:10, Gravett 2005:43). Four types of interaction that assist in meaning-making can be identified, namely learner-content, learner-educator, learner-learner, and learner-technology (Royer 2007:4). Beyond the interaction and creation of an appropriate learning climate lies the use of claims of situated cognition to embed learning for

students in a context that is relevant to them (Massyn 2009:145). Situation cognition was discussed in point 2.4.2.2.

2.5.3 Process lens

Massyn (2009:145) is of the opinion that the most important theory in this regard is Mezirow's transformation theory, which postulates the use of prior experiences through reflection to lead to a new interpretation that will influence the future of the learner. Knowles *et al.* (2005:115) propose a process model for designing the learning experience for adults. According to them the difference between the more traditional content model and the proposed process model is that in terms of the content model the educator determines the content beforehand and designs the learning around the content in the form of lectures, guides and so forth, while in the process model the educator prepares a set of procedures that will be used to involve the learner. The difference lies not in the way content is handled, but in the fact that the content model is concerned with the transmission of information, while the process model is more concerned with procedures and resources that will help learners acquire skills and knowledge. (This has relevancy in CPD.) Knowles *et al.* (2005:116) identify eight steps in the process model; namely, preparing the learner, establishing a co-operative learning climate, creating a mechanism for mutual planning, diagnosing the needs of the learner, formulating outcomes that satisfy the needs, designing a pattern of learning experiences, conducting these learning experiences with appropriate techniques and materials, and evaluating the learning outcomes and re-diagnosing learning needs. Both models assume the active participation of the adult learner as from the beginning of the learning process (Massyn 2009:146).

2.5.4 Adult educator lens (teacher lens)

Teaching for adults demands various roles of the educator. Adults prefer learner-centred environments and should be regarded as partners in the learning process (Kiely *et al.* 2004:26). The educator needs to create a learning climate that is conducive to sharing, but challenging enough to encourage critical reflection and a reconsideration of who the student is.

Massyn (2009:147) points out that experiential learning provides a framework in which the adult educator can use the learners' experiences in a constructive way that

facilitates learning. When linking content with prior experiences, students can have mixed feelings. While some students experience confusion (if their experiences are different from those in the learning material) others may feel confident (if the two are similar), while learners with no prior experience which they can fall back on may feel lost (Dobrovolny 2003:3). The role of the educator as a guide or facilitator should be to identify relevant experiences that could be used to reflect upon in the learning process. The educator also needs to be a catalyst, creating a dilemma for students to reflect upon. Furthermore, the educator is a coach and mentor, assisting students in assessing their prior experiential learning (Merriam *et al.* 2007:169).

In summary, the four-lens model and its application to design learning for adult learners were discussed as referenced from Massyn (2009:142-147). [Cross-referencing to this section will be done in Chapter 6].

2.6 ADULT LEARNING PRINCIPLES

It is crucial in learner-centred education to have knowledge about learners and their needs, as well as the learning process and strategies for guiding and facilitating learning (Nel 2007:25). According to Jarvis (2004:29), the concept of adult learning is by no means new. It has important implications in the design of the learning opportunities for the educators of adult learners (Nel 2007:25).

Merriam and Brockett (1997:8) refer to adult education as follows: "…activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults".

According to Nel (2007:27) adult education needs to be inclusive of the following:

- It should be relevant to the adult learners' life-worlds and they should know the rationale and benefit for engagement.
- Adult learners need feedback on progress, strengths and weaknesses.
- Adults learn best if they feel safe and protected – the facilitator should ensure an environment of co-operation where they feel safe to explore.
- Adult learners want to contribute to application potential of new learning.
- Assessment should be done on real-life tasks.

- Adults may bring physiological ageing to the learning environment and therefore the learning environment should take this into account (Gravett2005:16, Jarvis 2004:145).

According to Gravett (2005:7), there is no "typical adult learner". This author (Gravett 2005:7) expresses the opinion that each adult learner is an individual with different experiences, pre-knowledge, life-worlds, life-tasks and life-roles – therefore each learner has a unique set of needs, strengths, weaknesses and preferences. The different views on the attributes of adulthood can be summarised as those adult learners who prefer autonomy, responsibility and self-determination, with a self-concept of being responsible for their own learning and decisions together with a need to be respected and acknowledged as responsible human beings (Gravett 2005:9).

Accoring to Gravett (2005:15), adult educators should therefore tie new knowledge to the learners' life-worlds or the known to complement or enhance existing knowledge.

Vella (1994:184) explains that adults' motivation for participation in education frequently stems from the need to acquire knowledge, attitude and skills to apply in life problems or life tasks: adult learners want to experience the immediate usefulness or relevance of new learning. Therefore learning outcomes must be clear to the learners to enable them to make informed choices (WFME 2002:24).

Vella (1994:188) argues that the ideal situation will accommodate the learner's attributes, preferences and needs and the adult educator's expertise and guidance. This will require learning events that will accommodate independence, responsibility and self-direction through communication between the adult educator and the learner (Vella 1994:189).

Stross (1999:304) claims that adults will be more likely to engage in productive learning if their learning programmes support adult learning principles.

Adult learners participate in learning because of the need to solve problems and address challenges in their real life-worlds (Gravett 2005:17).

From the overview above it follows that the following aspects are essential for the design of learning in CPD programmes: take the characteristics of adult learners into

account; keep the different life-stages of adults in mind and aim to develop the adult learner not only with specific content in mind, but also as a holistic person; the learning environment should create an optimal learning climate; teach adult learners in real-world situations and ensure relevance; and include self-directed student learning[Cross-referencing to this section will be done in Chapter 6].

2.7 ADULT EDUCATION: STRATEGIES AND TECHNOLOGIES

In this section, the researcher will deal with self-directed learning and study materials; instructional-design theory to guide the creation of online learning communities; and online instruction in a continuing professional education setting.

2.7.1 Self-directed learning: Adult learners' perceptions and their study materials

2.1.1.1 *Rationale for self-directed learning*

Self-directed learning has been defined as a process or as a goal or product. According to Knowles (1975:18) self-directed learning is defined 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 strategies, and evaluating learning outcomes". Knowles (1975:18) further states that self-direction is seen as valuable because it is believed to enhance creativity, help avoid blind acceptance of existing knowledge, encourage the use of energies for what is personally important and consistent with personal values, and help adaptation to a rapidly changing environment.

Wood (1998:88) warns that failure to match the knowledge and conceptual understanding of learners to the needs of the curriculum – and these needs are often implicit and not clearly identified by the lecturer – has grave consequences for the future of higher education institutions, as well as for the economic and social development of the country. According to Hughes (1999:2) self-directed learning has, however, been critiqued in many ways: It fails to take into account the linguistic, social, cultural and political formations within which, not only selves, but also choices and rationalities are shaped. It is also seen as a concept that fits well within the

American ideology of rugged individualism and the self-made person. On the other hand, a commitment to self-directed learning can be seen as intrinsic respect for adults. It gives back to adults some of the control and authority they have otherwise lacked in their educational (and other) lives.

Piskurich (1993:3) points out that self-directed learning cannot be effectively developed in situations where either the content is so effective that it is difficult to assess, or when the learning materials constantly change and require verbal instruction. Self-directed learning can, however, be developed in situations where there is a critical need for the active mastery of the material, or because of time and money constrains, or because of a small component of staff (Piskurich 1993:20). Greyling, Geyser and Fourie (2002:113-117) measure the students' perceptions of their own self-directed learning; explore the extent to which their study materials support and enhance their self-directed learning; and lastly interpret these adult learners' perceptions of their own learning in terms of self-directed learning support in their learning materials.

2.7.1.2 *Characteristics of self-directed learners*

Self-directed learning has been associated with a person's abilities. Self-directed learners are characterised by four dimensions:

- **Personal autonomy (self-determination).** Personal autonomy means having a disposition toward acting and thinking independently in all situations (Candy 1991:101). Three overlapping elements of autonomy can be identified (Candy 1991:104), namely:
  - Intellectual autonomy, which means that a person will not base any of his/her primary beliefs on the authority of others, but on his/her own experience, reflection on evidence, sense of what is right or wrong.
  - Moral autonomy, which includes independent thought and the capacity to carry into practice what one decides, should be done.
  - Emotional autonomy implies that a person will exercise self-mastery in the face of strong emotional involvement, and that he/she would remain emotionally detached in relationships with other people.
- **Self-management (self-regulation).** According to Pintrich (1995:7) self-management includes the regulation of three aspects, namely regulation of

behaviour – that is, the learners' control of knowledge and skills to utilise resources in the academic environment, such as time, place to study, and facilities like the library, technology, peers and academic staff. A second aspect is motivation and affect, in other words, the learners' responsibility to control and change their attitude and beliefs as well as the goal orientation that directs and motivates them to be successful. The third aspect refers to their metacognitive strategies – their skills in reflecting on their own learning.

- **Independent pursuit of learning.** Independent learning can be described as the autodidactic process that occurs in diverse settings and concerns a varied, possibly limited range of subjects (Greyling *et al.* 2002:14). Learning as demonstrated in assignments and portfolios can be assessed. Learners who take responsibility for their learning can also do so in a small or large group. Not all self-directed learning is a solitary activity. The learner who takes responsibility for his/her own learning can do so in a small or large group. These learners can be engaged in idiosyncratic and individually devised learning activities while belonging to a larger community, a group of enthusiasts sharing the same pleasures, concerns and difficulties. Brockett and Hiemstra (1991:12) identified this as the "fellowship of learning". The value that learning communities and student engagement can add to learning is described by Hu, Kuh and Li (2008:71) as well as by Zhao and Kuh (2004:115).
- **Learner-control.** Learner-control is an approach to learning and to planning instruction in which learners assume control over the learning process (Kreber 1998). Teacher-control and learner-control, however, are not in a dichotomous relationship, which is mutually exclusive, but should be arranged on a continuum, with total teacher-control (or total dependence on the lecturer) at one end and learner-control (or independence from the lecturer) at the other end (Troskie-de Bruin 1999:245; Candy 1991:10-11).

People may vary in their ability and capacity for self-directed learning, but the individual's willingness to take responsibility for his/her own learning can be enhanced. Students, however, move through various stages of development from dependence to interdependence. If the teaching methods employed do not allow for or develop this independence, independent learners may become dependent learners. Learners are encouraged by the demands of the learning activity and can develop from dependence to counter-dependence. During this phase learners react against being dependent, but they may also react against accepting responsibility. This is followed by a phase of independence during which they can take responsibility for their own learning.

However, the end state is not independence, but interdependence. During this final stage, the learners not only take responsibility for their own learning, but also for each other are learning. This is what happens when co-operative learning methods are used where students are expected to be inter-dependent and co-responsible for the learning of the group (Troskie-de Bruin 1999:245-246).

2.7.1.3 *The development of self-directed learning*

Self-directed learning should not be developed independently from course content. Barrows (in Ryan 1993:53) states that self-directed learning skills have to be perfected through active, repeated and guided practice, but must also be associated in the learning process with the acquisition of course-related information. In addition to indicating specific discipline-related knowledge to be developed during a course of study, objectives can also require students to demonstrate successful self-direction in their learning (Greyling *et al.* 2002:116).

Candy (1991:322-336) and Hatcher (1997:18) state that approaches to increase independence in learning include: making use of learners' existing knowledge structures, learner participation ("experience by doing"), encouraging deep-level learning, developing critical thinking, enhancing reading skills (the processes of gaining and applying information through reading), improving comprehension monitoring and creating a supportive climate for learning.

Research by Greyling *et al.* (2002:112-121) was triggered by the poor performance of a group of adult learners from a historically disadvantaged background doing a post-graduate programme in education through distance education. These researchers explored the extent to which these learners' self-directed learning had been or can be developed through their study materials, as it is acknowledged that their life experiences in their disadvantaged communities could have had a negative influence on their optimal development as adults. The research was undertaken in order to improve the learners' achievement and to enhance their lifelong learning skills – a national priority in South Africa.

From their research it was concluded that these learners perceive themselves as learners who took responsibility for their own learning, but they also expressed their dependence on other learners – thus somewhere between counter-dependence and

independence (Greyling *et al.* 2002:116). Furthermore, they expressed their reliance on the lecturer to explain to them exactly what was expected of them all the time and that achieving good grades was more important than really understanding something.

When these learners' perceptions of their own self-directed learning are compared to what their study materials offered them, the following conclusions came to the fore (Greyling *et al.* 2002:117-121) :

- All the study materials included outcomes, in line with the critical cross-field and the developmental outcomes, in terms of the development of the learners' learning competences as part of their outcomes.
- These learners expressed a need for learning support, e.g. other learners to discuss things and a lecturer who tells them what to do.
- The learners expressed, quite strongly, that they wanted to take part in deciding what they wanted to learn, and that they wanted to relate what they had learned to their long-term goals.
- The fact that reading packages were supplied is a bonus for these students who may not have had access to libraries close to their homes.
- Learner support could include more detailed instructions on how to plan their study schedule, and also the right place to study.
- The fact that these students expressed a positive attitude towards learning is a major advantage that should be nurtured.
- If it is taken into consideration that this is a post-graduate qualification, then it is appropriate that higher order cognitive skills are required.
- One could ask if the ways in which the learning activities are organised and presented are really based on these learners' needs.
- Opportunities to reflect on their own progress are provided, but the skills of reflection are not developed.

Greyling *et al.* (2002:119) found that conscious and purposeful development of their self-directed learning competencies was needed. It can also be concluded that certain dimensions of their adulthood, e.g. their autonomy, responsibility and self-determination, will also be developed when their self-directed learning competencies are improved. The development of these competences could not only contribute towards their learning achievements, but also to the development of them as adults. A creative approach to curriculum development, based on the needs of these learners,

could contribute to the achievement of a national goal, namely lifelong (and therefore interdependent) learners. Staff development is seen as going hand in hand with curriculum development. The integration of cognitive development activities with subject content confronts the lecturer and subject specialist with new challenges (Greyling *et al.* 2002:120).

2.7.2 Instructional-design theory to guide the creation of online learning communities for adults

The Internet provides a powerful delivery system for adult learning, and with improvements in web-based applications and information technology come new opportunities and challenges for educators to design, develop, and deliver effective instruction. According to Dawson (2006); Garison and Arbaugh (2007); Rovai, Wighting and Lucking (2004); Shea, Li and Pickett (2006) and Snyder (2002) an increasing amount of research has been devoted to the design of online learning communities that embrace learning as a social and constructive process.

It is important for both theorists and practitioners to understand how to apply new and emerging educational practices and technologies that foster a sense of community and optimise the online learning environment. In order to accomplish this goal, it is critical that researchers continue testing instructional-design theories and models in different online contexts and either build upon those theories and models or develop new ones that will provide appropriate and relevant guidance (Snyder 2009:48).

"New instructional-design theories are needed to guide the design of instruction using new technologies and tools that the Internet offers. Designers need prescriptions on how to effectively use these new tools and technologies to enhance teaching and learning in various settings" (Reigeluth 1999:51). For example, educators who teach online may select a particular tool because it is available to them or use an instructional method because it is the method with which they are most familiar; however, they may not have a clear understanding of how the tool or method supports a particular type of content or instruction. Reigeluth (1999:52) adds that as new technologies emerge, educators seek guidance on how to use these technologies to enhance teaching and learning and build a sense of community.

Instructional-design theory supports a sense of community amongst adult learners and serves as the basis for further development of specific instructional design prescriptions for how to use some of the new and emerging web tools that are available in the Read/Write Web such as blogs, wikis, podcasts, and virtual worlds.

The question that comes to mind is: What exactly is Instructional-Design Theory?

Design theory is *goal*-oriented whereas descriptive theory is *outcome*-oriented (Snyder 2009:48). Design theories emphasise prescriptions for accomplishing a given end while descriptive theories describe how things work. Reigeluth (1997:117) states that in the applied field of education, design theory is more useful and more applicable. There should be a focus on the identification of specific instructional problems and the appraisal of technology applications best-suited to solve those problems.

2.7.2.1 *Theoretical framework*

The theoretical framework that supports the goal, values, and methods of instructional-design theory comes from three fields of study: learning communities, adult learning theory, and constructivism.

- **Learning communities.** According to Bielaczyc and Collins (1999:269) learning communities are groups of people that share the common interests of learning and sharing knowledge. The goal of a learning community is to advance collective knowledge by supporting the growth of individual knowledge. McLellan (1998:100), Palloff and Pratt (1999:239) and Ravitz (1997:14) argue that the principles and instructional methods for creating learning communities support the direction of the current status of adult learning theory and the new paradigm of instructional-design theories. Wenger (1996:20; 2000:226) proposes a social definition of learning and distinguishes between three modes of belonging by which learners participate in social learning systems: these systems include three constitutive elements namely, communities of practice, boundary processes among these communities and identities as shaped by our participation.
- **Adult learning theory.** Adult learning theories are postulated/ developed to help theorists and practitioners by providing workable and testable explanations of the learning process. Adult learning theories seek to explain how the process of learning as an adult differs from learning as a child and focus on describing how

various social, psychological, emotional, and physiological factors affect adult learning. Major theories on adult learning such as andragogy, self-directed learning, and transformational learning attempt to provide further justification for the distinction between learning as a child and learning as an adult.

- **Constructivism.** Constructivism is one of three primary theoretical perspectives that determine the instructional methods used in instructional-design theories. By combining new information with existing knowledge and experience, learners "construct" their own learning. The educator facilitates learning by providing authentic learning scenarios and problems (Dick, Carey & Carey 2005).

According to Reigeluth (1999:53) constructivism supports learner-centred environments that are authentic, collaborative, constructive, and active. Many of the traditional instructional-design theories focus on simple, domain-dependent, cognitive learning.

2.7.2.2 *Design theory goal, values, methods and situations*

Reigeluth and An (2006:49) indicate that research in the fields of learning communities, adult learning theory, and constructivism provides the theoretical framework for the instructional-design theory. Instructional-design theories begin with a goal. The goal communicates the general or overarching aim of the theory. From the goal comes the development of values. These values describe the guiding principles for how instruction is designed and delivered. Situations describe the conditions under which a method works best and the desired instructional outcomes (Reigeluth & An 2006:49).

- **Design theory goal.** The goal of design theory is to foster the sharing of information, knowledge, skills and experiences among adults with common interests and goals through online communication. Collaboration and interaction are the main goals of design theory (Reigeluth & An 2006:50).

- **Design theory values.** The instructional-design values support the goal and the methods used to attain the goal. This theory is based on five values:
  - *Value 1*: *Cultivate a learner-centred environment*. According to Jonassen, Peck and Wilson (in Snyder 2009:50) learner-centred environments engage learners

in meaningful learning, which is authentic, collaborative, constructive, and active.

- *Value 2*: *Leverage community synergy*. Covey (in Snyder 2009:50) states that in learning communities, synergy means improving the quality of learning for all by sharing information, knowledge, skills, experiences, and best practices.
- *Value 3*: *Respect individuality, diversity, and experience*. According to Palloff and Pratt (in Snyder 2009:50) each adult should be recognised as a contributor to the learning community and opportunities should be created to engage all adult learners in sharing their unique expertise.
- *Value 4*: *Focus on real-life problems*. Knowles, Holton & Swanson (in Snyder 2009:51) and Knowles (in Snyder 2009:51) state that adults seek learning that will help them cope with everyday situations.
- *Value 5*: *Promote self-directed learning*. Brookfield (in Snyder 2009:51) and Knowles (in Snyder 2009:51), propose that members define their own learning goals, find supporting resources, determine their own learning methods, and evaluate their own progress.

Table 2.1 shows instructional design theory elements as applied to an online graduate course as summarised by Snyder (2009:54-55) and are described on the next pages.

TABLE 2.1 INSTRUCTIONAL-DESIGN THEORY ELEMENTS APPLIED TO AN ONLINE GRADUATE COURSE (From Snyder 2009:54-55).

(continues through the following two pages)

GOAL : TO FOSTER THE SHARING OF INFORMATION, KNOWLEDGE, SKILLS AND EXPERIENCES AMONG ADULTS WITH COMMON INTERESTS AND GOALS, THROUGH ONLINE COMMUNICATION, COLLABORATION AND INTERACTION.		
Value 1	**Methods**	**Situations**
Cultivatea learner-centered environment	Confirm member expectations	• Students should first become familiar with course goals and objectives so they can align their expectations accordingly. • Confirm member expectations at the start of the online course. • Students can share their expectations via a student homepage, blog, wiki, or online discussion thread.
	Define and communicate the learning community's purpose	• When communicating purpose, show how it relates to the course objectives and the students' real world. Incorporate examples from what the students have shared regarding their Personal goals and expectations. • The community's purpose should align with the course objectives and the students' expectations. • Connections among purpose, course assignments and learners' expectations should be frequently communicated throughout the course (e.g., via email, discussion postings, blogs, wikis and podcasts).

	Encourage shared authority among learners and Facilitator	• This should be done after the students have established trust and rapport with each other and the instructor. • Student must be willing to take on the leadership role. • Provide structured opportunities for learners to take on the role of facilitator, whether it is leading a discussion or teaching a portion of the class.
	Provide multiple ways to learn content	• Provide a rich assortment of resources (e.g., articles, PowerPoint presentations, blogs, podcasts and discussing assignments) from which learners can learn the content. • Students need to understand how the resources support the learning objectives and should be given clear guidance on how to access the resources.
Value 2	**Methods**	**Situations**
Leverage community synergy	Provide learning opportunities that facilitate communication, collaboration and interaction.	• Instructor needs to determine whether activities will be shared among all Classmates or whether to divide students into smaller learning groups. • This method is useful when trying to create something new or solve ill-defined problems. • The course goals and objectives should be reflected in each learning activity. • Students and instructor should be familiar with the goals and interests of each learning community member. • Establish and communicate clear guidelines for communication, collaboration and interaction (e.g., discussing ground rules, expectations for participation, virtual team guidelines). • Establish and communicate assessment and evaluation methods (e.g., individual or group).
	Encourage public sharing of information, knowledge and experiences.	• This method is helpful in encouraging students to find and express their own voice. • Learners must be willing to take the risk of sharing their thoughts and ideas with a broader audience.
	Utilise the World Wide Web as an extension of the learning community boundaries.	• Students must be able to evaluate the quality of online resources. • Instructor provides guidance to relevant web resources.
Value 3	**Methods**	**Situations**
Respect individuality, diversity and experience	Establish trust and rapport	• Both instructor and students must be willing to self-disclose (e.g., share thoughts, feelings, aspirations, goals, dreams and fears). • Best facilitated by providing instructions on what and how to share (e.g., discussion forum, student homepage). • If a hybrid course, take advantage of classroom time to build trust and rapport through student introductions and collaborative classroom activities.
	Reinforce, recognise and Reward	• Trust and rapport should be established among the community of learners. • Students should feel comfortable accepting developmental feedback publicly (e.g., public feedback via discussion forum or blog). • Instructor should be skilled at providing balanced, timely and respectful feedback. • This method is useful when trying to model appropriate behaviour (i.e., publicly praising a student for the way he or she answered a discussion forum post or blog entry.

Value 4	Methods	Situations
Focus on real-life problems	Offer a flexible learning framework, which enables community members to set and achieve individual goals.	• Students need to understand how their personal goals and expectations connect with the course goals and objectives. • Instructor needs to be familiar with students' personal goals and expectations for the course and how to reinforce them through the course content and instruction. • Provide options for learners to achieve a particular learning objective (e.g., submit a paper; create a blog, wiki or podcast; take a test). • Provide assignments that learners can apply to their unique situations. Encourage them to complete assignments within that real-world context.
Value 5	**Methods**	**Situations**
Promote self-directed learning	Maintain consistency and predictability.	• The learning environment should be consistent and predictable so that the learner can focus on the content and not the delivery environment. • The learning objectives should align with the course deliverables. • The instructor should provide consistent, formative feedback to students Throughout the semester so that there are no surprises at the end of the semester.
	Provide relevant and Accessible information.	• Students should be intrinsically motivated. • Students need to accept responsibility for their own learning. • The learning environment needs to be rich with resources from which the learner can construct new knowledge and skills.
	Allot time for closure and reflection.	• Facilitators can allot time after each assignment or at the end of the course; however, reflection time should be built into the course upfront (e.g., syllabus) and not handled as an afterthought. • Students need to be open to examining what they have learned over the semester and should be able to evaluate whether they achieved the goals they have set for themselves. Encouraging students to articulate personal goals and expectations at the beginning of the course helps to facilitate this process. • Reflection activities complete the constructivist intention-action-reflection cycle described by Jonassen (2004) that is suggested for meaningful and trans-ferable learning.

- **Design theory methods.** While instructional-design values serve as general guiding principles for designing instruction, instructional methods are specific variables in the environment that can be manipulated to change or influence behaviour (Reigeluth & An 2006:50). Following are the major methods that this theory offers:
  - Establish trust and rapport: Devoting adequate time to building relationships by establishing trust and rapport with members early on helps them feel more secure and comfortable in an online learning community (Reigeluth & An 2006:50).
  - Maintain consistency and predictability: "Maintaining consistency and predictability supports the feeling of connection, strengthens trust among community members, and facilitates online learning activities" (Ito, Adler, Linde, Mynatt & O'Day 1999:Online).

- Define and communicate the learning community's purpose: "Defining a purpose helps to identify the target audience and the community's structure" (White 2000:Online).
- Confirm member expectations: Ask members to write down and share what they expect to gain from the learning community, as open exchanges of this kind encourage members to think about the community's purpose and clarify what they want to achieve (White 2000:Online).
- Provide learning opportunities that facilitate communication, collaboration, and interaction: Jonassen *et al.* (in Snyder 2009:51) explain that people learn by sharing information with each other and collaborating to solve problems.
- Offer a flexible learning framework that enables community members to set and achieve individual goals: Berge (1997:36) states that it is important to offer a variety of ways that members can engage in the community to ultimately achieve their own personal goals.
- Provide multiple ways to learn content: "Provide activities that allow learners to experiment in a variety of ways" (Kommers, Grabinger & Dunlap in Snyder 2009:52).
- Encourage public sharing of information: Bielaczyc and Collins (1999:278) state that public sharing of information expands the collective knowledge of the entire learning community.
- Provide relevant and easily accessible information: According to Jonassen (1999:215) information in the learning community should be relevant to the community's purpose and easily acceptable to all community members.

"The design theory elements of an instruction-design theory for promoting online learning communities for adults include the goal, values, methods, and situations. These elements support an online learning community framework that is interactive, collaborative, and constructive. It is necessary to develop instructional methods that incorporate emerging web tools and describe specific situations in which each method works best in order to further develop this theory and make it more practical for designers and facilitators of online learning" (Snyder 2009:52).

Snyder (2009:52-53) claims that the following questions merit further investigation:

- How do instructors/facilitators best use web tools to support collaboration and construction of knowledge among a community of learners?

- Now that the walls of the classroom have opened up to the global community of learners, what is the role of instructors? How should they dialogue and discourse in such global environments?
- How can instructors/facilitators use web tools to enhance student-to-student, student-to-instructor, and student-to-resource interaction in online learning communities?
- What type of tools and technologies can support the value of respecting individuality, diversity, and experience? What can the online facilitator do to foster this value among students in an online learning community?
- What type of web tools help bridge the gap between theoretical and practical? What about virtual worlds and simulations to explore the world and create virtual realities in which we can focus on real life problems? When should an instructor use a virtual world?
- For graduate courses that are taught solely online, how can facilitators quickly establish the elements needed to form a community of learners?
- For graduate courses that are taught using both face-to-face and online formats, what is the best way to combine classroom time and online time to cultivate lasting online communities of learners?

Instructional-design theory including its goals, values, methods, and situations can serve as a starting point from which to determine how to incorporate new and emerging web tools and develop specific guidelines for using such tools to foster an online learning community that is interactive, collaborative, and constructive.

2.7.3 Online instruction in a continuing professional education setting

A great deal of research has addressed the feasibility of online education and the use of technology within formal educational settings. Although some studies found the efficacy to be statistically significant in favour of online education, the majority found no significant difference between the various educational delivery methods (Donavant 2009:228).

Donavant (2009:228) expresses the gap in current research in this field as follows:

"There is a need within Adult Education for research that examines online education's impact on differing learner groups and on learners' attitude towards themselves and

the subject matter. Is online education effective for professional development, and are there circumstances in which online education would be the preferred delivery method?" (Donavant 2009:228).

According to Donavant (2009:29) adults are intrinsically motivated towards learning, but that motivation is grounded on their perception of the need to learn given material in relationship to their adult roles; learning that is forced on adults will not be effective and will be met with resentment. Adult educators should assess educational needs, including learners' willingness to participate in educational activities, accurately.

Knowles' (1980, 1984) andragogical principles provide a "situational bridge" between the purely "non-vocational view of adult education" espoused by Lindeman (1945:5-13) and the "organisational yet learner-inspired emphasis" of Nadler and Nadler (1994:36-38) from which to examine various professional development issues. "The andragoginess of professional development training may well depend on the voluntariness of the experience, a measure often assessed in the light of the self-directedness of the adult learner, that is, the *willingness* to participate relative to one's life experience and adult role" (Donavant 2009:230).

Up to now, the nearly worldwide consideration among studies examining the quality of online education programmes is student-student and student-instructor communication and interaction (Hereford 2000:30; McConnell & Schoenfeld-Tachner 2004:181; Picciano 2001:43). The determining factors in the satisfaction and potential success of participants in previous studies examining the efficacy of online education within higher education settings have been identified as: gender, race, age and previous exposure to online education delivery methods (Roach 2002: 22-26; Sakurai 2002: 28-32).

The majority of research regarding online education within higher education has been from a top-down approach, examining the delivery method from the perspective of administrators and faculty (Oritz-Rodriquez *et al.* 2005:97). Examining adult education endeavours from any single perspective without considering other factors that could affect the adult learner is irresponsible. More holistic approaches in which the efficacy of online education is studied from the administrative perspective in combination with learners' issues and points of view are needed (Mayadas 2001:134-138).

Empirical research on adult learning principles and adult educational techniques in professional development was almost non-existent up to now (Birzer 2004:393-411; Dempsey 1998:10-14; Schafer & Boyd 2007:372-413; Waggoner & Christenberry 1997:1–8). Donavant (2009:229), however, determined the efficacy and feasibility of online education within the area of professional development.

According to Donavant (2009:241), professional development training is best achieved through a comprehensive approach that incorporates the varying needs of individual learners, in consideration of a particular subject matter, and in conjunction with other factors. Recognition of the social element of adult education and the overall environment in which professional development training occurs makes a comprehensive assessment of training techniques and delivery methods necessary.

Consideration of the efficacy of online education should include evaluation of the delivery method as it relates to the various demographic characteristics of potential participants. In this light, the relationship between formal educational level and potential online learning success has tremendous implications. If the use of online education for professional development is increasing, and the current literature indicates that it is, organisations that use or may consider using online education to meet professional development requirements, would probably realise the greatest return on their training-investment by employing adults with higher levels of postsecondary education (Donavant 2009:242).

As has been emphasised above, for adults education does not occur in a vacuum; adults can, and do, consider their educational endeavours in respect to other pertinent aspects of their lives. Following on Knowles' (1984) explanation given above, Brockett (1992:87-93) makes the point that mandatory continuing education violates the central principles of adult education, and that mandates regarding participation undermine adult education's effectiveness by creating punitive attitudes toward the endeavour. Mandatory adult education often results in anger, lack of motivation and a feeling of disenfranchisement. Professional education that fosters negative attitudes is potentially detrimental to organisations than no training at all.

If administrators and trainers can use online education to provide wider curriculum choices to a greater number of learners, the delivery method will find its legitimate place within professional development. Administrators and trainers must resist the

impulse to embrace online education as a solution to rising costs and other impediments to requisite training. Instead, they should carefully evaluate its appropriate use in order to develop the areas in which online delivery of professional development education provides the greatest benefits (Donavant 2009:243).

In summary, findings in a number of scholarly research articles were discussed in this section and self-directed learning, instructional-design theory to guide online learning communities and online instruction in continuing professional education settings were discussed. [Cross-referencing to this section will be done in Chapter 6.]

2.8 EDUCATING EDUCATORS OF ADULTS

2.8.1 The education and training of the adult educator

Van Rooy (2001:61-70) reports on research consisting of a contextual analysis of adult education practices and field analysis of the training provided for adult educators.

Van Rooy (2001:61-70) examines what is currently provided by the Faculty of Education at Unisa against the background of needs, trends and structures in the field and, from the findings, he identifies indicators for future curriculum development and learning programme design: "Adult education is a major focus of the new educational dispensation in South Africa and this focus has significant implications for educating educators of adults. South Africa has a critical backlog in the formal provision of adult education". Van Rooy (2001:61) further states that one of the obstacles to development in South Africa is the fact that much of the country's adult population is seriously lacking in basic education and skills at a time when skills development is a priority throughout the world.

Van Rooy (2001:62) refers to adult education as …"the process of promoting and improving all the types of learning with which educators of adults and their learners may be involved".

To recap, adult education refers to the learning activities engaged in by adults in either a formal or non-formal educational setting for the purpose of effecting personal change and growth. It also refers to the field of academic study that examines the discipline of adult learning and the delivery of learning programmes for adults.

Van Rooy (2001:62-63) describes the education of educators of adults in terms of six contextual categories:

- **Historical context.** In South Africa, adult education needs emerged from the country's socio-political history, a history which is characterised by policies of separate education and unequal facilities for South Africa's different population groups.
- **Political context.** In South Africa, an understanding of adult education is closely linked to an appreciation of the political purpose of adult education. Outside the formal state system, adult and non-formal education in South Africa has inherently been linked to a political mission.
- **Philosophical context.** Because of the socio-political and economic drive of adult education in South Africa and the socio-political multicultural context from which adult education students are drawn, the progressive tradition – with its flexible blend of emphasis on individuals and the community – has inevitably become a dominant guiding philosophy.
- **Professional competencies.** The context of socio-political change continually shapes the professional competencies required of educators of adults in South Africa.
- **Conceptualising adult education in higher education.** Brookfield (in van Rooy 2001:63), from his experience of adult education at university level, believes that curricula of typical courses in British and American departments are based on fundamentally different conceptualisations of the nature of adult education. American departments work on the premise of meeting needs, an approach which leaves little room for introducing educational alternatives, while British departments rely more on exploring the question of what ought to be the central purpose of adult education. Smith (in van Rooy 2001) states that if these two positions are conceptualised as opposite ends in a continuum with a wide range of different combinations in between, the concept of adult education that underpins the adult education programmes in South Africa would probably fall in the centre.
- **Perspectives on adult basic education and training (ABET).** ABET has its origins in adult literacy work and concerns the problems of adult illiteracy. It involves instructional programmes for undereducated or functionally illiterate adults. Over the last decade the original focus on adult literacy extended into becoming a broader concept of adult basic education (AEB) and owing to the policy

commitment to the integration of education and training, the acronym ABET has replaced ABE.

Cooper (1997:5) offers his perspectives on the adult education field and states that the great diversity of education, training and development (ETD) practices in different sites and contexts leads to significant institutional differences and boundaries, and a lack of coherence in the qualifications offered within each site of practice. The ETD field consists of three broad sites of ETD practice. The formal sector consists of specialised learning institutions where education and training is both the institution's core and whole job. The non-formal sector consists of public and private sector organisations or work sites with in-house education and training functions. Education and training is not core business and ETD roles are frequently embedded in more fundamental processes of production and customer service. The informal sector consists of civil society or sites of civic and cultural association, where ETD practices are usually partly related to the job and also part of a service relationship to some project other than formal education and training itself (NTB 1997:6-18).

The roles of ETD practitioners appear to be broadly similar across the field and are grouped around three main role clusters: teaching, design and management. It is possible to offer programmes which provide opportunities for applying learning to the workplace contexts. "In higher education contexts, because it is not immediately linked to the workplace, learning programmes tend to be evaluated in terms of whether learners have acquired knowledge rather than whether or not they can apply knowledge" (Van Rooy 2001:66). Practitioners perform any one or more multiple roles across a very broad field and in multiple sites of practice within delineated subfields of specialised ETD institutions; public and private sector organisations; commercial and industrial workplaces; and Non-Government Organisations (NGOs).

As far as professionalisation and professional development of adult educators are concerned, Cooper (1997:7) explains that there are two areas of common practices. Firstly, career progression typically occurs along three lines: from a limited to a broader ETD responsibility, from generalist to specialist roles, and from instructional to management roles, and secondly, there is a high degree of insulation of career tracks from non-ETD into ETD work, and across ETD institutional boundaries. Van Rooy (2001:67) argues that within the adult education context, "professional" is perceived as an internally-regulated sense of professional competence.

Development of adult educators can only really take place within a more integrated field, in conjunction with institutional restructuring within that field, and within a quality improvement process that emphasises input and process as much as output. As far as qualifications structures for adult educators in higher education are concerned, research qualifications are valued most highly for practitioners in higher education, while at technikons (universities of technology) the emphasis is on professional qualifications. "In the corporate world supervisory or management qualifications have been most important to ETD practitioners. It is only in technical colleges, possibly, that specific teaching qualifications have been essential for professional advancement (Cooper 1997:9).

The new value placed on training and knowledge acquisition will mean new professional paths. These new professional paths require new forms of recognition and qualification. This could mean that higher education adult educator qualifications could be set to play a much more important role in the future. Integration of higher education qualifications (by the NQF) for adult educators will ensure learning and progression pathways that allow for trans-institutional movement that fully recognise previous learning experience.

The reconstructive vision of a future, integrated and more professional field would, if realised, have a major impact on the numbers and kinds of adult educators seeking higher education qualifications, although the current field of adult education is viewed as fragmented and of varying quality (Cooper 1997:11). Such a vision (again, if realised) will also present challenges in terms of both curriculum development and choice of learning facilitation methodologies. It will be necessary to take into account the fact that adult education practitioners are located and based in multiple sites of practice in both the process of curriculum development and the construction of new qualifications.

2.8.2 The adult education facilitator

To recap the definition provided earlier in this text, Knowles (in Jarvis 1996:45) describes adult education or andragogy as the art and science of facilitating adult learning. It refers to adults, not because of their chronological age, but because of the responsibilities they have in society. Scholtz (2005:14) states that adult education is therefore a process whereby persons whose major social roles are characteristic of

adult status undertake systematic and sustained learning activities for the purpose of bringing about change. This is change in knowledge, attitudes, values and skills of adult learners.

Scholtz (2005:15) argues that adult education is important for health professionals. CPD is one section of the adult education spectrum. Qualified health professionals are socially mature and therefore adult learners. CPD is utilised as a coping mechanism for change and it can promote change and react to change.

In line with what has been discussed above, Scholtz (2005:15) states that the andragogical viewpoint perceives adults as autonomous learners possessing great experience, capable of setting their own goals and selecting their own problem areas. In the adult learner there is a change in self-concept since adults need to be more self-directed. Adults have a readiness to learn if the learning addresses a problem with which they are confronted and which they regard as relevant. Therefore their orientation toward learning is problem-centred and not so much subject-centred.

The use of adult learning facilitation principles in CPD events is described by Scholtz (2005:15). Facilitation is a process of identifying, and providing, suitable resources that will aid the learning process. In adult education the humanity of adult learners and of the teacher is of paramount importance. It must be remembered that learning and not teaching is the most significant element in education. Systematic planning is a powerful tool for designing effective, efficient, relevant and innovative learning events. Planning involves assessing the needs of the learner, developing event objectives, formulating an instructional and administrative plan, and designing a programme evaluation plan.

According to Scholtz (2005:15) radiographers (and other health professionals as well) bring to the learning situation their own experience, meaning system and felt needs; hence, facilitators should use the experience of radiographers/health professionals as learning resources.

If the learning is relevant to the health professional's experience or need to learn, then learning will be applied more successfully to the satisfaction of the adult learner.

In restructuring traditional learning methods, facilitators should use a variety of methods and a range of materials involving as many of the adult learner's senses as

possible. This ties in with what was emphasised above: If information is meaningful to them and if they are able to integrate it into the store of existing knowledge, adults are more likely to retain information.

Facilitators should encourage adult learners to reflect on a particular idea and to analyse it based on their respective experiences, and implement methods to assist radiographers, for instance, to see the relation between theory and practice. Facilitators should also create an ethos in which no adult feels threatened or inhibited and where all learners are encouraged to participate to enhance the learning process.

To foster facilitation and to encourage adult learners to participate in the learning process, Scholtz (2005:15) is of the opinion that the facilitator should:

- be empathetic and sensitive to the humanity of the adult learner
- anticipate a successful learning outcome
- reinforce all correct knowledge and understanding so that adult learners can maintain a high level of self-confidence and self-esteem
- provide learners with the opportunity to reflect upon incorrect knowledge so that they can correct it themselves, where this is possible
- encourage co-operation rather than competition in the learning situation
- allow adult learners to learn at their own pace because if the provision of a learning event is too fast adults experience stress and anxiety leading to unsatisfactory learning.

If facilitators aim to provide an efficient and effective service to adult learners they need to involve them in all the stages of a well-planned educational CPD event. Traditional teaching no longer maximises educational value; thus, learner-centred methods should be used.

Scholtz (2005:16) states that "Whether you are a learner or a facilitator, one should remember: Education is life - not a mere preparation for the unknown kind of future living … The whole of life is learning, therefore education can have no ending."

2.8.3 Teaching practice principles

According to the document Improving Teaching and Learning Resources (HEQC CHE 2004:14) excellent teachers have never operated in isolation. Good teaching practice needs to be developed and supported by an institutional environment and culture that are conductive to learning.

The HEQC CHE (2004:14) summarises several principles for good teaching practice, namely:

- Enthusiasm for one's subject and the ability to motivate students to learn.
- Respect for students and sensitivity to their levels of understanding.
- Appropriate expectations and work-loads for students.
- Sound preparation, clarity of course requirements and good organisation of the material.
- Clarity of explanation and the ability to support discussion.
- Encouragement of independent thought in students.
- Fair assessment procedures and constructive feedback.

Good teaching is not just an individual responsibility. It is also dependent on environmental, institutional and structural factors such as resourcing, staffing, workloads, venues, libraries, time-tabling, leadership and management, incentives and human resources policies and practices (HEQC CHE 2004:143).

In summary, this section dealt with the education and training of adult educators, the adult educator-facilitator and good teaching practice principles [Cross-referencing to this section will be done in Chapter 6].

2.9 LEARNING TRANSFER AND PROFESSIONAL PRACTICE

Plentiful evidence exists to show that learning occurs during continuing education programme sessions (Davis, Thompson, Oxman & Haynes, 1995:700-705; DeMuth, 1990:47-58). Less evidence exists about whether and how learning is brought back to the workplace and made known. While different philosophical positions debate the intended purposes of adult education, all anticipate learning and change to extend beyond organised educational experiences (Elias & Merriam 1980:46). In whatever part

of the life-span it occurs, continuing education must facilitate the successful performance of practitioners in the diverse practice characteristic of professional work (Houle 1980:12). The application of learning after the programme and the impact of application on learning are two of seven categories proposed for evaluating the effectiveness of continuing education for professionals (Ottoson 1995:17). Continuing education is not intended as an end in itself.

The end of programmes, however, is often the last contact with adult learners. This cut-off point is problematic for policy, programme and practice decisions in adult and continuing education. Policy makers need a realistic understanding of the post-educational process to make informed decisions about the role of adult education in achieving policy or programme aims. Continuing education planners and instructors can more effectively meet the needs of practitioners if they can identify how, when and why practice changes occur (Lockyer 1992:35). Knowing only that intended effects were not achieved is not instructive for future programme planning (Weiss 1972:39). Evaluators of short-term educational programmes need broader markers of educational value than de-contextualised objectives. An understanding of post-programme application can inform these decisions.

The transfer of training rests on a psychological understanding of how prior learning influences later learning (Annett & Sparrow 1985:116-124). Application involves putting learning from continuing education programmes into practical contact with intended application settings, such as work, home or community contexts (Ottoson 1995:17-30).

In research done by Ottoson (1997:1-16) she found five types of influences that impact on learning transfer and application, namely:

2.9.1 Educational influences

Ottoson (1997:5) points out that although participants attended the same CPD programme, they may not experience the "same" programme. Participants' experiences varied for a host of reasons. Venue, for example, influenced attendance and participation. For some who had travelled long distances, the attendance of a course or programme represented an opportunity to "feel freer" or "hot damn, a week

away" (Ottoson 1997:5). For many local participants, however, this meant double time, not free time, as they also attended to work, child-care and other responsibilities.

Work in small groups during the programme provided participants with opportunities for practice and support in applying the conceptual model to an area of interest. Groups also provided opportunity for less relevant experiences and mixed messages. Some participants gained from the application efforts of other participants in small groups and recognised, "I have the same thing". Other participants, however, gained little from their companions, indicating that they were "further along", working on a "broader project", or "don't consider myself too much in health" (Ottoson 1997:5). Those who stressed their uniqueness found the experiences of others and, in turn, the innovation, less valuable and/or generalisable to their own situation. These small groups variously reinforced or contradicted the instructors about the innovation's nature and flexibility.

2.9.2 Innovation influences

Despite the consistent visual representation during the programme, some respondents had nearly polar opposite understandings of what was to be applied – for example ranging from "very difficult" to "common sense" (Ottoson 1997:6).

2.9.3 Predisposing influences

Among the influences that predisposed respondents toward or away from application were reasons for participation in the programme, cognitive and affective changes occurring during the programme, and prior personal values and beliefs. Among those positively predisposed to participation were those looking for "organisation and structure" to support a programme or "a model behind our programme", as well as the respondent who was "thrilled to go … [and] thought it would be a fantastic experience". These reasons for participation stand in contrast to the less positively predisposed: respondents who said, "they sent me", or, "I wouldn't have gone if I had to pay for it myself", as well as the respondent who explained the programme was offered by her employer as a substitute for another programme she was unable to attend. These varied reasons can affect receptivity to the innovation and, in turn, application (Ottoson 1997:6).

2.9.4 Enabling influences

Enabling influences are individual skills or proximal contextual characteristics that facilitate or constrain application. A broad array of contextual characteristics were identified with the potential to influence application, including opportunity, timing and resources (Ottoson 1997:8).

2.9.5 Reinforcing influences

In an effort to create social support, respondents cast a wide net. Some found it in the teaming encouraged by the programme. "It was good to have someone else to go with so we could struggle together". It became evident, however, that the group of participants attending together from the same organisation did not necessarily constitute a team. One respondent who attended with others from her organisation chuckled at the idea of "standing around in the hallways talking about the [innovation]" upon return to work. Attendance with others might provide, but did not insure, social support following the programme (Ottoson 1997:9).

In an effort to create a support programme, presenters can foster group participation, attendance from same practice/organisation, reading about the innovation in a professional journal, observing another colleague using innovation, or continued contact with presenters (Ottoson 1997:10).

Multiple factors influence application. As learning from continuing education programmes pass through the gizzard of practice, the strength and range of contextual influence emerge. Limited resources, responses of others, the nature of the participant's job and organisational structure, taken separately or in combination, have the potential to influence application. In turbulent environments, respondents had difficulty getting a toehold from which to launch an innovation; in calm but intractable environments, the potential for slipping back into old routines discouraged it; in some politically-charged environment the innovation had to fit the context well enough so that change in operations would not be evident. No participant returned to a barrier-free environment brimming with support and resources (Ottoson 1997:10).

In summary, application needs to be anticipated during programme design and pursued in programme implementation and evaluation. The multitude of influences on

application by participants, educational programmes, the innovation and the practice context, suggest that devoting no or little time for synthesis, integration and planning beyond the programme is inadequate preparation for application. Helping participants plan ways to strengthen their potential sources of support and reinforcement for the innovation in their work environment may be equally important, especially if the innovation is complex and requires a long time to apply. Continuing education programmes may need to devote as much time to preparing participants for application as in helping them understand the innovation itself [Cross-referencing to this section will be done in Chapter 6].

2.10 THE CONCEPTUALISATION AND CONTEXTUALISATION OF CPD

2.10.1 Clarifying concepts

It would be unlikely that many health professions during the previous decades have not been involved in Continuing Medical Education (CME) activities. It would be equally unlikely, however, that these activities were part of any contextually structured educational plan towards professional development. Such activities are often driven by external needs such as a reaccreditation procedure or other goals.

The concept of continuing medical education is not a new one. Doctors have taken part in meetings and read scientific journals for many years. However, only recently has the right of a doctor to practise from registration to retirement without any independent appraisal of his/her ability been called into question. As interest in the fitness of individual doctors to practise has increased, CME has become the focus of attention (Gibbs, Brigden & Hellenberg 2005:5).

In 1998, the Standing Committee on Post-graduate Medical and Dental Education in the United Kingdom stated that the CME was no longer adequate to meet all the educational and career needs of doctors/dentists in modern health care. It recommended that CME needed to be set into a wider context of Continuing Professional Development (CPD). Similar committees throughout the world held similar opinions and thus CPD developed from the earlier concepts of Continuing Professional Education (CPE) and CME (Gibbs *et al.* 2005:5).

In essence, CPD is broader educationally than CME. It recognises that a doctor/health professional is involved in more than clinical work: for example, management, teaching, audit and research and that all these areas need to be addressed when considering an individual's professional development. It also recognises the changing needs of the practitioner in a changing environment. Before the change to CPD, most doctors/health professionals had an informal approach to their continuing education, going to meetings (mainly lectures) as they occurred without considering their particular professional needs. CPD replaces this relaxed approach with a structured system that ensures that educational activities take place on a formal, regular and, above all, planned basis. A Professional Development Plan (PDP) is central to the CPD process. This allows individuals to direct their own learning schedule and is firmly based in adult learning theory.

Although there is much debate among educationalists as to whether adults really learn differently from others and apply their style to their personal learning, and despite the lack of empirical evidence to support the theory, the concept of learning styles is useful. Applied to the concept of learning styles are five principles:

- As people mature, their learning becomes more self-directed.
- Adults' previous experiences act as a learning stimulus and resource.
- Adults become ready and willing to learn because they experience a need to know something in the course of their daily and professional lives.
- Adult learning is often problem-centred, rather than subject-centred.
- Internal motivators are more potent for adults than external assessment; i.e. their learning tends to be self-directed (Gibbs *et al.* 2005:7).

In short, the reasons that tend to motivate adults to learn are different from those that motivate children or young students. Whereas children (and students) are largely motivated by assessment, adults identify their own need to know for various reasons. This autonomy is important and valued by individual learners. As was pointed out above, adults tend to favour self-directed learning; they also tend towards problem-centred learning and that which is meaningful to their life situation with immediacy of application.

Other important concepts in adult learning are experiential learning (or learning by doing) and self-directed learning, as discussed above.

The theoretical basis for adult learning theory is mainly founded in constructivism, which includes learning through experience and will strike a familiar cord with clinicians/health professionals. The other theories that relate to learning are known as rationalism or idealism and associatism. This is summarised by Gibbs *et al.* (2005:6) as follows:

- Constructivism. This is based on the work of the philosopher Kant and was then taken up by the 20th century educationalists Bruner and Piaget, amongst others. It depends on new experiences building on previous understanding and knowledge (structures). This concept led to the notion of a spiral curriculum where knowledge is revisited at increasing levels of understanding. It has influenced all curricula for medical undergraduates, whether problem-based or not, as well as current ideas about experiential learning for post-graduates and the importance of reflection as part of the Personal Development Plan.
- Rationalism or idealism was proposed by Chomsky but is now less popular than Constructivism. Rationalism is based on the idea that there are predetermined directions for a biological plan, thus representing a more linear and directive model of learning.
- Associatism is also now less popular than constructivism, it relies on establishing in the learner an association between certain stimuli and responses. Pavlov was a proponent of this type of learning.

Experiential learning has become increasingly popular in modern clinical practice. It is based on the concept that ideas are not fixed, but that they develop and are changed and reformed through experience. The cyclical educational model based on experience was developed by Kolb in 1984 and is known as the Kolb Learning Cycle (Fry, Ketteridge & Marshall 2000:117-123).

The steps are as follows:

- The learner gains new (concrete) experiences.
- The learner takes time to reflect on the experience, a stage that is influenced by feedback from others.
- The learner forms, reforms and processes (conceptualises) the experience to take ownership of the ideas.

- Finally, the learned concepts are used to make decisions, solve problems, change practice and test the implications, generating new experiences to start the cycle again (Fry *et al.* 2000:121).

This experiential cycle therefore involves reflection, processing, thinking, understanding and using new ideas. Any cyclical process is continuous and hence the notion of continuing medical education of professional development.

Although the key concepts in CME/CPD are the importance of reflection and reflective practice, the relationship between professional knowledge and professional competence is also of interest. The latter is generally considered to refer to minimum standards of knowledge, skills and attitude. It relates to the performance of a task or series of tasks, but the amount of underlying knowledge and understanding that is required is debatable (Gibbs *et al.* 2005:6).

2.10.1.1 *Continuing Professional Development (CPD)*

CPD is a term that has become progressively more prominent in recent years within the healthcare sector. Familiarity with the term and awareness of both its meaning and its importance has gradually increased among health professionals as the demand for enhanced quality, efficacy and cost-effectiveness of service provision has grown.

CPD is the learning in which professionals engage in the context of their working lives. There are several descriptions of CPD, most of which emphasise a planned and systematic process, recognising that through increased professional performance, this should benefit individuals, organisations and the wider society (Woodward in O'Sullivan 2006:1). The most generally used definition is that of Madden and Mitchell (Madden & Mitchell in O'Sullivan 2006:1), through their study of a range of professions:

"CPD is the maintenance and enhancement of the knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to the needs of the professional, the employer, the profession and society."

O'Sullivan (2006:1) summarises that professionals:

- need to keep abreast of new developments in terms of knowledge, skills and technology to ensure continuing competence in their current job.
- need to enhance their knowledge and skills to be able to initiate and respond to change in the working environment as additional roles may be demanded of them.
- may develop personal and professional effectiveness and increasing job satisfaction.

Within the Allied Health Professions, most post-qualifying education and training was haphazard until the early 1990s when many of the professional bodies recognised the need for a strategy and structure for continuing education and adopted the term 'CPD' (O'Sullivan 2006:2). CPD describes the learning activities that are undertaken throughout an individual's working life and they are intended to maintain and enhance the performance of an individual in their working capacity. Individuals now work in environments which are changing constantly and these changes both generate and require a wealth of new or expanded knowledge, skills and information. It is becoming increasingly evident that it is difficult for initial professional education to equip the individual to either assimilate or develop this new information for the duration of their working lives. To keep abreast of such developments, there is growing pressure on individuals to develop their skills and knowledge through CPD. The recognition of the need for CPD as part of the broader lifelong learning agenda is evident in order to have a skilled, competent and adaptable workforce and compete globally and enhance economic competitiveness.

Lifelong learning should be for all aspects of life and meet a variety of needs and objectives. It should foster personal and collective development, stimulate achievement, encourage creativity, provide and enhance skills, contribute to the enlargement of knowledge itself, enhance cultural and leisure pursuits and underpin citizenship and independent living. This will require recognition of and support for a wide range of learning, undertaken in different locations, in various forms and through different routes (NAGCELL in O'Sullivan 2006:2).

In 1994, the Department of Health in the United Kingdom proposed the following definition of CPD (Grant & Stanton in Gibbs *et al.* 2005:6):

"Promoting high quality and up to date patient care by ensuring that all clinicians have the learning opportunities to maintain and improve their competence to practice."

The Allied Health Professions have embraced the rationale for CPD and have agreed on a definition for CPD through the project 'Demonstrating Competence through CPD' (United Kingdom):

"… a wide range of learning activities through which professionals maintain and develop throughout their career to ensure that they retain their capacity to practise safely, effectively and legally within their evolving scope of practice" (Department of Health in O'Sullivan 2006:2).

As defined above, andragogy is the study of adult learning theory. CPD is underpinned by andragogical concepts and those associated with reflective practice. These relationships are well-documented in the literature. Examples include descriptions of the importance of adult learning theory and its application to practice (Aspland 1996:139-149). Influential work on experiential learning (Kolb 1984), learning styles (Honey & Mumford 1992:17-54) and reflective practice has made a major contribution to understanding the way in which adults learn in the workplace and apply that learning to their practice. An example of these concepts is offered by Kolb (1984), who argues that learning is a naturally occurring phenomenon and that the ability to learn is a proactive skill which allows us to influence and shape our learning environment. Kolb views experiential learning as a cycle involving action and reflection, theory and practice and argues for a relationship between thinking and experience. The learning cycle is designed to bring about change and improvement and has been adapted by many professional bodies to implement the CPD process in terms of identifying needs, planning action, implementation and review.

Kolb's learning cycle can be linked to the four learning styles identified by Honey and Mumford (cf. Figure 2.3) (1992) namely:

- activist
- reflector
- theorist
- pragmatist

In order to complete Kolb's cycle, ideally, individuals should balance across all four learning styles. This will also enable them to extract and articulate their learning and its importance for practice, and enable them to be effective in their CPD, and benefit

from all types of learning opportunities. Honey and Mumford (1992) argue that individuals differ in their preferred style of learning and that preferences affect the way an individual learns from the learning opportunity. It is important that individuals recognise their preferred styles and also adopt strategies to develop others. Honey and Mumford (1992) also suggest that the prospective learning strategy, i.e. planned learning, is the most effective and best serves the aims of CPD, although the incidental en retrospective learning also has a value.

Reflective practice has been identified as a way of consciously analysing actions and decision-making processes and developing theoretical insights based on experience and practice. Critical analysis and evaluation refocuses thinking on existing knowledge to generate new knowledge and ideas (O'Sullivan 2006:3).

The conscious development of reflective practice enables individuals to carry out routine actions quickly and efficiently as well as exercising professional judgements and decision-making in new and uncertain situations (Alsop 2000:151; Schon 1987:69).

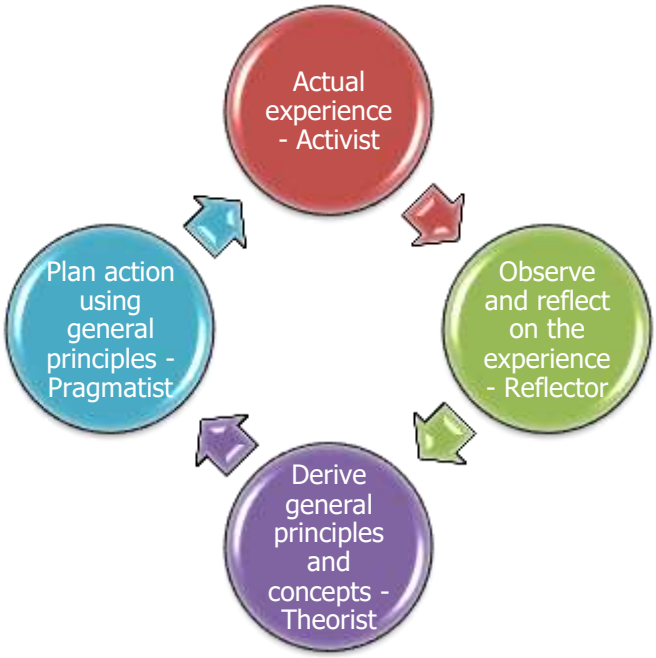


FIGURE 2.3: THE RELATIONSHIP BETWEEN THE LEARNING CYCLE AND LEARNING STYLES
[From O'Sullivan (2006:3)]

There is a fundamental link between reflective practice and learning as the process is likely to alter the individual's perceptions and lead to changes in behaviour where

appropriate. This facilitates the development of enhanced practice and improvement in quality. Reflective practice has been widely acknowledged in the health professions as a process to integrate learning and practice. Whilst it is recognised as an essential element of CPD amongst Allied Health Professionals, its vagueness is a concept and its complexibility creates barriers for some to implement it effectively. The required skills and its application through techniques and processes, such as clinical supervision, resulting in both development of staff and improved quality, can be addressed by providing Allied Health Professionals with appropriate structures and tools (Cole 2000:23).

Although the importance of the theories underpinning the concept of CPD is recognised within the literature, there is little evidence to show that it is well- understood by professionals themselves. It is possible that the application of this work is occurring subconsciously amongst practitioners, but this needs to be made explicit to enable them to recognise and articulate their learning from practice and to become effective learners. This is an important element of CPD (O'Sullivan 2006:4).

The development of CPD as a planned, systematic, educational process is underpinned by a number of key principles (cf. Figure 2.4):

1. The individual learner is responsible for managing and undertaking CPD activities and the effective learner knows best what he/she needs to learn.
2. The learning process is continuous in a systematic cycle of analysis, action and review.
3. Learning objectives should be clear and should serve organisational needs and patient needs as well as individual goals.
4. The process is planned and based on identifiable outcomes of learning achieved (O'Sullivan 2006:4).

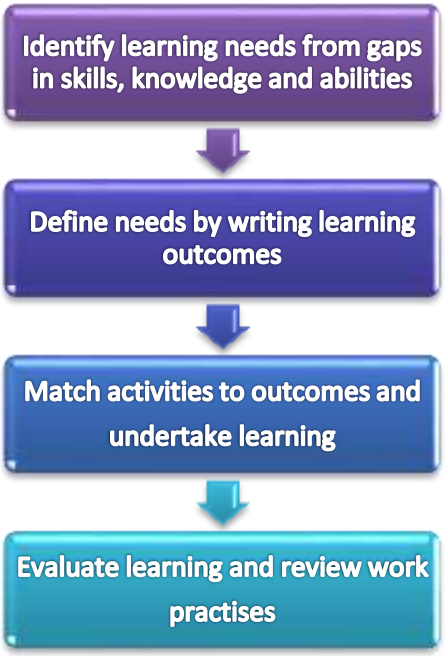


FIGURE 2.4: THE CPD PROCESS
(From O'Sullivan 2006:4)

2.10.2 The purpose of CPD

Professional bodies have a responsibility to ensure that their members are demonstrably able to provide best practice. Thus, professional bodies need to have a strategic policy and effective structure for CPD. Professional bodies produce policies and guidelines for CPD. In South Africa the Health Professions Council of South Africa approved a document: Continuing Professional Development Guidelines for the Health Care Professionals in April 2009.

Guided by the principle of beneficence, health professionals aspire to standards of excellence in health care provision and delivery. The Health Professions Act, 1974 (Act No. 56 of 1974) (as amended) (HPCSA 2009:4; HPCSA 2011:4) endorses Continuing Professional Development (CPD) as the means for maintaining and updating professional competence, to ensure that the public interest will always be promoted and protected, as well as ensuring the best possible service to the community. CPD should address the emerging health needs and be relevant to the health priorities of the country. In this spirit of dedication to best practice and a desire to act and serve wisely and well, the following Guidelines for Continuing Professional Development, through engagement with continuing education activities is presented for all health professionals who are registered with the Health Professions Council of South Africa.

The hierarchy of activities detailed include traditional learning experiences such as attendance at conference presentations and workshops, as well as structured courses and quality assurance audits of practices or groups of professionals in their work environments (HPCSA 2009:4; HPCSA 2011:4).

Registered professionals in the following categories are required to engage in CPD:

- Dental therapy and oral hygiene
- Emergency care practitioners
- Medical and dental board
- Occupational therapy and medical orthotics/prosthetics
- Optometry and dispensing opticians
- Physiotherapy, podiatry and biokinetics
- Radiography and clinical technology
- Speech, language and hearing professions (HPCSA 2009:6-7; HPCSA 2011:6-7)

All these professionals have to adhere to the HPCSA's guideline document (HPCSA 2009:7; HPCSA 2011:7).

The purpose of CPD is to assist health professionals in maintaining and acquiring new and updated levels of knowledge, skills and ethical attitudes that will be of measurable benefit in professional practice and to enhance and promote professional integrity. The beneficiary will ultimately be the patient/client. All registered health professionals are required to complete a series of accredited continuing education activities each year. The activities are clustered together to represent a hierarchy of learning. Health professionals may select activities at any level of learning that meet their particular needs and the demands of their practice environments (HPCSA 2009:5).

The accepted purpose of CPD is to enhance the quality of performance received by and to the benefit of the client. In healthcare, the purpose of CPD is to enhance the quality of the outcome of patient care, and patients should expect to receive treatment which is effective, based on sound evidence and up to date. Whether CPD can be related to demonstration of competence is debatable, as is the relationship between undertaking CPD and its impact on practice (Cervero 2001:16-30; Ferguson 1994:640-646; Henwood & Benwell 1998:17-25; McCormick & Marshall 1994:17-22).

The responsibility for CPD lies with the individual as part of their professional role. Individual professionals need to demonstrate the ability to successfully engage in CPD in order to develop the knowledge base of the profession, practise autonomously and competently and be accountable (Bossers, Kernaghan & Hodgins 1999:116-121; Higgs 1993:8-11).

O'Sullivan (2006:8) describes the fundamental principles of professionalism as follows:

- a motivation to deliver a service to others
- adherence to a moral and ethical code of practice
- striving for excellence, maintaining an awareness of limitations and scope of practice
- the empowerment of individuals and teams.

Competence is associated with knowledge and ensuring that practice is safe and effective. Competence has a minimum of two dimensions, namely scope and quality. The first covers the particular roles, tasks and situations in which the individual is competent, while the second involves some judgement about the quality of that competence, ranging from novice to expert (O'Sullivan 2006:8).

Allied Health Professionals are required to adhere to codes of professional conduct and are expected to undertake CPD, which is one of the responsibilities that is associated with professional autonomy. Likewise, competence is at the core of what it means to be a professional.

According to O'Sullivan (2006:9) competence has the following elements:

- Individuals have a responsibility to ensure the safety and efficacy of their practice.
- Individuals need to be able to think critically about what they do, rather than simply deal with the routine or technical elements of their role.
- Individuals' competence does not exist in a vacuum, but is determined in part by their interactions with others and their ability to act, influence and respond appropriately in whatever contexts they practice.

O'Sullivan (2006:9) emphasises that the relationship between CPD and competence is difficult to define and that the literature is inconclusive regarding the impact of CPD on

practice. There is, however, an inherent belief amongst Allied Health Professionals that CPD is a worthwhile process. Managers need to be aware of both the positive attitudes towards CPD and factors that facilitate CPD. Additionally and perhaps more importantly, the inhibitory factors affecting individuals' ability to engage in effective CPD need to be highlighted.

Health Professionals may accept the principles of CPD and have positive attitudes towards commitment to undertake CPD in principle, but they need various forms of support to enable them to undertake it effectively. Managers have a responsibility to support their staff to enable them to enhance service delivery and patient care and to respond to service development. This can be done by introducing systems and structures, such as clinical supervision and journal clubs and providing appropriate learning opportunities which will be of benefit to the organisation, the team and the individual professional. Additionally, the working environment should be one that fosters and encourages growth through discussion, questioning and the use of research. Taking students on clinical placements requires all staff to contribute to their experience and can assist in the development of a learning culture.

Managers need to understand the principles of CPD, recognising its integration into practice as well as understanding how their staff learns, both individually and collectively. There needs to be an overall strategy for CPD, which might include, for example, protected time for activities, such as reflective practice or journal reading, as well as having a dedicated person responsible for CPD. The Chartered Society of Physiotherapy (Chartered Society of Physiotherapy 2003) has developed a framework for CPD to assist organisations and managers in implementing best practice, which includes 14 outcomes covering a wide range of issues to create optimal conditions for those working in a therapy service to undertake their CPD (O'Sullivan 2006:9).

The main obstacles in the motivation levels of healthcare professionals include the confusion of the funding sources and responsibility and inequity of resource allocation for funding CPD, both between the healthcare professions and within the individual professions. Some study leave and funding is provided by employers for formal programmes and Allied Health Professionals are willing to pay some of their own costs, but many have difficulty in participating because of the cost and lack of appropriate opportunities (Calpin-Davies 1996:133-141; Cutts, Johnson & Fielding 1994:1-6; Laszlo & Strettle 1996:363-367; Maxwell 1995:189-197).

There is a distinction between CPD as an attitude of mind and as an act of compliance. This distinction is important within the healthcare professions given the future statutory requirement for CPD and the professional bodies' approach that both ensures public safety and promotes professional excellence. Thus, the motivation for CPD is influenced by personal factors, for example, career development and promotion and external factors, such as fulfilment of statutory requirements (Calpin-Davies 1996:133-141; Henwood & Benwell 1998:17-25). However, the primary motivation is the innate desire to learn and develop in order to enhance professional performance, as well as increasing self-esteem and job satisfaction. Henwood and Benwell (1998:17-25) include motivation as one of four factors determining and concluded that motivation was linked to individuals' job-related knowledge and skills, goals and development rather than relying on a mandate for CPD. This can be related to the benefits and sanctions models of CPD, discussed in 2.10.3.3 below.

The role, demands and aspirations of Allied Health Professionals have led to conflicts associated with time and the guilt culture (O'Sullivan 2006:10). The latter, connected to dedicating time for CPD, is due to the nature, management and organisation of the professions. This is a 'doing' culture rather than a 'thinking, reflecting and preparing' culture. Feelings of guilt do not sit comfortably with the increased demand for professional accountability, but the management nature of most of the Allied Health Professions is that all possible time should be devoted to patients. O'Sullivan (2006:10) states further that this is compounded by such issues as waiting lists, patient throughput targets and staff shortages. The guilt culture could be masking other barriers to undertaking effective CPD, such as the lack of skills to articulate work-based learning and to reflect on practice and allocating time to non-treatment activities. Other identified barriers to undertaking CPD include family commitments, lack of library facilities and relevant journals and lack of internet access (O'Sullivan 2006:10).

Motivation, commitment and professional responsibility towards CPD are paramount, but this needs to be balanced with realistic workloads, protected time and a culture that recognises learning and development as in integral part of patient care. There is a need to overcome the barriers in order to place CPD at the core of practice.

2.10.3 Models of CPD

Whilst there is agreement about the planned process of CPD and its rationale, there are different models of CPD that continue to create debate:

- input versus outcomes
- sanctions versus benefits and
- obligatory or mandatory.

2.10.3.1 *Input-based model*

An input-based model specifies how much CPD activity should be undertaken over a given period of time in terms of either hours spent or points collected and is linked to recognised learning activities. Whilst this is a straightforward way of measuring CPD, some may argue that it is also simplistic, with the focus on the activity itself rather than the learning gained and its impact on practice (O'Sullivan 2006:1).

2.10.3.2 *Outcomes-based model*

An outcomes-based approach places more responsibility on the individual to ascertain their CPD needs and evaluate the learning, demonstrating how this has improved their professional performance. Within many professions, there has been a trend to move away from input-based, quantitative CPD models to outcomes-based qualitative approaches to CPD. However, the measurement of outcomes still remains a challenge for many professional bodies. The Allied Health Professions in Brittain piloted a CPD Outcomes Model in 2003 as a means of measuring CPD against six broad outcomes that encapsulate professional practice (O'Sullivan 2006:2).

2.10.3.3 *Sanctions and benefits models*

Rapkins (in O'Sullivan 2006:5-6) identified two models of CPD policy and practice from Madden and Mitchell's research (in O'Sullivan 2006:5-6): the sanctions model and the benefits model. The sanctions model includes compulsory monitored CPD for the purpose of updating technical knowledge and skill and non-participation usually results in sanctions that can include loss of membership or chartered status. Arguments against this model focus on the lack of guarantee that compliance leads to the

application of learning. The benefits model is voluntary and self-monitored and CPD is undertaken to update and broaden knowledge, skills and expertise. This model places emphasis on individual responsibility, professional autonomy, openness and flexibility, but there is no guarantee that all professionals will take part.

2.10.3.4 *Obligatory model*

Later research has further distinguished the sanctions and benefits models into compulsory, obligatory, voluntary and mixed CPD (Friedman, Durkin & Hurran in O'Sullivan 2006:5-6). Obligatory CPD is closely linked to the concept of professionalism as professionals are expected to undertake CPD which is self-monitored in terms of both updating and development. There is, however, no checking of compliance. Many professional bodies assume this approach, linking it to codes of conduct. Compulsory or mandatory CPD involves 'policing' activity and is often adopted by regulatory bodies (O'Sullivan 2006:6).

2.10.4 Activities which can contribute to CPD

A wide range of activities (cf. Table 2.2) can legitimately contribute to an individual's CPD and there is an expectation that an individual's CPD will constitute a balance of planned formal learning and the incidental learning that takes place during the course of practice. However, there is no expectation that all of the activities are undertaken at any one time. Indeed, if that were the case, there would be no time to work with patients. It is recognised that the focus of CPD varies through different stages of an individual's career and therefore, the amount of CPD undertaken will fluctuate. At some stages, individuals will be consolidating their knowledge and skills and at other times they may be striving to specialise or further the boundaries of knowledge and practice. The CPD activity should reflect these varying stages and the focus should be on the learning achieved and its impact on practice.

TABLE 2.2 EXAMPLES OF FORMAL AND INFORMAL LEARNING ACTIVITIES (From O'Sullivan 2006:6) (Table continues on following page)

• Attending meetings, e.g. clinical interest group • Attendance at conferences and seminars • Audit • Certified study e.g. Diploma, Degree, Higher Degree, Research Degree

- Clinical/professional supervision
- Discussion and networking
- In-service education programmes
- Learning agreements
- Learning from patients and from own experience of treatment
- Mentoring (staff and/or students)
- Post-qualification courses (including short courses provided by both in-
- house and external providers)
- Preparing and delivering teaching
- Reading and reviewing journals and research papers
- Secondment/work shadowing
- Self-supported or peer-supported study
- Significant incident analysis
- Supervising or teaching staff and students in the workplace
- Systematic reflection on practice
- Undertaking research and presentation of research papers
- Work-based learning
- Writing for journals

2.10.5 Factors affecting CPD

Managers need to be aware of both the positive attitudes towards CPD and factors that facilitate CPD. Additionally and perhaps more importantly, the inhibitory factors affecting individuals' ability to engage in effective CPD need to be highlighted.

Health Professionals may accept the principles of CPD and have positive attitudes towards commitment to undertake CPD in principle but they need various forms of support to enable them to undertake it effectively. Managers have a responsibility to support their staff to enable them to enhance service delivery and patient care and to respond to service development. This can be done by introducing systems and structures, such as clinical supervision and journal clubs, and providing appropriate learning opportunities which will be of benefit to the organisation, the team and the individual professional. Additionally, the working environment should be one that fosters and encourages growth through discussion, questioning and the use of research. Taking students on clinical placements requires all staff to contribute to their experience and can assist in the development of a learning culture.

Managers need to understand the principles of CPD, recognising its integration into practice as well as understanding how their staff learns, both individually and collectively. There needs to be an overall strategy for CPD, which might include, for example, protected time for activities, such as reflective practice or journal reading, as well as having a dedicated person responsible for CPD.

2.10.6 Support for CPD

The majority of the literature indicates that the responsibility for CPD should lie with the individual; however, effective CPD of any individual needs to be planned with and supported by employers and managers and guided strategically and in principle by professional bodies.

2.10.6.1 *Organisational and managerial issues*

Organisations are concerned with enhanced performance, competitiveness and cost-effectiveness and have a range of obligations if they are to provide services to the public. The success of an organisation is, however, also dependent upon its ability to change and on the performance of its employees. Individual learning is at the heart of organisational change and development and is central to the concept of the 'learning organisation' (Boulstridge & Cooper in O'Sullivan 2006:11). Senge (in O'Sullivan 2006:11) links the relationship between the individual and the organisation by stating:

"Organisations learn only through individuals who learn. Individual learning does not guarantee organisational learning. But without it, no organisational learning occurs."
For any organisation, CPD must be managed on a continuing basis through the promotion of learning as an integral component of work and thus, introducing a culture of learning rather than occasional injections of 'training'. The learning organisation facilitates the learning of all employees, and to be beneficial to both, it should have clear strategies to guide the integration between learning and work and appropriate resources to integrate them.

Managers are expected to employ competent staff to deliver the service and to ensure that they continue to practise at a level of currently approved practice highlighting the links between evidence-based practice, clinical effectiveness and cost-effectiveness. In addition, the public expects a qualified professional to be competent in his or her professional tasks and duties. Thus, the organisation and the individual have responsibilities around CPD.

2.10.6.2 *Creating a learning organisation*

An effective learning environment is one where questioning is encouraged, there is a forward-looking approach, practice is based on research, there is an awareness of professional development and individuals feel supported. All individuals within an organisation have a role and responsibility to contribute to this environment.

CPD should be linked to broader organisational learning and competitiveness and is likely to be fostered if organisations can see a return on investment (Sandelands 1998:4). Learning organisations are likely to attract active, ambitious learners who would like to foster and encourage learning environments to the benefit of all levels of the organisation.

Several authors (Jones & Robinson 1998:1; Sandelands 1998:4) have stated the need for a deeper understanding of CPD, including workplace learning, by managers. Senior managers have the responsibility to promote CPD through strategic planning and practices to ensure that appropriate planning takes account of, for example, the impact of legal requirements, new technology and changes in work practices.

2.10.7 *Systems associated with CPD*

The ethos of an organisation can encourage and enable individuals to continuously learn and develop, but this needs to be supported by systems and tools that have practical application. These systems need to be initiated from a management level with appropriate resources allocated to training, implementation and evaluation.

Within the context of healthcare performance management this implies the integration of a number of separate diverse initiatives at both conceptual and practical levels, including business planning, benchmarking, education and training, clinical audit, performance indicators, performance appraisal (O'Sullivan 2006:12).

2.10.7.1 *Performance appraisal*

According to O'Sullivan (2006:12) performance appraisal is one initiative that can be linked and aligned to CPD in the United Kingdom. It is not directly implemented in South Africa. Formal, systematic individual appraisal or performance review can be

introduced as a means of developing the competence and expertise of individuals in order to meet the organisation's objectives with main functions as identifying training needs, setting objectives and targets and providing feedback on performance. It can provide a mechanism to help to structure and guide and individual's CPD.

2.10.7.2 *Mentoring*

Mentoring has its origins in advising and counselling and can be either formal or informal. It is concerned with broad learning for longer-term development rather than short-term skill acquisition. Formal mentoring takes place in organisations with, for example, a 'buddy' system whereby individuals volunteer to either be a mentor or be mentored. The relationship is facilitative and a mentor is rarely the learner's line manager. Informal mentoring systems taking place outside the workplace can provide continuity, taking an overview of development (Coles 1996:152).

Mentoring can be an important aspect supporting CPD as an experienced mentor can encourage and guide an individual to devise strategies to meet personal and professional growth. A mentor is concerned with supporting an individual; challenging ideas in discussion and shaping the way goals are achieved to plan for career development (Coles 1996:152-158). The importance of the personal qualities of the mentor is emphasised, as the mentor supports, enables and empowers the learner, which is fundamental for the independent learner.

According to Coles (1996:156) the real power of mentoring is the development of insights where connections are made between knowledge and personal experience. Insights are difficult to define, but examples include understanding of the values and behaviours of others and how to work with others. The benefits to the learner, the mentor and the organisation are identified in terms of enhanced skills, improved performance, job satisfaction and staff retention. The potential pitfalls include: lack of time, lack of skills, and lack of management support. The significance of mentoring is that it can provide the link between off-the-job formal training and the embedding of new skills and knowledge through practice. Mentoring can be a valuable support mechanism, focusing on professional development in the broadest context.

2.10.7.3 *Clinical supervision*

Clinical supervision can be a mechanism for the mutual support and development of healthcare professionals. Clinical supervision is well-established within some professions, for example, nursing and social work, but still relatively new to the Allied Health Professions (Sellars 2004:64). Clinical supervision is intended to increase the understanding of professional issues through the implementation of an evidence-based approach to maintaining standards in practice.

Clinical supervision assists practitioners in developing reflective and analytical skills. It encourages practitioners to examine their practice by identifying strengths and successes as well as weaknesses and mistakes (Thomas 1995:12-13).

2.10.7.4 *Peer review*

Peer review, like clinical supervision, can be a system of support for CPD. It is focused on the evaluation of the clinical reasoning about a patient episode. Individuals should select a peer who is similar in terms of grade, experience and knowledge. It can be a learning opportunity for both parties, enhancing clinical reasoning, professional judgement and reflective skills. There are different methods of peer review; for example, direct observation, documentation, questioning and discussion (Hagedorn 1996:221; Slater & Cohn 1991:1038). By analysing practice, practitioners can problem-solve and reason, resulting in learning that can be applied in different situations and enhance the quality of care of patients. Evidence of participation in a peer- review process and the outcomes in relation to development and enhanced practice can be part of an individual's CPD (Slater & Cohn 1991:1039).

Managers play a critical role in sustaining these support systems by enabling time to be taken to reflect and question practice. This needs to be embedded as an acceptable part of day-to-day practice. Many organisations have introduced these systems or have allocated dedicated time to CPD, which is promoted by the professional bodies. There needs to be a culture of CPD where it is recognised and valued and meets the needs of both the individual and the service. Although the importance of CPD may be officially recognised, it can get compromised in practice in some organisations (O'Sullivan 2006:14).

2.10.7.5 *Portfolio-keeping*

A portfolio is a reflective and evaluative tool that enables individuals to collect evidence of their learning and development and plan future learning. Professional bodies can produce portfolios, guides or learning logs in both paper and electronic formats to assist their members in planning, recording, reflecting and evaluating CPD.

The key principle is that a portfolio should be a private, personal document owned by the individual. The fact that a portfolio is private indicates that portfolios are for personal use and are a source of information for evidence of professional development. Individuals may share some of the information, but some reflections and analysis could be private and confidential to them. The individual has total control over the portfolio and decides what to include and how to structure it (O'Sullivan 2006:15).

The benefits of portfolio-keeping are summarised in Table 2.3 below.

TABLE 2.3 BENEFITS OF PORTFOLIO-KEEPING
(From O'Sullivan 2006:16) (Table continues on following page)

- Focuses and organises learning
- Provides a structure for reflective practice
- Facilitates reflective practice
- Provides concrete examples of professional competence
- Assists in personal/professional/career development
- Encourages analytical thinking and provides evidence of learning rather
- than simply a description
- Encourages proactive, self-directed learning
- Active process brings about change in learner
- Making a written commitment to change makes action more likely
- Leads to connection of learning with day-to-day practice
- Improves practice

In summary, CPD is a complex idea which embraces a number of theoretical concepts. Effective CPD should enable professionals to develop the qualities of self-directed, proactive and independent learning. By developing these abilities, the individual should enhance their practice to the benefit of the patient and service provision. This development will occur through a planned and systematic process encompassing a range of activities focused on practice. The responsibility of CPD lies with the individual, employers, professional bodies, statutory bodies and government, all with different agendas.

2.10.8 Criteria for Effective Continuing Education: The CRISIS criteria

The need for Continuing Medical Education (or now referred to as Continuing Education or the more encompassing term Continuing Professional Development) is well recognised. The challenge was to make it effective. CRISIS, an acronym, stands for the criteria which must be met to produce effective continuing education programmes and was developed by Harden and Laidlaw in 1992. These criteria are still relevant and applicable (cf. Figure 2.5).

The range of approaches adopted in CPD varies widely, from formal lecture-based courses to small-group discussions or practical sessions and distance-learning programmes. Much discussion relating to the design of continuing education has focused on comparisons of different methods (e.g. videotapes versus lectures), on the use of new technology (e.g. computer-assisted learning, interactive video disks or satellite) and on the details of subject content.

However, to maintain and encourage quality in all forms of CPD, a set of educational criteria is necessary. Using such criteria, programme designers, course instructors and teachers can ensure quality in their products; those responsible for auditing and administering programmes can check on high standards and participants can assess what they consume.

The rationale of the CRISIS criteria has been explored and the criteria related to Brookfield's (1986) principles of effective practice in facilitating adult learning (Mulholland 1990:70).

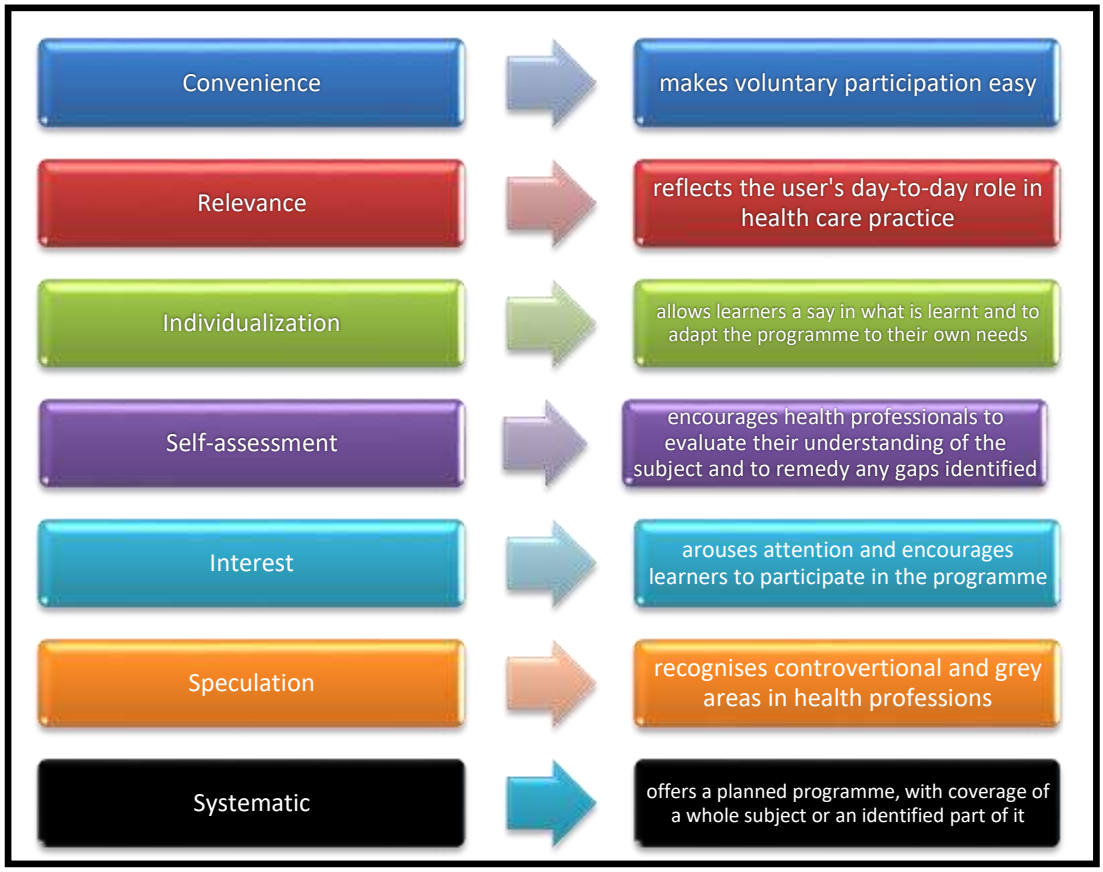


FIGURE 2.5: A SCHEMATIC OVERVIEW OF THE CRISIS CRITERIA [From Harden & Laidlaw (1992:413)]

A description of the criteria (cf. Figure 2.5) follows, based on Harden and Laidlaw (1992:409-422) [Their original terminology is used]:

2.10.8.1 *Convenience*

To suit the user, continuing education must be available at the right place, at the right time and at the right pace. Access to resources should be rapid and easy.

- Place

On occasion, it may be necessary for a professional to attend a course some distance from home and the place of work. This is expensive in terms of time, travelling costs and accommodation. Courses in the local post-graduate centre have clear advantages. Learning can also be based at home, in the surgery or elsewhere (e.g. while travelling

to and from work). Such learning opportunities save the learner from spending valuable time in non-productive travel to and from a post-graduate centre.

A tradition has long existed whereby professionals educate themselves at home through books, journals and magazines. A parallel tradition has put far greater resources into centralised learning, while community-based learning was the poor relation. According to Harden and Laidlaw (1992:411) there is an argument for a mixed model with centralised courses and courses in post-graduate centres continuing their traditional role alongside distance learning. The centralised courses should, however, be made more convenient and accessible, e.g. by adjusting opening hours of the post-graduate centre and by providing professionals with more details of events and resources.

- Time

To attend a conventional course at a post-graduate centre or university, the learner must fit in with fixed course schedules and hours. This may be difficult for professionals with a range of commitments. The co-operation of partners in a group practice may also be required, to provide cover while the person is absent, attending an educational activity.

Any fixed time, even a regular commitment at a set hour on a particular day of the week, is awkward to keep to. It is uncommon to find a post-graduate tutor who, in response to poor attendance at post-graduate meetings, has changed the day and time of the sessions to that suggested as more appropriate by the participants, only to find there are no improvement and indeed on occasion even a drop in attendance. With distance learning, the user chooses the time and the duration of each period of activity.

- Pace

In formal courses, students are traditionally constrained in having to learn at the same speed. Professionals with some previous experience in the area could learn more quickly, but are forced to slow down and therefore suffer from boredom. It is possible, to an extent, to make allowances in the planning of courses as solutions are easier with distance-learning programmes, which should let users work at their own pace – repeating as necessary or skimming material if already known (Harden 1988:139).

Making education more convenient

The convenience of CME is increased by taking the education programme to the professionals, rather than expecting the professionals to come to the educator. Through distance-learning techniques, professionals can study when and where they wish and at a pace best suited to their needs. More than anything else, the development of distance-learning approaches has helped to make continuing education more convenient. Distance learning has four main features (Harden 1988:139-141), namely:

- The teacher is separated geographically from the student: communication is written, audiovisual or electronic.
- The learning programme is carefully planned: the student receives advice and assistance on how best to tackle the subject.
- The student's work is reviewed and remedial action prescribed where necessary: this implies two-way communication.
- The learner works alone or occasionally in a small group.

Developments in telecommunication technology can provide convenient opportunities to hear and to question the views of one expert or of an expert panel located remotely from the learner. Through satellite television and a supplemental telephone line, local audiences in many locations can tap into international expertise.

2.10.8.2 *Relevance*

Topics addressed in CME/CPD programmes should be seen as being of practical importance and dealing with everyday problems rather than just academic interest. The presentation of a series is often seen as the basis of continuing-education programmes, but by themselves they may not be seen as relevant. It is how the facts are applied to practice that makes them relevant. Knowledge alone is not enough – the learner must be shown the uses to which that knowledge can be put. A connection between relevance and the perceived needs of users is important.

The highest priority learning needs in continuing medical education, according to Harden (1988:141) involve:

- frequent, important or serious illnesses amendable to medical care;
- conditions for which management methods have recently improved; and
- conditions where education can improve previously poor management.

To ensure relevance, materials should be aimed at a particular audience and carefully checked for appropriateness with a sample of the target audience. To ensure continued relevance, periodic checks and, if necessary, updates should be made.

Relevance of a programme can be improved by examining the needs of the professional to whom the programme is addressed. To offer a relevant programme, it is important to understand the relationship between the three components of relevance (cf. Figure 2.6).

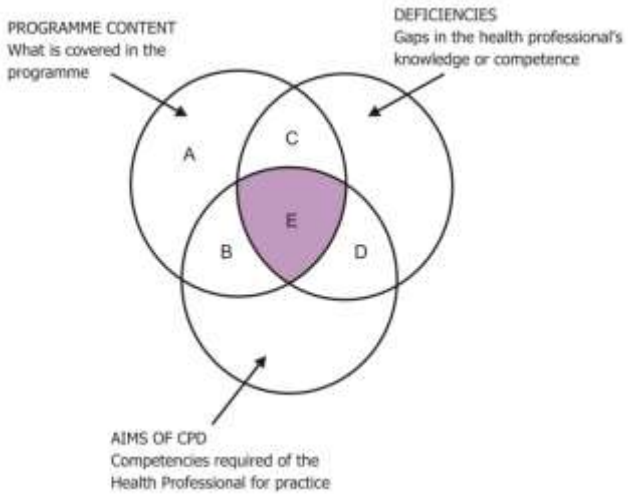


FIGURE 2.6: THE RELATIONSHIPS BETWEEN THE THREE COMPONENTS OF RELEVANCE
[From Harden & Laidlaw (1992:420)]

(A) aspects of the programme where there is a mismatch between the educational activity on the one hand and on the other the objectives of CPD and the needs of the health professional using the programme;

(B) aspects of the programme which, though relevant to continuing education in general, are not relevant to the health professional using the programme as he or she is already competent in the area;

(C) aspects of the programme which address areas where the health professional is not fully competent but which are not relevant to his or her practice;

(D) deficiencies in the health professionals competence in areas where he or she should be competent but which have not been addressed by the programme;

(E) a relevant programme – the area of competence addressed is required for practice, the health professional is not already fully competent in the area and the topic is addressed in the programme.

2.10.8.3 *Individualisation*

Those following a continuing-education programme come from various educational backgrounds and differing domestic or professional circumstances. Their needs will therefore differ. A recently qualified professional may be up to date on a subject, but lacking in experience: more senior colleagues may have the experience, but may be short on up-to-date theory.

The variation in individuals' needs can be divided into at least 10 areas:

1. type of practice: e.g. hospital or community, urban or rural;
2. previous experience and information about the subject of programme;
3. degree of interest, e.g. some practitioners are particularly interested in one field, others in another field;
4. preferred learning strategies and methods, e.g. lectures, group work, problem-based learning.
5. learning ability and speed;
6. amount of time willing to spend in continuing-education activities;
7. time of day and of week available for learning;
8. preferred location for learning, e.g. home, work, post-graduate centre, car;
9. learning on own or along with other professional members of the healthcare team; and
10. teaching responsibilities, e.g. postgraduate or undergraduate lecturer (Harden & Laidlaw 1992:418).

The need of some participants for additional information can be identified and built into the design of the programme. Page lay-out and design, the use of headings and summary lists can all help readers match the programme to their learning needs. The professional can scan the programme, pausing to study aspects of interest in more depth. Feedback and self-assessment provide a powerful method of individualising a programme. Programmes can also be designed to take account of different learning strategies. Programmes can be produced in different versions to take into account the

time professionals have available to study the topic. For example, two different versions of a programme – one summative and the other detailed can be made available.

2.10.8.4 *Self-assessment*

A feature that often distinguishes successful from unsuccessful continuing education is the incorporation of a self-assessment component. Indeed, continuing education has been equated with continued self-assessment - critical self-appraisal being the hallmark of the good professional.

'The examination of clinical practice' must be the key element in continued medical education, which otherwise becomes an intellectual or scientific game without a clear consequence. Even excellent professionals can develop bad habits and become out-dated. These will show up in the mirror of self-assessment (Harden & Laidlaw 1992:419).

Self-assessment can contribute to CE in a number of ways:

- It can serve as a diagnostic test to see whether readers need to participate in the learning activity/programme and, if so, to select parts of the programme from which they would benefit.
- It can assess whether learners have the necessary competence or prerequisites to undertake the programme.
- It can check whether they have mastered the topics covered in the programme.
- It can demonstrate to doctors/health professionals that they can go beyond the contents of the programme and apply it in their own context (Harden & Laidlaw 1992:419).

2.10.8.5 *Interesting*

Any continuing-education programme has to compete for time in the lives of very busy people, whether patients or healthcare professionals.

Continuing-education must be interesting to be successful for three main reasons:

- to gain the attention of the potential user;
- to encourage potential users to become actual users, and to invest time,
- effort (and possibly money); and
- to hold attention and sustain the user's motivation to complete the material.

According to Harden and Laidlaw (1992:419) for each continuing-education programme, there will be an appropriate combination of at least six factors to maximise attractiveness and interest, namely:

- Relevance
- Presentation of materials
- Text design and lay-out
- Visuals and colour
- Cartoons and humour
- Active involvement

2.10.8.6 *Speculation*

It is important to include areas of controversy and speculation in programmes. Reasons for this include:

- It will add to the interest of the programme, which may otherwise be boring and dull.
- It makes the programme credible. Neglect of such issues may result in a programme seen as irrelevant to day-to-day practice, where issues are seldom clear-cut and where uncertainty is common.
- Confronting such issues in a programme may help the doctor/health professional to tackle them in practice.

Areas where speculation may exist include:

- topics where there is more than one 'correct' solution;
- recent advances, which may not have been generally adopted or about which there is some uncertainty; and
- subjects that are socially sensitive and have different interpretations (Harden & Laidlaw 1992:419).

2.10.8.7 *Systematic*

To be systematic, a continuing-education programme should let the consumers know how and why aspects of the subject will be covered over a planned period. The benchmark for systematic coverage is that a course provides all that the learners need to know about a particular topic. It need not include all there is to know or even all that it is nice to know (Harden & Laidlaw 1992:420).

2.10.9 Guidelines for Health Care Professionals as far as CPD is concerned

In the document: Continuing Professional Development: Guidelines for the Health Care Professionals (HPCSA 2009; HPCSA 2011) 10 aspects are discussed in full. The aspects include:

- Roles and responsibilities [*of* Health professionals (including Continuing Education Units (CEUs), Certificate of attendance, CPD Activity Record); *of* Accreditors; *of* Service providers (including accredited providers and providers of Professional Boards); *of* National Accreditors Forum; *of* HPCSA CPD Committee; and *of* HPCSA CPD section).
- Hierarchy of learning activities.
- Non-compliance.
- Deferment.
- Health Professionals abroad.
- Retirement, illness and non-clinical practice.
- Community service and internship.
- Voluntary removal from register: de-registration.
- Restoration after erasure.

Together with the CRISIS criteria (cf. 2.10.7), the guidelines in the before-mentioned documents formed part of the framework for Section C in the Delphi-questionnaire.

[Cross-referencing to this section, namely Point 2.10 The conceptualisation and contextualisation of CPD will be done in Chapter 6.]

2.11 SUMMATIVE DISCUSSION OF A THEORETICAL FRAMEWORK

Different concepts were identified, described and placed in context in relation to each other.

It is important that CPD developers have knowledge of adult development perspectives and learning theories as well as an understanding of the purpose of CPD, the different CPD models, systems and activities; factors impacting on CPD and initiatives to support CPD. All these influence the design of learning.

When learning programmes are designed for adult learners, it must be based on adult learning principles – also taking into account the criteria that ensure effectiveness of CPD – and grounded within the professional guidelines of the HPCSA.

Developers of CPD programmes have to look into a different array of educational strategies and technologies that might not only be the conventional method of lecturing, but must ensure a variety of opportunities, products, strategies, techniques and modes of delivery. Perhaps developers have to think new, and come up with new ideas and initiatives.

It is also important that educators/presenters be trained and be knowledgeable of good teaching practice principles and learning with the view to ensure quality and relevant education.

Learning transfer to professional practice is of utmost importance. One of the most relevant questions is: "How can adult learning are transferred to the occupational therapist's practice?" Thus, how can learning opportunities be presented so that the therapist really can apply it in the day-to-day practice? Only if that happens the individual will be able to manage their practice to the benefit of the patient and service provision.

2.12 CONCLUSION

In this chapter a literature study was done to conceptualise and contextualise CPD from an adult-learning perspective. The chapter serves as theoretical framework for the study.

In Chapter 3, the research design and methods applied will be discussed in detail.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the research design and research methodology in the study. In the first place, theoretical perspectives on the research design are provided. It is followed by a detailed explanation of the process of each technique, namely the methodology and procedures designing the occupational therapists' questionnaire, the Delphi questionnaire and the pilot studies, while the sample selection and the data analysis are also described.

Goddard and Melville (2001:1) state that "research is not just a process of gathering information, as is sometimes suggested. Rather, it is about answering unanswered questions or creating that which does not currently exist". According to Leedy (1989:5), research is the "procedure by which we attempt to find systematically, and with the support of demonstrable fact, the answer to a question or the resolution of a problem".

These descriptions of research form the basis of this study, namely, a part of the research involved a number of selected questions being asked of the occupational therapists in order to obtain some level of understanding of their perspectives on their needs for and the factors impacting on CPD; the appropriateness of CPD activities and their needs as adult learners. The other aspect of the research involved the creation of a new model for CPD, something that did not exist, and something that would be conducive to the development of occupational therapists as lifelong adult learners.

3.2 THEORETICAL PERSPECTIVES ON THE RESEARCH DESIGN

Theory building, strategy of inquiry and types of design will be discussed.

3.2.1 Theory building

Lynham (2002:244) states that theory building may be seen as a continuous theory-research cycle consisting of two parts, with the first part being theoretical and the second part being the operational side of the cycle. In the first part, the concepts of the theory are identified and these concepts represent variables whose interactions constitute the essence of theory. After identifying the units or concepts of theory, the next step in theory building is to specify how the units interact and relate to each other. Successful completion of the first part results in a conceptual or theoretical framework (Moagi-Jama 2009:80). In this study, the conceptual or theoretical framework relies on the literature as discussed in Chapter 2. The second part, namely the operational side of the cycle, includes the empirical study and the findings and interpretation thereof.

3.2.2 Strategy of inquiry and research approach

Creswell (2008:4) defines mixed-methods research as: "an approach to inquiry that combines or associates both quantitative and qualitative forms". It involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both approaches in a study. Thus, it is more than just simply collecting and analysing both kinds of data; it also involves the use of both approaches so that the overall strength of a study is greater than either qualitative or quantitative research.According to Creswell and Plano Clark (2007:8) the basic premise of the definition is that the combination of quantitative and qualitative approaches provides a better understanding of research problems than either approach alone.

Creswell and Plano Clark (2007:11) refer to those types of mixed-methods studies that might conform to part of their definition as "gray areas." A study employing minimum qualitative research and thus may not include a rich collection of qualitative data, however, meet their minimum criteria as spelled out in their definition, and therefore they consider it an example of mixed-methods research (Creswell and Plano Clark 2007:12).

Where quantitative and qualitative data complement each other, a mixed- methods approach applies (Creswell *et al.* 2006:1; Johnson & Onwuegbuzie 2004:14; Yin

2006:41). The questionnaire survey and the Delphi questionnaire in this study have quantitative and qualitative elements.

3.2.3 Types of mixed-methods designs

Ivankova *et al.* (2007:264-268) describe four types of mixed-methods designs, namely explanatory, exploratory, triangulation and embedded. The selection of a specific mixed method is challenging but important, and researchers must base their decision on the following: the appropriateness of the design to the research question; the expertise of the researcher; and the available resources (Ivankova *et al.* 2007:265).

Johnson and Onwuegbuzie (2004:17) define mixed-methods research as "… the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts, or language into a *single* study. The focus into a *single* study is critical to mixed-methods research".

According to Creswell and Plano Clark (2007:8), the definition, however, also suggests that mixed-methods studies may involve collecting and analysing qualitative and quantitative data within a single study or within multiple studies in *one* programme of inquiry.

To choose a specific mixed method, the researcher has to consider factors such as timing, weighting and mixing (Creswell & Plano Clark 2007:79-82). The timing decision involves the order in which data will be collected – it can either be collected simultaneously (concurrently) or sequentially with either the quantitative of qualitative first. The weighting decision refers to the equal or unequal weight (in terms of the importance or priority) of the quantitative and qualitative methods. Decisions as far as the weighting is concerned will be based on the literature cited, the purpose of the study and practical considerations (Creswell & Plano Clark 2007:79-82). [cf. Figure 3.1].

In Figure 3.1 the Decision Tree for Mixed-Methods Design Criteria for Timing, Weighting and Mixing is given. The shaded boxes show the relevance as far as this study is concerned.

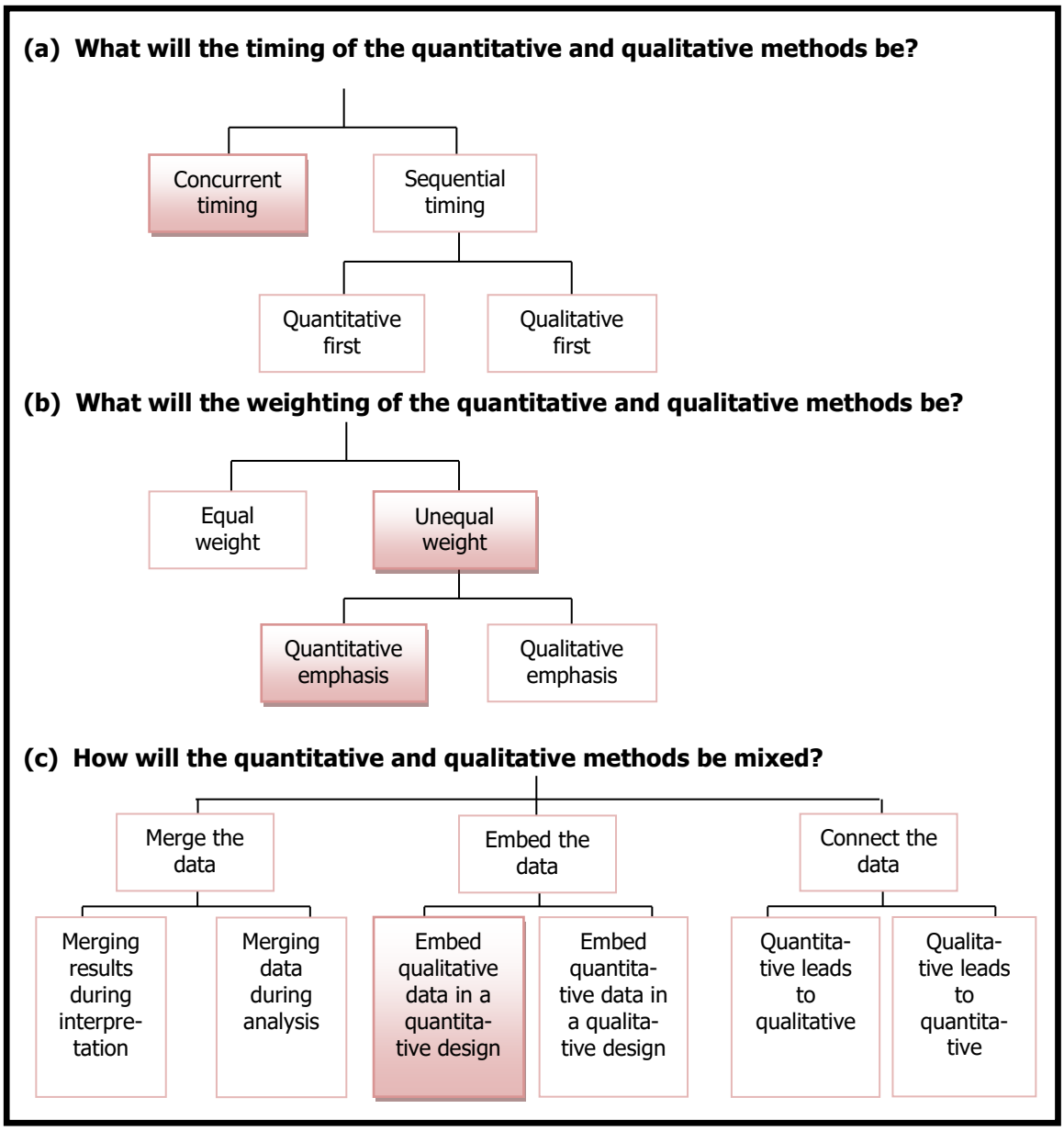


FIGURE 3.1: DECISION TREE FOR MIXED-METHODS DESIGN CRITERIA FOR TIMING, WEIGHTING AND MIXING

Based on Creswell and Plano Clark (2007:80)

The decision on weighting refers to how the data will be mixed, which indicates the "explicit relating of the two data sets" (Creswell & Plano Clark 2007:83). Strategies to mix data can be classified as "merging", "embedding" and "connecting" data (Creswell & Plano Clark 2007:84).

Creswell and Plano Clark (2007:7) state that by mixing the datasets, a researcher provides a better understanding of the problem than if either dataset had been used alone. There are three ways in which mixing occurs: merging or converging the two datasets by actually bringing them together, connecting the two datasets by having

one build on the other, or embedding one dataset within the other so that one type of data provides a supportive role for the other dataset. Data needs to be mixed in some way so that they form a more complete picture of the problem than they do when standing alone (cf. Figure 3.2).

Figure 3.2 shows the three ways of mixing quantitative and qualitative data. The shaded boxes show the relevance as far as this study is concerned.

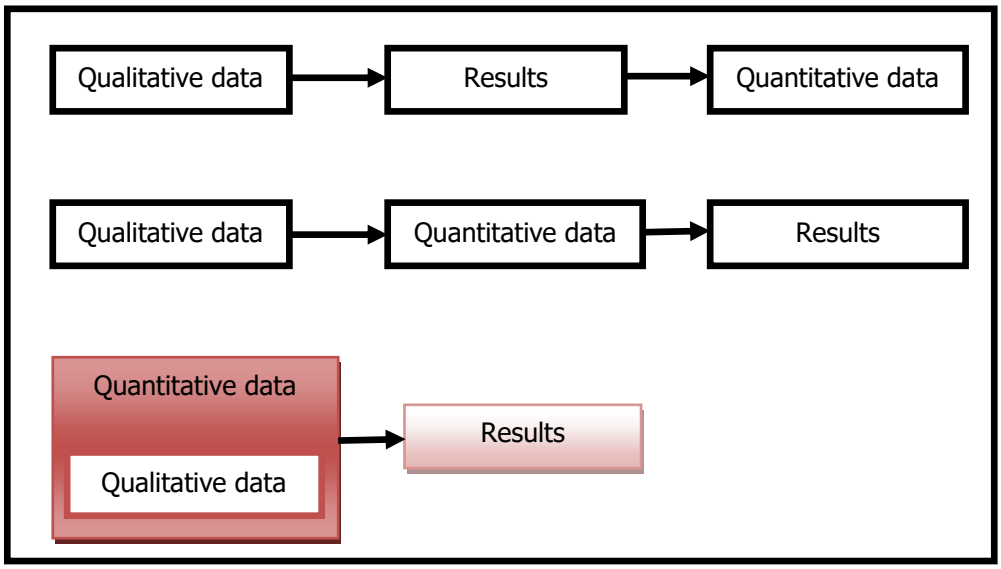


FIGURE 3.2 THE THREE WAYS OF MIXING QUANTITATIVE AND QUALITATIVE DATA

Based on Creswell and Plano Clark (2007:7)

In Table 3.1 the proposed choice of the mixed-methods design is tabled. The shaded boxes show the relevance as far as this study is concerned.

TABLE 3.1: PROPOSED CHOICE OF THE MIXED-METHODS DESIGN BASED ON THE THREE KEY DECISIONS

Compiled from Creswell and Plano Clark (2007:85)

(Table continues on next page)

DESIGN TYPE	TIMING	WEIGHTING	MIXING	NOTATION
Triangulation	Concurrent	Usually equal (not necessarily)	Merge the data during the interpretation or analysis	QUAN + QUAL
Embedded	Concurrent	Unequal	Embed one type of data within a larger design using the other type of data	QUAN (qual)

	or sequential (one-or-two phase approach)			or QUAL (quan)
Explanatory	Sequential: Quantitative first, followed by qualitative (two-phase approach)	Usually quantitative	Connect the data between the two phases	QUAN →qual
Exploratory	Sequential: Qualitative first, followed by quantitative (two-phase approach)	Usually qualitative	Connect the data between the two phases	QUAL →quan

In mixed-methods research, researchers make use of visual diagrammes and notation systems (first used by Morse 1991) to better understand the nature of the mixed-methods approach (Creswell & Plano Clark 2007:41; Ivankova *et al.* 2007:263). Visual diagrammes use geometric shapes (boxes or ovals) to show the steps in the research process and arrows to show the progression through the steps. The notation systems use pluses (+) to indicate methods that occur at the same time and arrows (→) to indicate methods that occur in a sequence. Parentheses are used to indicate methods that are embedded within other methods (Creswell & Plano Clark 2007:41). A notation system further designates the importance of the methods within the study, with the primary method being indicated with uppercase letters (QUAN or QUAL), and the secondary method indicated with a lower case (quan or qual) (Ivankova *et al.* 2007:263; Johnson & Onwuegbuzie 2004:19).

As was pointed out earlier, four basic types of mixed-methods are described in the literature, namely the triangulation, exploratory, explanatory and the embedded type (Creswell & Plano Clark 2007:67; Ivankova *et al.* 2007:63). [cf. Table 3.1 & Figure 3.1].

The Triangulation Design is the most common and well-known approach to mixing methods (Creswell, Tashakkori, Jensen and Shapley 2003:215). The purpose of this design is "to obtain different but complementary data on the same topic" to best understand the research problem (Creswell & Plano Clark 2007:41). Creswell *et al.* (2003:216) state that the intent in using this design is to bring together the different strengths and non-overlapping weaknesses of quantitative methods with those of qualitative methods. This design is used when a researcher wants to directly compare

and contrast quantitative statistical results with qualitative findings or to validate or expand quantitative results with qualitative data (Creswell & Plano Clark 2007:62).

The Exploratory Design is used when the results of the first method (qualitative) can help to develop or inform the second method (quantitative) (Creswell & Plano Clark 2007:75). As this design begins qualitatively, it is best suited for exploring a phenomenon (Creswell *et al.* 2003:221). The Explanatory Design is a two-phase mixed-method design and is used when qualitative data are needed to explain or expand on the quantitative data. The quantitative results provide a general picture while the qualitative results refine, explain or extend the general picture (Creswell & Plano Clark 2007:72; Ivankova *et al.* 2007:264).

The Embedded Design is a mixed-methods design in which one data set provides a supportive, secondary role in a study based primarily on the other data type (cf. Figure 3.3a) (Creswell *et al.* 2003:68). The premises of this design are that a single data set is not sufficient, that different questions need to be answered, and that each type of question requires different types of data. Researchers use this design when they need to include qualitative or quantitative data to answer a research question within a largely quantitative or qualitative study. This design is particularly useful when a researcher needs to embed a qualitative component within a quantitative design, as in the case of an experimental or correlational design. In the experimental example, the investigator includes qualitative data for several reasons, such as to develop a treatment, to examine the process of an intervention or the mechanisms that relate variables, or to follow up on the results of an experiment (Creswell & Plano Clark 2007:67).

The embedded type is used when one data set provides a supportive, secondary role. It means that both quantitative and qualitative data are collected, but one of the data types plays a supplemental role within the overall type. According to Creswell and Plano Clark (2007:67) this type of method is particularly useful when a qualitative component is embedded within a quantitative component.

The Embedded Design Procedures mixes the different data sets at the design level, with one type of data being embedded within a methodology framed by the other data type. For example, a researcher could embed qualitative data within a quantitative methodology, as might be done in an experimental design, or quantitative data could

be embedded within a qualitative methodology, as could be done in a phenomenology design (see Figure 3.3a). The Embedded Design includes the collection of both quantitative and qualitative data, but one of the data types plays a supplemental role within the overall design. An Embedded Design can use either a one-phase or a two-phase approach for the embedded data (see Figure 3.3b), and the quantitative and qualitative data are used to answer different research questions within the study (Hanson, Creswell, Plano Clark, Petska & Creswell 2005:225). Althoughmany variants of the Embedded Design are possible, there are two variants worth naming, namely the experimental model (cf. Figure 3.3b) and the correlation model (cf. Figure 3.3c). The shaded boxes show the relevance as far as this study is concerned.

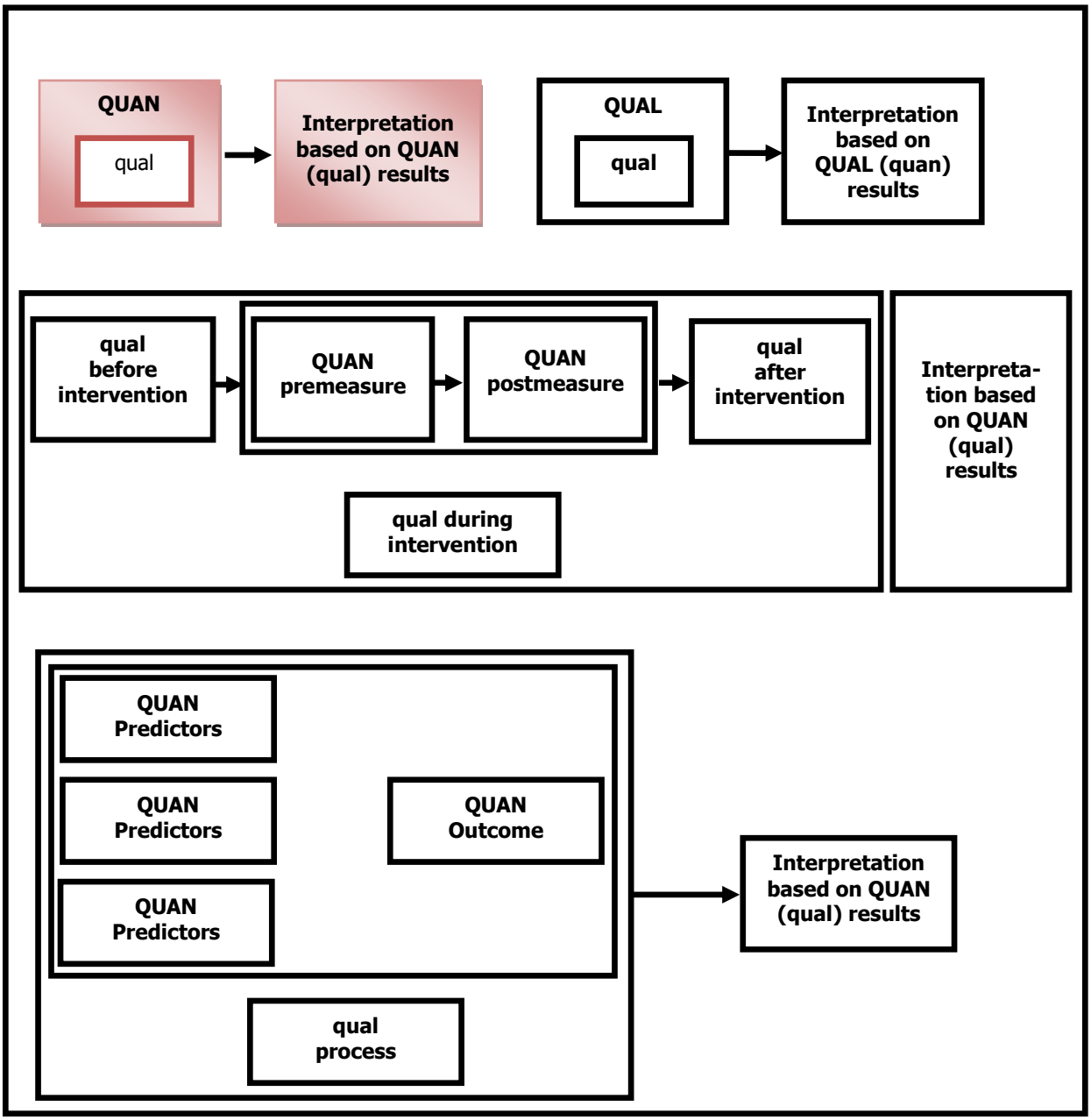


FIGURE 3.3 THE EMBEDDED DESIGN

Based on Creswell and Plano Clark (2007:68)

3.2.4 The mixed-methods research design in this study

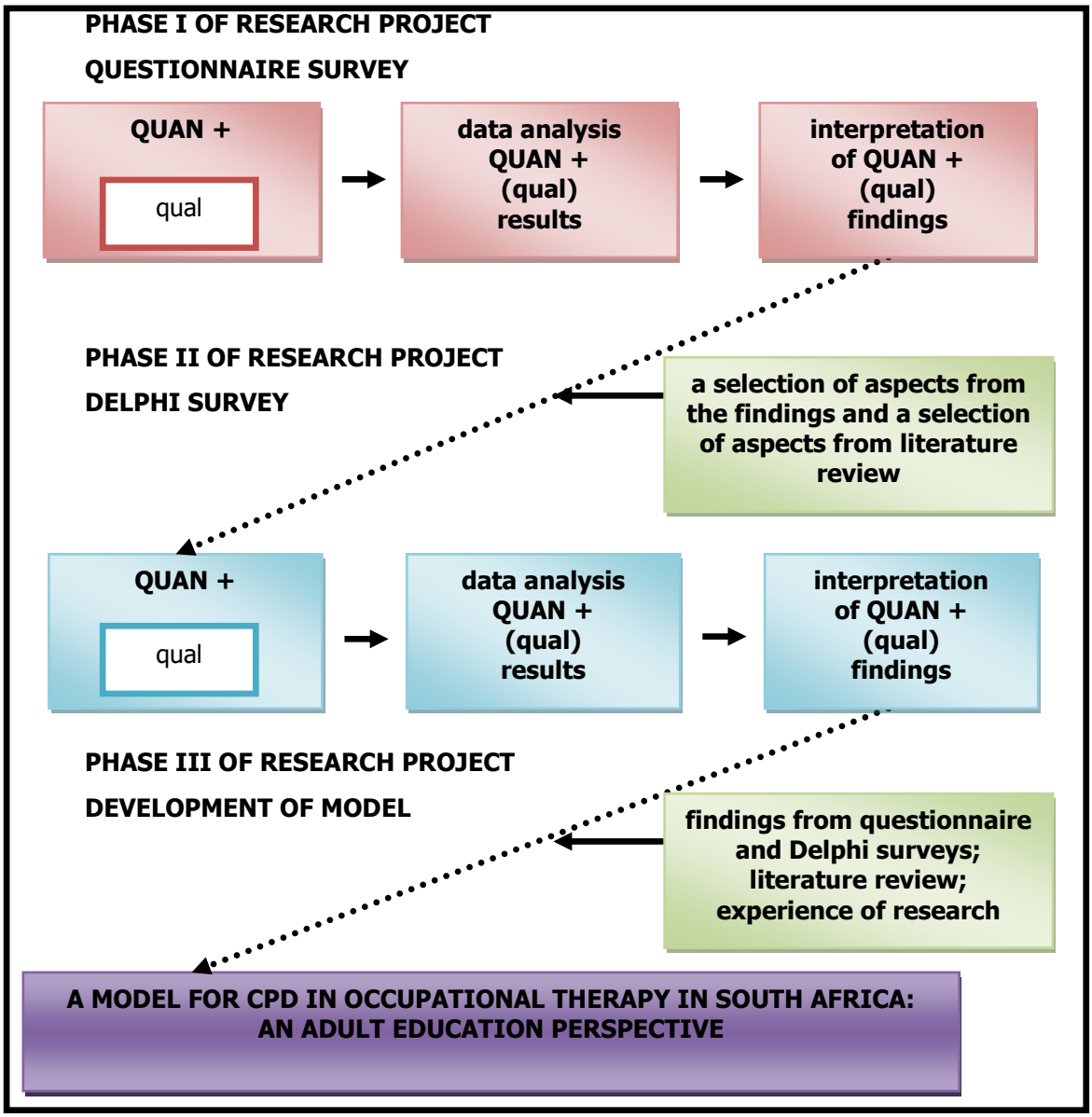


FIGURE 3.4: THE MIXED-METHODS RESEARCH DESIGN IN THIS STUDY [Compiled by the Researcher, Collender 2010]

The mixed-methods research design in this study follows an embedded design approach (Creswell & Plano Clark 2007:100). [cf. Figure 3.4].This mixed-methods design addresses the aim of the study, namely to develop from an adult education perspective, a model for CPD in Occupational Therapy. It was therefore, necessary to determine the needs for CPD of occupational therapists with regard to content, cost, time, CPD activities, learning situations and mode of delivery to improve the effectiveness of CPD programmes for the therapists, if necessary.

An embedded mixed-methods design was used – a design in which one data set provides a supportive, secondary role in a study based primarily on the other dataset.

The overall research project or programme can be divided into three phases, namely: Phase 1: Questionnaire survey; Phase II: Delphi survey; and Phase III: Development of model (cf. Figure 3.4).

In Phase I of the overall research project (programme), the *primary* purpose was to collect quantitative data through a questionnaire survey sent to occupational therapists. The *secondary* purpose was to collect the qualitative data that support and enhance the quality, depth and width of the quantitative data. In most of the questionnaire survey the qualitative data were subordinate to the quantitative data and were used to enhance the quantitative data. In Section E: Adult education (cf. Appendix A3), respondents had to give their opinion - as a mature, experienced person in a profession and as an adult learner - on factors influencing CPD and the effectiveness of programmes. This data was analysed in a qualitative way. The data of the questionnaire survey were analysed separately and interpreted together.

In Phase II of the research project (programme) the *primary* purpose was to collect quantitative data through a Delphi survey directed at a panel of experts. The *secondary* purpose was to collect qualitative data that support and enhance the quantitative data. The Delphi experts could give comments on statements; give general comments; and they also could add additional statements or sections to the Delphi questionnaire, to be included in follow-up rounds. In the Delphi survey the qualitative data were subordinate to the quantitative data and were used to enhance the quantitative data. The data were interpreted together.

In Phase III of the research project (programme) a model was developed, based on the findings of Phase I and II as well as from the literature review and from the experience and expertise drawn from the research.

3.3 RESEARCH METHODS

The methods that were used and which formed the basis of the study comprised a literature review, and – as the empirical study - a questionnaire survey and a Delphi

process. In this section information on the sampling, data collection, data analysis, ethical consideration, and validity and reliability will be included.

3.3.1 Literature review

The purpose of a literature review was to provide a background in order to develop the questionnaires and the context for the research problem, to establish the need for the research and to indicate that the researcher was knowledgeable about the area (Landman 1988:69).

The literature review focussed on CPD from an adult education perspective. Various sources of information were consulted, including books and journal articles, as well as relevant publications on the Internet. The focus of the review was, however, the context of Higher Education and adult education. The development of the questionnaire was also structured in such a way as to provide both quantitative and qualitative responses from the occupational therapists. [For a full discussion on the literature underpinning this study, please see Chapter 2].

3.3.2 The questionnaire survey

3.3.2.1 *Theoretical aspects*

The theoretical aspects and methodological bases for the use of a questionnaire are discussed in this section.

According to Goddard and Melville (2001:47), a questionnaire may be considered to be a printed list of questions that respondents are asked to answer. Questionnaires may include open and closed questions; typically the closed questions are answered by means of ranking or scoring. The effectiveness of a questionnaire, however, depends upon the prior planning of the questionnaire, particularly in terms of how objectively it can be analysed afterwards.

Goddard and Melville (2001:48) suggest the following criteria for a good questionnaire:

- The questionnaire is complete – it contains all the data needed.
- It is short and, therefore, does not abuse the respondents' time or concentration.

- It asks only relevant questions.
- It gives clear instructions.
- It has precise, unambiguous, comprehensive and understandable questions.
- It has objective questions and does not suggest answers.
- It starts with general questions.
- It has appropriate questions.
- It puts sensitive questions at the end.
- It uses mostly closed questions, often with a four-point scale.

The research instrument used also needs to be reliable, while the information obtained must be valid (with regard to these concepts, cf. 3.4).

Questionnaires may be structured, semi-structured and unstructured. A structured questionnaire, involves the use of fixed standardised questions and/or scales which are presented to the respondents in the same way, with no variations in question wording, and with mainly pre-coded response choices (Bowling 2002:258). When very specific information is required, closed or structured questions may be used. This type of questionnaire may also be used for large-scale data collection (Goddard & Melville 2001:48). A semi-structured questionnaire contains variations in question wording and may have variations in scales or presentation and open-ended questions may be included. The questionnaire in this research study (cf. Appendix A3) falls mainly in the structured category with some exceptions in view of accommodating all answers and views of respondents, as well as the adding of open-ended questions - in most cases asking of respondents to motivate their answer.

The main advantage of the use of structured questionnaires is the ability to collect unambiguous and easy to count answers, leading to quantitative data for analysis (Bowling 2002:258). Because this method leads to greater ease of data collection and analysis, it is relatively economical and large scales of people can be included. The disadvantages of structured questionnaires are that the pre-coded response choices are not always sufficiently comprehensive and that not all possible answers are necessarily easily accommodated. Some respondents may, therefore, be forced to choose inappropriate pre-coded answers that do not fully represent their views.

Another weakness of structured questionnaires is that it assumes that the questions will be understood by the respondents, whereas a further complication is that

respondents may not all share the same perspectives and understanding of the terms and concepts used. There is also the potential for bias in that respondents' replies may be influenced by the design of the pre-coded questionnaires, while some questions may be leading in the sense that they may lead potential social desirability bias (Bowling 2002:259).

Two other problems related to the use of questionnaires are the often low ratesof return and the process of selecting participants. This study, however, attempts to ensure reliability and validity through appropriate and carefully constructed questionnaires, as well as through systematic selection of participants.

3.3.2.2 *Occupational therapists' questionnaire*

Prior to the commencement of the research, permission and consent had to be obtained from the participants. A letter of invitation to participate in the questionnaire survey (cf. Appendix A1) and a form of consent to participate in the research study (cf. Appendix A2) were sent to the occupational therapists.

The purpose of the questionnaire (cf. Appendix A3) was to do a needs analysis of CPD for occupational therapists and to determine the effectiveness of CPD activities concerning the acquisition of new skills, knowledge and professional behaviour. The questionnaire is mostly quantitative, but also included open-ended questions, with Section E representing a qualitative approach.

Various scaling methods were used in the questionnaire survey, for example an adapted Likert scale that was reduced from a five-point to a four-point scale for some questions. This was done to prevent the respondents from simply choosing a middle response and instead making a decision. In some questions respondents had to choose between a yes or no option; select only one option or sometimes more than one option. In some questions they could choose among five options; for example, no need at all; not needed; neutral; needed or highly needed. Respondents could add other relevant information and or answer open-ended questions in some cases (cf. Appendix A3).

In compiling the occupational therapists' questionnaire, use was made of the questionnaire survey instruments of Kriel (2003) [cf. Appendix A3 Sections A and B]

and Castleman (2007) [cf. Appendix E3 Sections A and C] as well as from the literature cited. Relevant information was selected and adapted for a needs analysis questionnaire survey for occupational therapists. All information in this regard are acknowledged and referenced (cf. List of references included in Appendix A3).

The questionnaire (cf. Appendix A3) collects information in four sections, namely:

Section A: Demographics (cf. Appendix A3)

This section deals with the collection of information to compose personal, professional, employment and geographic profiles of the respondents.

- Personal profile
  In the personal profile category information on the gender, age, population group and access to electronic communication media was collected.
- Professional profile
  In the professional profile category information on educational background (including highest qualification obtained in occupational therapy as well as in other disciplines, qualifications in another professional fields and interests in other field of study) was collected.
- Employment profile
  In the employment profile category information on current employment in the public/private sector; the time period working as occupational therapist as well as in a managerial position of the respondent was collected.
- Geographic profile
  In the geographic profile category information on workplace location; size of practice; patient numbers; patient age profile; hospital/clinic profile; patient disease profile and distance from health services was collected.

Section B: Professional development (cf. Appendix A3)

This section deals with issues related to the needs for and the factors impacting on Professional Development.

The following aspects are included in the questionnaire:

- keeping abreast of developments
- opportunities to be kept informed of
- stumbling blocks with regard to CPD
- motivating factors to engage in CPD
- current CPD activities meeting needs
- acquiring CPD points
- preferred CPD activities
- preferred CPD venues and events
- fees and cost as far as CPD is concerned
- preference as far as time is concerned to attend opportunities
- motivation for compliance
- preference as far as learning situation is concerned.

Section C: Content needs (cf. Appendix A3)

This section deals with the content needs of occupational therapists.

The following content needs are included in this section:

- clinical needs
- business needs
- computer needs
- health policy needs
- ethical needs
- interpersonal skills needs
- personal growth areas
- product needs

It was also requested that respondents indicate their areas of interest and expertise.

Section D: Appropriateness of CPD activities (cf. Appendix A3)

This section deals with the appropriateness of various CPD activities.

The respondents have to indicate how *effective* the current products/activities on offer are, secondly how *important* each of these products/activities are for the future, and thirdly how *necessary* the specific products/activities are for the future.

Section E: Adult education (cf. Appendix A3)

This section deals with adult education.

The respondents have to, as adult learners, identify (and motivate their answers) which factors are important to them as far as CPD is concerned. They also have the opportunity to make recommendations as to how more effective CPD programmes can be offered for occupational therapists.

3.3.2.3 *Sample selection*

Sampling methods for research may be broadly divided into two groups, namely for quantitative research and for qualitative research. For each of these research processes, the methods can be further divided into random and non-random sampling, depending upon the purpose of the research. Random sampling would include such methods as unrestricted random sampling, simple random sampling, systematic random sampling, stratified random sampling, cluster sampling, as well as other techniques with slight variations to the sampling methods. The results of random sampling are often used to draw conclusions on how the research would apply to the wider population (Bowling 2002:187).

Non-random sampling is usually conducted for the purposes of understanding complex phenomena and to generate hypotheses, rather than to apply findings to a wider population. Sampling methods for qualitative research often involve methods such as convenience sampling, purposive sampling, snowballing and theoretical sampling. While these methods are non-random, they may be specifically used to determine a particular understanding of a condition or problem in a select community in the population (Bowling 2002:187).

The sample design in this study was a stratified sample. "In this method of sampling (i.e. stratified), the population is divided into a number of homogeneous, non-overlapping groups, called strata. Within each stratum, independent sampling (e.g.

simple random or systematic sampling) is then conducted. The strata can be formed based on natural subgroups, for example the nine provinces in South Africa, or they can be based on available information, for example the job level of employees" (Maree & Pietersen 2007:18). The strata in this study are the different provinces in the country.

3.3.2.3.1 Target population

A target population entails individuals who all possess specific characteristics (De Vos 1998:14). For the purpose of this study, it was all the qualified occupational therapists, registered with the HPCSA on 1 July 2008 and who could be classified as adult learners, thus 23 years of age or older (cf. 3.3.2.1.3). An address list, with registration numbers, surname and initials as well as postal addresses was obtained from the Office of the HPCSA.

3.3.2.3.2 Survey population

The survey population consisted of occupational therapists registered with the HPCSA, selected throughstratified samplingusing a simple random sample. As a starting point, the number of occupational therapists on the list were categorised by province and counted. It was then decided to select 20% of respondents per province, using the random numbers table and selecting every "x" number of participants to serve as part of the survey population; in this study it was every fifth individual. The survey population ultimately consisted of individuals who were willing to sign the consent forms and complete the questionnaire.

3.3.2.3.3 Sample size

There were 2231 names on the list, but some of their addresses/particulars were not complete – these names were deleted before the process of selection per province – ending up with 2018 individuals. A total number of 405 participants were selected. The invitation letter to participate in the study, consent forms and questionnaires were posted to them simultaneously. The researcher also asked them not to complete the questionnaire if they were, firstly, not yet 23 years of age (thus a adult learner by definition) and, secondly, if they had not yet been working as an occupational therapist

for one year, but to send it back in such a case, uncompleted in the addressed envelope included.

3.3.2.3.4 Description of the sample

The sample thus consisted of qualified and registered occupational therapists, 23 years and older, having worked for more than one year on completion of their degree and who were willing to consent to participate in the study.

3.3.2.3.5 The pilot study

In order to streamline the research process, it is important to conduct a smaller version of the research study in order to identify possible problems and pitfalls in the proposed technique, as well as to ensure that the most efficient and appropriate research instrument is used. This process is generally referred to as a pilot study.

A pilot study is often conducted to test the feasibility of a proposed study (University of Washington 2004). "Feasibility" refers to the ability of actually conducting the study as proposed. This involves checking on the instruments used for data collection and the logistics of performing the study. A further important reason for the pilot study in this research project was to improve the internal validity of the questionnaires used.

Van Teijlingen and Hundley (2001:1) suggest that the reason for conducting a pilot study could be for pre-testing or "trying out" a particular research instrument. One of the advantages of conducting a pilot study is that it might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated.

Van Teijlingen and Hundley (2001:1) explain that pilot studies refer to mini-versions of a full-scale study (also called "feasibility" studies), as well as the specific pre-testing of a particular research instrument such as a questionnaire or an interview schedule. They point out that the benefits of performing a pilot study do not guarantee success in the main study – but it does at least increase the likelihood of it – and that pilot studies fulfill a range of important functions and can provide valuable insights for other researchers.

Clarke-Farr (2005:221) warns that there are also certain limitations and potential problems inherent in conducting pilot studies. These include the possibility of presupposing the research by making inaccurate predictions or assumptions and by including the data from the pilot study in the main results. These potential problems, therefore, needed to be considered and kept in mind throughout the research process in this study.

Peat, Mellis, Williams and Xuan (2002:123) list a number of goals of a pilot study that may improve the proposed questionnaire. These were, in return, summarised and reduced as follows by Clarke-Farr (2005:221-222):

- "administer the questionnaire to pilot participants in exactly the same way as it will be administered in the main study;
- ask the participants for feedback to identify ambiguities and difficult questions;
- record the time taken to complete the questionnaire and decide whether it is reasonable;
- discard all unnecessary, difficult of ambiguous questions;
- assess whether each question gives an adequate range of response;
- establish that replies can be interpreted in terms of the information that is required;
- check that all questions are answered;
- re-word or re-scale any questions that are not answered as expected;
- shorten, revise and, if possible, pilot again".

A pilot study was conducted by testing the questionnaire on four individuals (a qualified occupational therapist working in a state facility, an educationist, an occupational therapist in private practice and a bio-statistician) in order to evaluate aspects such as the clarity and distinctness of the questions; to determine how much time would be needed to complete the questionnaire; and to ensure that the questions were not biased. Only two typing errors were corrected. The responses of those individuals were not included in the final questionnaire survey.

3.3.2.3.6 Data gathering

Consent to participate in the study was obtained by means of written communication. A total of 405 questionnaires were posted to the targeted occupational therapists. Respondents were granted a six-week period to complete the questionnaire. They

were requested to return it using the addressed envelope that was included. They were also offered the option to request the consent form and questionnaire in electronic format via the email address of the researcher. Only 12 respondents made use of this alternative option. The questionnaire was not anonymous, but the participants were ensured that the results would be handled confidentially.

After four weeks a second round of questionnaires were again sent to the 405 addresses, requesting the occupational therapists to complete the questionnaires – or to ignore the second request if they had already done so.

Of the 405 posted questionnaires (of both rounds), as many as 31 were returned unopened, mostly due to incorrect addresses. A total of 17 questionnaires were returned with a note from a family member, friend or colleague explains that the occupational therapist is working abroad. Altogether 211 completed questionnaires were returned. The response rate was calculated as 60% [405-31-17=357; 211 of 357=59,94%] and was acceptable. Leedy and Ormrod (2001:204) mention that the response rate to posted questionnaires, according to theory, is less than 50%.

3.3.2.3.7 Data analysis

The data analysis was done by a qualified statistician working, at that point in time, in private capacity as well as part-time for the University of the Free State. The data analysis consisted mostly of calculating descriptive statistics such as percentages and frequencies. According to Pietersen and Maree (2007:183) descriptive statistics is a collective name for a number of statistical methods used to organise and summarise data in a meaningful way. Both numerical and graphical methods were used to analyse the responses, except in the case of some of the open-ended questions.The relatively rich qualitative data were analysed by the researcher herself, using qualitative scientific methods. Qualitative data were analysed by reading and reflection, identification of themes, establishment of patterns and connections, as well as coding.

According to De Vos (2005(a):337) it is important to read respondents' statements/responses through thoroughly several times and in their entirety, and to immerse oneself in the details to get a sense of the data before breaking it up into parts. Data can then be organised to discover patterns, themes, forms and qualities and connections can be formed. In this study, the researcher identified recurrent

themes, and reviewed and coded them (De Vos 255(a):333; Fossey, Harvey, McDermott& Davidson 2002:729).

Different types of coding were used in this study to analyse data; namely, open coding, axial coding and selective coding. During open coding, data are broken down into parts, closely examined, compared for similarities and differences, and questioned in terms of phenomena reflected in the data. Axial coding is done by putting data back together in new ways after the process of open coding, by making connections between categories. Selective coding is a process of selecting core categories and systematically linking them to other categories (De Vos 2005(a):338; Nieuwenhuis 2007:105).

Nieuwenhuis (2007:105) also describes two other types of coding, namely inductive (to let codes emerge from data) and priori (codes developed beforehand) coding. In this study an inductive coding strategy was followed in addition.

3.3.2.3.8 Data interpretation

Taylor-Powell and Renner (2003:5) describe data interpretation as the meaning and significance attached to data that were analysed. In this study the data interpretation (of Phase I) was guided by the findings of the quantitative and qualitative data collected from the questionnaire survey, within the context of the literature review.

Fossey *et al.* (2002:730) point out that it is important to provide a coherent account including giving a description of interaction, giving examples and discussing the meaning and importance when interpreting data. Taylor-Powell and Renner (2003:5) emphasise the use of quotations or own words of respondents to illustrate meaning (cf. Chapter 4).

3.3.3 The Delphi technique

3.3.3.1 *Theoretical aspects*

The Delphi technique is summarised by Linstone and Turoff (2002:3) when they consider Delphi to be "… more of an art than a science". With that in mind, they suggest that Dephi may be characterised as a method for structuring a group

communication process so that the process is effective in allowing a group of individuals, as a whole,to deal with a complex problem. They explain further that, in order to accomplish this structured communication, provision is made for feedback on individual contributions of information and knowledge; assessment of the group judgement or view; for individuals to revise views; and a degree of anonymity for individual responses.

Bowling (2002:407) also classifies the Delphi technique as a consensus method for both qualitative and quantitative research and further suggests that consensus methods are increasingly being used to establish the extent of consensus and, in some cases, to develop it. In particular, consensus methods may be used in areas of uncertainty in clinical medicine and health policy, where there is a lack of definitive evidence about the effectiveness and appropriateness of health-care interventions. The use of the Delphi technique for the development of health-related education programmes in particular is well established (Jones & Hunter 1995:376).

A critical component of the Delphi process includes the selection of a panel of experts to participate in the formulation of the outcomes of the research. Critcher and Gladstone (1998:435) place great importance on the selection of the correct panel of experts, and that these experts function as referees and advocates for a specific issue or field of interest. The preparatory phase of groundwork for the panel is most important in order to ensure a successful process. Part of this preparatory process would also include the careful construction of the Delphi questionnaire, with particular attention paid to questions that are in the form of clear statements, as well as provision for feedback, comments and recommendations by the panel (Clarke-Farr 2005:225).

It can, therefore, be inferred that the main aim and purpose of the Delphi process is to reach consensus and stability among a panel of experts on a specific statement provided and proposed by the researcher. In order to facilitate the process, the researcher provides feedback to each member of the panel on the previous rating of the panel as a whole and of the individual as such. There is then the opportunity to undergo a second and even a third round of questions in order to obtain consensus.

Clarke-Farr (2005:226-228) summarises important aspects of the Delphi technique and highlights the following advantages and disadvantages as listed by the Michigan State University (1994:1-3):

a) *Advantages of the Delphi technique*

The advantages of the Delphi technique can be listed as follows:

- "It allows participants to remain anonymous.
- It is inexpensive.
- It is free of social pressure, personality influence and individual dominance.
- It is a reliable judgment or forecast of results is likely.
- It allows sharing of information and reasoning among participants.
- It is conductive to independent thinking and gradual formulation.
- It consists of a well-selected respondent panel.
- It can providea broad analytical perspective on potential growth impacts.
- It can be used to reach consensus among groups hostile to one another".

b) *Disadvantages of the Delphi technique*

The disadvantages of the Delphi technique can be listed as follows:

- "The judgments are those of a selected group of people and may not be representative.
- There may be a tendency to eliminate extreme positions and force a middle-of-the-road consensus.
- It is more time-consuming than the group process method.
- It should not be viewed as a total solution to forecasting.
- It requires skill in written communication.
- It requires adequate time and participant commitment (about 30-45 days)".

The key element of the Delphi technique, therefore, is the overall aim of reaching consensus and stability. Mitroff and Turoff (2002:22) reflect this in their statement that "… the validity of the resulting judgement of the entire group is typically measured in terms of the explicit 'degree of consensus' among the experts". Some of the criticisms and drawbacks of this technique, however, centre around the fact that some of the

judgements that emanate from the Delphi process may be considered to be a compromise judgement, rather than the best objective statement. However, this may be partially negated by a suitably sized Delphi Panel. It may, therefore, be hypothesised that the truth content of the Delphi process (often measured as the error) increases as the size of the Delphi group increases (Mitroff & Turoff 2002:24) and that the results of the technique should nevertheless form an important and valid part of the research process.

Dalkey (1969:12) analysed the relationship between reliability and the Delphi group size. His research demonstrated a definite increase in the reliability of the group responses with increasing group size. There was also an approximately linear relationship in reliability when there were between three and 11 members of the group. It was found that there was a large increase in reliability when group size increased from one to 11 members, but after this point, it did not increase significantly.

The validity of and justification for the use of the Delphi technique as a method for this research is an important consideration. According to De Meyrick (2003:14), the Delphi method has a long tradition as a valid research technique, especially in medical and health-related fields. Furthermore, in many health-related issues, there is a relevant body of expert knowledge held by a group of recognised experts, and it is this expert knowledge that must be identified, not the estimates of respondents without the necessary expertise (De Meyrick 2003:14). This aspect, therefore, justifies the fact that the Delphi panel consists of members or experts who are usually purposefully selected by the researcher and as opposed to being randomly selected without considering their unique skills and expertise.

3.3.3.2 *The Delphi process and questionnaire in this study*

The Delphi technique was used in this study for specific reasons, namely that it is a quick and cost-effective method of gathering expert opinions. Difficulties and problems when encountering face-to-face discussions were overcome by using the Delphi process (Critcher & Gladstone 1998:432; Linstone & Turoff 1979:4; Murry & Hammons 1995:426). The study allowed a range of experts from various backgrounds to participate equally in the process. As the research was aimed at designing a model, the Delphi process lent itself to an exploration of the topic; participants could carefully consider their responses in their own time; and as this study needed a quantitative as

well as a qualitative approach, the Delphi technique was therefore regarded as a suitable research method.

The Delphi instrument was a product of certain aspects of the questionnaire survey and the literature cited. A description of the questionnaire as measuring instrument will be presented in Chapter 5, followed by a discussion of the different Delphi rounds.

3.3.3.3 ***Sample selection***

3.3.3.3.1 Target population

The target population consisted of experts in the fields of Higher Education, Health Sciences Education, Occupational Therapy and CPD.

3.3.3.2 Survey population

The survey population consisted of experts who had consented to function as Delphi expert members in the field of Higher Education, Health Sciences Education, Occupational Therapy and CPD.

3.3.3.3.3 Sample size

The sample size consisted of 10 expert members, selected according to fixed criteria. The criteria were set after the literature study and the questionnaire survey had been completed.

3.3.3.3.4 Description of the sample

The sample consisted of six experts from Occupational Therapy, who are in managerial and leadership positions, four of them from an academic institution and two in private practice; four of the experts have a Ph.D. in either Higher Education or Health Professions Education and two of them serve/or have served on CPD Committees of the Council. These two experts are not qualified as occupational therapists, but are professionally qualified in two other health professions. Out of the 10 experts eight were women. All 10 experts had more than 10 years' experience in their specific field

of expertise with high national and international standing. All these experts are familiar with and confident within the field of CPD and adult education.

3.3.3.3.5 The pilot study

The pre-testing of the Delphi questionnaire was done by means of a pilot study. This was undertaken to ensure the reliability, validity and trustworthiness of the study. For the pilot study an individual from Health Sciences Education, as well as a senior occupational therapist were involved to ensure that the questions were clear, that the statements were correctly numbered, and so forth. These experts did not partake in the Delphi questionnaire process.

3.3.3.3.6 Data gathering

Prior to commencing the research, letters of invitation were sent to the expert panel members to request their participation in the research (cf. Appendix B1). Consent to participate in the study had been obtained through personal and electronic communication. All the participants in the Delphi process had to give their consent. This was accomplished by means of a consent form for the participants to complete, should they accede to the request (cf. Appendix B2). The Delphi questionnaires together with an accompanying letter were electronically distributed to the participants during the different rounds (cf. Appendices C,D & E).

According to Dajani, Sincoff and Talley (1979:83), consensus is assumed to have been achieved when a certain percentage of responses fall within a prescribed range for the value being estimated. The aim of the Delphi process is to reach a level of consensus among the expert panel members on a specific statement.For the purpose of this study, consensus was set at 80%.

Stability is described as the natural tendency for opinions of experts to centralise (Linstone & Turoff 1979:277). Stability can, therefore, be declared when movement of the opinion of the group as a whole has reached stability.

3.3.3.3.7 Data analysis

The analysis of the various rounds of the Delphi process was done manually by the researcher (cf. Chapter 5, Points 5.2.2.2, 5.2.3.2 and 5.2.4.2).

3.4 ENSURING THE QUALITY, RELIABILITY, AND VALIDITY OF THE STUDY

There are different views about validity and reliability of data and results in the mixed-methods approach. Validity differs in quantitative and qualitative research, but in both approaches it serves the purpose of checking on the quality of the data and the results. In quantitative research, validity means that the researcher can draw meaningful inferences from the results to a population; reliability means that scores received from participants are consistent and stable over time (Creswell & Plano Clark 2007:133). These authors state that in qualitative research, there is more of a focus on validity to determine whether the account provided by the researcher and the participants is accurate, can be trusted, and is credible (Creswell & Plano Clark 2007:134; Lincoln & Guba 1985 in Creswell & Plano Clark 2007:134).

There are different views about assessing the quality of mixed-methods research. The researcher depended strongly on the work of Maree (2007:295-301) in choosing terminology describing the quality in this research study.

3.4.1 Trustworthiness

Trustworthiness in a mixed-methods approach is described as "including for analysis and interpretation of all the topics that were covered by both the quantitative and qualitative aspects of the study" (Golafshani 2003:597). In this study the analysis and interpretation of the findings of the questionnaire survey and the Delphi survey are given in Chapters 4 and 5.

Westphal (2000:1) argues that another way of establishing trustworthiness of results is by linking findings and conclusions to both data and theory. In this study, the findings and conclusions reached in the empirical investigation (Chapters 4 and 5) are linked to the literature and theory in Chapter 2.

Maykut and Morehouse (1994:64) explain the term "trustworthiness" as referring to the "believability" of a researcher's findings. Guba, as quoted in De Vos, Stydom, Fouche and Delport (2002:351-352), identifies trustworthiness as consisting of four elements, namely credibility, transferability, dependability and confirmability. Babbie and Mouton (2001:277-278) believe that, since a quantitative study cannot be considered valid unless it is reliable, a qualitative study cannot be called transferable unless it is credible and it cannot be deemed credible unless it is dependable.

The trustworthiness of this study was, therefore, further enhanced through the reliability and the validity of the quantitative research instrument – in this case, the questionnaires, as well as the credibility of the Delphi instrument,the Delphi method of research, as well as the Delphi panel. Trustworthiness of the study was ensured through the selection of subject experts and specialists in the field of CPD for the Delphi panel according to set criteria. Furthermore, trustworthiness of the Delphi process was ensured by providing the Delphi panel with individual and collective written feedback of the results after each round of the Delphi study.

3.4.2 Credibility/Internal validity

Leedy and Ormrod (2001:31) define "validity" as the extent to which the instrument measures what it is supposed to measure. According to Bowling(2002:150), an instrument would then be assigned validity after it had satisfactorily been tested and repeated in the population for which it had been designed. This type of validity is known as internal validity, as compared to external validity, which refers to the generalisability of the research findings to the wider population of interest (Bowling 2002:150).

Maree (2007:297) states that internal validity refers to an accurate presentation of a particular context or event as described by the researcher. De Vos (2005(b):346), however, describes credibility as the alternative to internal validity and states that the goal in credibility is to demonstrate that the research was conducted in such a manner as to ensure that the subject was accurately identified and described. In this study, the subject of the study was grounded in a theoretical framework in Chapter 2. In addition, validity was further established through the expertise of the participants in the Delphi panel, the broad-based collaboration through which the research instruments had been designed based on the scientific work and literature of various researchers and others,

as well as by the supportive expertise that the promoters and the statistician provided to the researcher.

3.4.3 Data quality (reliability/dependability) and objectivity / confirmability

The term reliability is used in quantitative research, whereas dependability is used in qualitative research (Patton 2002:546). Tashakkori and Teddlie (2003:706) propose the term 'data quality' to refer to the reliability in a mixed-methods study. Tashakkori and Teddlie (2003:706) describe data quality (with specific reference to data collection) as the standard against which the data can be considered to be trustworthy and dependable. Lincoln and Guba (in Patton 2002:546) define dependability as a systematic process followed in a systematic way while De Vos (2005b:346) sees it as an attempt "to account for changing conditions in the phenomenon chosen for study as well as changes in the design created by increasingly refined understanding of the setting". Reliability is defined as the "stability or consistency of a measurement" (Delport 2005:162). De Vos (2005b:346) indicates that dependability and reliability refer to different sets of assumptions that do not measure exactly the same aspect, and so refer to two separate, but related aspects.

In order to increase the reliability of the questionnaire in this study, the constructs tested were clearly defined and care was taken to ensure that the questions reflected the different constructs. From a qualitative point of view, the aspects related to dependability included the use of both quantitative and qualitative questions, in order to enhance the quantitative data and to incorporate perspectives which would lead to a more holistic picture (De Vos 2005b:346).

McMillan and Schumacher (2006:28) caution that the "overall credibility of a mixed-methods study depends on the independent quality of the quantitative and qualitative designs as well as the interplay between them". Objectivity is thus very important.

De Vos (2005b:347) indicates that confirmability refers to the question of whether the "findings of the study could be confirmed by another". In order to provide a more objective viewpoint in this study, two different data sets were used (quantitative and qualitative data).

"Reliability" is defined as the extent to which a measurement instrument yields consistent, stable, and uniform results over repeated observations or measurements under the same conditions each time (Goodwin 1995:96). The data quality in this research was therefore further established by means of well-constructed questionnaires, carefully piloted and reviewed by experts in this area of research.

3.4.4 Openness

The researcher was open to different views – not only to the views of the occupational therapists that completed the questionnaire survey, but also the views of the Delphi experts. Fossey*et al.* (2002:730) point out that evidence of different views sought suggests openness by the researcher.

3.4.5 Authenticity

According to Fossey *et al.* (2002:725) and McMillan and Schumacher (2002:407) authenticity in research can be established by presenting the views of participants in their own words, including verbatim quotes, when presenting findings. Quotations and own words (or modifying the words, but keeping the meaning) of the occupational therapists in this study are included in Chapter 4.

3.4.6 Generalisation

Where generalisations were made in this study, they were based on the theoretical views in Chapter 2 and are cross-referenced in text (cf. Chapter 6).

3.5 ETHICAL CONSIDERATIONS

3.5.1 Approval

Approval to execute the research was obtained from the Vice-Rector (Academic Planning); as well as the Dean and the Faculty Board of the Faculty of Humanities, UFS. Title registration, as well as project and ethics approval, were on 19 March 2008 and final approval at Faculty Board on 6 May 2008.

3.5.2 Informed consent

All the respondents in the empirical study had to consent to take part. This was done by means of written consent. The forms were available in English only. The participants were given a description of the study and the expected duration of the participation. The sample subjects knew that their participation was voluntary and they would have the choice of either participating or not. Participants were guaranteed that all information would remain confidential. The researcher's name and contact details were available to the participants. In addition, participants will have access to the published results of the study.

3.5.3 Right to privacy and confidentiality

The information collected by means of the questionnaire survey as well as the Delphi questionnaires had to be dealt with in a strictly confidential manner and no name or personal information has been made known. The nature and quality of the participants' responses were confidential. None of the respondents' names appeared on any document, as only code numbers were used.

3.5.4 Minimising of potential misinterpretation of results

To ensure correct analysis of the quantitative data, a statistician was contracted to do the analysis of the data (cf. McMillan & Schumacher 2006:144). The researcher is convinced that all possible measures were taken to ensure that the study complied with high ethical standards (cross-referencing and scientific referencing).

3.6 CONCLUSION

Chapter 3 provided an overview of the research methodology involved in the study and the procedures that were followed.

In the next chapter, Chapter 4, entitled ***Results and discussions of findings of the questionnaire survey***, the results of the questionnaire as data collecting method employed in the study will be reported and discussed.

CHAPTER 4

RESULTS AND DISCUSSION OF FINDINGS OF QUESTIONNAIRE SURVEY

4.1 INTRODUCTION

The purpose of the chapter is to present the results from 211 questionnaires distributed to occupational therapists in South Africa.

The questionnaire (cf. Appendix A3) was designed to determine the needs of occupational therapists in CPD, but from and adult education perspective.

In this chapter research question 2 is answered, namely:

"…2. W*hat are the CPD needs of Occupational Therapy practitioners practicing in South Africa; what factors influence CPD; and what is the perceived effectiveness of the various CPD activities offered by providers?"*

Objective 2 addresses research question 2, namely to:

"…2. Compiling a needs analysis of CPD for occupational therapists, identifying factors influencing CPD and determining the effectiveness of various CPD activities for the acquisition of new skills, knowledge and professional behaviour".

The demographic description of the sample is presented first (cf. 4.2: Demographic description of the sample). This demographic information includes biographic data such as gender, age and population group (personal profile); information on their educational background, qualifications and field of interest (professional profile); information on employment and managerial position (employment profile); as well as information on workplace location, practice, patients, disease and distance from health services (geographic profile). (cf. Appendix A3 Section A.)

The second section, Section B (Appendix A3) deals with issues related to the needs for and the factors impacting on Professional Development.

The third section, Section C (Appendix A3) of the questionnaire deals with the content needs of occupational therapists.

The fourth section, Section D(Appendix A3) of the questionnaire deals with the appropriateness of CPD activities on offer. Respondents have to indicate firstly how effective the current products/activities on offer are; secondly how important each of these products/activities are for the future, and thirdly, how necessary the specific products and activities are for the future.

The fifth section, Section E (Appendix A3) of the questionnaire deals with adult education including important factors that influenced the therapist as far as CPD is concerned. The occupational therapist could also make recommendations to improve the effectiveness of CPD programmes and, if they wish to, add other comments as far as topics relating to the questionnaire are concerned.

4.2 DEMOGRAPHIC DESCRIPTION OF THE SAMPLE

[Please compare Section A of Questionnaire (Appendix A3)].

Respondents were asked to give information on their gender, age, race, access to electronic media, educational background and interest, type of practice and experience, managerial duties, number of patients they see per year, most prevalent condition in their practice, and distance of practice from public health facilities.

4.2.1 Gender distribution of the sample

Table 4.1 indicates the gender distribution of the sample. Of the respondents 210 answered the question on gender: one respondent omitted his/her gender.

TABLE 4.1: GENDER DISTRIBUTION OF THE SAMPLE
(Question 2, Section A of Questionnaire) [n=210]

	FREQUENCY	PERCENTAGE
Males	011	05.24
Females	199	94.76

Discussion: The gender distribution of 94.76% (estimated as 95%) females and 05.24% (estimated 5%) males correlates with the actual distribution as far as

occupational therapist registration with the HPCSA is concerned (based on information from address list as received from HPCSA). The findings indicate clearly that the respondents were not evenly distributed between male and female.

4.2.2 Age distribution of the sample

Table 4.2 indicates the average ages of the different gender groups.

TABLE 4.2: AVERAGE AGES OF GENDER GROUPS
(Question 2, Section A of Questionnaire) [n=186]

GENDER	n	LOWER QUARTILE	MEDIAN	UPPER QUARTILE	MINIMUM	MAXIMUM
Males	9	27.00	35.00	43.00	24.00	46.00
Females	177	28.00	36.00	46.00	23.00	78.00

Discussion: The age of males in the sample is between 24 years and 46 years with the median value of 35 while the age of females in the sample is between 23 years with the oldest 78 years and a median value of 36 years. The findings indicate that there is a good distribution as far as age of respondents is concerned with most respondents in the age bracket of their later twenties and the mid-forties. It also means that these occupational therapists, as adult learners, have not only professional experience, but can bring to the learning situation more holistic and real-life world experiences. These learners may have the expectation to be exposed to effective and relevant professional development programmes.

4.2.3 Race distribution of the sample

Table 4.3 shows the race distribution of the sample.

TABLE 4.3: RACE DISTRIBUTION OF THE SAMPLE
(Question 3, Section A of Questionnaire) [n=209]

	FREQUENCY	PERCENTAGE
Black	008	03.83
Indian	005	02.39
Coloured	002	00.96
White	193	92.34
Asian	001	00.48

Discussion: Of the sample 92.34% of the respondents are White, 3.83% Black, 2.39% Indian, 0.96% Coloured and 0.48% Asian. It could not be established that the sample is in line with the race distribution of registered occupational therapists as it was not recorded in the HPCSA's registration documentation. The researcher is of the opinion that there are definitely more occupational therapists from other race groups, due to the fact that Kwazulu-Natal, MEDUNSA, Western Cape and other institutions all train therapists from different race groups.

4.2.4 Access to technology

Table 4.4 shows the access that occupational therapists have to technology.

TABLE 4.4: ACCESS TO TECHNOLOGY

(Question 4, Section A of Questionnaire) [n=211]

	FREQUENCY	PERCENTAGE
Cellphone	208	98.58
Computer	207	98.10
Email	200	94.79
Internet	199	94.13
TV3	172	81.52
DSTV	091	43.13

Discussion: This question asked respondents to select all technologies from a list that they had access to. Table 4.4 shows the percentage that has access to each type of technology. Nearly all respondents had access to cellphones (98.58%). Most had access to a computer (98.10%), although a smaller percentage of respondents had access to e-mail (94.79%) and internet (94.13%). A fair number of respondents had access to TV3 (81.52%) (a training channel) but a smaller percentage (43.13%) of respondents had access to DSTV. This means that occupational therapists can be reached by cellphone and by e-mail with the view to be informed of CPD opportunities, and a fair number have access to electronic media to access online CPD programmes, whether it may be available and they wish to use the opportunity.

4.2.5 Highest qualifications obtained in Occupational Therapy

Table 4.5 shows the highest qualification that the respondents obtained in Occupational Therapy.

TABLE 4.5: HIGHEST PROFESSIONAL QUALIFICATIONS OBTAINED IN OCCUPATIONAL THERAPY

(Question 5, Section A of Questionnaire) [n=208]

QUALIFICATION	FREQUENCY	PERCENTAGE	CUMULATIVE FREQUENCY	CUMULATIVE PERCENTAGE
Doctoral	002	00.96	002	000.96
Master's	021	10.10	023	011.06
Bachelor's	178	85.58	201	096.63
Diploma	007	03.37	208	100.00

Discussion: The first part of the question as far as the professional profile is concerned, asked respondents to indicate their highest qualification in Occupational Therapy. The sample, as demonstrated in Table 4.5, indicated highly skilled professionals with 85.58% of respondents with a professional bachelor's degree and 10.10% with an additional master's degree in Occupational Therapy. Two respondents (0.96%) also have a doctorate in Occupational Therapy in the field of general Occupational Therapy. The second part of the question asked the respondents to indicate the specific sub-discipline in which they have the higher qualification. As far as the specific sub-discipline is concerned 10.10% of the 21 respondents have a master's degree of which 11 (52.2%) have the degree in general Occupational Therapy, three in Paediatrics (4.29%) and two in Vocational Rehabilitation (9.5%). One respondent each (4.76%) has a master's degree in one of the following disciplines: Hand Therapy, Biomechanics, Neurology, and Neuro-Sciences, and another group specialised (information was not given) in Occupational Therapy (five therapists in total).

Of the respondents 178 had a B-degree (as highest qualification) in Occupational Therapy. Seven respondents have a Diploma in Occupational Therapy – six in general Occupational Therapy and one in Occupational Therapy Paediatrics.

This means that these highly skilled professionals may be motivated to be engaged in CPD programmes and also may be interested to be enrolled for master's and or doctorate qualifications.

4.2.6 Highest other qualification obtained in another discipline

Table 4.6 shows the highest other qualification that the respondents obtained in a discipline other than Occupational Therapy.

TABLE 4.6: HIGHEST OTHER QUALIFICATIONS OBTAINED IN A DISCIPLINEOTHER THAN OCCUPATIONAL THERAPY

(Question 6, Section A of Questionnaire) [n=72]

QUALIFICATION	FREQUENCY	PERCENTAGE	CUMULATIVE FREQUENCY	CUMULATIVE PERCENTAGE
Doctoral	002	02.78	002	002.78
Master's	008	11.11	010	013.89
Bachelor's	036	50.00	046	003.89
Diploma	026	36.11	072	100.00

Discussion: Of the respondents 72 of the 211 have a qualification in a discipline other than Occupational Therapy as well: Two (2.78%) have a doctorate; eight (11.11%) a masters; 36 (50.00%) a bachelor's and 26 (36.11%) a diploma. The specific discipline of the doctorates was not indicated; the masters are in Management, Human Resource Management, Theology, Social Work, Human Physiology, Psychology and Genetics; and the diplomas are in Management, Human Resource Management, Theology, Islamic Studies, Sound Engineering, Labour Law, Nursery School Teaching, Education, Higher Education and Massage Therapy. The fact that more than 34% of the respondents also have another qualification other than Occupational Therapy, illustrates the depth of knowledge that these adult learners bring into the learning situation.

4.2.7 Professional fields of study

The respondents were asked to select all the professional fields in which they have obtained a qualification. Table 4.7 indicates the professional fields of study of the sample.

TABLE 4.7: PROFESSIONAL FIELDS OF STUDY

(Question 7, Section A of Questionnaire) [n=207]

PROFESSIONAL FIELD	FREQUENCY	PERCENTAGE
Occupational Therapist	190	91.79
Teacher	004	01.93
Social Worker	001	00.48
Theologian	001	00.48
Law Professional	001	00.48
Kinesiologist	001	00.48
Sensory Integration Specialist	002	00.97
Massage Therapy	001	00.48
Public Health Nurse	001	00.48
Diverse Other Group	007	03.38

Discussion: Of the respondents 190 of the 207 who answered the question whether they have obtained another professional qualification as stated in the questionnaire indicated that they are only qualified as an occupational therapist; however, of the respondents 17 indicated that they also have another professional qualification(s) (cf. Table 4.6). These adult learners can bring a richness of knowledge and experience into the learning situation.

4.2.8 Fields of study interest

Table 4.8 shows the fields of study interest as indicated by the respondents from the given list on the questionnaire. They could mark more than one field of interest from the list (N=192).They could also indicate other fields of study that they are interested in.

TABLE 4.8: FIELDS OF STUDY INTEREST
(Question 8, Section A of Questionnaire) [n=180]

	FREQUENCY	PERCENTAGE	CUMULATIVE FREQUENCY	CUMULATIVE PERCENTAGE
Management	61	33.89	061	033.89
Higher Education	60	33.33	121	067.22
Health Sciences Education	71	39.44	192	106.66

Discussion: Of the 180 respondents 33.89% shows an interest in Management, 33.3% shows an interest in Higher Education and 39.44% in Health Sciences Education.

Some of the 180 respondents also indicated an interest in the following other fields that were not on the options list: Health Professions-related (15.56%), School Education-related (2.22%), Business Management-related (2.22%), Medico-legal related (0.56%), Diverse Interest-related e.g. Theology, Agriculture, Communication (1.67%).

4.2.9 Type of industry where employed

Table 4.9 shows the type of industry where the occupational therapists are employed and that was chosen from the options list.

TABLE 4.9: TYPE OF INDUSTRY WHERE EMPLOYED

(Question 9, Section A of Questionnaire) [n=203]

	FREQUENCY	PERCENTAGE
Respondents that didn't choose of the options listed	16	07.88
Public Sector	75	36.95
Private Sector-Solo practice	52	25.62
Private Sector-Group practice	30	14.78
Private Sector-Locum	06	02.96
Academic Institution	24	11.82

Discussion: Of the 203 respondents that completed this question, 16 respondents did not choose any of the options that were listed in the questionnaire. Of the 203 respondents that completed the question 26 indicated other options of employment that were not listed as options. It is clear that some of the occupational therapists are employed in more than one type of practice (dual employment). For example, four respondents (1.97%) are employed by an NGO, four respondents (1.97%) by a non-profit organisation, three respondents (1.48%) by a school, three respondents (1.48%) are non-working, two respondents (0.99%) are employed by an insurance company, two respondents (0.99%) in the corporate environment, and one each (0.49%) by a private partnership/university partnership, profit organisation/private rehabilitation centre or private hospital. This means that provision must be made as far as CPD programmes on offer are concerned for the different groups, such as occupational therapists working in the public sector (36.95%); those from the private sector (43.36%); those from the academic sector (11.82%); as well as for those from other diverse industries or combination types.

4.2.10 Duration of working as an occupational therapist

Table 4.10 shows the duration that the respondents work as occupational therapists.

TABLE 4.10: DURATION OF WORKING AS AN OCCUPATIONAL THERAPIST(Question 9, Section A of Questionnaire) [n=207]

n	LOWER QUARTILE	MEDIAN	UPPER QUARTILE	MINIMUM	MAXIMUM
207	5.0000000	13.0000000	21.0000000	1.0000000	38.0000000

Discussion: The minimum number of years was one year and the maximum number of years that a respondent worked as an occupational therapist was 38 years with the median number at 13 years. This means that the respondents have, holistically seen,

much working experience, but it also means that there is room for further professional development.

4.2.11 Management responsibilities

Table 4.11(a) shows respondents with management responsibilities and Table 4.11(b) shows respondents managing others.

TABLE 4.11(a): THOSE WITH MANAGEMENT RESPONSIBILITIES
(Question 11, Section A of Questionnaire) [n=200]

	FREQUENCY	PERCENTAGE	CUMULATIVE FREQUENCY	CUMULATIVE PERCENTAGE
Yes	149	74.50	149	074.50
No	051	25.50	200	100.00

Discussion: Of the 200 respondents that answered this question 74.5% have managerial responsibilities and 25.5% do not have managerial responsibilities. It means that quite a large number of the respondents have managerial responsibilities and may need managerial knowledge and skills.

TABLE 4.11(b): THOSE RESPONDENTS MANAGING OTHERS
(Question 11, Section A of Questionnaire) [n=200]

	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
Yes	099	49.50	099	049.50
No	101	50.50	200	100.00

Discussion: Of the 200 respondents that answered this question 49.50% indicated that they have managerial duties (and 50.50% that they do not have) as far as managing other individuals. This means that there might be a need to include human resource management principles in CPD offerings.

4.2.12 The managerial level

Table 4.12 shows the managerial level of respondents.

TABLE 4.12: MANAGEMENT LEVEL OF RESPONDENTS

(Question 12, Section A of Questionnaire) [n=195]

	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
Executive level	29	14.87	029	014.87
Senior level	30	15.38	059	030.26
Middle level	48	24.62	107	054.87
Junior level	37	18.97	144	073.85
Not on management level	51	26.15	195	100.00

Discussion: Of the respondents (195) that answered this question 26.15% indicated that they are not working on a managerial level; 18.97% work on a junior level; 24.62 % on a middle level; 15.38% on a senior level and 14.87% on an executive level. This means that if management courses are included in CPD programmes, they must cater for the different managerial levels as far as knowledge and skills are concerned.

4.2.13 Geographic profile of practice or workplace

Table 4.13 shows the location of respondents' practice or workplace in a rural or urban area, as well as residential or commercial area.

TABLE 4.13: GEOGRAPHIC PROFILE OR RESPONDENTS' PRACTICE OR WORKPLACE – RURAL OR URBANAREAAND RESIDENTIAL OR COMMERCIAL AREA

(Question 13 and 14, Section A of Questionnaire)

n	GEOGRAPHIC AREA	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
207	Rural	051	24.64	051	024.64
	Urban	156	75.36	207	100.00
203	Residential	148	72.91	148	072.91
	Commercial	055	27.09	203	100.00

Discussion: Of the respondents 24.64% have their practice or workplace located in a rural area and 75.36% in a urban area.

Of the respondents 72.91% have their practice in a residential area and 27.09% in a commercial area. From the findings it is clear that most of the respondents' practices are in an urban area and also located in a residential area, however, nearly a quarter of practices are in a rural location.

4.2.14 Size of practice or workplace

Table 4.14 shows the size of respondents' practice or workplace.

TABLE 4.14: SIZE OF PRACTICE OR WORKPLACE

(Question 15, Section A of Questionnaire) [n=194]

NUMBER OF PATIENTS	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
Less than 50	35	18.04	035	018.04
Between 51 and 100	28	14.43	063	032.47
Between 101 and 500	85	43.81	148	076.29
More than 501	46	23.71	194	100.00

Discussion: The question as far as the size of practice is concerned, asked respondents to indicate how many patients they had on the database of the practice they worked for during the previous three years. Of the respondents 18.04% indicated less than 50 patients; 14.43% indicated between 51 and 100 patients; 43.81% between 101 and 500 patients; and 23.71% indicated that they had more than 501 patients during the last three years on the database of their practice or workplace. This data means that quite a range in practice size exists and that nearly one out of four occupational therapists works in a large practice or workplace facility.

4.2.15 Annual number of patients per occupational therapist

Table 4.15 shows the number of patients that an occupational therapist (respondent) sees per year.

TABLE 4.15: NUMBER OF PATIENTS PER OCCUPATIONAL THERAPIST PER YEAR

(Question 16, Section A of Questionnaire) [n=192]

NUMBER OF PATIENTS PER OCCUPATIONAL THERAPIST PER YEAR	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
Less than 50	68	35.42	068	035.42
Between 51 and 100	56	29.17	124	064.58
Between 101 and 500	23	11.98	147	076.56
More than 501	45	23.44	192	100.00

Discussion: As regards the question how many patients of the before-mentioned number of patients on the database of their practice/workplace they see as therapist yearly, 35.42% indicated that they see less than 50 patients themselves per year; 29.17% see between 51 and 100 patients; 11.98% see between 101 and 150 patients; and 23.44% see more than 150 patients per year.

4.2.16 Distribution of age across patients

Table 4.16shows the percentage of respondents' patients that are (a) younger than 18 years of age; (b) between 19 years and 45 years and (c) that are older than 45 years.

TABLE 4.16: DISTRIBUTION OF AGE ACROSS PATIENTS
(Question 17, Section A of Questionnaire) [n=193]

	SEE NO PATIENTS IN THIS CATEGORY	LESS THAN 25%	BETWEEN 26-50%	BETWEEN 51-75%	ABOVE 76%
Younger than 18 years of age	**07.25**	31.09	09.84	04.15	**47.67**
Between 19 years and 45 years	**36.27**	20.21	**22.80**	15.54	05.18
Older than 45 years	**38.86**	**23.32**	18.13	12.44	07.25

Discussion: Of the respondents 07.25% do not see patients younger than 18 years of age at all. Of the respondents 47.67% indicated that more than 76% of their patients are younger than 18 years of age.

Of the respondents 36.27% do not see patients between 19 years and 45 years of age at all. Of the respondents 22.80% indicated that 26-50% of their patients are between 19 years and 45 years.

Of the respondents 38.86% do not see patients older than 45 years of age at all. Of the respondents 23.32% indicated that less than 25% of their patients are older than 45 years of age.

It is clear from these findings that these respondents see younger patients and less patients over 45 years. These therapists will have specific needs for CPD to enhance their skills and knowledge.

4.2.17 Description of practice/or work place

The respondents were asked to describe their practice/ workplace, for instance, in terms of size, population and patients, etc. (cf. Question 18, Section A of Questionnaire). The aim was that the qualitative data would enrich the quantitative data from the questionnaire.

The researcher grouped respondents' descriptions into 10 categories. Quite a range of variation as far as type and size of workplace, location, number and age of patients and services is included. Own words of some of the respondents are tabled to emphasise variations and complexibility (own words of respondents are not language edited in the thesis):

Table 4.17 shows the different categories that describe the practices/workplace of the respondents.

TABLE 4.17: DIFFERENT CATEGORIES OF DESCRIPTIONS OF PRACTICES/WORKPLACE
(Question 18, Section A of Questionnaire) [n=193]
[Table continues on next pages]

CATEGORY	DESCRIPTION OF PRACTICE/WORKPLACE OF RESPONDENT
A: HOSPITAL FACILITY	Includes private and public facilities, with delivering of a wide range of services (cf. respondents own words).
A1: Private hospital	*"Sub-acute hospital – 25 beds, local Medi-Clinic nursing homes, home visits and outpatients. Rooms at sub-care hospital (gym area)."* *"In Medi-Clinic Hospital as well as Netcare Hospital. All hospital patients".* *"21-bed Step-down clinic, mostly elderly patients and physical diagnoses. Therapy area, 1 gym, full bathroom, kitchen."* *"Sub acute unit – physical rehabilitation. 30-beds in unit – all adults with sub acute physical needs, 3 OT's."* *"1pPractice – 3 hospitals."* *"Psychiatric hospital – private patients: 150-bed hospital – 90% of time fully occupied. Groups, 2 a day, plus minus 10 patients in a group, 90% white adults, 10% other nationalities, 2% teenagers, also attending groups."* *"Netcare Rehab Hospital, doing FCE and Medico-legal evaluation and student supervision."*
A2:Public/state hospital primary/district level (including clinics)	*"Practice at district hospital – 100-bed, rural clinics."* *"Community based rehabilitation, district level. Mostly developmental delays."* *"District Health Service (Johannesburg Metro district). Population 3.8 million i.e. 45% of Gauteng population. Service (rehab is offered at the C.H.C. (Community Health Centre) and outreach to clinics). 9 CHC, 30 prov. clinic, 70 local clinic."* *"Our department of 10 staff covers services in at least 26 health centres*

	and includes community based service – whole Cape Town metro." *"I work in a small primary government hospital, 6 wards, and currently 4 OT's work in our department. We also visit clinics. Most of my patients are outpatients."* *"250-bed district hospital. In-and-out patient visits to mobile clinic and rural clinics twice weekly. Involvement in local special schools."* *"An office 3m², treatment 6m²patients living in rural with high illiteracy. Both in-/out-patient and group sessions."*
Secondary level	*"State hospital, 10 OT's, 4 OTA's, patients from an 800-bed hospital."* *"Level 2 hospital – bed capacity 290, population – 200 000. 26 CHC's."* *"Rehabilitation unit for private/state patients and SCI's, BI's and CVA's. 15-bed unit, average length of stay 4-6 weeks. Also see paediatric out-patients."* *"General physical hospital with 1000 beds. Generally see 40-50 patients per day."* *"850-bed hospital, public sector, lower income group, TBI, stroke, hand injuries, CP and developmental delay patients."* *"Hospital setting, mostly black patients, acute hospital, many patients both in and out-patients."* *"3 OT's, in-patients and out-patients, range from children – adults, all areas, varying diagnoses."* *"OT team has 2 permanent and 3 community service OT's. Severely understaffed. Patient load 30:1. All psychiatric patients."* *"Rehab hospital. Rehab ward – 15 beds. Low income patients. Attend to both in-and-out-patients."* *"Therapy services nationally to orphaned and vulnerable children. Offices in three mayor centres."* *"We have limited space, we see over 50 outpatients monthly and 10 or more inpatients monthly."* *"Small practice, acute hospital patients between 0-90 yrs. Small outpatient basis of babies, adults, geriatric groups."*
Tertiary/academic complex level	*"Tertiary hospital complex serving the whole of Limpopo Province Tertiary and secondary services. 5 million Population. Variety patients."* *"Majority Sesotho speaking patients. Psychiatric patients. Tertiary hospital."* *"Offering level I, II, III Hospital services, also with outreach services to the referring health care centers."*
B: PRIVATE PRACTICE FACILITY	Includes small, middle and large practices, located in/adjacent to hospital, private homes, homes, loose standing buildings (practices), in residential and industrial areas, rural area (cf. respondents own words). *"General practice. 6 Staff in total. Average 5-9 patients per day. In/Out patients and clinics treatment."* *"Home Practice, Part time – 8 clients/week."* *"10 Patients a day. All ethnic groups."* *"it is a big private practice in Kimberley with white, African and colored patients. In conjunction with a clinical psychologist."* *"Referring specialist = one. Workplace 3 x 4m office. Mainly WCA patient due to big industrial area. Only to hand injuries."* *"We have a contract to do injured mineworkers – we are a multidisciplinary private practice. 4 OT's, 2 PT's, 3 T's, 3 OTA's and 2 PTA's."* *"Cover a whole region form 26 referring clinics. See government patients and starting out with some private patients. CP, hands, stroke, mental health patients are the majority."* *"Very small. Only one or two LO's at a time and one or two adults work part time on our farm as well."* *"22m²; Fulltime; 5 to 12 per day. Parents and kids; including consultations with parents."*

	"Disability Management within the insurance sector." *"Office base, go to a school and medical centres of local industries."* *"Ek werk alleen. Praktyk is aan kant van my huis. Ten volle toegerus."* *"The practice is in a step-down unit. Medical aid clients are a variety of conditions (TSI, SCI, CVA, HIY, falls, hip and knee replacements). There are 17 beds. Out patients are also treated on a weekly basis."*
C: SCHOOL FACILITY	Includes services to children in school facilities, pre-school, primary and secondary schools, schools for physically challenged / specific needs (cf. respondents own words). *"School; part of auxiliary team. Low social income population 450 kids."* *"Private Remedial school, I see 35 children with learning difficulties/ADHD."* *"Work at a school (6-18 years) for mentally handicapped children (70 children receive OT)."* *"6 OT's as part of multidisciplinary team of 20 people at a school for children with ADD and ADHD grade 1-9, 480 learners."* *"In a remedial school (private), 250 pupils total; case load of plus minus 50. Mainly 6-9 year olds."* *"230 High school students with behaviour difficulties."* *"School for the physically challenged (360 learners). One OT. Plus minus 32-40 children treated regularly."* *"School for learners with special needs, 350 learners with OT's. Learners may have physical, neurological, psychological or learning disabilities."* *"Working in public special school, mostly low socio-economic, working with kids under 12 years, about 20 kids, only O.T. Also doing own solo practice, 9 kids, higher economic class, kids under 12 years."* *"Special needs school – responsible for 4 classes (plus minus 50 pupils altogether) myself. Mostly kids with no income families. Plus minus 360 children in school."* *"School setting with 361 learners."* *"Large room based at school. Clients come from the school and surrounding areas."* *"A school for severely mentally handicapped learners. Currently there are 518 learners."* *"Inclusive school with plus minus 250 learners with physical and mental disabilities. Age 6 to 18 years."* *"Paediatric – learning disabled – ages 6-13 years. Plus minus 100 clients per year (treatment and assessment. School set-up."* *"Public school (LSEN School). Ages 5 – 10 (Gr. 1 and 2). 80 Children – Treat plus minus 50."* *"School based OT practice. I see about 15 children in 4 mornings in total (Ages 4-8 years)."* *"Small practice at a school (private). This is where I worked last year for 3 years."* *"Education Gr R to Gr. 12, addressing barriers to learning in Inclusion."* *"Based at a school (2 schools), private."* *"A Junior Preparatory School (Private school)."* *"Plus minus 25 children per week at two different schools – classroom – 5-12 years – developmental delay."*
D: PAEDIATRIC PRACTICE FACILITIES	Includes private practice/institution, delivering service to children (cf. respondents own words). *"Paediatric practice – full time."* *"Small private practice with two other therapists. I work 3 mornings a week. All the patients I see regularly are children but I occasionally see adult patients for a friend (OT) in adult neuro."* *"Paeds. OT practice."* *"Practice catering for babies to age 18. Paeds Gymnasium, office and sensory integration gym."*

	"Paediatric practice – full time." *"I have a paediatric practice and work (part time) at an institution for disabled children."* *"Small, private practice, mostly children with learning disabilities."* *"3 Therapists, plus minus 100m2; paeds."* *"Learners with intellectual impairment to prepare for work (WVB)."* *"Dean's Assistant (Deputy Dean) Faculty of Health Sciences."* *"Private paediatric practice in an upmarket urban area. Joint practice with psychologists."* *"Children: 0-12 years. Mainly: SI Deficit and Autism. 3 Therapists at practice."* *"Private Paediatric Practice. Age 4 years – 10 years."* *"Therapy services nationally to orphaned and vulnerable children. Offices in three mayor centres."* *"Small practice. Children. Plus minus 50 per year."*
E: FACILITIES FOR THE DISABLED	Includes services for the disabled (cf. respondents own words). *"Secure care facility. 50 Children, mostly black children between 14 – 17, awaiting trialists."* *"Visually disabled and learning disabled children."* *"Multiracial, school going age all cognitively impaired and attendant physical impairments."*
F: WORK REHAB-ILITATION FACILITIES	Includes services for patients who need to be rehabilitated for work (cf. respondents own words). *"Mainly WCA Patients."* *"Small practice. 3 OT's, 1 OTA. All adult patients. Mostly African or white. Large treatment room and a simulation workshop. Out-patients."*
G: MEDICO-LEGAL FACILITIES	Includes variations of patients e.g. age, needs, (cf. respondents own words). *"Medico-legal, age 17 years onward."* *"General practice. 6 Staff in total. Average 5 – 9 patients per day. In/Out patients and clinics treatment."* *"Team of 24 OT's/nurses employed as claims accessors for big insurance company."* *"80% medico-legal assessment reports regarding incapacity leave and illl health retirement, 20% paeds. Therapy."* *"Medico-legals; 6 therapist and admin = 16 employees; patients all ages; sizes, status and types of injury."* *"Corporate business."* *"Medico-legal practice, 5 OT's8 – 10 patients per week per therapist."*
H: MENTAL HEALTH FACILITIES	Includes facilities and services for mental health patients of various ages (cf. respondents own words). *"Long term mental healthcare users (500)."* *"Group therapy up to 70, 15 individual cases per therapist, physically disabled develop mentally delayed."* *"Forensic psychiatry in-patients; 370 beds, 250-260 usable."* *"OT team has 2 permanent and 3 community service OT's. Severely understaffed. Patient load 30:1. All psychiatric patients."*
I: GERIATRIC FACILITIES	Includes facilities and services for old/geriatric patients (cf. respondents own words). *"Contract to various old age homes – see geriatrics in their own homes."* *"Visit old age homes and private homes. 5 – 8 patients per week. 1 OT in practice. Mostly see white patients."*

J: ACADEMIC FACILITIES	Includes facilities and various services for patients at academic institutions/hospitals or clinics (cf. respondents own words). *"Assessment of students for extra time for exams at university plus minus 40 per year."* *"Fall under research at university. 10 Staff members. I am the ONLY OT. Work with PHC 2nd Hospitals where USAID partners work in SA. Work with children".* *"Full time lecturer and see patients in hospital/clinic."* *"Academia – part time. NPO – wheelchair and seating service for KZN – rural and urban, consultative and hands on, all ages, private and public sector – average of 300 t0 500 per year."*

Discussion: The importance of this question was to be able to compile a summative description with the view to conceptualise and contextualise the needs of occupational therapists in line with the large variation of practice and combination of services offered by the different practices. These findings must be taken into account when CPD activities are planned.

4.2.18 Provincial location of nearest public hospital or clinic to practice or workplace

Table 4.18 shows the provincial location of the nearest public hospital or clinic to the respondents' practice or workplace.

TABLE 4.18: PROVINCIAL LOCATION OF NEAREST PUBLIC HOSPITAL OR CLINIC TO PRACTICE OR WORKPLACE
(Question 12, Section A of Questionnaire) [n=203]

PROVINCE	FREQUENCY	PERCENTAGE	CUMALITIVE FREQUENCY	CUMULATIVE PERCENTAGE
Gauteng	67	33.00	067	033.00
North West	08	03.94	075	036.95
Mpumalanga	06	02.96	081	039.90
Limpopo	08	03.94	089	043.84
Free State	13	06.40	102	050.25
Western Cape	60	29.56	162	079.80
Kwazulu-Natal	21	10.34	183	090.15
Eastern Cape	20	09.85	203	100.00

Discussion: 33% of the respondents' nearest clinic or workplace is in Gauteng, 29.56% in the Western Cape, 10.34% in Kwazulu-Natal and 9.85% in the Eastern Cape; 6.40% in the Free State and 3.94% in Limpopo while 2.96% of the respondents nearest clinic or workplace is in Mpumalanga. The respondents were not asked to

indicate in which province their practice or workplace is, although the findings from this question can give information thereof as a group. There were no respondents who indicated that their nearest public hospital or workplace is in the Northern Cape. This could be due to the fact that the Northern Cape option was not offered (for this question in the questionnaire) (Appendix A3).

4.2.19 The most prevalent conditions in practice or workplace

Table 4.19 shows the five most prevalent conditions in the respondents' practice/workplace among their patients.

TABLE 4.19: THE FIVE MOST PREVALENT CONDITIONS IN PRACTICE/WORKPLACE

(Question 20, Section A of Questionnaire) [n=198]

CONDITIONS	FREQUENCY	PERCENTAGE
Developmental delays	130	65.66
Sensory integration problems	103	52.02
Stroke	087	43.94
Head Injuries	076	38.38
Mental Retardation	055	27.78
Hand Therapy	050	25.25
Joint problems	047	23.74
Amputations	045	22.73
Spinal injuries	045	22.73
Psychiatric Disorders (depression, anxiety, affective disorders, psychosis)	040	20.20
Dementia or cognitive disorders	037	16.69
Pain	031	15.66
Burn Wounds	024	12.12
Blindness and/or deafness	024	12.12
Cerebral palsy	015	07.58
Psychotic disorders	014	07.07
Learning disabilities	013	06.57
ADHD/ADD	006	03.03
Orthopaedic	006	03.03
Autism	005	02.53
Neurological problems	005	02.53
HIV-related pathologies, AIDS	005	02.53
Epilepsy	004	02.02
Muscular dystrophy	002	01.01
[DCD, Medical Legal, FCE, Development problems, Aspergers syndrome, Behaviour, Injuries sustained from road accident, Elderly, Substance abuse, Psychosis, Work assessment, Degenerative conditions, Pervasive developmental disorders, Cancer, Fine Motor, Gross Motor, Biomechanical, Ergonomic, NDT difficulties, Prematurity] Indicated individually.		

Discussion: Respondents were asked to indicate the five most prevalent conditions among their patients. Respondents to this study identified developmental delays (65.66%), sensory integration problems (52.02%), stroke (43.94%), head injuries (38.38%) and mental retardation (27.78%) seen by them in (clinical) practice.

As seen from the responses it is evident that a large group of occupational therapists work with children and thus it is logical that the most prevalent conditions seen are those that occur with children.

4.2.20 Distance from accredited services

Table 4.20 shows the percentage of respondents whose workplace is less than 10km, between 10 and 40km and more than 40km from accredited services.

TABLE 4.20: COMPARISON BETWEEN DISTANCES FROM ACCREDITED SERVICES
(Question 21, Section A of Questionnaire) [n=198]

	LESS THAN 10 KM	BETWEEN 10 AND 40 KM	MORE THAN 40 KM
Dietician	85.86	11.62	02.53
Emergency Services	90.40	08.59	01.01
Other Occupational Therapists	78.79	15.66	05.56
Pathology laboratories	79.79	13.99	06.22
Physiotherapists	90.95	07.54	01.51
Pharmacist	93.94	06.06	00.00
Subsidised facilities for inpatients	74.73	21.51	03.76
Non-subsidised facilities for in-patients	73.37	18.48	08.15
Private primary health services	74.47	19.15	06.38
Public primary health services	67.54	28.80	03.66
Psychologist	81.44	10.82	07.73
Specialised radiology	69.63	17.80	12.57
X-rays	86.08	12.37	01.55

Discussion: Table 4.20 shows that 85.86% of the respondents' practice or workplace is less than 10km from the services of a dietician, 11.62% between 10 and 40km while only 2.53% of the respondents' practice or workplace is more than 40km from the services of a dietician.

More than 70% of the respondents' practice or workplace is less than 10km of most from the services with only the public primary health services (67.54%) and specialised radiology (69.63%) a little less.

A smaller percentage of the respondents' practice or workplace is more than 40 km away from services. Specialised radiology services are in 12.57% of respondents practices or workplace more than 40km away.

Take into account that 24.64% of the respondents' practice or workplace is in a rural area while 74.88% is in a city area (N=207). Further 72.91% of the respondents' practice or workplace is in a residential area and 27.09% in a commercial area (N=203).

It is clear that occupational therapists tend to cluster near other health care providers.

4.3 PROFESSIONAL DEVELOPMENT

[Please compare Section B of Questionnaire (Appendix A3)]

This section deals with issues related to the need for and the factors impacting on Professional Development. Respondents were asked to indicate whether they are keeping abreast of development in their field as far as theoretical knowledge and clinical practice are concerned; whether there are sufficient opportunities to keep them informed; whether they experience any stumbling- blocks as far as CPD is concerned; what motivating factors there are for CPD engagement; how they acquire CPD points; and, their preferences as far as venues, fees, time, duration of events and learning situations are concerned.

4.3.1 Keeping abreast of developments in the field of Occupational Therapy as far as theoretical aspects and clinical practice are concerned.

Table 4.21(a) shows respondents' perception on whether they are keeping abreast of developments in the field of Occupational Therapy as far as theoretical aspects are concerned.

TABLE 4.21(a): RESPONDENTS' OWN PERCEPTION AS TO WHETHER THEY WERE KEEPING ABREAST OF THEORETICAL ASPECTS IN OCCUPATIONAL THERAPY

(Question 1, Section B of Questionnaire) [n=209]

RESPONDENTS' PERCEPTION	% OF RESPONDENTS
YES	67.94
NO	32.06

Discussion: Table 4.12(a) shows that 67.94% of the respondents felt that they were keeping abreast of the theoretical aspects of development in Occupational Therapy. Plus-minus two out of every three respondents were confident that they were keeping up with the theoretical aspect of Occupational Therapy.

Table 4.21(b) shows the reasons why the occupational therapists are of the opinion that they are keeping abreast of the theoretical aspects.

TABLE 4.21(b): RESPONDENTS' WAYS OF KEEPING ABREAST OF THEORETICAL ASPECTS OF DEVELOPMENTS IN THE FIELD OF OCCUPATIONAL THERAPY

(Question 2, Section B of Questionnaire) [n=142]

REASONS	% OF RESPONDENTS
Study newest edition of text books	30.28
Postgraduate studies and research, obtaining qualifications	20.42
Reading journals, literature (also on line)	18.31
Academic lecturing, supervision, examination, career progression	09.51
Intrinsic motivation to keep abreast of developments	08.45
Practice is based on evidence-based education	07.04
Team discussions	05.63
Part of an interest group	04.93
Put questions to other therapists	04.93
Conference attendance	04.93
Presenting seminars to train other therapists	04.93
In-service-training	04.23
Overseas study tours	04.23
Involvement in development of profession	04.23
Organising and attending own CPD events monthly	04.23
Part of journal club, presenting on a regular basis	04.23
Part of a study group	03.52
Form mentoring relationships	03.52
Gain information during practice meetings	02.82
Get information via internet	01.41
Networking with other therapists	01.41

Discussion: Of the respondents 30.28% indicated that they are keeping abreast of theoretical aspects by studying the newest editions of text books, 20.42% by obtaining qualifications or enrolling for post-graduate education and 18.31% by reading journals or literature online. A high percentage of respondents prefer to enrol for qualifications. This together with study on their own (text books, journals) shows an approach that they prefer to study from home/practice. Only 4.93% indicated that they prefer conference attendance. Through academic lecturing, supervision, examinations and career progression 09.51% keep abreast (cf. Table 4.21(b)).

Table 4.22(a) shows respondents' perception on whether they are keeping abreast of developments in the field of Occupational Therapy as far as clinical practice is concerned

TABLE 4.22(a): RESPONDENTS' OWN PERCEPTION AS TO WHETHER THEY WERE KEEPING ABREAST OF DEVELOPMENT IN THE FIELD OF CLINICAL PRACTICE

(Question 3, Section B of Questionnaire) [n=207]

RESPONDENTS' PERCEPTION	% OF RESPONDENTS
Yes	67.15
No	32.85

Discussion: Of the respondents 67.15% indicated that they are keeping abreast in the field of clinical practice, or two out of every three occupational therapists.

Table 4.22(b) shows the reasons why the occupational therapists are of the opinion that they are keeping abreast in the field of clinical practice.

TABLE 4.22(b): RESPONDENTS' WAYS OF KEEPING ABREAST OF DEVELOPMENTS IN THE FIELD OF CLINICAL PRACTICE IN OCCUPATIONAL THERAPY

(Question 4, Section B of Questionnaire) [n=163]

REASONS	% OF RESPONDENTS
Attending courses, workshops, forums, case study groups	38.04
Contact with other occupational therapists	12.88
Further studies	11.04
Involvement in training students and supervision	10.42
Reading journals, reports, literature	00.92
Member of professional society	00.80
Research	00.05

Attending informative practice meetings	00.03
Community work	00.02

Discussion: Of the respondents 38.04% kept abreast of developments in the field of clinical practice in Occupational Therapy by attending courses, workshops, forums, case study groups and 12.88% by being in contact with other occupational therapists. It seems to keep abreast of clinical practice, they prefer the social, and clinical-practical approach. Further studies help in 11.04% as well as involvement in training students and supervision in 10.42% of the respondents. Reading, professional society involvement, research, practice meetings and community work play a minor role. It is clear that the respondents make use of a variety of strategies to stay abreast as far as the theoretical and clinical work is concerned (cf. Tables 4.21(b) & 4.22(b)).

4.3.2 Opportunities to stay informed in the field of Occupational Therapy

In Table 4.23(a) the respondents' view on sufficient opportunities to stay informed in the field of Occupational Therapy are given while in Tables 4.23(b) and 4.23(c) respondents give the reasons for confirming that there were or were not, respectively, sufficient opportunities to keep informed in the field of Occupational Therapy.

TABLE 4.23(a): RESPONDENTS' VIEW ON SUFFICIENT OPPORTUNITIES TO STAY INFORMED IN THE FIELD OF OCCUPATIONAL THERAPY
(Question 5, Section B of Questionnaire) [n=204]

OPPORTUNITIES AVAILABLE	% OF RESPONDENTS
Yes	49.51
No	50.49

Discussion: Of the total number of respondents, 49.51% felt that there were sufficient opportunities to stay informed in the field of Occupational Therapy; however, 50.49% answered in the negative. This large group (50.49%) who felt the opposite, is high. The challenge would be to research why more than half of respondents felt negative and to address their reasons.

TABLE 4.23(b): RESPONDENTS' REASONS FOR CONFIRMING THAT THERE WERE SUFFICIENT OPPORTUNITIES TO KEEP INFORMED IN THE FIELD OF OCCUPATIONAL THERAPY

(Question 6, Section A of Questionnaire) [n=101]

REASONS/MOTIVATIONS FOR SUFFICIENT OPPORTUNITIES	% OF RESPONDENTS
Access to journals and awareness of new literature, access to library	19.80
Sufficient courses, workshops in certain provinces, bigger cities	18.81
Access to internet	17.82
Private groups offer opportunities in bigger cities with updates on new courses	15.84
Practicing near tertiary institutions that are accredited providers	09.90
Communication by SMS, e-mails, phone calls, effective	07.92
Belong to professional societies	06.93
Companies provide financial support	02.97
Self-motivation	00.99

Discussion: The four main reasons why respondents are of the opinion that there are sufficient opportunities to keep informed are: access to journals, literature, library (19.80%); sufficient courses, workshops in certain provinces and bigger cities (18.81%); access to internet (17.82%); and private groups offering opportunities in bigger cities with updates of new courses (15.84%). Of the respondents 09.90% indicate that they practice near tertiary institutions that are accredited providers; and 07.92% state that communication by SMS, e-mails or phonecalls is effective. Financial support and self-motivation also play a role.

TABLE 4.23(c): RESPONDENTS' REASONS FOR CONFIRMING THAT THERE WERE NOT SUFFICIENT OPPORTUNITIES TO KEEP INFORMED IN THE FIELD OF OCCUPATIONAL THERAPY

(Question 6, Section B of Questionnaire) [n=103]

REASONS/MOTIVATION FOR NOT SUFFICIENT OPPORTUNITIES	% OF RESPONDENTS
Poor communication as far as information on courses, seminars, workshops, etc. is concerned	14.56
Courses, seminars, workshops are too expensive	13.59
Opportunities offered only in certain big cities	13.59
Too few CPD activities presented by experts in a specific field	11.65
Not enough opportunities to develop theoretical basis (credit-bearing) short courses, post-graduate courses	11.65
Not enough exposure to international experts/opportunities	05.82
Not enough opportunities for learning in communities and primary health care facilities	02.91
Only attend to obtain CPD points although not relevant topics; lack of self-motivation	02.91
Type of setting restricts teaching and training opportunities (eg. hotel venues)	09.70

Not enough clinical workshops	07.77
Professional bodies disorganised	01.94
No access to internet	00.97
HPCSA website not up to date	00.97
Not enough leave available	00.97
Work pressure during workweek does not motivate attendance	00.97

Discussion: The group of respondents (50.49%) that have felt that there are not sufficient opportunities to keep informed offer the following reasons, namely: 14,56% indicated that poor communication as far as information on courses, seminars and workshops plays a role; 13.59% indicated that the abovementioned opportunities are too expensive; 13.59% that they are only offered in certain big cities; 11.65% is of the opinion that too few CPD activities are presented by experts in a specific field and 11.65% is of the opinion that not enough accredited short courses or post-graduate courses are available to develop the theoretical basis. The type of setting (09.7%) and shortage (lack) of clinical workshops (07.77%) play a role. Of the respondents 05.82% is of the opinion that there is not enough exposure to international experts/opportunities. A few other reasons are also given [cf. Table 4.23(c)].

4.3.3 Experiencing stumbling-blocks in Continuing Professional Development

Table 4.24(a) shows respondents' opinion on whether they experience stumbling-blocks in CPD.

TABLE 4.24(a): RESPONDENTS EXPERIENCING STUMBLING-BLOCKS IN CPD (Question 7, Section B of Questionnaire) [n=207]

RESPONDENTS' FEEDBACK	% OF RESPONDENTS
Yes	85.99
No	14.01

Discussion: Of the respondents 85.99% indicated that they experience stumbling-blocks in CPD. This is an alarmingly high figure and notice have to be taken thereof. Providers of CPD programmes, including academic departments, must take these factors that influence CPD, into account. Only 14.01% is of the opinion that they do not experience any problems.

In Table 4.24(b) respondents give the reasons why they are of the opinion that they experience stumbling-blocks in their professional development.

TABLE 4.24(b): STUMBLING-BLOCKS EXPERIENCED BY RESPONDENTS IN TERMS OF THEIR CPD

(Question 8, Section B of Questionnaire) [n=178]

REASONS PROVIDED	% OF RESPONDENTS
Cost (including registration, travel, accommodation and locum costs)	21.35
Availability of opportunities mostly in larger cities	16.85
Lack of self-study courses	12.36
Quality , relevance and range of subjects	12.36
Disorganised and dysfunctional state of HPCSA and other bodies as far as CPD	06.74
Not enough international exposure	06.74
Loss of income	06.18
Scheduling of opportunities	05.62
Time-consuming	05.62
Lack of credited short courses	04.49
Limited opportunities in certain provinces	04.49
Difficult to get courses accredited	04.49
Not enough clinical workshops	02.80
Limited funding available	02.25

Discussion: Respondents (21.35%) indicated that the cost of CPD, including registration for events, travel and accommodation cost as well as to substitute them when absent with a locum posed problems – this also latches onto the loss of income (06.18% of respondents indicated this also as a stumbling-block), together with limited available funding (02.25%). Another group of stumbling-blocks have to do with the supply of courses: self-study courses (12.36%); lack of credited short courses (04.49%); and not enough clinical workshops (02.80%). Quality, relevance and the range of subjects is also a major stumbling-block (12.36%); not enough international exposure (06.74%) is also indicated. The availability of opportunities (16.85%) – mostly presented in large cities only – and limited also in certain provinces (04.49%) is a large stumbling-block that has to be sorted out. Scheduling of opportunities (indicated by 05.62%); and CPD programmes that are time-consuming (05.62%) pose a challenge. The disorganised and dysfunctional state of HPCSA and other bodies (06.74%) and the difficulty to get courses accredited (04.49%) are also mentioned by plus minus 10% of respondents.

4.3.4 Motivating factors to engage in Continuing Professional Development

Table 4.25 shows the factors that motivate occupational therapists to engage in CPD.

TABLE 4.25: FACTORS WHICH MOTIVATE RESPONDENTS TO ENGAGE IN CPD (Question 9, Section B of Questionnaire) [n=140]

FACTORS	% OF RESPONDENTS
To gain recognition via further qualification/accumulative	48.57
To obtain new relevant information with the view to provide better service/training with an impact on proficiency/effectiveness in practice (to offer better standard of care)	24.29
If there is recognition by employer for further studies or promotion	06.43
Self-motivation	06.43
If there is a sponsorship	05.00
If cost-effective CPD activities are offered (affordability)	02.86
If courses are closer to practice	02.86
If there is better managerial process by HPCSA	02.86
If not time-consuming	02.14
If CPD activities are better organised	02.14
If more accessible	01.43
If more points can be obtained per hour	01.43
If there is the opportunity to answer questions on reading matter at home/via internet	01.43
If there is a course by which you can specialise in a specific field	01.43
Have to engage in CPD activities, it is obligatory and points are needed	00.71

Discussion: The main factor which motivated respondents to engage in CPD was the gaining of recognition (in total 55% of respondents) – firstly to better develop themselves via the obtaining of a further or accumulative qualification (48.57% of respondents) and secondly recognition by their employer via further studies with the view to get promotion (06.43%). Of the respondents (24.29%) indicated that a motivating factor was to obtain relevant information with the view to provide better service/training with an impact on proficiency/effectiveness in practice with the view to offer a better standard of care. Some of the other factors are based on logistics, namely: whether there is a sponsorship (cost)(02.86%); course is close to practice (venue)(02.86%); if course is affordable (02.86%); time-effective (02.14%); well organised (02.14%); more accessible (01.43%) and if more points can be obtained per hour (01.43%). Specialised courses (01.43%); and better managerial processes (02.86%) are also indicated. The fact that CPD activities are obligatory and points needed is also mentioned (00.71%).

4.3.5 Continuing Professional Development activities meeting respondents' needs

Table 4.26(a) shows whether current CPD activities meet the needs of respondents.

TABLE 4.26(a): RESPONDENTS' PERCEPTION AS TO WHETHER CURRENT CPD ACTIVITIES MET THEIR NEEDS

(Question 10, Section B of Questionnaire) [n=202]

RESPONDENTS' PERCEPTION	% OF RESPONDENTS
Yes	42.08
No	57.92

Discussion: Only 42.08% of the respondents answering this question were of the opinion that current CPD activities met their needs while 57.92% indicated that current CPD activities did not meet their needs.

Table 4.26(b) shows the respondents' reasons for stating that current CPD activities met their needs while Table 4.26(c) shows the respondents' reasons for stating that current CPD activities did not meet their needs.

TABLE 4.26(b): RESPONDENTS' REASONS FOR STATING THAT CURRENT CPD ACTIVITIES MET THEIR NEEDS

(Question 11, Section B of Questionnaire) [n=85]

REASONS	% OF RESPONDENTS
Wide range of CPD approved activities are on offer	40.00
Relevant qualifications are on offer	30.59
Some specific fields of interest are well covered	11.76
Workshops/seminars/courses focussing on clinical practice are on offer	10.59
Universities, OTASA conferences offer various relevant conferences and journal discussions	07.06

Discussion: Of the 85 respondents that answered the question and indicated that CPD activities offered met their needs 40.00% of them gave as reason that a wide range of CPD approved activities are on offer and 30.59% was of the opinion that relevant qualifications are available to enrol for. Of the respondents 11.76% gave as reason that some specific fields of interest are well covered; 10.50% workshops/seminars/courses focussing on clinical practice are available and 07.06% is of the opinion that universities as well as OTASA offer relevant and various opportunities.

TABLE 4.26(c): RESPONDENTS' REASONS FOR STATING THAT CURRENT CPD ACTIVITIES DO NOT MEET THEIR NEEDS

(Question 11, Section B of Questionnaire) [n=117]

REASONS	% OF RESPONDENTS
Content of programmes not relevant	25.64
Content must be more practically/clinically directed	12.82
Variety of activities very limited	11.97
Some specific fields of interest are not covered at all	08.54
No interesting courses on offer	07.69
Need not only topics on typical OT areas, but also managerial, business skills and medico-legal	06.83
Similar topics on an ongoing basis on offer	05.13
Unclear objectives and content-difficult to decide whether relevant programme on offer	05.13
CPD activities do not lead to broader scope	04.27
Distance to CPD centres to far/not convenient	04.27
Cost of workshops	04.27
Poor scheduling of activities	03.42
No activities offered as self study courses	03.42
No journal clubs in area of practice	03.42
Not enough communication on workshop logistics	03.42
No internet courses on offer	02.56
Struggling to obtain points on ethics	02.56
Need more information on community practices	01.70
No tutor system on offer	01.70
Evidence-based practical courses for primary health care interventions are unavailable	00.85

Discussion: Of the 117 respondents that answered the question and indicated that CPD activities offered did not meet their needs gave as reason some factors that play a role as far as content is concerned, namely 25.64% indicated that programme content is not relevant; 12.82% indicated that content must be more practically/clinically directed; and 05.13% indicated that course objectives are unclear making it difficult to decide as far as relevancy is concerned. Of the respondents 11.97% gave as reason limited activities; 08.54% that specific fields of interest are not covered; 08.54% no interesting courses on offer; 05.13% indicated that the similar topics are covered on an ongoing basis; 04.27% indicated that CPD activities do not lead to a broader scope and 0.85% indicated that evidence-based practical courses for primary health care interventions are not available. Of the respondents 06.83% stated that other topics than on pure Occupational Therapy, such as managerial, business skills and medico-lega, must be included. As mode of delivery 03.42% indicated no activities offered as self-study courses and 3.42% that no internet courses are available. Other reasons were distance to CPD centres (04.27%); cost of workshops (04.27%); poor scheduling of activities (03.42%); not enough communication regarding workshops (03.42%); more information needed on community practices (02.56%); no tutor system

available(01.70%); struggling to obtain points on ethics (02.56%); and no journal clubs in area of practice (03.42%).

4.3.6 Respondents' ways of acquiring Continuing Professional Development points in order to maintain a licence to practice

Table 4.27 shows the respondents' ways of how they intend to acquire points for CPD in order to maintain their licences to practice.

TABLE 4.27: RESPONDENTS' WAYS OF ACQUIRING CPD POINTS IN ORDER TO MAINTAIN A LICENCE TO PRACTICE
(Question 12, Section B of Questionnaire)[n=211]

WAYS OF ACQUIRING POINTS	% OF RESPONDENTS
Attending seminars, workshops, courses	60.12
Reading articles, answer questionnaires where relevant	56.69
Attending conferences	50.24
Attending journal clubs	42.65
Obtaining further qualifications (credit-bearing short courses leading to a qualification if possible)	08.87
Enrolling for internet courses if available	18.96
Attending mentoring meetings	09.95
Attending groups or study groups	07.58
Attending practice meetings	07.58
In-service learning opportunities	07.11
Using internet to get more information	05.21
Joining an international internet group (for future career options)	05.21
Lecturing, training and supervising students	04.74
Presenting workshops, seminars	02.84
Attend own CPD programmes and activities that were developed by respondents themselves	02.37
Continue attending activities in which respondents have no interest	02.37
Doing research and writing articles	01.42

Discussion: Respondents could indicate more than one way to acquire CPD points. Of the 211 respondents 60.12% gave as an option the attendance of seminars, workshops, courses; 56,69% reading of articles and answering of questionnaires; 50.24% attendance of conferences; 43.65% attendance of journal clubs; 33.18% obtaining of further qualifications; attendance of mentoring meetings (29.95%); study groups (07.58%); practice meetings (07.58%); and in-service learning opportunities (07.11%). Of the respondents 05.21% indicated that they would use internet to get information while 05.21% stated clearly that they prefer to join an international internet group for future career options. Of the respondents 04.74% indicated that they will lecture (academic), train and supervise students and 01.42% will do research

and write articles. Of the respondents 02.84% will present workshops and seminars; 02.37% will attend their own CPD programmes that were developed by themselves (02.37%) or will continue attending activities that do not interest them (02.37%).

4.3.7 Preferred Continuing Professional Development activities

Table 4.28 shows the activities that the respondents preferred to attend.

TABLE 4.28: CPD ACTIVITIES PREFERRED BY RESPONDENTS
(Question 13, Section B of Questionnaire) [n=208]

ACTIVITY	% OF RESPONDENTS
All of the following informal activities, formal activities that do not necessarily lead to a formal qualification and formal activities that lead to a formal qualification	54.33
Informal activities to acquire points (eg. study groups, reading professional journals, interest groups)	44.23
Formal activities that do not necessarily lead to a formal qualification (e.g. seminars, conferences)	43.27
Internet and electronic media	01.92
Hands-on-courses	00.96
Research	00.96
Lectures in academic setting	00.96
Writing for publication	00.96
Answering questions in journals	00.48
In-service on-site clinical-work	00.48
Activities presented at venues where practice and theory can be meaningful integrated	00.48

Discussion: The respondents could mark more than one option and could also add activities. Of the 208 respondents 54,33% chose a selection of all the options that was offered; 44.32% prefer informal activities to acquire points and 43.27% chose formal activities. Smaller percentages of respondents also indicated other options (cf. Table 4.28).

4.3.8 Preferred venues for Continuing Professional Development events

Table 4.29 shows the preference of respondents as far as venues for CPD events are concerned.

TABLE 4.29: RESPONDENTS' PREFERENCE OF VENUES FOR CPD ACTIVITIES

(Question 14, Section B of Questionnaire)

VENUE	DEFINITELY NOT PREFERRED/NOT PREFERRED	NEUTRAL	PREFERRED/ HIGHLY PREFERRED	NUMBER OF RESPONDENTS (n)
Conference centre	10.50%	48.50%	41.00%	200
Hotels	40.00%	43.68%	16.32%	190
Academic institutions	01.46%	36.59%	**61.95%**	205

Discussion: A clear preference (61.95%) was expressed to make use of venues within academic institutions. Only16.32% of respondents showed a preference for hotels as venue for CPD activities.

Other preferences that were also suggested (cf. Question 15, Section B of Questionnaire) by 16.1% of the respondents (N=211) are workplace-related venues such as hospitals, clinics, practices, schools, churches, community centres, primary care facilities and rehabilitation centres. Of the respondents 04.75% expressed the opinion that they prefer venues close to airports and/or a comfortable place nearby for CPD activities.

4.3.9 Cost of Continuing Professional Development activities

Table 4.30(a) shows the percentage of respondents that are willing to pay for CPD opportunities.

TABLE 4.30(a): RESPONDENTS WILLINGNESS TO PAY FOR CPD OPPORTUNITIES

(Question 16, Section B of Questionnaire) [n=199]

RESPONDENTS' WILLINGNESS TO PAY	% OF RESPONDENTS
Yes	92.46
No	07.54

Discussion: Of the respondents 92.46% expressed the willingness to pay for CPD opportunities while 07.54% indicated in the negative.

Table 4.30(b) shows the respondent's opinion on what they regard as a reasonable fee per day of a CPD opportunity.

TABLE 4.30(b): RESPONDENT'S OPINION ON A REASONABLE FEE PERDAY FOR A CPD OPPORTUNITY

(Question 17, Section B of Questionnaire) [n=184]

FEE PER DAY	% OF RESPONDENTS
R100	30.98
R250	**48.91**
R500	13.04
R750	00.54
R1000	02.17
Other, such as to differentiate fee according to type of offering, be income-related or could be paid by the institution or practice	04.35

Discussion: Of the respondents, 48.91% is of the opinion that R250/day is a reasonable fee for the attendance of a CPD opportunity and 13.04% R500/day. Of the respondents 30.98% indicated that they are of the opinion that R100/day is reasonable. The differentiation of fee according to the type of offering, taking into account the income of occupational therapist or subsidising by institution or practice (04.35%) is an option worth of exploring.

4.3.10 Time to attend Continuing Professional Development opportunities

Table 4.31(a) shows the preference as far as the time of the year is concerned to attend CPD opportunities. Respondents could indicate more than one preference.

TABLE 4.31(a): RESPONDENTS PREFERENCE AS FAR AS TIME OF THE YEAR IS CONCERNED FOR ATTENDANCE OF OPPORTUNITIES

(Question 18, Section B of Questionnaire) [n =204]

TIME OF YEAR	% RESPONDENTS
January	15.69
February	15.20
March	**23.53**
April	19.61
May	19.61
June	**22.06**
July	**24.51**
August	20.59
September	**23.53**
October	16.18
November	09.80
December	09.80
Not really a specific preference – does not mind but did make a choice.	**44.12**

Discussion: Of the respondents 44.12% was of the opinion that they really do not mind, but they have made a choice. Months of preference were July (24.51%); March and September (23.53% each); June (22.06%); and August (20.59%). It seems that the first two months of the year (15.69%; 15.20%) and the last two of the year (09.80%) are less preferred. From the motivations of the answers it was clear that respondents indicate more when they **do not** want to attend CPD activities, for example:

"… start of the new year as far as planning is concerned".
"… before end of year rush/madness".
"… definitely not December".
"I hate it that all CPD opportunities happen in the middle of the year – June/July is over used".

Other respondents indicate when will be the best, for example:

"… spreading out through the year".
"… September is more off-beat".
"During school holidays".
"If the topic interest me, I don't care about time, I will work my schedule around it".
"Time of year makes no difference. The way points are gathered and lost after two years argues for always engaging in collection".

Table 4.31(b) shows the preference as far as the time of the month is concerned to attend CPD opportunities. Respondents could indicate more than one preference.

TABLE 4.31(b): RESPONDENTS' PREFERENCE AS FAR AS THE TIME OF THE MONTH IS CONCERNED FOR ATTENDANCE OF CPD OPPORTUNITIES (Question 18, Section B of Questionnaire)[n=202]

TIME OF MONTH	% OF RESPONDENTS
First week of month	05.45
Second week of month	10.40
Third week of month	06.93
Fourth week of month	00.50
Not really a specific preference	82.18

Discussion: Of the 211 respondents 202 answered this question. Respondents could indicate more than one preference: of these respondents 82.18% indicated that they

do not really have a specific preference. However, it seems that a number of them (10.40%) prefer the second week, followed by the third week (06.93%) and the first week (05.45%) of the month, although it is clear that the fourth week of the month is less preferred. The reason may be that it is near to the end of the month, with more patients or with more financial management.

TABLE 4.31(c) SHOWS THE PREFERENCE AS FAR AS TIME OF THE WEEK IS CONCERNED TO ATTEND CPD OPPORTUNITIES
(Question 18, Section B of Questionnaire) [N=201]

TIME OF WEEK	% OF RESPONDENTS
Saturdays	46.77
Sundays	04.98
Weekdays	66.67
Not really a specific preference – do not mind but did make a choice	10.95

Discussion: Respondents (201) could make more than one choice: 66.67% preferred to attend CPD activities during weekdays; 46.77% Saturdays and only 04.98% Sundays. Of the respondents 10.95% argue that they do not really have a specific preference; however, they have made a choice.

4.3.11 Motivation for compliance attendance

Table 4.32 shows the reasons why respondents attend CPD opportunities. Respondents could make more than one choice.

TABLE 4.32: RESPONDENTS' REASON FOR ATTENDING CPD OPPORTUNITIES
(Question 19, Section B of Questionnaire)

CHOICE	YES	NO	UNSURE	NUMBER OF RESPONDENTS (n)
The content	**98.45**	0.52	01.04	193
Personal interest in topic	**97.00**	00.50	02.50	200
CPD points	83.68	13.68	02.63	190
Price of event	71.11	18.33	10.56	180
Place of event	68.89	26.67	04.44	180
The presenter	67.04	21.79	11.17	179
Duration/length of event	58.48	35.09	06.43	171
Compulsory	50.94	37.11	11.95	159
Time of year	28.21	**60.90**	10.90	156

Discussion: Of the respondents a high number, namely 98.45% stated that the main reason for attending CPD opportunities is the programme content and 97.00%

indicated the reason for attending is interest in the topic. These are important factors to keep in mind when planning CPD programmes, and emphasis must be placed on the quality and relevancy of content ensuring that a whole range of interesting topics are offered. The fact that occupational therapists need to get CPD points (83.68%) and that it is compulsory to practice (50.94%) also plays an important role. Other reasons why respondents attend CPD opportunities are the price of a specific event (71.11%); the place where the event takes place (68.69%) the choice of presenter (67.04%); and the duration of the event (58.48%). Of the respondents 60.90% indicated that the time of year when the CPD opportunities is offered is not important. A few respondents (four) also motivated their choice by highlighting that the content of the programme must be useful to their current practice.

4.3.12 Learning situation

Table 4.33 shows the respondents' preference as far as learning situations are concerned.

TABLE 4.33: RESPONDENTS' PREFERENCE AS FAR AS LEARNING SITUATIONS ARE CONCERNED
(Question 20, Section B of Questionnaire)

LEARNING SITUATION	NOT AT ALL/ NOT PREFERRED	NEUTRAL	PREFERRED/ HIGHLY PREFERRED	NUMBER OF RESPONDENTS (n)
Peer review sessions (informal discussions with peers)	04.41	22.06	**73.10**	204
Lectures with time for questions and answers of participants but no group work	05.92	34.48	**59.61**	203
Mentoring in a clinical centre	17.70	30.21	**52.09**	192
Lectures with involvement of participants through discussions in big groups	20.00	28.78	**51.22**	205
Facilitated workshops where participants work in small groups on given case studies	24.02	25.49	**50.49**	204
Presentation of research papers with time for questions and answers	20.59	29.90	49.51	204
Distance education with no workshops or lectures	24.39	31.22	44.39	205

Facilitated workshops where participants work in small groups on cases from their own practices	24.13	31.53	44.33	203
Facilitated ward rounds	33.50	32.99	33.50	197

Discussion: A number of respondents indicated a variety of learning situations that they do not prefer at all/not prefer. It is important to highlight the preferred/highly preferred learning situations, for example peer review sessions (73.10%); lectures and questioning time (59.61%); mentoring in a clinical centre (52.09%); combination of lectures and big group discussions (51.22%); combination of facilitated workshop and small groups working on given case studies (50.49%) or on case studies from their own practices (44.33%); presentation of research (49.51%); and distance education with no workshops or lectures. It seems that on facilitated ward rounds as far as the learning situation is concerned the respondents are not positive or negative. When planning a specific learning situation it will be good to focus on learning situations where a percentage of respondents are positive and/or neutral (cf. Table 4.32). Other preferred learning situations such as displaying of workplace skills plans, on-line courses, practical workshops, formally peer-reviewed sessions, inter-disciplinary offerings and lecturers with follow-up written exams afterwards, were additionally suggested to the above-mentioned options by a few of the respondents.

4.4 CONTENT NEEDS FOR PROFESSIONAL DEVELOPMENT

[Please compare Section C of Questionnaire (Appendix A4)]

This section deals with the content needs of occupational therapists. Respondents could indicate more than one need/option answering the questions.

Respondents were asked to indicate their needs as far as the content of CPD programmes are concerned. They had to indicate their need for CPD in the clinical (disease) area, business area, computer area, health policy and management area, ethical area, interpersonal skills area and personal growth area. They also had to indicate their areas of interest and expertise. They were also asked to indicate their preferred educational product/service that they would like to be included in a full inclusive CPD-initiative.

4.4.1 Need for Continuing Professional Development in clinical areas

Table 4.34 shows the respondent's need for CPD in clinical areas.

TABLE 4.34: RESPONDENTS' NEED FOR CPD IN CLINICAL AREAS

(Question 1, Section C of Questionnaire)

CPD NEED IN CLINICAL DISEASE AREA	DEFINITELY NOT PREFERRED/NOT PREFERRED	NEUTRAL	PREFERRED/ HIGHLY PREFERRED	NUMBER OF RESPONDENTS (n)
Neuro-paediatric	14.98	13.90	**71.12**	187
Sensory integration	13.09	16.23	**70.68**	191
Paediatric	13.76	15.87	**70.37**	189
Child Psychology	15.60	23.12	61.29	186
Neuro-physiological	14.2	26.14	59.66	176
Biomechanical	18.23	27.07	54.70	181
Psychiatric disorders	26.43	24.14	49.42	174
Psycho-social	24.85	27.12	48.02	177
Community service learning	32.95	26.59	40.46	173
Forensic	50.00	25.29	24.71	174

Discussion: The respondents could choose more than one option in the clinical areas. Of the respondents 71.12% indicated a need for CPD in the neuro-paediatric area; 70.68% in the sensory integration area; 70.37% in the general paediatric area and 61.29% in the child psychology area. Just more or less than 50% of the respondents expressed a need for CPD in the neuro-physiological area (59.66%); biomechanical (54.70%); psychiatric disorders (49.42%); psycho-social (48.02%) and community service learning (40.46%). Half of the respondents (50.00%) did not have any needs for CPD training in forensics, although 24.71% indicated a need and 25.29% was neutral.

Of the 211 respondents 35 individuals expressed the need for CPD in other clinical areas not listed in Table 4.34: 20% of them for CPD training in the vocational (rehabilitation) area, 11.43% in the medico-legal area, 05.71% for CPD training, respectively in hand therapy, geriatrics, learning disability, adult neurology, education management, intervention-based modelling and ethics areas as well as 02.85% for CPD training respectively in HIV-related occupational therapy, insurance management, disability management, corporate wellness, neo-natal area, programme development, article writing and clinical supervision, general management and a combination of a wide range of activities – some of which are very occupation specific like the use of pressure garments.

4.4.2 Need for Continuing Professional Development in business areas

Table 4.35 shows the respondents' need for CPD in business areas.

TABLE 4.35: RESPONDENTS' NEED FOR CPD IN BUSINESS AREAS

(Question 2, Section C of Questionnaire)

CPD NEED IN BUSINESS AREAS	DEFINITELY NOT PREFERRED/NOT PREFERRED	NEUTRAL	PREFERRED/ HIGHLY PREFERRED	NUMBER OF RESPONDENTS (n)
Leadership	18.04	23.20	**58.76**	194
Strategic planning	25.00	22.92	**52.08**	192
Marketing	19.89	28.06	**52.04**	196
Motivation of personnel	24.61	23.59	**51.79**	195
Financial/budget control	24.48	26.04	49.48	192
Performance appraisal	20.31	30.73	48.96	192
Financial planning	25.64	26.15	48.21	195

Discussion: Respondents could choose more than one option in the business area. Plus-minus two out of every four respondents made a choice in the preferred/highly preferred column (48.21% - 58.76%) while plus-minus one out of every four respondents were neutral (22.92% - 30.73%) and one out of every four (18.04% - 25.64%) indicated that they did not have a need for CPD in business areas.

Of the 211 respondents six individuals expressed the need for CPD in other business areas not listed in Table 4.30: 66.67% of them (four respondents) identified a need for CPD training in business-and-ethics while 33.37% (two respondents) identified the need for training as far as the training of caregivers.

4.4.3 Need for Continuing Professional Development in computer training areas

Table 4.36 shows the respondents' need for CPD in computer training areas.

TABLE 4.36: RESPONDENTS' NEED FOR CPD IN COMPUTER TRAINING AREAS

(Question 3, Section C of Questionnaire)

CPD NEED IN COMPUTER TRAINING AREAS	DEFINITELY NOT PREFERRED/NOT PREFERRED (% RESPONDENTS)	NEUTRAL (% RESPON-DENTS)	PREFERRED/HIGHLY PREFERRED (% RESPON-DENTS)	NUMBER OF RESPONDENTS (n)
Database management	23.30	19.42	**57.28**	203
Accounting	38.05	19.51	42.44	205
Internet skills	**48.77**	20.20	31.04	203

Discussion: Respondents could choose more than one option in the computer training areas. Of the respondents 57.28% indicated that they need training in database management; 42.44% in accounting and 31.04% in internet skills. Although quite a high percentage of respondents did not prefer any training as far as internet skills are concerned, to be included in CPD programmes.

Of the respondents 12 individuals expressed the need for CPD in other computer training areas not listed in Table 4.36: namely 33.33% of them (four respondents) identified a need for CPD training in Excel programme use; 25.00% (three respondents) in training to use the internet as research tool; 16.67% (two respondents) in PowerPoint presentations; and 08.33% (one respondent), respectively, in software training, web-hosting and adaptive devices for physical conditions, respectively.

4.4.4 Need for Continuing Professional Development in health policy areas

Table 4.37 shows the respondents' need for CPD in health policy areas.

TABLE 4.37: RESPONDENTS' NEED FOR CPD IN HEALTH POLICY AREAS

(Question 4, Section C of Questionnaire)

CPD NEED IN HEALTH POLICY AREAS	DEFINITELY NOT PREFERRED/ NOT PREFERRED (% RESPONDENTS)	NEURAL (% RESPONDENTS)	PREFERRED/ HIGHLY PREFERRED (% RESPON-DENTS)	NUMBER OF RESPONDENTS (n)
HPCSA policies and guidelines	11.83	35.96	**52.21**	203

National health insurance	17.41	34.83	47.76	201
National health policy	18.19	37.37	44.44	198
Managed care	**31.47**	38.58	29.95	197

Discussion: Respondents could choose more than one option in the health policy areas. Of the respondents 52.21% indicated that they need training to be informed and understand policies and guidelines of the HPCSA; 47.76% in national health insurance issues; 44.44% in national health policy and 29.95% in managed care. Plus-minus just more than one out of three respondents were neutral (34.83% - 38.58%).

Of the respondents 12 individuals expressed the need for CPD in other health policy areas/policy areas not listed in Table 4.37: namely 25.00% of them (three respondents) identified a need for CPD training on education policies; and 08.33% (one respondent each), respectively, on inclusive education, school-related polices, disciplinary procedures, labour act (WCA), RAF, HIV/AIDS-legislation in insurance field, medical aid schemes, USA-related insurance field and report writing on policy documentation.

4.4.5 Need for Continuing Professional Development in ethical areas

Table 4.38 shows the respondents' need for CPD in ethical areas.

TABLE 4.38: RESPONDENTS' NEED FOR CPD IN ETHICAL AREAS
(Question 5, Section C of Questionnaire)

CPD NEED IN ETHICAL AREAS	DEFINITELY NOT PREFERRED/ NOT PREFERRED (% RESPON-DENTS)	NEUTRAL (% RESPONDENTS)	PREFERRED/ HIGHLY PREFERRED (% RESPONDENTS)	NUMBER OF RESPONDENTS (n)
How to deal with ethical dilemmas	01.45	19.80	**78.75**	207
Relationship between ethics and law	02.92	30.58	66.50	206
Informed consent	08.33	26.48	65.19	204

Principled underpinnings of ethics in health care	08.46	34.33	57.21	201
Confidentiality	13.53	34.78	51.69	207
Perverse incentives (e.g. bribes)	33.50	48.00	18.50	200

Discussion: Respondents could choose more than one option in the ethical areas. Of the respondents 78.75% indicated a preferred/highly preferred need for training on how to deal with ethical dilemmas; 66.50% on the relationship between ethics and law; 65.19% on informed consent; 57.21% on the principles that underpin ethics in health care and 51.69% on confidentiality. Of the respondents 33.50% indicated that they do not need training on perverse incentives (like receiving bribes, etc.) while 48.00% was neutral.

Of the respondents two individuals expressed the need for CPD in other ethical areas not listed in Table 4.38: namely 50% (one respondent) identified a need for training on how to deal with therapists who interfere (conflict management – researcher's interpretation) and 50% (one respondent) identified a need for including practical examples – such as case studies – on ethical issues.

4.4.6 Need for Continuing Professional Development in interpersonal skills areas

Table 4.39 shows the respondents' need for CPD in interpersonal skills areas.

TABLE 4.39: RESPONDENTS' NEED FOR CPD IN INTERPERSONAL SKILLS AREAS

(Question 6, Section C of Questionnaire)

CPD NEED IN INTERPERSONAL SKILLS AREAS	DEFINITELY NOT PREFERRED/ NOT PREFERRED (% RESPON-DENTS)	NEUTRAL (% RESPON-DENTS)	PREFERRED/ HIGHLY PREFERRED (% RESPONDENTS)	NUMBER OF RESPONDENTS (n)
Counselling	06.28	27.54	**66.18**	207
Conflict management	12.20	26.34	**61.46**	205
Debriefing	12.68	31.71	55.61	205

Negotiation skills	16.10	31.22	52.68	205
Communication skills	17.79	36.06	46.15	208

Discussion: Respondents could choose more than one option in the interpersonal skills areas. Of the respondents 66.18% indicated a preferred/highly preferred need for training in counselling; 61,46% in conflict management; 55.61% in debriefing; 52.68% on negotiation skills; and 46.15% in communication skills.

Of the respondents three individuals expressed the need for CPD in other interpersonal skills areas not listed in Table 4.39: namely 33.33% (one respondent) identified a need for training on how to contain yourself; 33.33% (one respondent) on how to discipline adults or employees and 33.33% one respondent) identified the need for training on court appearance and behaviour.

4.4.7 Need for Continuing Professional Development in personal growth areas

Table 4.40 shows the respondents' need for CPD in personal growth areas.

TABLE 4.40: RESPONDENTS' NEED FOR CPD IN PERSONAL GROWTH AREAS (Question 7, Section C of Questionnaire)

CPD NEED IN PERSONAL GROWTH AREAS	DEFINITELY NOT PREFERRED/ NOT PREFERRED (% RESPONDENTS)	NEUTRAL (% RESPONDENTS)	PREFERRED/ HIGHLY PREFERRED (% RESPONDENTS)	NUMBER OF RESPONDENTS (n)
Stress management	12.56	28.99	**58.45**	207
Self-assertiveness	17.88	25.60	56.52	204
Time management	15.27	37.44	47.29	204
Self-management	19.61	35.30	45.09	204

Discussion: Respondents could choose more than one option in the personal growth areas. Of the respondents 58.45% indicated a preferred/highly preferred need for training in stress management; 56.52% in self-assertiveness; 47.29% in time management and 45.09% in self-management.

Of the respondents two individuals expressed the need for CPD in other personal growth areas not listed in Table 4.40: namely 50.00% (one respondent) identified a need for training to ensure that the occupational therapist has time for relaxation and exercise; and 50.00% (one respondent) identified the need for training on motivational factors with the view to bring hope in patients' lives.

4.4.8 Need for including educational products/services in a Continuing Professional Development initiative

Table 4.41 shows the need for including specific educational products/services in a CPD initiative.

TABLE 4.41: NEED FOR THE INCLUSION OF A SPECIFIC EDUCATIONAL PRODUCT/SERVICE IN A CPD INITIATIVE
(Question 8, Section C of Questionnaire)

PRODUCT/ SERVICE	NO NEED AT ALL/NOT NEEDED (% RESPON-DENTS)	NEUTRAL (% RESPONDENTS)	NEEDED/HIGHLY NEEDED (% RESPONDENTS)	NUMBER OF RESPONDENTS (n)
One-day refresher seminars	02.45	08.33	**89.22**	204
Newsletter on the latest development	01.44	13.87	**84.69**	209
Full journal articles in areas of interest	04.83	11.11	**84.06**	207
A summary of latest developments in areas of interest	00.49	16.01	**83.50**	206
Training workshops	02.45	17.16	**80.39**	204
Compact disk-based educational programmes	04.98	17.41	**77.61**	201
Journal clubs	07.84	22.06	70.10	204
Distance learning	05.77	28.84	65.39	208
Evening expert talks	08.95	21.39	63.66	201
Access to mentors	11.11	25.61	63.28	207

Internet-based educational programmes	11.94	25.37	62.69	201
Organised group case/problem discussion	05.42	36.45	58.13	203
Facilitated sessions	07.03	35.18	57.79	199
Self-assessment of practice: minimum performance standards	06.83	35.61	57.56	205
Internet-based conference attendance	21.08	35.78	43.14	204
Access to Telemedicine (the use of information and communication technology)	24.75	38.12	37.13	202
24-hour hotline with expert clinical advice	**29.95**	34.31	35.74	07
TV broadcasting of educational programmes	**36.14**	32.18	31.68	202

Discussion: The respondents were asked to indicate their needs for 18 different educational products or services – they could also add others. Of the respondents 89.22% (of the 204 respondents) indicated that one-day refresher seminars are needed or highly needed; 84.69% indicated a need for a newsletter on the latest developments; 84.06% indicated full journal articles in areas of interest; 83.50% indicated summaries of the latest developments in areas of interest; 80.39% indicated a need for training workshops; 77.61% indicated compact disk-based educational programmes; 70.10% indicated the need for journal clubs. Of the respondents 65.39% indicated a need for distance learning programmes; 62.69% for internet-based educational programmes; and 43.14% indicated the need for internet-based conference attendance. Of the respondents 63.66% indicated a need for evening expert talks; 63.28% for access to mentors; 58.13% for organised group cases or problem discussion; 57.79% for facilitated sessions; 57.56% indicated a need for self-assessment of practice against minimum performance standards; 37.13% indicated a need for access to telemedicine; 35.74% a 24-hour hotline with expert clinical advice; 31.68% TV broadcasting of educational programmes – in the last two instances 29.95% and 36.14% of the respondents indicated no need at all or needed, respectively.

Of the respondents two individuals identified other products/services that are not listed in Table 4.41: namely, 50.00% of the respondents (one individual) identified the need as far as assistance to do own research in practice; 50.00% of the respondents (one individual) identified the need for a "four-day Bosberaad (a long-term planning or strategic meeting, held away from the workplace) for the top in the profession".

4.4.9 Clinical areas of interest and expertise

Table 4.42 shows the clinical area of interest and expertise as indicated by the respondents.

TABLE 4.42: CLINICAL AREAS OF INTEREST AND EXPERTISE
(Question 9, Section C of Questionnaire)

CLINICAL AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Paediatric	85	**40.28**	34	**16.11**
Sensory integration	67	**31.75**	26	**12.32**
Neuropaediatric	59	27.96	29	**13.74**
Biomechanical	43	20.38	26	**12.32**
Neuro-physiological	43	20.38	20	09.48
Child psychology	34	16.11	03	01.42
Psychiatric disorders	30	14.22	12	05.69
Psycho-social	29	13.74	06	02.84
Community service learning	15	07.11	07	03.32
Forensic	10	04.74	00	00.00
Vocational training/ rehabilitation	09	04.27		
Public education	05	02.36		
Hand therapy	04	01.89		
Medico-legal	03	01.42		
Disability management	03	01.42		
Learning disabilities	01	00.47		
Geriatric care	01	00.47		
Spinal cord injuries	01	00.47		
Management	01	00.47		
Insurance	01	00.47		
Adult neurology	01	00.47		
Prematurity	01	00.47		
Seating	01	00.47		
Qualitative clinical research	01	00.47		
Adult physical	01	00.47		

Discussion: Table 4.42 shows the clinical areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of

interest is given in a descending order as indicated by the respondents. Beneath the double line respondents added other clinical areas of interest that were not listed as an option in the questionnaire – they indicated only their other clinical areas of interest and did not give an indication of their expertise in these areas. Nine respondents added vocational training/ rehabilitation; five respondents added public education as areas of interest and four respondents hand therapy, for example.

Of the respondents 40.28% indicated the clinical area paediatrics as their area of interest; 31.75% sensory integration; 27.96% neuropaediatrics; 20.38% biomechanical and neuro-physiological areas respectively each; 16.11% child psychology; 14.22% psycho-social; 07.11% community service learning and 04.74% forensic as a clinical area of interest. The area in which most respondents indicated that they have a specific expertise is clinical paediatrics (16.11%); then neuropaediatrics (13.74%) and thirdly sensory integration and biomechanical (each 12.32%).

4.4.10 Health management areas of interest and expertise

Table 4.43 shows the health management areas of interest and expertise as indicated by the respondents.

TABLE 4.43: HEALTH MANAGEMENT AREAS OF INTEREST AND EXPERTISE (Question 10, Section C of Questionnaire)

HEALTH MANAGEMENT AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Monitoring and evaluation	68	**32.23**	13	06.16
Leadership	64	30.33	13	06.16
Project management	60	28.44	14	06.64
Strategic planning	53	25.12	16	07.58
Financial management	37	17.54	06	02.84
Human resource management	36	17.06	09	04.27
Marketing and customer relations	32	15.17	05	02.37

Discussion: Table 4.43 shows the health management areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents.

Of the respondents 32.23% indicated monitoring and evaluation as an interest area; 30.33% of respondents leadership; 28.44% project management; 25.12% strategic planning; 17.54% financial management; 17.06% human resource management and 15.17% indicated that they have an interest in marketing and customer relations. Only a small number of the respondents indicated expertise in these areas (cf. Table 4.43).

4.4.11 Computer areas of interest and expertise

Table 4.44 shows the computer areas of interest and expertise as indicated by the respondents.

TABLE 4.44: COMPUTER AREAS OF INTEREST AND EXPERTISE
(Question 11, Section C of Questionnaire)

COMPUTER AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Internet skills	103	**48.82**	29	13.74
Database management	064	30.33	01	00.47
Word processing	052	24.64	26	12.32
Worksheet creation	050	23.70	08	03.79
Data recovery	028	13.70	00	00.00
Network management	025	11.85	01	00.47
Desktop publishing	020	09.48	01	00.47
Firewall management	016	07.58	01	00.47
Software programming	014	06.64	01	00.47
PowerPoint design and presentation	001	00.47		

Discussion: Table 4.44 shows the computer areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents. Beneath the double line respondents added one other computer area of interest that was not listed as an option in the questionnaire – the respondent only indicates the area of interest and did not give an indication of expertise, but it may be assumed that this respondent is not an expert in this field and rather would prefer training in PowerPoint design and presentation.

Of the respondents 48.82% indicated an interest in internet skills; 30.33% in database management; 24.64% in word processing; 23.70% in worksheet creation; 13.70% in data recovery; and 11.85% in network management and so forth. The areas where

respondents indicated that they have expertise in is the area of internet skills (13.74%) and word processing (12.32%).

4.4.12 Health policy areas of interest and expertise

Table 4.45 shows the health policy areas of interest and expertise as indicated by the respondents.

TABLE 4.45: HEALTH POLICY AREAS OF INTEREST AND EXPERTISE
(Question 12, Section C of Questionnaire)

HEALTH POLICY AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
National health policies	74	**35.07**	04	01.90
Public private partnership in health	67	**31.75**	00	00.00
Health law and regulation	65	**30.81**	01	00.47
Managed care	30	14.22	02	00.95
National education (incl. school education) policies	03	01.42		
Medico-legal policies	01	00.47		

Discussion: Table 4.45 shows the health policy areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents. Beneath the double line respondents added two other health policy areas of interest that were not listed as an option in the questionnaire. Three of the four respondents (75.00%) indicated national education (including school education) policies as an area of interest while one respondent (25.00%) indicated medico-legal policies as an area of interest.

Of the respondents 35.07% indicated an interest in national health policies; 31.75% in public private partnerships in health; 30.81% in health law and regulation; and 14.22% in managed care. A very low percentage of respondents with expertise were indicated (cf. Table 4.45).

4.4.13 Ethics as an area of interest and expertise

Table 4.46 shows ethics as an area of interest and expertise as indicated by the respondents.

TABLE 4.46: ETHICS AS AN AREA OF INTEREST AND EXPERTISE

(Question 13, Section C of Questionnaire)

ETHICS AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
How to deal with ethical dilemmas	101	**47.87**	04	01.90
Relationships between ethics and law	077	**36.49**	04	01.42
Confidentiality	063	**29.86**	07	03.32
Principled underpinnings of ethics in healthcare	055	**26.07**	03	01.42
HIV/AIDS and ethics	053	**25.12**	03	01.42
Informed consent	045	**21.33**	09	04.27
Perverse incentives (e.g. bribes)	007	03.32	01	00.47
Ethics and elderly	001	00.43		

Discussion: Table 4.46 shows ethics as an area of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents. Beneath the double line one respondent added one other ethics area of interest that was not listed as an option in the questionnaire, namely ethics and the elderly.

Of the respondents 47.87% indicated an interest in how to deal with ethical dilemmas; 36.49% in relationships between ethics and law; 29.86% in confidentiality; 26.07% in the principles that underpin ethics in healthcare; 25.12% HIV/AIDS and ethics; 21.33% in informed consent and only 03.22% of respondents have an interest in the ethics area of perverse incentives. A very low percentage of respondents with expertise were indicated (cf. Table 4.46).

4.4.14 Interpersonal areas of interest and expertise

Table 4.47 shows the interpersonal areas of interest and expertise as indicated by the respondents.

TABLE 4.47: INTERPERSONAL AREAS OF INTEREST AND EXPERTISE

(Question 15, Section C of Questionnaire)

INTERPERSONAL AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Counselling	104	**49.29**	16	07.58
Communication skills	086	**40.76**	14	06.64

Conflict management	079	**37.44**	04	01.90
Debriefing	051	24.17	02	00.95
Negotiation skills	041	19.43	07	03.32
Experience in teamwork with occupational therapists	001	00.47		

Discussion: Table 4.47 shows the interpersonal areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents. Beneath the double line one respondent added one other interpersonal area of interest that was not listed as an option in the questionnaire, namely experience in teamwork with occupational therapists.

Of the respondents 49.29% indicated an interest in counselling as an area of interest; 40.76% communication skills; 37.44% conflict management; 24.17% debriefing and 19.43% negotiation skills as an area of interest. Of the respondents 07.58% indicated that they have expertise in counselling and 06.64% in communication skills (cf. Table 4.47).

4.4.15 Personal growth areas of interest and expertise

Table 4.48 shows the personal growth areas of interest and expertise as indicated by the respondents.

TABLE 4.48: PERSONAL GROWTH AREAS OF INTEREST AND EXPERTISE (Question 15, Section C of Questionnaire)

PERSONAL GROWTH AREA	INTEREST AREA		EXPERT AREA	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
Stress management	109	**51.65**	08	03.79
Self-management	095	**45.02**	09	04.27
Time management	084	**39.81**	10	04.74
Self-assertiveness	001	00.47		
Counselling skills	001	00.47		

Discussion: Table 4.48 shows the personal growth areas of interest and expertise as indicated by the respondents. The frequency as well as the percentage is given. The area of interest is given in a descending order as indicated by the respondents. Beneath the double line respondents added two other personal growth areas of interest that was not listed as an option in the questionnaire. One (50.00%) of the two

respondents indicated self-assertiveness as an area of interest and the other respondent (50.00%) indicated counselling skills.

Of the respondents 51.65% indicated an interest in stress management; 45.02% in self-management; and 39.81% in time management. A relatively low percentage of expertise in these areas was indicated (cf. Table 4.48).

4.5 APPROPRIATENESS OF VARIOUS CONTINUING PROFESSIONAL DEVELOPMENT ACTIVITIES

Section D of the Questionnaire (cf. Appendix A3) deals with the appropriateness of various CPD activities.

4.5.1 Appropriateness (effectiveness, importance and necessity) of Professional Development activities

It was requested of the respondents to answer this section as follows:

"**First indicate how <u>effective</u> (=E) the current products/activities on offer are, secondly how <u>important</u> (=I) each of these products (activities) are for the future, and thirdly, how <u>necessary</u> (=N) the specific products and activities are for the future.**

Effectiveness of current CPD product/activity

4 = extremely effective (those currently offered are extremely effective)
3 = effective (those currently offered are effective)
2 = less effective (those currently offered are less effective)
1 = not effective at all (those currently offered are not effective at all)

Importance of product/activity for future CPD

4 = extremely important (must be a product/activity to be offered)
3 = important (must preferably be a product/activity to be offered)
2 = less important (may possibly be left out as a product/activity to be offered)
1 = not important at all (can definitely be left out as a product/activity to be offered)

Necessity of product/activity for future CPD

4 = extremely necessary (is a definite required product/activity to be offered)

3 = necessary (is preferably be a product/activity to be offered)

2 = less necessary (may possibly be left out as a product/activity to be offered)

1 = not necessary (can definitely be left out as a required product/activity to be offered)".

Table 4.49 shows the appropriateness of CPD activities. Only a few trends will be highlighted in the thesis. A full article on the findings as far as the appropriateness of CPD activities, will be compiled for publication by the researcher.

TABLE 4.49: APPROPRIATENESS OF CPD ACTIVITES

(Section D of Questionnaire) (A = appropriateness; FM = frequency missing; F = frequency; % = percentage; E = effectiveness; I = importance; N = necessity; 4,3,2,1 = see scales point 4.5)

			4		3		2		1	
	A	FM	F	%	F	%	F	%	F	%
A summary of the latest development in areas of interest	E	12	029	14.57	50	25.13	70	**35.18**	050	**25.13**
	I	12	132	**66.33**	53	**26.30**	12	06.03	002	01.01
	N	13	137	**69.19**	50	**25.25**	08	04.04	003	01.52
Full journal articles in areas of interest	E	12	036	18.09	65	**32.66**	67	**33.67**	031	15.58
	I	15	110	**56.12**	75	**38.27**	08	04.08	003	01.53
	N	13	113	**57.07**	71	**35.86**	13	06.57	001	00.51
Newsletters on the latest developments	E	13	036	18.18	68	34.34	74	37.37	020	10.10
	I	12	120	60.30	53	26.63	19	09.55	007	03.52
	N	15	121	61.73	55	28.06	16	08.16	004	02.04
Distance learning activities/courses/ programmes	E	13	016	08.08	49	24.75	75	**37.88**	058	**29.29**
	I	14	071	**36.04**	78	**39.59**	38	19.29	010	05.08
	N	16	080	**41.03**	69	**35.38**	38	19.49	008	04.10
Access to mentors	E	11	024	12.00	49	24.50	66	33.00	061	30.50
	I	12	088	44.22	68	34.17	32	16.08	011	05.53
	N	12	092	46.23	74	37.19	24	12.06	009	04.52
24-hour hotline with expert clinical advice	E	17	012	06.19	20	10.31	48	24.74	114	58.76
	I	14	028	14.21	57	28.93	72	36.55	040	20.30
	N	15	035	17.86	55	28.06	68	34.69	038	19.39
Access to Telemedicine	E	16	009	04.62	25	12.82	57	29.23	104	53.33
	I	18	029	15.03	76	39.38	49	25.39	039	20.21
	N	18	028	14.51	70	36.27	55	28.50	040	20.73
TV broadcasting of educational programmes	E	18	009	04.66	32	16.58	57	29.53	095	49.22
	I	18	026	13.47	70	36.27	51	26.42	046	28.83
	N	16	027	13.85	69	35.38	56	28.72	043	22.05
Internet-based conference attendance	E	15	010	05.10	30	15.31	52	26.53	104	53.06
	I	16	045	23.08	77	39.49	44	22.56	029	14.87
	N	15	053	27.04	68	34.69	49	25.00	026	13.27

Internet-based educational programmes	E	16	026	13.33	36	18.46	50	25.64	083	42.56
	I	16	081	41.54	70	35.90	27	13.85	017	08.72
	N	15	087	44.39	64	32.65	23	11.73	022	11.22
Compact disk-based educational programmes	E	14	027	13.71	47	23.86	61	30.96	062	31.47
	I	20	093	48.69	77	40.31	13	06.81	008	04.19
	N	20	087	45.55	71	37.17	20	10.47	013	06.81
Self-assessment of practice: minimum performance standards	E	16	025	12.82	45	23.08	63	32.31	062	31.79
	I	17	078	40.21	80	41.24	26	13.40	010	05.15
	N	16	077	39.49	78	40.00	30	15.38	010	05.13
Organised group case/problem discussions	E	15	028	14.29	72	36.73	60	30.61	036	18.37
	I	14	072	36.55	98	49.75	25	12.69	002	01.02
	N	16	079	40.51	88	45.13	26	13.33	002	01.03
Training workshops	E	11	068	**34.00**	91	**45.50**	32	16.00	009	04.50
	I	13	128	**64.65**	65	**32.83**	05	02.53	000	00.00
	N	15	132	**67.35**	61	**31.12**	03	01.53	000	00.00
One-day refresher seminars	E	19	067	**34.90**	61	**31.77**	54	28.13	010	05.21
	I	15	129	**65.82**	56	**28.57**	07	03.57	004	02.04
	N	15	136	**69.39**	49	**25.00**	10	05.10	001	00.51
Evening expert talks	E	15	035	17.86	72	36.73	57	29.08	032	16.33
	I	17	079	40.72	70	36.08	34	17.53	011	05.67
	N	15	077	39.29	77	39.29	34	17.53	008	04.08
Journal clubs	E	16	039	20.00	59	30.26	67	34.36	030	15.38
	I	16	001	00.51	92	47.18	82	42.05	005	02.56
	N	14	094	47.72	80	40.61	16	08.12	007	03.55
Facilitated sessions	E	16	029	14.87	61	31.28	72	36.92	033	16.92
	I	17	067	34.54	92	47.42	29	14.95	006	03.09
	N	17	067	34.54	94	48.45	27	13.92	006	03.09
CSL in primary care hospitals	E	34	027	15.25	49	27.68	61	34.46	040	22.60
	I	35	064	36.36	68	38.64	27	15.34	017	09.66
	N	35	067	38.07	64	36.36	28	15.91	017	09.66
CSL in community clinics	E	33	023	12.92	51	28.65	59	33.15	045	25.28
	I	34	063	35.59	66	37.29	28	15.82	020	11.30
	N	35	065	36.93	65	36.93	26	14.77	020	11.36
CSL in other community facilities	E	39	001	00.58	14	08.14	49	28.49	049	28.49
	I	38	061	35.26	63	36.42	31	17.92	018	10.40
	N	39	063	36.63	58	33.72	33	19.19	018	10.47

Discussion: In Table 4.49 respondents indicated the appropriateness (including the effectiveness of CPD activities on offer; the importance of the product/service and the necessity of the product or service being offered) of CPD activities. Only a few trends are emphasised for example: As far as a summary of the latest developments as a CPD activity is concerned – 35.18% of respondents rate a "2" (less effective) and 25.13% of respondents rate a "1" (not effective at all), in total 60.31% are of the opinion that this CPD activity is not effective at this point in time, but 66.33% rate a "4" (extremely important) and 26.30% rate a "3" (important), in total 92.63% of respondents are of the opinion that this CPD activity is important while as far as the necessity is concerned 69.19% of respondents rate a "4" (extremely necessary) and 25.25% rate a "3" (necessary), in total 94.44% of the respondents are of the opinion that this CPD must

be an activity or product for CPD. Providers of CPD must take this into account when planning CPD (cf. Table 4.49).

Another example is training workshops, as well as one-day refresher courses, the respondents are of the opinion that it is relatively effective, but also important and necessary – so providers must still include it in their CPD activities (cf. Table 4.49).

4.6 ADULT EDUCATION

[Please compare Section E of Questionnaire (Appendix A3)].

This sections deals with adult education. The respondents had to answer two questions that were put to them in an open-ended format, namely:

"As a mature, experienced adult learner in a profession, which factors are important to you as far as CPD is concerned?"
"According to your own position, please make recommendations as to how more effective CPD programmes can be offered for occupational therapists."

The data was analysed by the researcher herself. The qualitative data was analysed by reading and reflection, identification of themes, establishment of patterns and connections as well as coding (cf. Chapter 3, 3.3.2.3.7 *Data analysis*). To ensure trustworthiness the direct words of respondents are quoted.

From this research, two themes emerged namely important factors as far as CPD is concerned as well as ways to offer more effective CPD programmes. Under the theme, important factors, as far as CPD is concerned (4.6.1), five categories were identified (4.6.1.1 – 4.6.1.5) and under point 4.6.1.2, two sub-categories (4.6.1.2.1-4.6.1.2.2). Under the theme, ways to offer more effective CPD programmes (4.6.2), five categories were identified and discussed in the format of recommendations (4.6.2, point 1-5).

For a discussion of relevant literature that forms a theoretical grounding to adult education and CPD and that is applicable to understand the qualitative findings in this Section (cf. Chapter 2).

4.6.1 Important factors as far as Continuing Professional Development is concerned

All the respondents (211) completed this question. The occupational therapists, as adult learners, had to indicate which factor(s) as far as CPD is concerned, are important to them as an individual. From the answers it was clear to the researcher that they as adult learners really opened-up and realised not only the importance of the contribution that they can make to this research, but also to CPD and to the profession *per se*. Quite a number of factors could be identified by the researcher and a discussion thereof will follow. [cf. Chapter 2, point 2.10]

In general, the need for CPD is well recognised by the respondents – only one respondent was of the opinion that CPD is not necessary and that it must not be forced on them:

"… ek voel CPD is onnodig. Ons is eties-verantwoordelike professionele mense en het in elk geval kursusse bygewoon voordat CPD verpligtend geword het – moet dit nie afforseer nie." [Researcher's translation: ... feel that CPD is not necessary. We are ethically responsible professional people and had in any case attended courses before CPD became compulsory – do not force CPD on us].

Although the need for CPD is well recognised, it is clear that there is a number of factors impacting on CPD and cognisance must be taken thereof when planning and offering CPD. These factors are of utmost importance to the occupational therapists as adult learners, to ensure effective adult learning. The five sub-categories (4.6.1.1-4.6.1.5) will be discussed.

4.6.1.1 *Factors that take the learner's needs into consideration as far as the content and context of CPD programmes are concerned*

An important factor that was mentioned by respondents is – the content that is covered in a CPD programme as well as the context in which the content is grounded. It is further clear that the content must also fill the gaps or deficiencies in the knowledge or competence of the occupational therapist.

One of the aims of CPD is to ensure that health professionals stay competent in their practice. Occupational therapists require up-to-date knowledge and skills that can be applied in their practices. This knowledge and skills must be based on new research, best evidence-based practice, new clinical developments as well as on national and international trends. The purpose of CPD is to better the competence of the health professional with the view to enhance service delivery to patients.

As far as content is concerned, it must be directed to include profession (field), specific knowledge packed into a diverse compiled and authentic programme, with a variation of topics over a wide spectrum of fields, including advanced topics – mainly with the view to stimulate the adult learner to think, discuss and to ensure interactive and relevant learning. In the words of some of the respondents:

"I need information that will make a difference in service delivery."
"Information must be the latest."
"… we need up-to-date information."
"Content must be based on new research findings."
"Content to be based on clinical evidence and be presented with reasoned arguments, with opportunity for ideas to be applied to real life situations."
"… different stimulating topics."
"It must be NEW info, not the usual repetition of old knowledge."
… content to be refreshing, stimulating."
"Updates please – new trends, best models of practice."
"More advanced topics based on new research."
"… to discover latest national and international trends."
" Need to keep abreast with theories, technology, nationally and internationally."
"To broaden my knowledge base and clinical evidence-based practice."
"That I do learning that enhances my O.T. practice and improves my standard of therapy as well as being of interest and excitement to me."
"Need new theoretical and clinical info with opportunity to apply it."
"Should be effective in improving quality of service – not just another rule or administrative duty to fulfill."
"… to keep abreast of new developments."
"Clinically I want to apply newly acquired knowledge."
"… content must be applied in my field of practice."

"I need to keep updated in my specialised field. I need to put into practice and clients as well as collogues need to benefit."
"… adding knowledge and skills, especially after many years of practice."
"Should be based on the latest research. It is difficult to accommodate all – as the years of experience differ greatly between learners."

4.6.1.2 ***Factors that take the learner's needs into consideration as far as the CPD process is concerned***

From the qualitative data it was clear that the qualitative findings concerning the CPD process were that the CPD process is a two-tiered-level process; however, the one level is not more important than the other, namely: managing and administrating process by HPCSA; and the managing process of CPD programmes.

4.6.1.2.1 Managing and administrating process by HPCSA

Firstly, it is clear that the managing process by the HPCSA plays an important role, including policy, guidelines, administration, coordination, monitoring and recording of the CEUs-system (points system), selection for a compliance audit and quality checks for accreditors and service providers. In the words of some of the respondents:

"… admin. of HPCSA … no!"
"Good administration by the HPCSA is necessary."
"Review type of courses and credit management and other courses."
"Effective administration of CPD by HPCSA."
"Appropriate allocation of points."
"That the OT-board will be more in touch with reality and respond to all courses applying for accreditation."

It is clear that a number of occupational therapists felt uncomfortable with the administration process, as it was experienced before and during the time that the research was done.

The researcher would like to emphasise that documentation, with clear guidelines on the whole CPD system, is available from the HPCSA and that health professionals have access to this information.

4.6.1.2.2 Managing process of CPD programmes

Secondly, factors impacting on the managing of CPD programmes themselves play an important role. The respondents indicated quite a range of factors that will ensure and enhance adult learning during professional development sessions. (cf. Chapter 2, point 2.10.8)

Relevancy. Most of the respondents emphasised the **relevancy** of CPD programmes. Topics should be seen as being of practical importance and dealing with everyday problems in a real-life world situation. It is how the facts are applied to practice that makes them relevant. A connection between relevance and the perceived needs of the adult learner as professional is of utmost importance. In the words of some of the respondents:

"Relevance must lead to professional gain and integration into practice."
"Programme must display the relevance to my field of interest."
"Relevant to my field, opportunity to learn new development and discussions of issues in field of my work."
"Relevancy to my area of practice."
"It must assist me with knowledge, skill and attitude change, in relevant topics for my daily work."
"Relevant so that I can allow for self-reflection."
"Must be relevant to my specific field of expertise."
"Relevant practical training needed."
"Relevant to career path in Occupational Therapy e.g. CT's in insurance industry, disability management."
"Good information that is relevant and usable, don't waste time on 'extras', must be based on practice."

Convenience. Another factor that was also indicated as very important is the **convenience** of CPD programmes on offer as far as place, time, cost and pace are concerned. The availability, the accessibility and affordability of CPD initiatives were mentioned by most of the respondents. In the words of some of the respondents:

"The keywords are: availability, accessibility, affordability, new information in field of interest."

"… easily accessible and affordable."
"… cost, time, place."
"Time to complete it (pace) and costs involved – amount of points I get play a small part."
"… well organized and paced."
"… cost effective and correctly timed."
"… value for money."
"Time and cost: registration, travel and accommodation, finding a locum – everything is expensive!"
"… locality, my time is precious."
"I would like to work and learn not being away from home."
"A larger variety of activities could be used to cater for the wide field that occupational therapists cover – shorter duration but multi-layer programmes."
"One or two day courses – I am willing to learn 12 hours or more a day: leave the time-consuming socials, refreshments, dinners, etc. (also costly)."
"… value for time spent."

Interest. Some of the respondents emphasise **interest** as a factor that plays a role; however, it was more important for them that CPD programmes on offer are relevant and convenient. For CPD programmes to be successful they must be interesting to gain the attention of the potential user; to encourage potential users to become actual users and to invest time and effort; and to hold attention and sustain the user's motivation to complete the material (Harden & Laidlaw 1992: 12). To be interesting and attractive a programme should be relevant; the presentation of material, text design and layout, visuals and colour and activities included, will also play a role. In the words of some of the respondents:

"Not just facts, add interesting case studies and/or learning experiences."
"… add workshop materials that is consumer friendly and that keep my interest – must also be useful to refer back to."
"Programme content and activities must ensure and keep my interest."
"Include course material that is relevant to your interest."
"Include a choice between several options; collaborative presentations."
"Not only academic and clinical facts – also include other topics of interest e.g. during lunch time/after hours such as tasks on motivation, time management and stress, etc."

Individualisation. Another factor that is also important is to cater for **individualisation** as individuals' needs will differ and will be influenced by type of practice, previous experience, expertise on subject, degree of interest, preferred learning strategies, learning ability, speed, and preferred location for learning. According to Harden and Laidlaw (1992:9) health professionals will need different levels of detail on a subject, so a learning programme can use three parallel text streams with information summarised in the left column, the main body of information in the middle column and further detailed information in the right column. Alternative paths through parallel tracks allow health professionals to choose the depth to which they study the subject – the smart scheduling of these different levels could offer individualisation on different times and/or venues. The need of some participants for additional information can be identified and built into the design of the programme. In the words of some of the respondents:

"As experienced therapist I would like to share my expertise with unexperienced therapists to help them". … "As experienced therapist I would like to share my expertise/experiences with experienced therapists to learn from them". "Plan time for this in your programmes."
"… some of us need personal growth."
"Include in programmes case studies on a concurrent base to cater for the different fields of interest and level of experience."
"… that I am an expert in my own sense and that I have something to share with my co-participants."
"… give us a range of problem solving."

Speculation. A factor worth mentioning is to include areas of controversy and **speculation** that will also add to the interest of the programme as well as to make it relevant to day-to-day practice. This can include topics where there is more than one solution; advances with not enough proof of excellence and socially sensitive issues. In the words of some of the respondents:

"… incorporate previous cases with the results and final outcome."
"Get experts of different ethnical backgrounds to talk on ethical dilemmas."
Systematic. Follow a **systematic** approach in formal programmes and present the subjects over a planned period. Planned curricula for CPD may be one of the solutions to haphazard CPD programme offerings and attendance. Academic institutions,

together withother role-players might set the standard and present authorities with the necessary outcomes that will do the profession honour as far as CPD is concerned. A curriculum based on outcomes and enhanced with different modes of delivery to suit the adult learner will ensure a win-win situation for the profession, therapist and patient. In the words of some of the respondents:

"… difficult to choose – my choice is mostly random and based on time and cost. Interest and relevancy is also important – but I have to get a number of points in a certain time span."
"… organised notifications well in advance may help."
"I have limited money and leave – work according to a schedule to present CPD in various fields and "include various topics."

Self-assessment. Most of the above-mentioned factors on the management process of CPD are also listed and discussed by Harden and Laidlaw (1992:1-16) in one or another way with different depth and width; however, these authors also emphasise the fact that there must be a form of **self-assessment** in CPD programmes, but in this study not a single respondent indicated that it is a factor that is important to them as adult learners.

4.6.1.3 *Factors that take the learner's needs into consideration as far as the educational grounding is concerned*

It came to the fore that different education strategies and methods must be followed. Programmes on offer have to include different options. The educational climate is important to ensure successful learning and CPD programmes have to be based on sound adult learning principles. In the words of some of the respondents:

"… include discussion sessions in between lectures."
"… mentorship works very well."
"Interactive learning opportunities to discuss practical issues, sharing experiences."
"Provide us with guides and copies of study material."
"It's frustrating that a lot of learning opportunities (educational) are not necessarily monitored externally but should count."
"Keep lectures – the lecturing style format with discussion of case studies are perfect."
"Include notes/material to reference back."

"Difficult all therapists in one programme – they differ greatly between experience, interest and bring all their own views to the course."
"… would like to share ideas, solve problems and network with colleagues."
"Because we have to get them to be practitioners, there should be more opportunities to get points. It should be easier."
"… would like to learn from home, offer distance education programmes."

4.6.1.4 *Factors that take the learner's needs into consideration as far as the educator of adult learners is concerned*

It is clear from the findings that presenters of CPD programmes, also referred to as educators, must have sound qualifications, national and international standing, the relevant and applicable knowledge, know about teaching practice principles, understand the needs of adult learners, can fulfill more than the role of lecturer, but can also facilitate learning, and ensure that learning transfer from the programme to professional practice takes place. The educator/presenter also has to have good presentation skills and make use of multi-media to enhance learning. In the words of some respondents:

"The programme must make use of presenters with outstanding knowledge on the topic."
"The credentials of presenters have to be made known before-hand and must be displayed and acknowledge on the programme and study material."
"… not enough to have one excellent guest presenter for one hour, and the other presenters are unknown and/or not knowledgeable."
"… info must be current, applicable and evidence-based."
"Good speakers, well qualified, information that will improve practice and tell new trends."
"Professional presentations of appropriate topics."
"… he must treat us with respect: we may know more than he does – he can also learn from us – just asked our opinions."
"We would like to be valued for our contributions during training sessions."
The above quotes really emphasised the needs of the adult learner as far as educators, trainers or guest presenters are concerned.

4.6.1.5 *Factors that take the learner's needs into consideration as far as quality is concerned*

From the findings it was clear that quality as a factor plays an important role in CPD. In the words of some of the respondents:

"… up the level of information to suit also the more experienced OT."
"Quality of the overall programme important."
"… include high quality content – academically."
"Should suit my needs and be at the right level."

It is clear that the adult learner demands quality education and training, quality programmes and presenters of high standing.

4.6.2 Recommendations on how to offer more effective Continuing Professional Development programmes

It was asked from the respondents to – according to their own opinion – make recommendations as to how more effective CPD programmes can be offered. [cf. Criteria for Effective Continuing Education: The CRISIS criteria, Chapter 2, point 2.10.8]

Of the 211 respondents, 185 responded to this question; responses summarised as the following recommendations:

1. **It is recommended that a variation of opportunities and activities (of quality) be offered to suit the needs of individual or groups of occupational therapists.** It can include formal post-graduate qualifications to informal group discussions. On-line, distance education, web-based training, internet, CD's and TV broadcasts can form part of formal training. CPD training and discussions in the workplace, forming of interest groups, afternoon sessions, journal clubs and questionnaires as well as practical sessions and demonstrations must be accredited and be explored for CPD. A system of mentorship and the forming of study groups can be explored. Self-directed study programmes, accredited and offered by universities is an option. Seminars, workshops, lectures, facilitated group discussions by experienced occupational therapists and

conferences must be kept up as a source of CPD opportunities. In the words of some respondents:

"Distance modules. Facilitate further research/debate/learning. More international speakers or local therapists with higher learning. Change to engage with the material in a manner that stimulates critical thinking."
"Study groups led by experienced OT's in a field. Internet Courses – self study."
"To offer variation between workshop, journal club and seminars."
"Online internet learning with training as to how access the latest information in the area of interest. Better use can also be made of our own expertise when running courses e.g. getting a group of experienced OT's in an area doing workshops, discussions, problem solving, as well as getting the latest research available in the area – or at least how to access it."
"Include practical aspects."
"More internet access and self monitoring instead of emphasis being on externally organised activities (e.g. workshops)."
"More self study in the convenience of your home, you own time."
"More web-based than distance. Improvement in understanding from employer (as in time-off and possible funding) for OT to attend to CPD. Programme of CPD activity to be designed according to needs not expertise of presenters."
"It should be qualitative, not quantitative. Less points 'required', more effective method e.g. mentorship."
"Good, effective, efficient system of getting activities CPD accredited. Organizing mentors in over certain areas where there is little support."

2. **It is recommended that CPD programmes of high quality must be affordable, accessible, relevant, interesting, applicable and available.** The cost, time, place and pace and the allocation of points must be fair. In the words of some respondents:

"A needs list to be submitted to OTASA for them to organise courses around that limited expenses/have more affordable courses."
"Cost. Look at experts and ask them to present short, affordable activities. CPD system still seems like a 'mountain' to climb, so most of us want to put it off and hope we don't get audited."

"Courses should be cheaper. Courses should include an invite and short synopsis of what it entails so we can issue it to our skills development office."
"Arrange opportunity for courses to clusters of OT's in the southern suburbs at venue accessible to them. Arrange that course can be funded by state. Make internet accessible to OT's at state institutions. Give free internet accessible to OT's at state institute. Give free access to OT's at academic libraries."
"Access by OT's in small towns is problematic – Internet, Journals could assist."
"Block weeks – courses all in one week at a time we can travel – attend 5 days of variety of courses. Remember we know stuff – don't just present pre-grad type of courses."

3. **It is recommended that CPD programmes be advertised and published in advance.** It can be done on internet, web-facilities, in calendar and newsletters. In the words of some respondents:

"Just do it. We make it far more complicated than it is. Market courses. Start presenting Practice Based evidence!"
"Marketing of CPD to private and public hospital management to make it easier to get funding and obtain leave."
"Marketing. Shorter, more frequent, bigger variety to choose from, more focused on workshops to advance deeper knowledge than short inputs with more general info."
"Have the same workshop in every province and advertise in one programme all the options."
"Good notification system for OT's in health and education. Also internet/CD programmes that can be worked through at own pace/when in rural area."
"New courses/information tends to be region-specific and not all is available country-wide. Courses to be well advertised. Training needed on doing research within your own facility or practice."
"A calendar with variety of events/e-mail of monthly events."
"Wider publicity far in advance, the permission of reflexivity for CPD, increased accessibility of HPCSA for registering of events (or loose the point accreditation system)."
"More widely spread central notification place."
"Surveys such as this should help if information is decimated to regions."

4. **It is recommended that CPD administration be in place.** This can be done by coordination, organising and monitoring of the system. In the words of some respondents:

   "Audit of skills/courses needed."
   "Praktiese sessies waar OT's idees uitruil. Dagsessies – verkieslik op 'n Saterdag. CPD Bank – meeste van die tyd weet ons nie eers of ons die CPD punte gekry het, waarvoor aansoek gedoen is nie – vir daardie kursus."
   "Easier process at HPCSA – currently their admin and assistance very poor. Journals. Completion of Questionnaires for CPD points."
   "Administration of accreditation needs to be more organised and timely."

5. **It is recommended that the focus be on knowledge and skills development and not on the gathering of CPD points.** Universities and the professional board can play a role to ensure levels of knowledge and skills. In the words of some of the respondents:

   "Universities must play a role in presenting of programmes."
   "A board of experts in that specific field has to go over and approve the talk."
   "Universities need to have higher level of workshops not basic courses – higher than formal first degree."
   "Accredited by a university to go towards credits for post-grad work."

4.7 SUMMATIVE DISCUSSION ON THE FINDINGS OF THE QUESTIONNAIRE

A summative discussion on the findings of the questionnaire, per section, will be given:

4.7.1 Section A: Demographics

4.7.1.1 *Summative discussion and conclusion on Section A: Demographics*

The demographic data of the respondents give an overall idea of the research population. The gender distribution of more females in the sample is in line with the realities of the profession – Occupational Therapy is a female-dominated profession,

although during the last few years more males are entering the profession. An overwhelming percentage of the respondents were white and female.

The age distribution of the respondents represents that of a segment of adult, mature professionals with a wide spectrum of experience, qualifications (not only in Occupational Therapy) and expertise. This indicates that CPD programmes on offer must take the needs of adult learners very seriously. The access to technology is a positive factor meaning that occupational therapists can be reached not only for notification of opportunities but also, and most importantly, to bring in new initiatives like online and blended learning.

The respondents already experienced and also indicated an interest in a wider educational field than Occupational Therapy and providers of CPD programmes can make use of these interests and present, for instance, managerial issues together with subject-specific matter, for example.

Plus-minus three quarters of the respondents' work places are in a city and in a residential area – near schools, hospitals and clinics. Clear findings show that there is a very large combination of practices that provide a range of services. Nearly four out of ten respondents are working in a public/state facility; however, it was also clear that a number of occupational therapists are in dual employment between private and public sector/semi-private.

Figures 4.1 – 4.14 provide a graphic presentation of some of the aspects of the main findings on Section A.

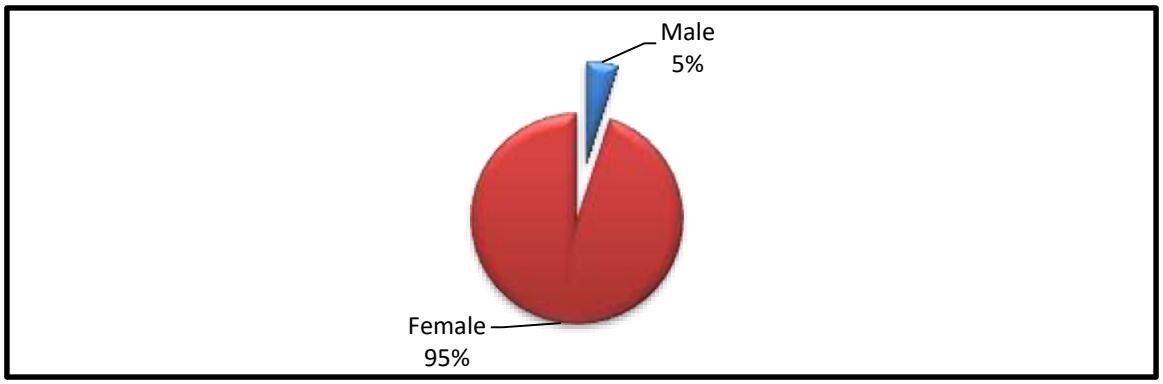


FIGURE 4.1: GENDER DISTRIBUTION OF THE SAMPLE
(Question 1, Section A of Questionnaire) [n=210]

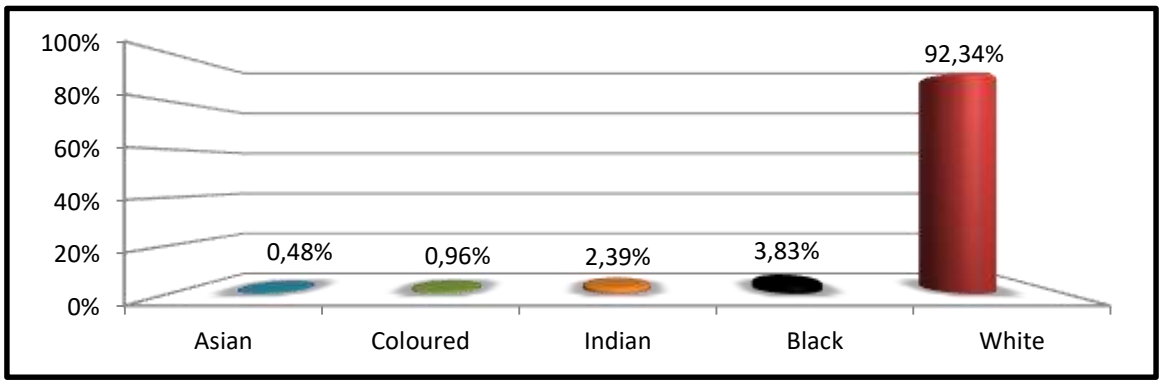


FIGURE 4.2: RACE DISTRIBUTION OF THE SAMPLE

(Question 3, Section A of Questionnaire) [n=209]

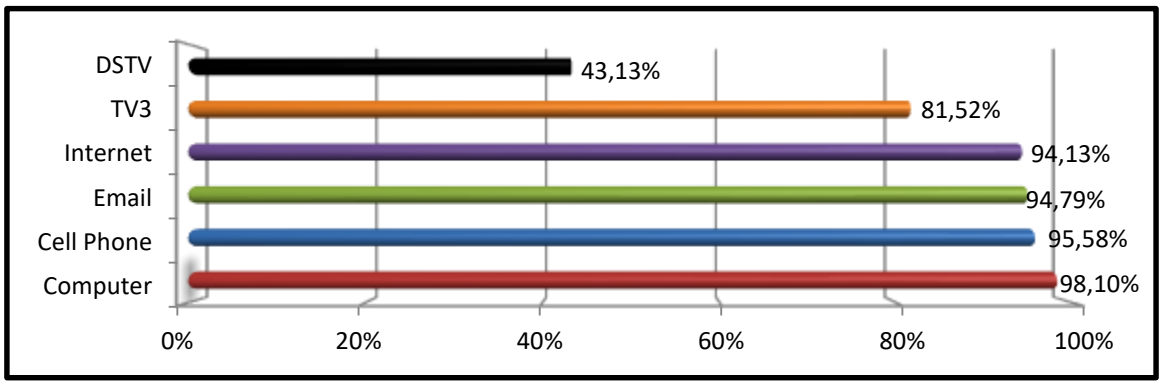


FIGURE 4.3: ACCESS TO TECHNOLOGY

(Question 4, Section A of Questionnaire) [n=211]

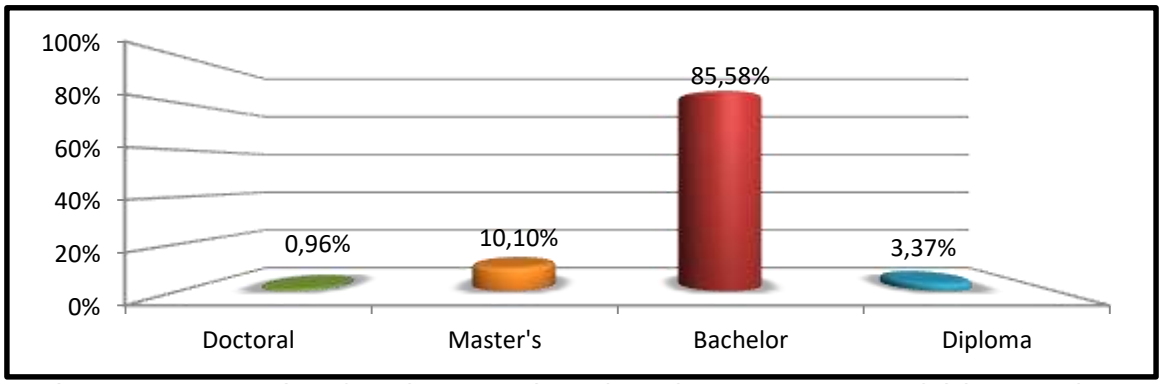


FIGURE 4.4: HIGHEST QUALIFICATION OBTAINED IN OCCUPATIONAL THERAPY

(Question 5, Section A of Questionnaire) [n=208]

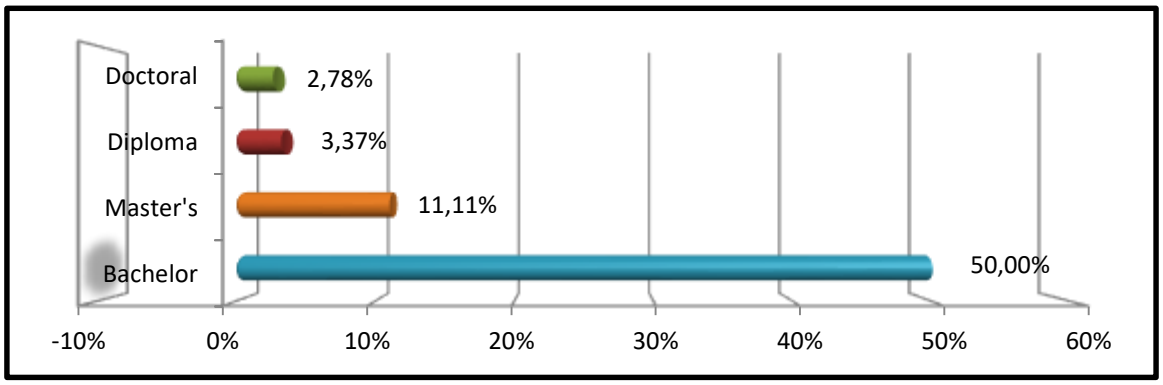


FIGURE 4.5: HIGHEST OTHER QUALIFICATION OBTAINED IN A DISCIPLINE OTHER THAN OCCUPATIONAL THERAPY

(Question 6, Section A of Questionnaire) [n=72]

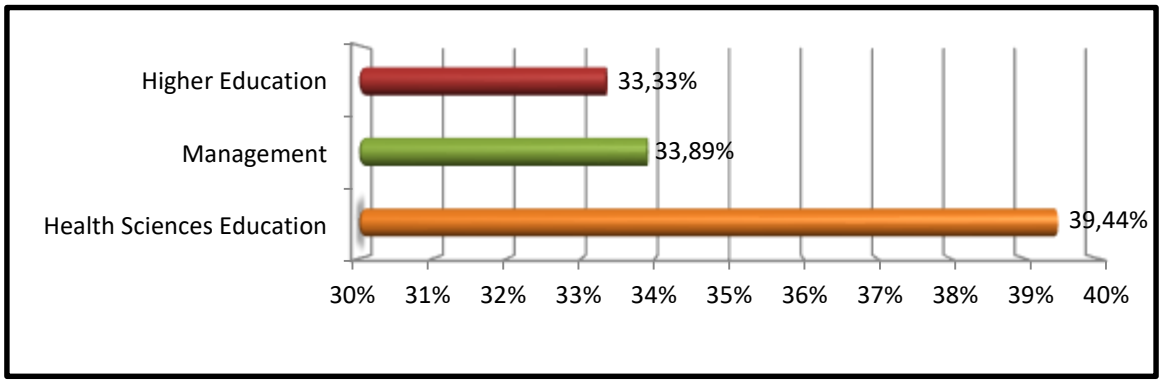


FIGURE 4.6: FIELDS OF STUDY INTEREST

(Question 8, Section A of Questionnaire) [n=180]

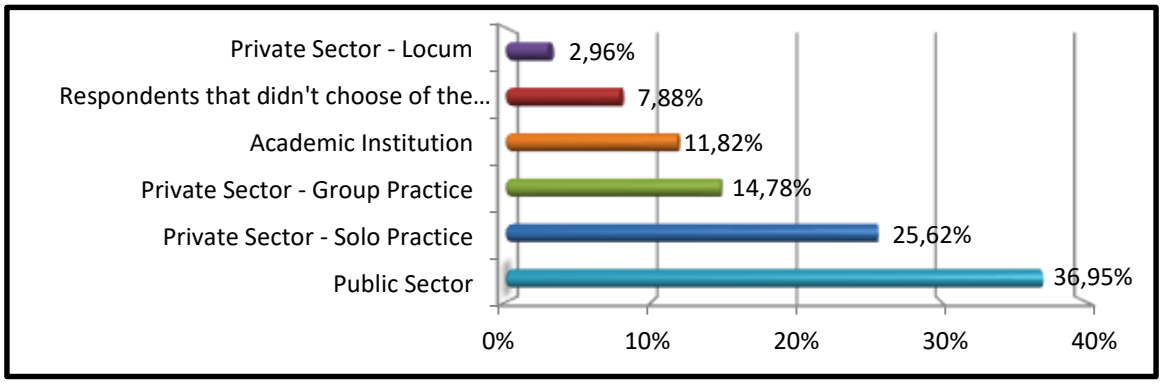


FIGURE 4.7: TYPE OF INDUSTRY WHERE EMPLOYED

(Question 9, Section A of Questionnaire) [n=203]

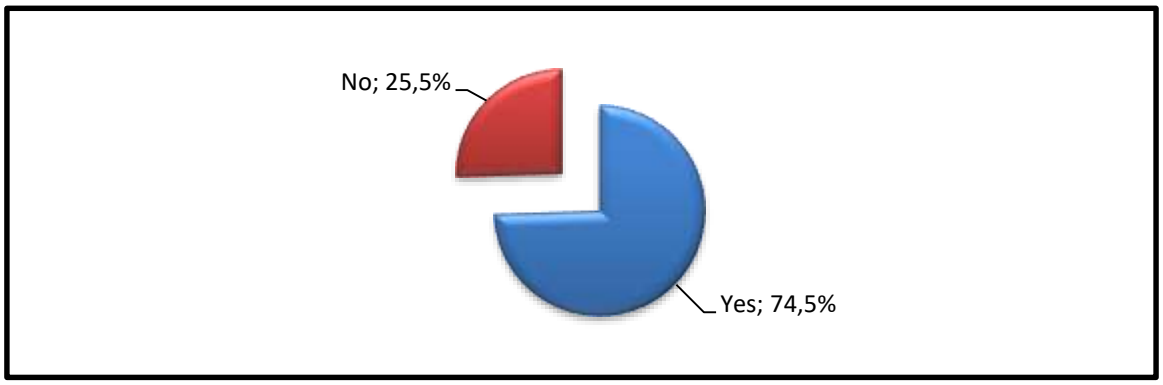


FIGURE 4.8(a): THOSE WITH MANAGEMENT RESPONSIBILITIES (Question 11, Section A of Questionnaire) [n=200]

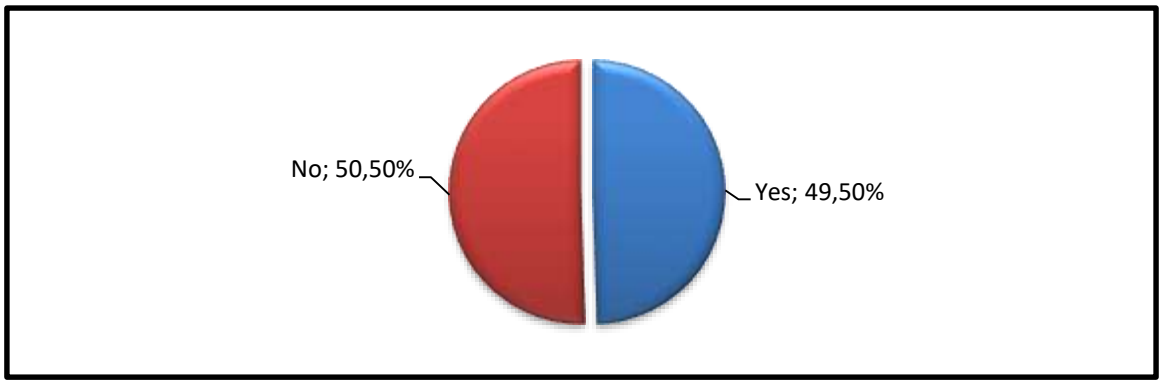


FIGURE 4.8(b): THOSE WITH MANAGERIAL RESPONSIBILITIES MANAGING OTHER INDIVIDUALS (Question 11, Section A of Questionnaire) [n=200]

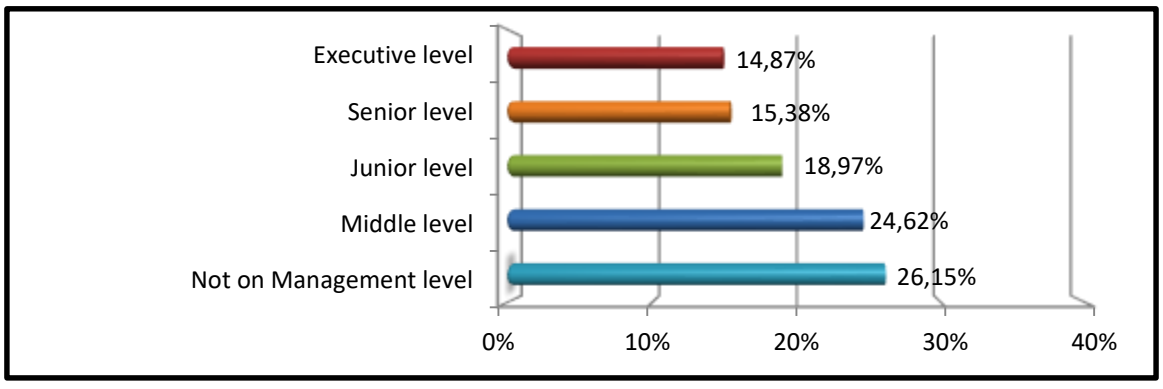


FIGURE 4.9: MANAGEMENT LEVEL OF RESPONDENTS (Question 12, Section A of Questionnaire) [n=195]

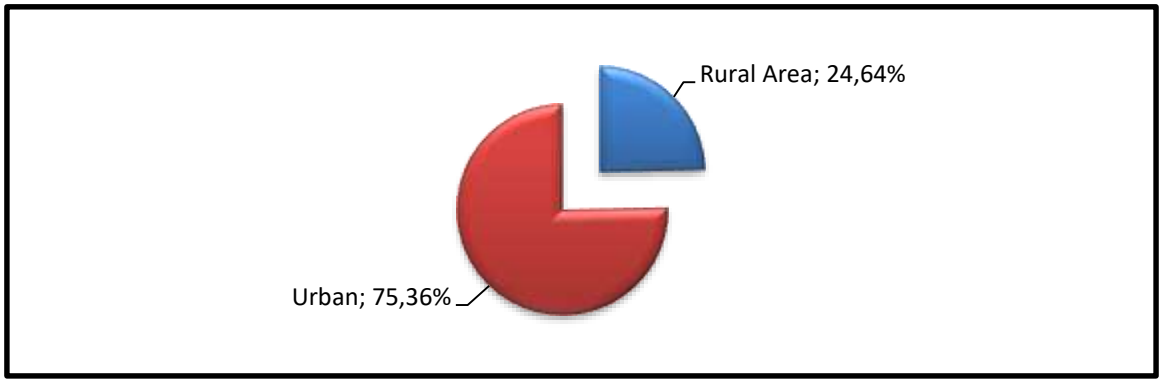


FIGURE 4.10(a): GEOGRAPHIC PROFILE OF RESPONDENTS' PRACTICE OR WORKPLACE - RURAL OR URBAN AREA
(Question 13, Section A of Questionnaire) [n=207]

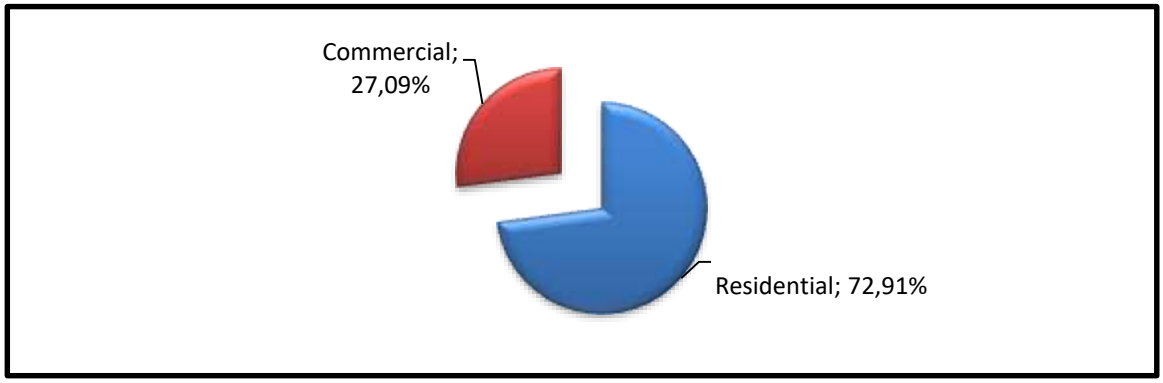


FIGURE 4.10(b): GEOGRAPHIC PROFILE OF RESPONDENT'S PRACTICE OR WORKPLACE: RESIDENTIAL OR COMMERCIAL AREA
(Question 14, Section A of Questionnaire) [n=203]

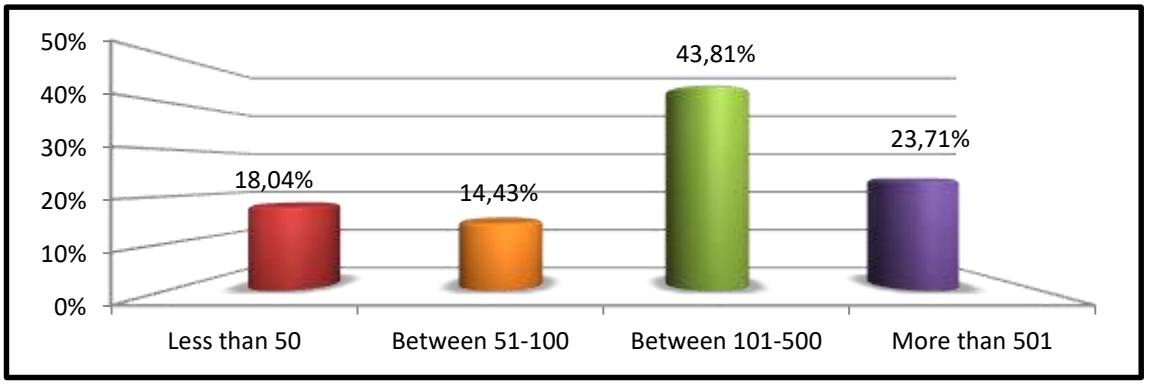


FIGURE 4.11: SIZE OF PRACTICE OR WORKPLACE
(Question 15, Section A of Questionnaire) [n=194]

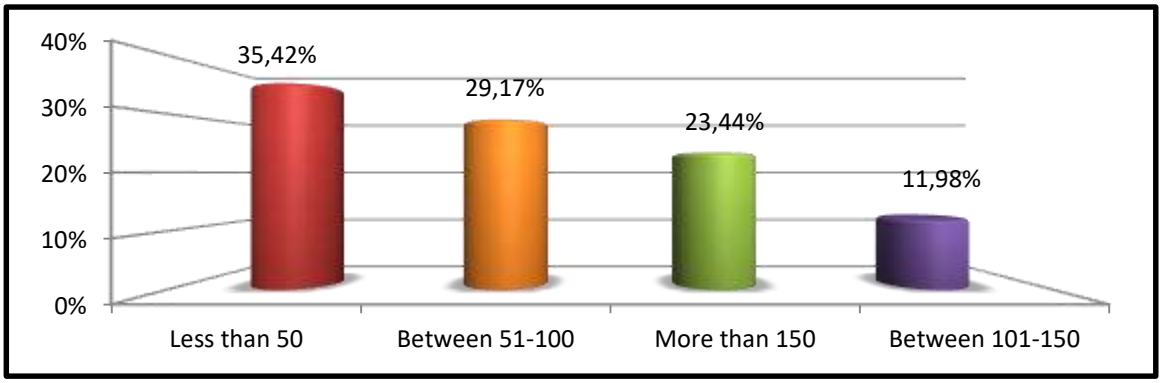
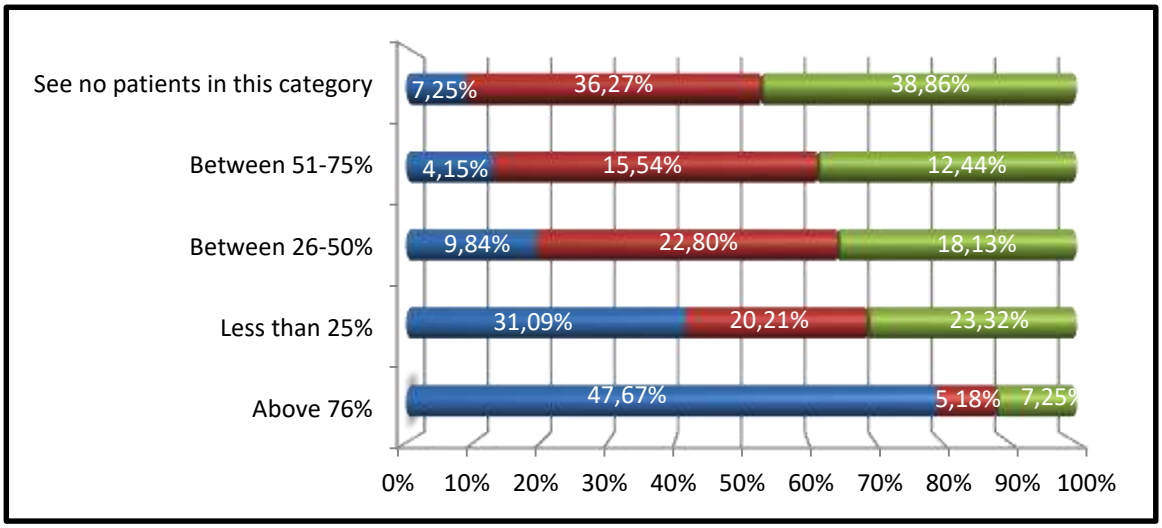


FIGURE 4.12: NUMBER OF PATIENTS PER OCCUPATIONAL THERAPIST PER YEAR

(Question 16, Section A of Questionnaire) [n=192]



Blue=Younger than 18years of age, Red=Between 19years and 45 years, Green=Older than 45 years

FIGURE 4.13: AGE DISTRIBUTION OF PATIENTS

Question 17, Section A of Questionnaire) [n=193]

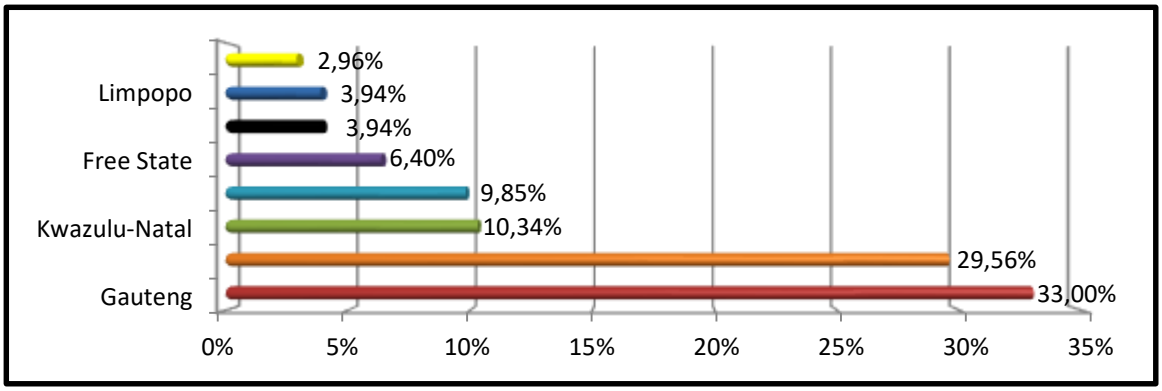


FIGURE 4.14: PROVINCIAL LOCATION OF NEAREST PUBLIC HOSPITAL OR CLINIC TO PRACTICE OR WORKPLACE

(Question 19, Section A of Questionnaire) [n=203]

4.7.1.2 Main findings of this Section A

The following are the main findings of this Section A: Demographics.

- As a result of the researcher's mid-level experience (qualified for eight years) she reached the conclusion that the respondents' demographics are more or less a fair reflection of the current demographics of the profession – in some aspects, like racial distribution, it is definitely not in line with the profession or society in general, but as far as gender and the wide range of qualifications and experience of occupational therapists are concerned it is more in line with the demographics of the profession.
- The respondents have access to technology – most can be reached by cellphone (98.58%) or email (94.79%) and they have access to the internet (94.13%); computers (98.10) and TV broadcasting (81.52%). This makes it possible as far as the number of patients is concerned.
- The sample demonstrated highly skilled professionals with 85.58% with only a professional bachelor's degree, while the other (11.06%) also have a master's or doctoral degree in Occupational Therapy with only 03.37% with a Diploma-qualification.
- Of the respondents 34.12% also have another qualification in another field of education, on Bachelor, Magister or Doctorate level.
- Of the respondents 39.44% are also interested in Health Sciences Education as a field for further study; 33.89% in management and 33.33% in higher education (respondents could choose more than one option).
- Of the respondents 36.95% are employed in the public sector, and another 11.82% in an academic institution – amounting to a total of 48.77% being employed in the public sector – 43.36% is in the private sector (some didn't choose of the options listed).
- Of the respondents 74.50% indicated that they have managerial responsibilities. Of the 200 respondents, 49.50% indicated that they manage other individuals (human resource management). Only 14.87% have managerial responsibilities on an executive level; 15.38% on senior level; 24.62% on middle level and 18.97% on junior level.
- Of the respondents 75.36% practice in an urban area versus the 24.64% in a rural area. Of the respondents 72.91% practice or work in a residential area and 27.09% in a commercial area.

- As far as size of practice is concerned 43.81% of respondents have between 101 and 500 patients in the practice; 23.71% more than 500, 18.044% less than 50 and 14.43% between 51 and 100 per practice.
- Of the respondents 35.42% have less than 50 patients that they are personally responsible for; 29.17% responsible for between 51 and 100 patients; 23.44% for more than 150, and 11.98% for between 101 and 150 patients. Most of the respondents treat younger patients.

4.7.2 Section B: Professional Development

4.7.2.1 *Summative discussion and conclusion on Section B: Professional Development*

This section dealt with issues related to the factors impacting on Professional Development.

The fact that 85.99% of respondents are of the opinion that they experience stumbling-blocks in CPD, necessitates investigation by CPD planners.

Plus-minus seven out of ten respondents were of the opinion that they were keeping abreast of theoretical and clinical aspects in Occupational Therapy, although only plus-minus half of the respondents are of the opinion that there are adequate opportunities.

Various factors impacting on CPD are summarised under Point 4.7.2.2.

Figures 4.15 – 4.16 provides a graphic presentation of some of the aspects of the main findings on Section B.

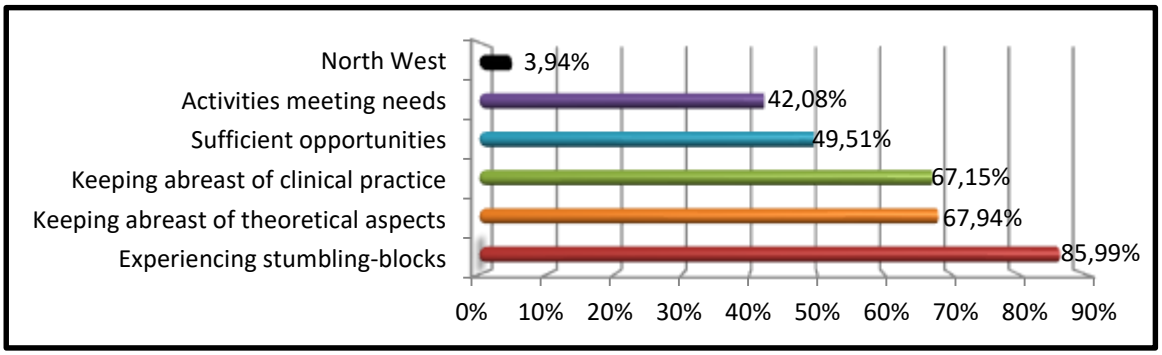


FIGURE 4.15: RESPONDENTS' PERCEPTIONS WITH REGARD TO PROFESSIONAL DEVELOPMENT

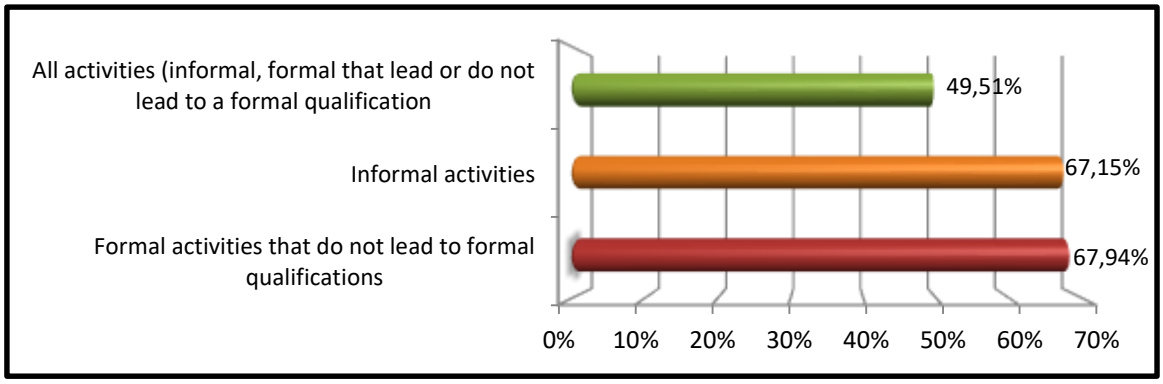


FIGURE 4.16: TYPE OF CPD ACTIVITIES PREFERRED BY RESPONDENTS

4.7.2.2 *Main findings of this Section B*

The following are the main findings of this Section B: Professional Development.

- A relatively large group (± 68%) were of the opinion that they were keeping abreast of theoretical aspects in the field of Occupational Therapy. Of the respondents ± 30% indicated that they keep abreast of theoretical aspects by studying the newest editions of text books, ±20% by obtaining qualifications or enrolling for post-graduate education and ±18% by reading journals or literature online. This shows an approach that they prefer to study from home/practice as far as theoretical aspects are concerned.
- Of the respondents (also ± 68% as above) were of the opinion that they were keeping abreast of developments in the field of clinical practice. Of the respondents ±38% indicated that they keep abreast of developments in the field of clinical practice by attending courses, workshops, forums, case study groups and ±12% by being in contact with other occupational therapists. It seems to keep abreast of clinical practice, they prefer social and clinical-practical approach.
- Of the respondents one out of two respondents was of the opinion that there are adequate (49.51%) opportunities to stay informed. The large group (50.49%) who felt that there are not sufficient opportunities is high and demanding research to address their reasons mainly based on logistics, for example lack of information, affordability, accessibility and content issues.
- More than 85% of the respondents experienced stumbling-blocks in CPD.It is very important to address the main reasons for this, namely overall costs, availability of events mainly in larger cities as well as the lack of courses such as self-study and short courses and clinical workshops.

- The main factor which motivated respondents to engage in CPD was the gaining of recognition (in total 55% of respondents) – firstly to better develop themselves via the obtaining of a further or accumulative qualification (48.75% of respondents) and secondly recognition by their employer via further studies with the view to get promotion (06.43%).
- Only, just more than 40% of respondents were of the opinion that activities offered during CPD opportunities met their needs. The other respondents that were of the opinion that their needs are not met, offered as reason not-relevant content of programmes, content not practically/clinically directed and that the variety of activities are limited.
- Respondents' ways of acquiring CPD points in order to maintain a licence to practice are mainly attending seminars, workshops, courses, reading articles, attending conferences and journal clubs and obtaining further qualifications.
- Respondents' preference of venues for CPD activities was mainly academic institutions, as first choice and secondly conference centres.
- Of respondents, ±90% are willing to pay for CPD opportunities; however, plus-minus one out of two respondents felt that R250 per day is a realistic fee. Some suggested a differentiated fee according to the type of offering.
- A large group of respondents indicated that they really do not have a specific preference as far as time of the year, month, and week are concerned.
- Of the respondents ±98% stated that the main reason for attending CPD opportunities are the programme content and their interest in the topic – important factors to keep in mind when planning CPD programmes.
- Respondents' preference as far as learning situations are concerned are mainly peer review sessions and discussions (±73%), lectures with time for questions (±60%), lectures followed by big group discussions (±51%) and followed by small group discussions (±50%) and mentoring in a clinical centre (±52%).

4.7.3 Section C: Needs for Professional Development

4.7.3.1 *Summative discussion and conclusion on Section C: Needs for Professional Development*

This section dealt firstly with the needs of occupational therapists in clinical, business, computers, managed care, ethics, interpersonal skills and personal growth areas.

Secondly, it established what type of educational product/service the occupational therapists would like to be included in a fully inclusive CPD-initiative.

The respondents clearly distinguished between the different options in each area with a clear preference showing that their interest lies in the clinical field or content of programmes in clinical areas.

As far as the choice of a specific educational product/service is concerned a large group identified one-day refresher seminars, newsletters on the latest developments, full journal articles, summaries of latest developments, training workshops and compact disk-based educational programmes.

These important choices must give CPD developers direction in planning CPD programmes, opportunities and activities.

4.7.3.2 *Main findings of this Section C*

The following are the main findings of this Section C: Needs for Professional Development.

- More than 70% of respondents indicated a need for CPD in neuro-paediatric, sensory integration and general paediatric clinical areas.
- More than 50% of respondents indicated a need for CPD in leadership, strategic planning, marketing and motivation of personnel in the business area.
- More than 55% of respondents indicated a need for CPD in database management in the computer area.
- More than 50% of respondents indicated a need for CPD as far as HPCSA policies and guidelines are concerned in the health-policy area.
- A large group of respondents (± 79%) indicated a need for CPD as far as how to deal with ethical dilemmas, and more than 65% indicated a need for CPD as far as the relationship between ethics and law, as well as informal consent in the ethical area.
- More than 60% of respondents indicated a need for CPD as far as counselling and conflict management are concerned in the interpersonal-skills area.
- More than 55% of respondents indicated a need for CPD as far as stress management and self-assertiveness are concerned in the personal-growth areas.

- A definite need was expressed for certain educational products/services to be included in a full CPD initiative. Respondents expressed their needs as follows:
- More than 80% of respondents preferred one-day refresher courses, newsletters on the latest developments, full journal articles, summaries of the latest developments and training workshops.
- More than 70% of respondents preferred compact disk-based educational programmes and journal clubs.
- More than 60% of respondents preferred distance learning, evening expert talks, accessibility to mentors and internet-based educational programmes.
- More than 50% of respondents preferred organised group case/problem discussions, facilitated sessions and self-assessment of practice against minimum performance standards.
- More than 43% of the respondents preferred internet-based conference attendance.
- Between 30% and 37% of respondents preferred access to telemedicine, accessibility to a 24-hour hotline with expert clinical advice and TV broadcasting of educational programmes.

4.7.4 Section D: Appropriateness of various Continuing Professional Development Activities

4.7.4.1 *Summative discussion and conclusion on Section D: Appropriateness of various Continuing Professional Development activities*

This section dealt with the appropriateness of various CPD activities as far as the effectiveness of the current products or activities on offer; with the importance of the product or activity for future CPD; and with the necessity of the product or activity for future CPD.

It is recommended that CPD developers look into the findings of this research study as far as the appropriateness of educational products or activities has been expressed. It was clear from the study that there is quite a variation in the effectiveness, importance and necessity of products. The effectiveness can be unsatisfactory, but respondents felt that it is important and necessary to be included in the future and so forth (cf. Table 4.49 for full details).

4.7.5 Section E: Adult education

4.7.5.1 *Summative discussion and conclusion on Section E: Adult education*

This section dealt with adult education. Respondents' personal view as adult learners was given on which factors are important as far as CPD is concerned, as well as making recommendations on how more effective CPD programmes can be offered for occupational therapists. [A full discussion was given under Point 4.6]

4.8 CONCLUSION

In this chapter, the results of the questionnaire survey were given and the findings discussed.

In the next chapter, Chapter 5, ***Results and discussion of findings of the Delphi process***, an exposition and discussion of the findings of the Delphi process will be provided.

CHAPTER 5

RESULTS AND DISCUSSION OF FINDINGS OF THE DELPHI PROCESS

5.1 INTRODUCTION

This chapter deals with an exposition and discussion of the findings of the Delphi process. In Chapter 3, ***Research design and methodology***, the Delphi technique, including the theoretical grounding to use the Delphi technique as well as the sample selection of Delphi experts, were described (cf. 3.3.3).

The research study is carried out and completed, based on three research questions. In this chapter research question 3 is answered, namely:

"…3. What relevant criteria, based on the needs of adult learners and the principles of adult education, can be used to compile a model for CPD in Occupational Therapy in South Africa and how should the model for CPD be composed in order to be conducive to the development of occupational therapists as lifelong adult learners?".

Objective 3, addresses research question 3, namely, to:

"…3. *Identifying a selection of relevant criteria for CPD in Occupational Therapy by using the literature study and questionnaire survey, and then to Delphi these criteria with a team of experts".*

5.2 DESCRIPTION AND DISCUSSION OF THE DELPHI STUDY

The design of the Delphi process; a description of the Delphi rounds, including the measuring instrument, the analysis of responses and the discussion of the findings of each round are given. A summative discussion on the outcome of the Delphi study will follow.

5.2.1 The design of the Delphi process

In the present study, a modified Delphi process was used. Three rounds of the Delphi process were required in the present study. The panel of experts were requested to rate, rephrase and comment on the statements.

The objective for each of the three subsequent rounds of the Delphi process was to reach an acceptable degree of consensus on the statements. If the required consensus was not achieved in the previous rounds, convergence of opinions on statements was attained and stability declared after round three.

Following the recommendations and suggestions of the Delphi panel, changes to statements were accommodated in consecutive rounds of the Delphi questionnaire. The changes were made by the researcher and involved editing and/or rewording of the statements. After round III, stability was declared for statements arriving at convergence of the opinions of the Delphi panel and consensus was not achieved.

According to Dajani, Sincoff and Tally (1979:83) **consensus** is assumed to have been achieved when a certain percentage of responses falls within a prescribed range for the value being estimated.

Consensus is defined according to the literature of Larson and Wissman (2000:45) where 80 % of the participants vote on a specific item within the same value of the three-point scale.

Stability is described as the natural tendency of opinions of experts to centralise (Linstone & Turoff 1979:277). Stability can be declared when movement of the opinion of the group as a whole has reached stability.

A flow chart in Figure 5.1 presents a summary of the three-round Delphi process applied in the present study.

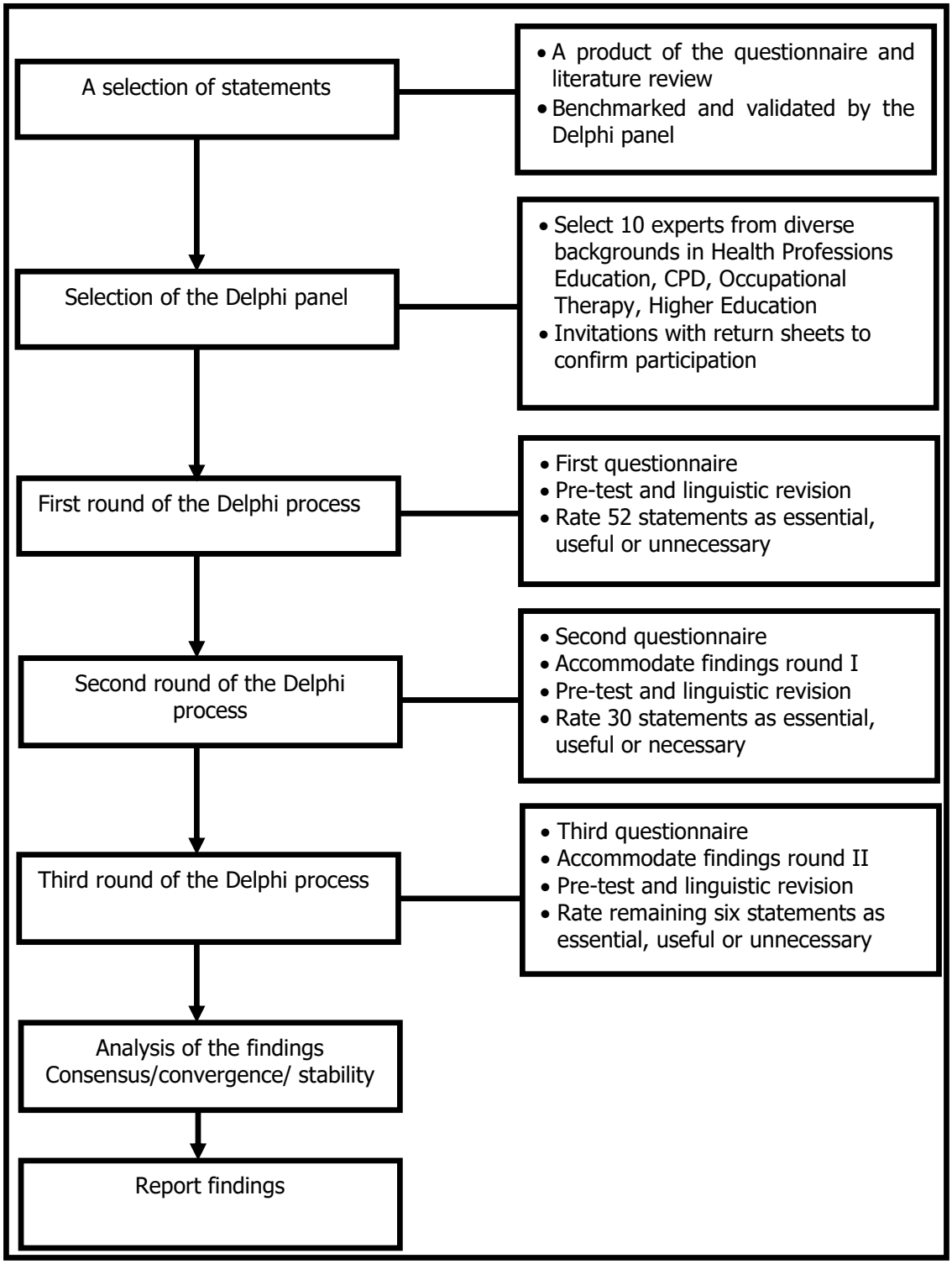


FIGURE 5.1: A FLOW CHART OF THE THREE-ROUND DELPHI PROCESS APPLIED IN THE PRESENT STUDY

[Compiled by the Researcher 2010]

5.2.2 First round of the Delphi study

The first round of the Delphi study entails referring to the measuring instrument which was used. Mention is made of the three-point Likert scale, as well as the different

sections and the titles used in the Delphi questionnaire. In addition, other aspects are discussed, namely the analysis of the responses, followed by a discussion of the first round of the Delphi study.

5.2.2.1 *The measuring instrument*

A letter of request was sent to experts to participate in the study (Appendix B1). If they were willing to do so they had to give consent (cf. consent form Appendix B2).A letter (cf. Appendix C1) accompanied the Delphi questionnaire round one of the Delphi study (cf. Appendix C2). In the letter the researcher thanked the participants for agreeing to take part in the Delphi research process. Information on the structure of the questionnaire was given and the procedure of the Delphi process was spelled out. A request that all questions had to be answered, was also included. Instructions on how to complete the questionnaire followed.

Each statement had to be evaluated in respect of its importance on a three-point Likert scale. These points were defined as follows:

1 = Essential (This criterion must **DEFINITELY BE INCLUDED** in the model).
2 = Useful (This criterion **CAN BE INCLUDED** in the model).
3 = Unnecessary (This criterion must **DEFINITELY BE EXCLUDED** from the model).

The layout of the Delphi questionnaire is discussed per section and is done only once in the following paragraphs, as the basic structure of the questionnaire stayed the same throughout all three of the rounds. No statements were added to the second round.

To compile each Section, aspects of the findings of the questionnaire survey and aspects of literature were used – referenced in [brackets] at the end of each Section. A referenced list is also included at the end of Appendix C.

SECTION A of the Delphi questionnaire was entitled **CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS** (cf. Appendix C2) and dealt with the description of the concepts CPD, adult education, as well as adult learner. This section was divided into three subsections (1-3) and contained various statements under each

subsection (n=18). A space was provided after each statement, allowing participants to add any comments if they felt the need to do so. The fourth subsection was an open-ended section in which the participants could add other statements or write additional comments (cf. Appendix C2, pp. 1-2). [cf. Chapter 2, Points 2.2; 2.10.]

SECTION B of the Delphi questionnaire (cf. Appendix C2) entitled **ADULT EDUCATION AND ADULT LEARNERS**, dealt with adult learning. This section contained six subsections (5-10), containing various statements under each subsection (n=27). A space was provided after each statement, allowing participants to add any comments if they felt the need to do so. Subsection 11 was an open-ended section in which participants could add other statements or write additional comments (cf. Appendix C2, pp. 3-4). [cf. Chapter 2, Points
2.2 – 2.8]

SECTION C of the Delphi questionnaire (cf. Appendix C2) entitled **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**, dealt with the contextualising and conceptualising of CPD aspects. This section contained four subsections (12-15), containing various statements under each subsection (n=37). A space was provided after each statement, allowing participants to add any comments if they felt the need to do so. Subsection 16 was an open-ended section in which participants could add other statements or write additional comments (cf. Appendix C2, pp. 4-6). [cf. Chapter 2, Point 2.10.]

SECTION D of the Delphi questionnaire (cf. Appendix C2) entitled **NEED FOR CPD IN SPECIFIC AREAS**, dealt with various content needs for CPD. This section contained only one subsection (17), containing various statements under this subsection (n=7). A space was provided after each statement, allowing participants to add any comments if they felt the need to do so. Subsection 18 was an open-ended section in which participants could add other statements or write additional comments (cf. Appendix C2, pp. 6-7). [cf. Questionnaire survey, Appendix A3 Section C.]

SECTION E of the Delphi questionnaire was entitled **ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA FROM AN ADULT EDUCATION PERSPECTIVE** (cf. Appendix C2), dealt with these aspects. This section contained only one subsection (19), containing four statements (n=4). Space was provided after each statement for the participants to add any

comments if they wished to do so. Subsection 20 was an open-ended section in which participants could add other statements or write additional comments (cf. Appendix C2, pp. 7).

5.2.2.2 *Analysis of responses*

The responses from round one of the Delphi study were analysed manually by indicating the frequency of responses for each statement on the three-point Likert scale. Consensus was considered to be achieved if nine of the 10 panel members (80.0%) chose the same item on the Likert scale. All items on which consensus had been reached during the first round, were excluded from the questionnaire for the second round.

5.2.2.3 *Discussion of the findings of round one of the Delphi study*

All 10 members of the panel responded to the Delphi questionnaire (100% response rate). After round one, consensus was reached on 52 of the 93 statements in the questionnaire, giving a 55.9% overall consensus.

An accompanying letter containing feedback on round one, as well as a questionnaire sheet attached to it (Appendix C3) – which contained the results of round one – was sent to the Delphi panelists after round one had been concluded. All the statements on which consensus had been reached were shaded (55.9% of the statements). The participants' comments were listed as well (cf. Appendix C3). These comments were noted and either included in the following round two (cf. 5.2.3.1) or kept for further consideration and or discussion in the thesis if considered relevant to enhance the outcome of the study. Where questions were put to the researcher by the panelists in order to obtain more clarity, they were communicated to and cleared with the panelist(s) who had posed the question(s). (For the findings of round one of the Delphi study cf. Appendix C3.)

5.2.3 Second round of the Delphi study

In the following section, the measuring instrument used during the second round of the Delphi study is discussed (cf. Appendix D1 & D2). The analyses of the responses

and the discussion of the findings of the second round of the Delphi study is also dealt with.

5.2.3.1 *The measuring instrument*

A letter (cf. Appendix D1) accompanied the Delphi questionnaire of round two (Appendix D2) to the Delphi experts. It stated the purpose of the questionnaire of round two, explained the instructions for the completion of the second round, giving an explanation of the rating scale and also including the contact details of the researcher.

Comments from the panelists were considered and included in some of the statements with the view to clarification, elaboration, completeness, etc. The statements that were adapted or to which changes were made, were printed in colour (cf. Appendix D2).

On completion of the questionnaire for round two, it was pre-tested by two colleagues and sent for linguistic revision.

The individual responses (in round one) of the participants were not included in the questionnaire for round two, as the researcher wanted to avoid influencing the participants in any way at that stage. All the panelists were allowed to change their opinions if they felt like doing so. They could therefore indicate a different level of importance to any of the statements, should they feel that it was appropriate.

The Delphi questionnaire that had to be completed for round two (included here as Appendix D2) was electronically transmitted to the Delphi panelists.

5.2.3.2 *Analysis of responses*

The responses from round two of the Delphi study were analysed manually by the researcher, indicating the frequency of responses for each statement in the questionnaire of the three-point Likert scale.

5.2.3.3 *Discussion of the findings of round two of the Delphi study*

All 10 members of the panel responded to the Delphi questionnaire in round two (100% response rate). After round two, out of the remaining 41 statements,

consensus was reached on 30 statements (73.1%). Thus, after round two of the Delphi process, out of the 93 statements, consensus had been reached on 88.2% of the total number of statements (82 out of 93). The results are reported in Appendix D3, including comments that had been made by the participants. The statements on which consensus was reached during round two, were shadowed. The results of round two of the Delphi study were conveyed to all the participants in a cover letter and attached questionnaire sheet (cf. Appendix D3).

5.2.4 The third round of the Delphi study

The final round, namely round three of the Delphi study is discussed. Reference is made to the measuring instrument, which was – as with the previous two rounds – a letter accompanying the questionnaire of round three (cf. Appendices E1-E3). The significance of the measuring instrument as well as what it entails, is explained. Reference is made to the analysis of the responses, followed by a discussion of the findings of round three of the Delphi study. These findings are significant, since they allowed the researcher to reach the conclusion that stability had been reached.

5.2.4.1 *The measuring instrument*

A letter (Appendix E1) accompanied the questionnaire of round three (Appendix E2). The purpose of this round was to try to reach consensus on the last 11 statements, or failing that, to declare stability (cf. 5.2.1 for a clarification of these concepts). It was requested from panel members to indicate whether they stood by their previous opinions, or if they preferred to make another choice. The researcher requested the panelists to make it clear that it was their final choice and that they would stand by it. Stability could then be declared.

5.2.4.2 *Analysis of responses*

The responses from round three of the Delphi study were analysed manually by indicating the frequency of the response for each statement in the questionnaire as far as each point on the Likert scale was concerned.

5.2.4.3 *Discussion of the findings of round three of the Delphi study*

All 10 members of the panel responded to the Delphi questionnaire (100 % response rate) in round three. After round three, consensus was reached on six of the 11 outstanding statements. After round three, consensus was reached on 88 of the 93 statements in total, giving a 94.6 % overall consensus and stability was reached on all the remaining (five) statements in round three.

A letter and questionnaire sheet (Appendix E3) were sent to the Delphi panelists to give feedback on the outcome of round three. The statements on which consensus was reached were shaded.

According to Linstone and Turoff (2002:18), "… stability of the distribution of the group's response along the interval scale over successive rounds is a more significant measure for developing a stopping criterion than degree of convergence. Therefore stability of the Delphi process can be declared when movement of the opinion of the group has reached stability".

Table 5.1 provides a full description of the statements in round three upon which stability was reached. The percentage of participants selecting a specific point on the Likert scale is indicated.

TABLE 5.1: ROUND THREE (FINAL ROUND) STABILITY STATEMENTS

	SECTION B **ADULT EDUCATION AND ADULT LEARNERS**				
	This section deals with adult learning. 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
5	**ATTRIBUTES OF THE ADULT LEARNER**				
	Although the attributes of the adult learner depends on their previous experience, exposure and learning style preference, adult learners in general:				
a	prefer autonomy	1	2	3	(1=30% & 2=70%) Stability
d	have a self concept of being responsible for their own learning and decisions	1	2	3	(1=20%, 2=50% & 3=30%) Stability

	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. 1 = percentage of participants who indicated that the statement is **essentia**l and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
b	Business needs:				
	• programmes have to include topics on business areas	1	2	3	(1=40%, 2=40% & 3=20%) Stability
c	Computer needs:				
	• programmes have to include topics on computer areas	1	2	3	(1=20%, 2=40% & 3=40%) Stability
g	Personal growth needs:				
	• programmes have to include topics on personal growth areas	1	2	3	(1=30%, 2=50% & 3=20%) Stability

5.2.5 Summative discussion on the outcome of the Delphi study

After round one consensus was reached on 55.9% of the 93 statements, while after round two consensus was reached on 88.2% of the 93 statements. After round three consensus was reached on 94.6% of the 93 statements, while stability was reached on the remaining 5.4% of statements.

Table 5.2 shows the number of statements on which consensus was reached during the three rounds of the Delphi survey.

TABLE 5.2: THE CONSENSUS STATUS DURING THE DELPHI PROCESS

SECTION OF QUES-TION-NAIRE	TOTAL NUMBER OF STATE-MENTS	NUMBER OF STATEMENTS ON WHICH CONSENSUS WAS REACHED AFTER ROUND 1	NUMBER OF STATEMENTS AT BEGINNING OF ROUND 2	NUMBER OF STATEMENTS ON WHICH CONSENSUS WAS REACHED AFTER ROUND 2	NUMBER OF STATEMENTS AT BEGINNING OF ROUND 3	NUMBER OF STATEMENTS ON WHICH CONSENSUS WAS REACHED AFTER ROUND 3
A	18	14	04	04	00	00
B	27	16	11	08	03	01
C	37	16	21	17	04	04
D	07	03	04	00	04	01
E	04	03	01	01	00	00
TOTAL	**93**	**52**	**41**	**30**	**11**	**06**
Total % consensus on 93 statements		**Round 1 55.9%**		**Round 2 88.2%**		**Round 3 94.6%**

From Table 5.2 it is clear that it was more difficult to reach consensus in Sections B (Adult education and adult learners), C (Contextualising and conceptualising CPD) and D (Need for CPD in specific areas) with Sections B and D posing a real challenge.

On the five statements where consensus was not reached, but stability was reached (declared), two statements were from Section B and three statements were from Section D.

The statements on which consensus was reached for *essential* items means that they have to be included in the model for CPD in Occupational Therapy in South Africa: an adult education perspective. Furthermore, on those items where consensus was reached on *useful* items, this would indicate that their inclusion in the model could aid/enhance its effectiveness, but they were not necessarily essential. Those items on which consensus was reached on *unnecessary*, indicate that they should be excluded from the model. The percentage of experts voting on each item is also indicated. (In this regard refer to Table 5.3 for a detailed analysis of consensus and stability items for the model – the outcome of the Delphi study.)

In Table 5.3 the outcomes of the Delphi study are indicated (cf. Table 5.3).

TABLE 5.3: OUTCOMES OF THE DELPHI STUDY

	SECTION A **CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS**				
	This section deals with the description of the concepts CPD, adult education as well as an adult learner. (R=Round) 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
1	**CONTINUING PROFESSIONAL DEVELOPMENT**				
	The concept CPD can be described as follows:				
a	CPD is a continuous process, and could be				
	• outside formal training	1	2	3	Consensus R2 (0:90:10)
	• outside graduate training	1	2	3	Consensus R2 (0:90:10)
b	It allows an individual health professional				
	• to maintain standards of clinical practice	1	2	3	Consensus R1 (80:20:0)
	• to improve standards of clinical practice	1	2	3	Consensus R1 (80:20:0)
c	Through the development of				
	• knowledge	1	2	3	Consensus R1 (80:20:0)
	• skills	1	2	3	Consensus R1 (80:20:0)
	• attitudes	1	2	3	Consensus R1 (20:80:0)
	• behaviour	1	2	3	Consensus R1 (80:20:0)
2	**ADULT EDUCATION**				
	The concept adult education can be described as follows:				

a	"The activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults" (Merriam & Brockett 1997:8)	1	2	3	Consensus R1 (80:20:0)
3	**ADULT LEARNER**				
	The concept adult learner can be described as follows:				
a	An adult learner is an individual				
	• with different experiences	1	2	3	Consensus R2 (80:20:0)
	• pre-knowledge	1	2	3	Consensus R1 (90:0:10)
	• real-life–worlds	1	2	3	Consensus R1 (90:10:0)
	• life tasks	1	2	3	Consensus R1 (90:10:0)
	• life-roles	1	2	3	Consensus R1 (90:0:10)
b	Each adult learner has an unique set of				
	• needs	1	2	3	Consensus R1 (100:0:0)
	• strengths	1	2	3	Consensus R1 (100:0:0)
	• weaknesses	1	2	3	Consensus R1 (90:0:0)
	• preferences	1	2	3	Consensus R1 (80:20:0)
4	**ANY FURTHER COMMENTS ON THESE CONCEPTS**				

	SECTION B **ADULT EDUCATION AND ADULT LEARNERS**				
	This section deals with adult learning 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
5	**ATTRIBUTES OF THE ADULT LEARNER**				
	Although the attributes of the adult learner depends on their previous experience, exposure and learning style preference, adult learners in general				
a	prefer autonomy	1	2	3	(1=30% & 2=70%) Stability
b	have responsibility	1	2	3	Consensus R3 (20:80:0)
c	have self-determination	1	2	3	Consensus R1 (20:80:0)
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	(1=20%, 2=5-% & 3=30%) Stability
e	Need to be respected and acknowledged as responsible human beings	1	2	3	Consensus R1 (80:20:0)
6	**LEARNING EVENTS**				
	Learning events will have to accommodate (to a greater or lesser extent):				
a	independence	1	2	3	Consensus R2 (20:80:0)
b	responsibility	1	2	3	Consensus R2 (20:80:0)
c	self-direction	1	2	3	Consensus R2 (20:80:0)
d	through two-way communication between the educator and the adult learner	1	2	3	Consensus R1 (10:80:10)
7	**LEARNING EXPERIENCES**				
	The adult learner has				
a	a vast array of life experiences	1	2	3	Consensus R2 (10:90:0)
b	specific attitudes	1	2	3	Consensus R1 (80:10:10)
c	pre-conceptions that come into play when knowledge has to be applied	1	2	3	Consensus R1 (90:0:10)
8	**LEARNING PROCESS**				
	Adult learners				
a	want to participate in the learning process	1	2	3	Consensus R1 (80:20:0)
b	prefer that learning should be facilitated rather than didactic with a synergistic result	1	2	3	Consensus R1 (80:20:0)
9	**LEARNING FACILITATION**				
	Facilitators need to explore learners'				
a	experiences	1	2	3	Consensus R1 (80:20:0)

b	beliefs	1	2	3	Consensus R2 (20:80:0)
c	needs	1	2	3	Consensus R1 (80:20:0)
d	and utilise and compliment those mentioned in a-c	1	2	3	Consensus R1 (90:10:0)
e	and ensure relevance of content	1	2	3	Consensus R1 (100:0:0)
f	and applicability of content	1	2	3	Consensus R1 (100:0:0)
10	**LEARNING STRATEGIES FOR ADULT LEARNERS**				
	Adult education strategies should be aimed to include the following/must emphasise:				
a	must be relevant to their real-life-world and they should know the rational or benefit for transformation or engagement	1	2	3	Consensus R2 (10:90:0)
b	all examples and case studies should be from the learners' real-life-world (real-life experiences)	1	2	3	Consensus R2 (20:80:0)
c	feedback on progress, strengths and weaknesses	1	2	3	Consensus R1 (90:10:0)
d	learners want to contribute to application potential of new learning	1	2	3	Consensus R1 (90:0:10)
e	assessment should be done on real-life tasks	1	2	3	Consensus R2 (20:80:0)
f	adults bring physiological ageing to the learning environment such as visual, audio, energy and health deterioration and therefore the learning environment should take this into consideration	1	2	3	Consensus R1 (80:10:10)
g	adults learn best if they feel safe and protected and the facilitator must ensure an environment of cooperation where they feel safe to explore	1	2	3	Consensus R1 (10:80:10)
11	**ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS**				

	SECTION C **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**				
	This section deals with the contextualising and conceptualising of CPD aspects. 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
12	**THE PURPOSE OF CPD**				
	The broad purpose:				
	• of CPD is a continuing process that allows individual health professionals to maintain and improve standards of professional practice	1	2	3	Consensus R1 (90:10:0)
	• through the development of knowledge, skills, attitudes and behaviour	1	2	3	Consensus R1 (80:20:0)
13	**THE CPD PROCESS**				
	The CPD process is a linear process and includes:				
a	a need assessment through identifying weaknesses or areas to be developed	1	2	3	Consensus R3 (20:80:0)
b	learning outcomes	1	2	3	Consensus R1 (100:0:0)
c	developing a learning plan	1	2	3	Consensus R3 (80:20:0)
d	implementing the learning plan (CPD event)	1	2	3	Consensus R3 (80:20:0)

e	assessment (formative and summative)	1	2	3	Consensus R3 (10:90:0)
f	evaluating the CPD event	1	2	3	Consensus R1 (90:0:10)
g	measuring the outcome of the CPD event	1	2	3	Consensus R1 (80:10:10)
h	improved competencies	1	2	3	Consensus R1 (80:10:10)
i	higher quality patient care	1	2	3	Consensus R1 (90:0:10)
14	**MANAGEMENT OF CPD**				
	To manage CPD a thorough knowledge of the following is necessary:				
a	Definitions, roles and responsibilities of the				
	• health professional	1	2	3	Consensus R2 (20:80:0)
	• accreditors	1	2	3	Consensus R2 (20:80:0)
	• service providers	1	2	3	Consensus R2 (20:80:0)
	• professional board	1	2	3	Consensus R2 (10:90:0)
	• national accreditors forum	1	2	3	Consensus R2 (20:80:0)
	• HPCSA CPD committee	1	2	3	Consensus R2 (20:80:0)
b	Hierarchy of learning activities				
	• activities on Level 1 and CEUs allocated	1	2	3	Consensus R1 (90:10:0)
	• activities on Level 2 and CEUs allocated	1	2	3	Consensus R1 (90:10:0)
	• activities on Level 3 and CEUs allocated	1	2	3	Consensus R1 (90:10:0)
c	Specific regulations and rules on				
	• activities that do not qualify for CEUs	1	2	3	Consensus R2 (20:80:0)
	• non-compliance	1	2	3	Consensus R2 (20:80:0)
	• deferment	1	2	3	Consensus R2 (20:80:0)
	• health professionals abroad	1	2	3	Consensus R2 (0:80:20)
	• retirement, illness and non-clinical practice	1	2	3	Consensus R2 (20:80:0)
	• community service	1	2	3	Consensus R2 (20:80:0)
	• voluntary removal from register : de-registration	1	2	3	Consensus R2 (20:80:0)
	• restoration after erasure	1	2	3	Consensus R2 (20:80:0)
15	**CRITERIA FOR EFFECTIVE CPD**				
	The following criteria ensure effective CPD				
a	convenience for the participant in terms of				
	• time	1	2	3	Consensus R1 (90:10:0)
	• pace	1	2	3	Consensus R1 (90:10:0)
	• place	1	2	3	Consensus R1 (90:10:0)
b	relevance to the needs of the participant	1	2	3	Consensus R1 (100:0:0)
c	individualisation to the needs of the participant	1	2	3	Consensus R2 (10:80:10)
d	self-assessment by the participant of his/her own competence	1	2	3	Consensus R1 (80:20:0)
e	interest in the programme by the participant	1	2	3	Consensus R1 (90:10:0)
f	A systematic coverage of the topic/theme for the programme	1	2	3	Consensus R2 (80:10:10)
g	inclusion of grey areas or areas of speculation in the programme	1	2	3	Consensus R2 (80:20:0)
16	**ANY FURTHER COMMENTS ON CPD**				

	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**
	This section deals with various content needs for CPD. 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.
17	**CONTENT NEED**
	The following needs must be included (separate or within) in CPD programmes/offerings

a	Clinical needs:				
	• programmes have to include topics on clinical disease areas	1	2	3	Consensus R1 (80:20:0)
b	Business needs:				
	• programmes have to include topics on business areas	1	2	3	(1=40%, 2=40% & 3=20%) Stability
c	Computer needs:				
	• programmes have to include topics on computer areas	1	2	3	(1=20%, 2=40% & 3=40%)

					Stability
d	Health policy needs:				
	• programmes have to include topics on health policy areas	1	2	3	Consensus R1 (90:10:0)
e	Ethical needs:				
	• programmes have to include topics on ethical areas	1	2	3	Consensus R1 (90:10:0)
f	Interpersonal skills:				
	• programmes have to include topics on interpersonal skills areas	1	2	3	Consensus R3 (10:90:0)
	Personal growth needs:				
g	• programmes have to include topics on personal growth areas	1	2	3	(1=30%, 2=50% & 3=20%) Stability
	SECTION E **ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA FROM ADULT EDUCATION PERSPECTIVES**				
	This section deals with aspects that should be addressed in the model 1 = percentage of participants who indicated that the statement is **essential** and must be included in the Model. 2 = percentage of participants who indicated that the statement is **useful** and could be included in the Model. 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the Model.				
19	**ASPECTS TO BE INCLUDED IN MODEL**				
	The following should be included:				
A	CPD from an adult education perspective: clarifying the concepts	1	2	3	Consensus R1 (80:20:0)
B	Adult education and adult learners	1	2	3	Consensus R2 (10:80:10)
C	Contextualising and conceptualising of CPD aspects	1	2	3	Consensus R1 (80:10:10)
D	Content need for CPD in specific areas	1	2	3	Consensus R1 (90:10:0)
20	**ANY FURTHER COMMENTS ON THE ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD**				

5.2.5.1 *Findings on consensus statements*

The statements on which consensus were reached are tabled in full (cf. Table 5.3).

The percentage of participants indicating a specific point on the Likert scale is indicated according to the following criteria as indicated in brackets in the far right-hand column of the page.

Column 1 = percentage of participants who indicated that the statement is **essential** and must be included in the model.
Column 2 = percentage of participants who indicated that the statement is **useful** and could be included in the model.
Column 3 = percentage of participants who indicated that the statement is **unnecessary** and should not be included in the model.

Consensus was reached on 88 of the 93 statements in the questionnaire, in other words 94.6% consensus. From these 88 statements the following results were obtained:

Consensus was reached on 54 selections for option 1 on the Likert scale deemed as essential, in other words 58.1%.
Consensus was reached on 34 selections for option 2 on the Likert scale deemed as useful, in other words 36%.

Consensus was reached on null selections for option 3 on the Likert scale deemed as unnecessary, in other words 0%. This means that no statements have to be eliminated for the model.

For the consensus statements, a distinction will be made between essential and useful statements when compiling the model (cf. Chapter 6).

5.2.5.2 *Findings on stability statements*

Stability was reached on five of the 93 statements of the Delphi questionnaire, in other words 5.4%. For the statements on which stability had been reached, it was decided that, in developing the framework, those statements where 50% or more of the Delphi respondents had indicated a point 3 on the Likert scale (indicating that the statement was unnecessary) would be eliminated (due to the statistical significance of 50%),referred to as the 50% rule.

There were no statements upon which stability had been reached that had a statistically significant 50 % response indicating "Unnecessary". (cf. Table 5.1.)

Of the remaining five statements the following results were obtained (cf. Table 5.2):

There were no selections for "Essential", option 1 on the Likert scale, in other words 0% (cf. 50% rule). There were three selections for "Useful", option 2 on the Likert scale, in other words 60.9%; there were no selections for "Unnecessary", option 3 on theLikert scale, in other words 0%. There was one selection for "Essential" and "Useful" (40:40:20), options 1 and 2 combined on the Likert scale, in other words 20%. There was also one for "Useful" and "Unnecessary" (20:40:40), options 2 and 3

combined on the Likert scale, in other words 20%. This was also indicated in bold under the recommendations (cf. Chapter 6).

5.3 CONCLUSION

The results of the Delphi study were presented in this chapter and the data findings were described. A 100% response rate by the participants of the Delphi study in all three of the rounds was reported.

Of the 93 statements compiled and presented in the Delphi questionnaire, consensus was reached on 88 statements. Of these 88 statements consensus was reached on 54 statements for option 1 (deemed "Essential" for the model). Consensus was reached on 34 statements for option 2 (deemed "Useful" for the model) and null statements, option 3, were deemed "Unnecessary" for the model.

Stability was reached on the remaining five statements. None of these statements were eventually not used for the development of the framework due to the fact that on none of the statements 50% (or more) of the respondents indicated that they were unnecessary for the model.

The fact that there was a 100% response rate in all the rounds by the Delphi respondents, as well as the fact that consensus was reached in 94.6% of the statements, is a very positive aspect of the study. This also indicates that the Delphi questionnaire was accurate, detailed and comprehensively compiled as a result of the literature cited during the literature review and questionnaires completed by the occupational therapists.

In the following chapter, entitled **A Model for Continuing Professional Development in Occupational Therapy in South Africa: an adult education perspective**, the development of a model as the final outcome of the study will be provided through synthesising the literature review; the results from the occupational therapists' questionnaire; as well as results emerging for the Delphi process.

CHAPTER 6

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

6.1 INTRODUCTION

This study was undertaken in order to develop a model for Continuing Professional Development in Occupational Therapy in South Africa from an adult education perspective. This was done to make a contribution to the continuous effective and efficient implementation of the CPD system for occupational therapists in South Africa, through identifying the CPD needs of occupational therapists and ultimately supporting health care in South Africa through education. The study could also serve as a directive for higher education institutions, for not all undergraduate and post-graduate programmes and curricula are necessarily built on adult learning principles. It might especially be the case in professional disciplines that the findings of the study could help bridge shortcomings in this regard.

It was therefore necessary to conceptualise and contextualise adult education and CPD; to determine the needs for CPD of occupational therapists with regard to content, cost, time, CPD activities, learning situations and mode of delivery in order to improve the effectiveness and efficiency of CPD programmes for the therapists and if necessary; to identify and validate a selection of relevant criteria for CPD in Occupational Therapy that could, together with the literature review and questionnaire survey, serve as backbone to compile the model.

The research methods used in developing such a model included a comprehensive literature review; the use of questionnaires for occupational therapists; and, finally, the Delphi technique for the validation of some of the aspects and criteria with the view to compile the model.

Chapter 1 dealt with the introduction and orientation to the study, whilst Chapter 2 conceptualised and contextualised adult education, CPD and learning transfer to professional practice. Chapter 3 described the research design, methodology, sampling

and selection. Chapter 4 provided the results and discussions of the questionnaire survey to occupational therapists whilst Chapter 5 described the findings of the Delphi study.

In this chapter, Chapter 6, a detailed discussion on the development of the model for CPD from an adult education perspective will be provided. The premises and points of departure for the development of the model will be outlined in addition to the benefits. The needs to be addressed by such a model will receive attention, together with the academic and administrative aspects for the compilation of the model. Challenges regarding the delivery, as well as recommendations made with regard to the model will be provided.

6.2 PREMISES FOR THE DEVELOPMENT OF A MODEL FOR CPD FROM AN ADULT EDUCATION PERSPECTIVE

To justify the development of a model for CPD, from an adult education perspective, it is important for the researcher to provide a clear rationale and justification for the provision of such a model.

6.2.1 Background and needs to be addressed by the CPD model

Major developments are taking place in South Africa's health care system, as well as in the higher education system. In recent years there has been a proliferation of interest in medical education and it has become apparent that health sciences education and training should be adapted to the needs of society (Nel 2004:185).

The unique function of faculties for health sciences/medical schools is to select and educate competent, skilled and caring practitioners, capable of meeting the individual's, as well as society's expectations of health care and to promote the health of all people (HPCSA 1999:1). They should strive to educate .... "who are capable of adaption to change, whose minds can encompass new ideas and developments and whose attitudes to learning are such that it will inspire the continuation of their educational process throughout their professional life" (HPCSA 1999:1).

In addition, the HPCSA is prescriptive as far as the mission of Faculties of Health Sciences/Medical Schools in South Africa is concerned: "…. to provide education and

training which enable graduates to render service across a wide front in medicine/health sciences and health care and to specialise in any field of medicine/health sciences" (HPCSA 1999:8).

Kriel (2003:376) pointed out that the notion of a "vocation for life" learnt once will have to be surrendered in favour of the idea of constant, that is, lifelong, learning, especially in the field of health professions. CPD is essential, due to the rapid rate of developments in health sciences, combined with the impact this has on health care practice. These factors have made it impossible to keep up to date with developments relevant to practice, resulting in the knowledge and skills of every individual decaying over time necessitating refreshment and reinforcing.

One of the objectives of accreditation and certification bodies and professional boards and employers, is to ensure that professionals in health services are kept sufficiently qualified to keep on practising. If there are hindrances to the delivery of effective CPD programmes, it has to be rectified. The proposed model for CPD – based on the needs of occupational therapists, scientific literature, and criteria validated by a panel of experts – is developed to ensure quality professional development on a continuing basis.

The HPCSA encourages CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also of improving competence and ultimately the performance of the health professional with an end benefit to the patient/client (HPCSA 2009:4; HPCSA 2011:4).

6.2.2 Benefits of the proposed model to the patient, community/society and the therapist

The study was premised on the basis that significant benefits must be derived from the model for CPD and that these benefits should apply to the patient, the community and the broader society. This model would also benefit the occupational therapists' profession, by creating greater participation of their profession in providing public health care. They will also be knowledgeable, skilled and competent, not only in Occupational Therapy but also in fields like ethics, business, management, etc. They also might have an expansion of scope of practice, due to be further trained in a sub-

speciality field, improved skills and competencies and a resulting increase in job satisfaction.

Patients will benefit by receiving up-to-date care, including specialised Occupational Therapy, health care and other health care services over a wide range and on different levels of care. A significant benefit for the patients and their communities will be early detection of disabilities and rehabilitation.

6.2.3 Establishment of effective and efficient professional development programmes

Should a more structured approach be followed for delivering CPD-programmes, it will then allow for the delivery of more effective and efficient CPD initiatives in a way that is more accessible, affordable and equitable for the occupational therapists. It will translate to better health promotion and health care, benefiting the patient.

It will be made possible by:

- part self-study, part contact-based sessions in order to meet the findings of this study.
- closer to home or local community-based activities, which will be more convenient and reduce costs.
- offering various CPD opportunities, by different modes of delivery with the exploitation of online and innovative educational approaches.
- relevant programme content.
- offering training in recognised speciality areas.
- increased options in profession-specific skills, clinical competence and patient care.
- capacity building, in the wider sense of the word, by including training in research methodology, leadership, management, computer skills, education and other fields of interest.
- the option of post-graduate studies, which have CPD links.
- flexible credit-bearing modules as participants in post-graduate studies will need to be accommodated in part-time studies.
- allowing vertical development by recognition of advanced knowledge and skills, through the process recognition of prior learning (RPL), linked to credit bearing modules of formal qualifications.

It is obvious, from the perspective of the researcher, that the above-mentioned premises are not negotiable in order to develop and implement a model for CPD that ensures effective and efficient CPD programmes.

6.3 POINTS OF DEPARTURE FOR THE DEVELOPMENT OF THE MODEL

At the centre of this research is the occupational therapist working in Occupational Therapy, who has to undergo continuing professional development to keep up with new knowledge, skills and competencies.

In order to compile a model for CPD, certain points of departure have to be highlighted, namely:

- CPD-programmes must take cognisance of the *HPCSA guidelines* for CPD and must serve as the directive for CPD-programme planning and implementation.
- CPD-programmes must address the *need of occupational therapists* as *adult learners* and be developed, taking into account adult learning principles.
- CPD-programmes must address the patient/*public need* by offering knowledge and skills that address current public need, that is, the needs identified of the occupational therapist to do justice to the above.
- CPD-programmes must be *affordable* by scheduling that is convenient as far as timing (with afterhours scheduling where possible) and convenient distance are concerned (offering at as many sites as possible), as well as by offering convenient modes of delivery (by internet or by various combinations of opportunities and activities).
- CPD-programmes must be *accessible* to occupational therapists by informal activities or by a type of structure that is modular in format, that is part-time based and that makes provision for the possibility to adding up credits that will be recognised for formal structured master programmes; using RPL and ensuring a symbiotic relationship between CPD and formal education – if therapists wish to follow a more formal career path by incorporating and linking CPD and formal training.
- CPD-programmes must provide for *personal development* opportunities, fostering career pathing, including the recognition of advances skills or specialities.
- CPD-programmes must offer *managerial* skills by offering fundamental and advanced management skills, including financial and human resource management.

- CPD-programmes must promote specific elective *research* by providing occupational therapists with basic and advanced research skills with the view to foster research as foundation in the Occupational Therapy profession by recognising research efforts and achievements. This can form links to post-graduate education and research.

For successful implementation it is necessary to identify the different role-players involved in CPD-processes in order to compile programmes.

6.4 ROLE-PLAYERS

To compile a model for CPD with the view to offer efficient and effective CPD-programmes, the following role-players in CPD need to be recognised and involved where possible and must be in line with the HPCSA (1999) guidelines:

- **The health professional – occupational therapist – by:**
  - maintaining and acquiring new and updated levels of knowledge, skills and ethical attitudes that will be of measurable benefit in professional practice and to enhance and promote professional integrity;
  - being actively involved in the planning of their own CPD that can lead to a sustainable and safe career;
  - communicating the different opportunities to other occupational therapists; and
  - ensuring clinical competence to the overall benefit of the patient.
- **The providers of CPD-programmes by:**
  - forming links between CPD-providers, accreditors and academic institutions;
  - developing capacity in formal and non-formal education, clinical and research sectors;
  - obtaining accredited service provider status as profession-specific higher education institutions and departments, professional associations, or formally constituted professional interest groups who meet the specific criteria and have been accredited by the Board/Accreditor to present learning activities for CPD.
  - functioning as a service provider (not accredited) within the guidelines of the Professional Board;
  - displaying a service-provider activity number on all documentation for a particular activity; the topic of the activity, the level there-off; the number of CEUs for that activity; the attendance/completion date; and the name and HPCSA

registration number of the attendee on all certificates that are provided to attendees.

- **The accreditors of CPD-programmes by:**
  - reviewing and approving applications for the provision of CPD activities by organisations and individuals without accredited service provider status and monitoring these activities;
  - revising CEUs allocated where the provider failed to comply with the rules and regulations of the CPD-guidelines.
- **The professional boards by:**
  - appointing profession-specific accreditors and approving accredited service providers in accordance with the HPCSA CPD Committee's criteria and guidelines;
  - ensuring that high standards are set and maintained for their accreditors and accredited service providers;
  - taking responsibility for conducting quality checks from time to time on the activities presented to their respective health professionals.
- **The national accreditors forum by:**
  - deliberating on policy and issues of common concern and consulting with the HPCSA CPD Committee on such matters applicable to all accreditors across all the professional boards.
- **The HPCSA CPD committee by:**
  - developing (together with the professional boards) policy proposals for a uniform but flexible system of CPD that will accommodate the diversity of health professionals;
  - by facilitating continuing development of all health professionals registered with the HPCSA and the professional boards;
  - addressing all CPD related issues within the existing policy parameters of the HPCSA and the professional boards;
  - reporting thereon to the HPCSA and the professional boards.
- **CPD section of the HPCSA by:**
  - administering and monitoring the HPCSA CPD system;
  - randomly selecting individual health professionals for compliance checks every two months.
- **The secretariat for CPD, located in the CPD, Registrations and Records Department of the HPCSA by:**
  - receiving and handling of all correspondence relating to CPD (excluding applications for accreditation of activities or service providers).

6.5 BACKGROUND TO THE COMPILATION OF THE MODEL

The outcome of this research study is the proposed model for CPD based on an adult education perspective.

The research methods that were used and which formed the basis of the study comprised a literature review, and – as the empirical study – a questionnaire survey and a Delphi process.

The purpose of the literature review was to provide a theoretical background in order to contribute to the development of the needs analysis questionnaire and the context for the research problem, to establish the need for the research as well as to contribute to the complication of the model.

The needs analysis questionnaire asked a number of questions to the occupational therapists in order to obtain some level of understanding of their perspectives or their needs for and the factors impacting on CPD; the appropriateness of CPD activities and their needs as adult learners. The findings of the questionnaire survey will also contribute to the compilation of the model.

From the literature study and questionnaire survey a number of criteria were selected and submitted to a panel of Delphi experts to be evaluated whether the specific criteria will be essential to be included or be useful to be included in the model or be unnecessary and be excluded from the model.

The findings of the Delphi study, together with those of the needs analysis questionnaire, as well as the literature review will be instrumental in the compilation of the model for CPD. All this information is categorised in six aspects, each with a number of elements, within.

Figure 6.1 shows the different aspects that are addressed in the model for CPD and how they impact on one another – shown by arrows. These aspects were identified from the literature review, the questionnaire survey on the needs of the occupational therapists as well as from the Delphi questionnaire and can act interactively and dynamically upon one another.

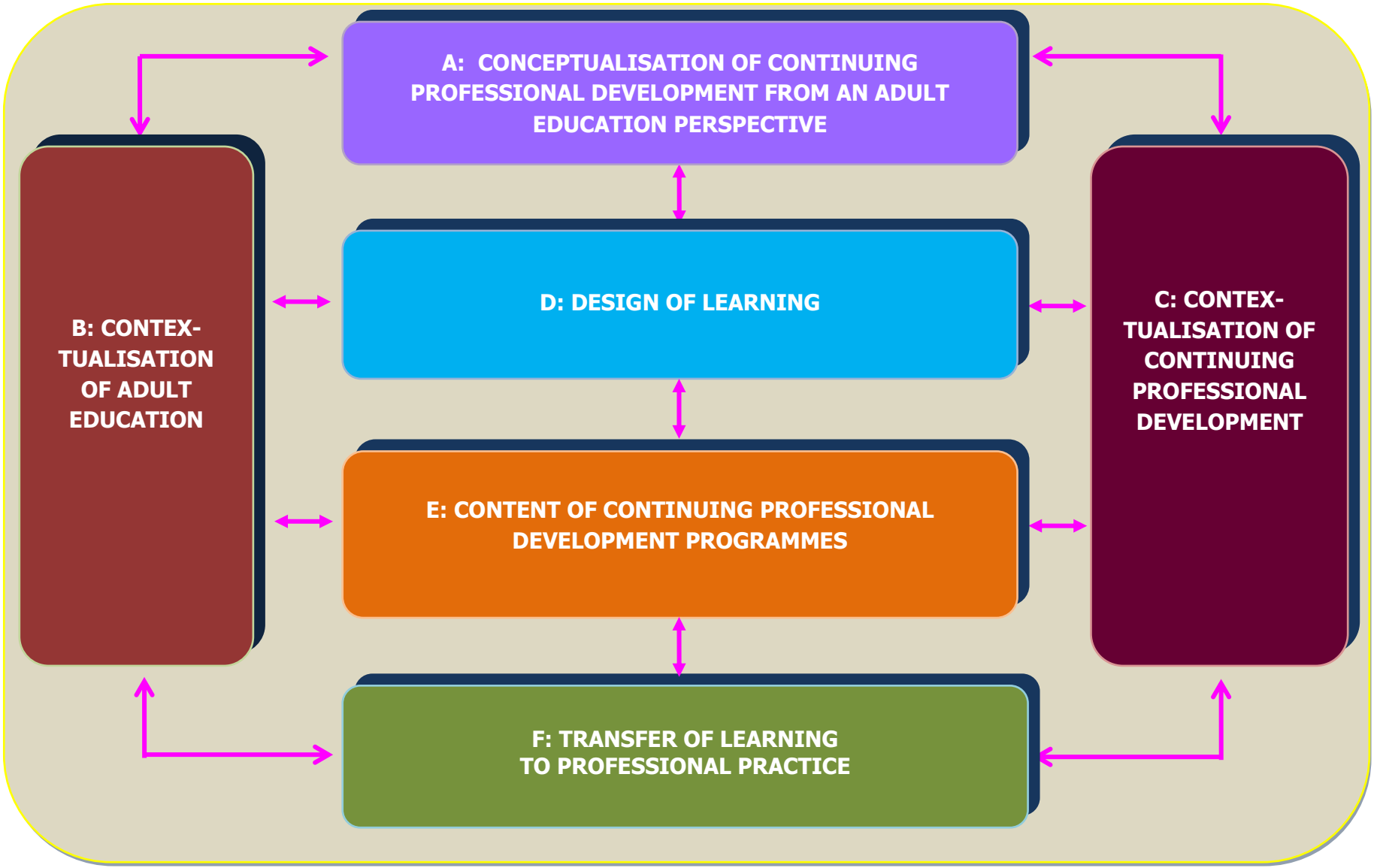


FIGURE 6.1: ASPECTS THAT ARE ADDRESSED IN THE MODEL FOR CPD
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

The following aspects are included in the model, namely:

A. The conceptualisation of CPD from an adult education perspective.
B. The contextualisation of adult education and adult learning.
C. The contextualisation of CPD.
D. The design of learning.
E. The content of CPD programmes.
F. Learning transfer to professional practice.

Each aspect is described and discussed in a structured way, namely: firstly the theoretical grounding; secondly, followed by making reference to the findings of needs analysis questionnaire; thirdly, followed by the expert panel's recommendations; and fourthly, concluding remarks by the researcher. This will be done where it is applicable and when it is feasible.

The Delphi results are used in such a way that the recommendations were categorised according to the indications whether the criterion-statement was pre-dominantly marked as essential to be included in the model (it will be typed in bold) or that the criterion-statement was useful to be included. It does not mean that the other recommendations are not important, however. They could be of importance in other specific circumstances or other professional groups. Recommendations were also ranked from most essential to least essential, where it was logical to do so (for example, the context might be lost if it was not done).

6.6 ASPECT A: THE CONCEPTUALISATION OF CONTINUING PROFESSIONAL DEVELOPMENT FROM AN ADULT EDUCATION PERSPECTIVE

6.6.1 Theoretical grounding based on literature

[Please cf. Chapter 2, Point 2.2.1 and 2.10.1.]

CPD is a concept that has become more emphasised in recent years. The meaning of CPD and its importance has gradually increased among all health professional groups and the demand for enhanced quality, efficacy and cost-effectiveness of service delivery has grown.

The HPCSA encourages CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also improving competence and ultimately the performance of the health professional with an end benefit to the patient/client (HPCSA 2009:4).

The adult education literature supports the idea that teaching adults should be approached in a different way than teaching adolescents and children (cf. 2.2.1).

The education of adults refers to the process of promoting and improving all the types of learning which educators of adults and their learners may be involved in. Adult education also refers to the learning activities engaged in by adults in either a formal or non-formal educational setting for the purpose of affecting personal change and growth. It, furthermore, also refers to the field of academic study that examines the discipline of adult learning and the delivery of learning programmes for adults and it is part of Education, Training and Development (Van Rooy 2001:2).

In this study ***adult education*** is defined as the process of promoting and improving systematic and sustained learning which educators of adults and their learners are involved in, either in a formal or non-formal educational setting, for the purpose of bringing about change in their knowledge, attitudes, values and skills.

In the context of this study it refers, furthermore, to the process whereby health professionals (e.g. occupational therapists) are assisted to maintain and acquire new and updated levels of knowledge, skills, competencies and ethical attitudes that will be of measurable benefit in professional practice as well as to enhance and promote professional integrity, with the ultimate beneficiary being the patient or client.

The interaction of the adult educator and the adult learner is important and the counselling of the adult learner is a critical component in adult education (Enos 1997:29).

The adult educator, from a humanistic perspective, also fulfils the role of content expert (Tiberius 2001:1), skilled performer (Tiberius 2001:1) and mentor (Daloz 1998:371).

In this study the ***adult educator*** is defined as an adult, a skilled person and content expert who moulds their adult learners with the view to make learning happen through mentoring, providing appropriate structure, expressing positive expectations and challenging students and providing vision. In the context of this study it refers furthermore to a professionally qualified educator, a health professional or higher educationalist who is a subject expert, mentor and role-model, and involved in education (higher education, including clinical education) and training.

According to Gravett (2005:7) an adult learner is a person who can be classified as an adult and someone who participates in educational activities. Merriam en Caffarella (1999) state that, in general, an adult learner will be somebody whose main life-task is not related to education, and who has many roles, such as worker, spouse, parent, etc.

In this study ***adult learners*** are defined as learners that are adults by definition (23 years or older using the South African legislative description), who bring accumulated experience with them into educational events and their readiness to learn is linked to their life roles and life-tasks. In the context of this study adult learners are professionally qualified in Occupational Therapy as occupational therapists, taking responsibility for their own lives, with other roles beside studying full time, but who also participate in continuing educational/ professional development activities.

CPD is the learning in which professionals engage in the context of their working lives. CPD is the maintenance and enhancement of the knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to the needs of the professional, the employer, the profession and society (Madden & Mitchell 1993 in O'Sullivan 2006:1).

Health professionals have to be engaged in a wide range of learning activities through which professionals maintain and develop throughout their career to ensure that they retain their capacity to practice safely, effectively and legally within their evolving scope of practice (Department of Health 2003in O'Sullivan 2006:2).

According to the WPME (2002:31) CPD is a continuous process outside formal graduate training that allows individual health professionals to maintain and improve standards of practice through the development of knowledge, skills, attitudes and behaviour.

Ethical practice of the health professions requires consistent and ongoing commitment from all concerned to lifelong learning to update and develop the knowledge, skills and ethical attitudes that underpin competent practice (HPCSA 2009:4).

In this study, ***CPD*** is defined as the process of lifelong learning to which occupational therapists are committed to maintain and acquire new and updated levels of knowledge, skills, clinical competence and ethical attitudes and behaviour with the view to promote professional integrity and competent practice.

6.6.2 Findings from the needs analysis questionnaire survey

The conceptualisation of CPD from an adult education perspective was not included in the needs analysis questionnaire (cf. 6.5.3).

6.6.3 Findings from the Delphi survey

The Delphi panel of experts made recommendations as far as the conceptualisation of CPD from an adult education perspective is concerned.

A1 DESCRIPTION OF CONCEPTS

It is recommended that concepts are described as follows so that all role-players can have clarity on what these concepts entail.

A.1.1 The concept CPD can be described as follows:

A1.1.1 CPD is a continuous process, and could be:

- outside formal training
- outside graduate training.

A1.1.2 CPD allows an individual health professional

- **to maintain standards of clinical practice**
- **to improve standards of clinical practice.**

A1.1.3 CPD allows the maintaining and improving of standards through the development of:

- **knowledge**
- **skills**
- **attitudes**
- **behaviour.**

A1.2 The concept adult education can be described as follows:

A1.2.1 The concept adult education can be described as:

- **the activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults.**

A1.3 The concept adult learner can be described as follows:

A1.3.1 The concept adult learner can be described as an individual with different:

- **pre-knowledge**
- **life-worlds**
- **life-tasks**
- **life-roles**
- experiences.

A1.3.2 Each adult learner has an unique set of:

- **needs**
- **strengths**
- **weaknesses**
- **preferences.**

6.6.4 Concluding remarks

The researcher is of the opinion that a clear understanding of the conceptualisation of CPD from an adult education perspective, including the description of the concepts – by all role-players – are of utmost importance and have to be included in the model for CPD (cf. Figure 6.2).

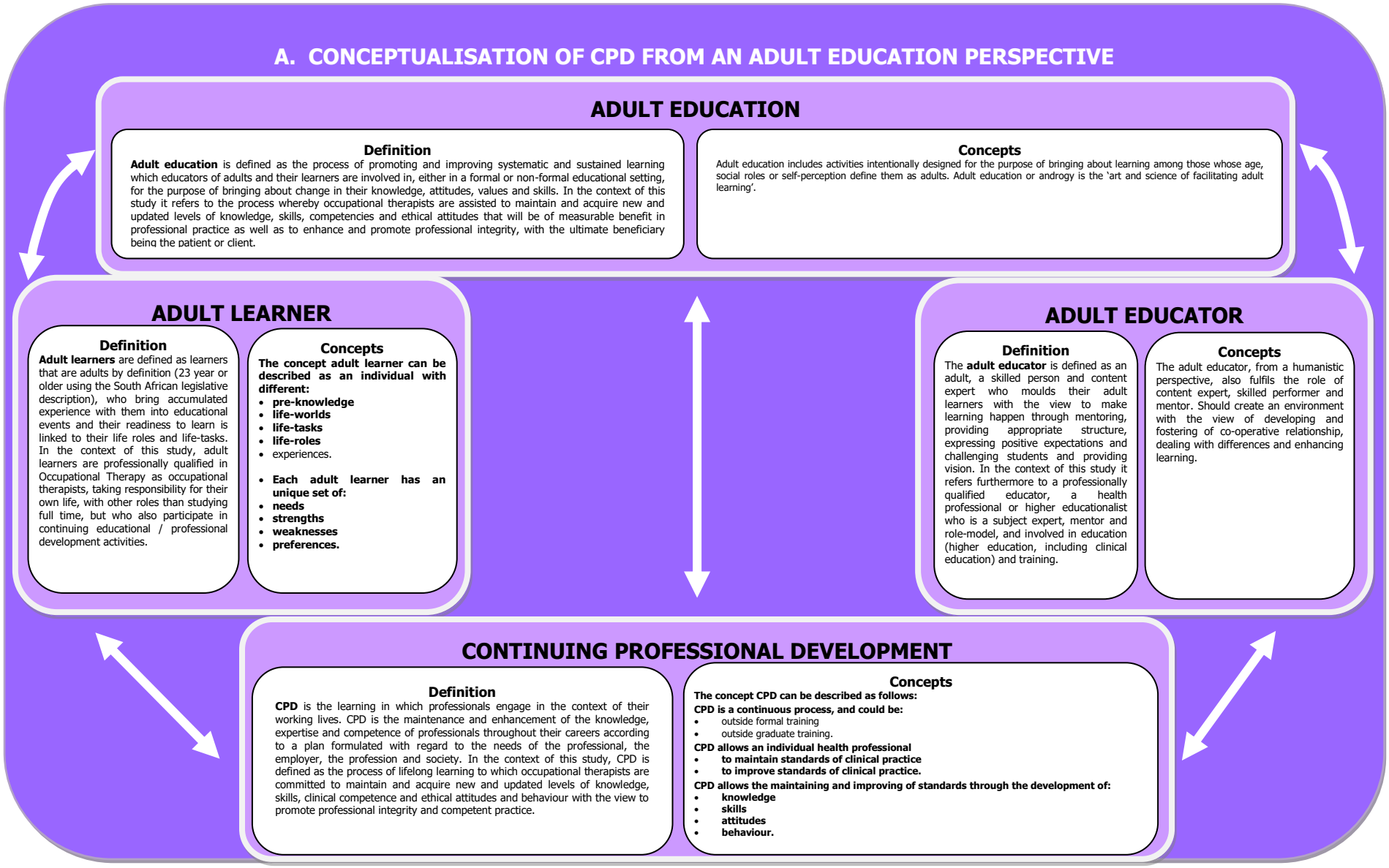


FIGURE 6.2: ASPECT A: CONCEPTUALISATION OF CPD FROM AN ADULT EDUCATION PERSPECTIVE
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.7 ASPECT B: THE CONTEXTUALISATION OF ADULT EDUCATION AND ADULT LEARNING

6.7.1 Theoretical grounding based on literature

[cf. Chapter 2, Point 2.3; Point 2.4].

To contextualising adult education and adult learning the emphasis will be placed on three main elements, namely:

- adult development perspectives and adult learning theories
- adult education
- adult learning

6.7.1.1 *Adult development perspectives and adult learning theories*

a) Adult development perspectives

To understanding how adult education perspectives underpin continuing education and professional development, it was important to describe the various stages of development. The four perspectives that were discussed in the literature review were the developmental, contextual, transitional perspectives as well as the integrated approach, as identified by Merriam, Caffarella and Baumgartner (2007:305).

The ***developmental perspective*** regards adult development as consecutive stages that mark the individual's development and are subdivided into:

- ***age theories*** – focus on transitional periods that are linked to certain ages in the development of an adult; chronological age is used to characterise periods of stability and transition; main eras are early, middle and late adulthood each with their own developmental tasks (cf. Massyn 2009:115; Merriam *et al.* 2007:307; & Schlossberg *et al.* 1995:9). (cf. Levinson's life-task model Chapter 2 Point 2.3.1.1).
- ***stage theories*** – the central concept is the resolution of crises in a person's life; at each stage the resolution of the crises will be critical in the development of the individual, the individual will be able to revisit and redefine previous issues at later stages; young, middle and late adulthood stages (cf. Massyn 2009:116; Schlossberg

et al. 1995:9). (cf. Erickson's theory on identifying development Chapter 2, Point 2.3.1.2).

- **constructive developmental theories** – focus on the professive development of individuals through the construction of meaning as they move through the various life-stages. As adolescents move to adulthood, their thinking develops from regarding the world as dualistic (right/wrong), to accepting various perspectives, but still without insight in the opposing viewpoints, to the final category of commitment where the individual accepts the responsibility that goes with the choices they make (Massyn 2009:117). (cf. Perry's theory Chapter 2 Point 2.3.1.3).
- **biological approach** – deals with the change in the biological and physical make-up on an individual through interaction with the environment, including aspects like life expectancy, health and the deterioration of the senses and the nervous system; biological deterioration can be minimised with little effect on learning (cf. Massyn 2009:117) (cf. Chapter 2 point 2.3.1.4).

The contribution of the developmental perspective to learning lies in acknowledging the impact of development on the life-tasks of the adult, which, in turn, provides clues to their motivation (Massyn 2009:117). Knowles (in Merriam *et al.* 2007:308) regards developmental tasks as an indication of a "readiness to learn" that would cumulate to a "teachable moment" where adults will be motivated to learn given the challenge that their particular developmental stage presents. This is an important aspect to consider when planning CPD-programmes for adult professional learners.

The ***contextual perspective*** is based on societal influences on the development of an individual. It takes into account the expectations of society – that an individual should conform to certain social roles in that community (Merriam *et al.* 2007:312). Life events happen off-time or on-time. Events that happen off-time result in a crisis that would not have been experienced as a crisis if it would have happened in on-time (cf. Chapter 2 Point 2.3.2).

From a contextual perspective of adult development, information on life events provides the adult educator with knowledge of the influence of certain life events on individuals and on their development and learning (Smith 2009:28-29). This perspective has to be taken into account to understand the needs of the learner during CPD-planning.

The ***transition perspective*** views adult development as a process of opportunities for development and growth focussing on life events, expected or unexpected, that lead to change. Schlossberg *et al.* (1995:26-28) emphasise that the focus is on the transition(s) that the adult is confronted with. Transitions are regarded as "anticipated or unexpected events or non-events that result in a change in relationships, routines, assumptions and/or roles (cf. Chapter 2 Point 2.3.3).

The meaning attached to events, such as job insecurity, changes in health or behaviour of family or patients, changes in work conditions and quality of services, as well as increasing responsibilities, can influence the health professional and this may have an influence on him/her as adult learner and their learning and professional practice.

The ***integrative perspective*** – all adult developmental theories have four elements in common, namely: interaction with the environment, differentiation and integration, a variable process, and the reframing of experiences. The environmental interaction indicates that development takes place in a social setting – how an individual assigns meaning to an event is influenced by the environment and culture. Differentiation and integration are similar to the concepts of the transition and stability phases. Taylor *et al.* (2000:11) indicate alternatives that can lead to integration. The variable process refers to the fact that although all individuals develop, it will not be at the same time for everyone. Development is dependent on experience and opportunities – so that the individual can challenge their existing frameworks (Merriam et al. 2007:314). The reframing of experience is the fourth element, which refers to how adults view their lives, and is formed during childhood and adolescence, and influences how a person perceives and interprets experiences from the environment (cf. Chapter 2 Point 2.3.4).

In summary, the importance of adult development perspectives is that it provides the educator with knowledge of the life circumstances of adults that lead to a need for further learning, be it formal or informal. In some instances certain life events bring adults to the formal learning process. In other instances it is the learning process that helps the development occur (Merriam & Brockett 2007:143, Taylor *et al.* 2000:337). According to Knowles *et al.* (2005:222) the challenge for adult educators is to understand development well enough to recognise which dimensions are most relevant to a particular group of learners in a particular learning situation. For this study it is the occupational therapists undergoing continuing professional development.

b) Adult learning theories

[cf. Chapter 2 Point 2.4]

The relationships between the learning theories (behaviourism, cognitivism and constructivism) and the adult learning theory (humanism) were discussed in Chapter 2 (cf. Point 2.4). Behaviourists regard learning as changes in overt behaviour, while cognitivism is more concerned with the cognitive changes that take place when learning occurs. Humanism also takes this cognitive dimension into consideration, but focuses on the effective dimension. They reject the behaviourist notion that behaviour is determined by the environment, but supports the belief that human beings are in control of their own lives. The most prominent theories of adult learning have humanism and constructivism as a foundation (Massyn 2009:123).

Under ***HUMANISM***, *andragogy, self-directed* learning and *transformational* learning will be discussed.

Andragogy – the study of adult education – emphasises the adults' *self-concept* and is based on his/her ability to take responsibility for his/her decisions and life. Adults want acknowledgement that they can direct their own lives, and will withdraw in a learning situation that does not acknowledge their self-directedness. According to Knowles *et al.* (2005:6) adult learners can also be insecure and facilitators then need to support such learners to develop from being dependent to becoming self-directed learners. Occupational therapists as adult learners need to take responsibility for their learning and should be actively involved in the learning process, also in the CPD-learning situation.

Adults bring their *prior experiences* to the learning environment; their experiences provide individual differences and comprise differences in terms of background, motivation, needs, interests and goals. These experiences can also have a negative influence where adults have preconceived ideas that require sensitivity when challenged. Occupational therapists as adult learners bring a vast array of experiences to the learning situation. These experiences determine their self-identity as described by Knowles *et al.* (2005:65).

Adults develop a *readiness to learn* when they need specific knowledge or a skill to cope with certain situations in their lives. Developmental tasks associated with different

life stages provide a rich source of information on the readiness of adults related to specific knowledge or skills (Knowles *et al.* 2005:67).Developmental stages of the respondents in this research study stretch over several ages or stages and they have a large base of specific knowledge, competencies and skills.

Adults' *orientation to learning* is more life-centred, or as Knowles *et al.* (2005:67) put it, task- or problem-orientated. Occupational therapists as adult learners are motivated to learn if they feel that the learning can assist them in their lives – if they can see the practical value of the knowledge for themselves or their patients.

Adults *need to know* the value of learning something before they will engage in the task (Knowles *et al.* 2005:64). Occupational therapists doing CPD as adult learners will be "relevancy-orientated" (Knowles *et al.* 2005:64) and will emphasise that the learning material must be applicable to their work or life roles.

The most important motivation to learn comes internally to the individual and can include job satisfaction, self-esteem and quality of life (Knowles *et al.* 2005:68). Occupational therapists do CPD as adult learners to keep up competencies and knowledge or to obtain new knowledge and skills with a view to better patient care.

Self-directed learning can be seen as the process in which adult learners take control of their own learning by identifying their learning needs, deciding on their learning goals, recognising the appropriate resources, implementing learning methods and strategies, and evaluating their progress (Brookfield 1995:2, Merriam *et al.* 2007:106).

Caffarella (1993:25-26) explains that self-directed learning is "self-initiated" and that the learner manages his/her own learning; that personal autonomy is assumed, as well as that the learning situation must be designed to provide more learner control (cf. Chapter 2, Point 2.4.1.2).

For ***transformational learning*** dialogue and critical reflection are necessary to ensure social change as outcome. Experience is seen as the starting point of the transformational learning process and is used in many ways to lead to critical reflection of the learner's assumptions. Critical reflection, in turn, is seen as the cornerstone of effective learning. In transformational learning, the outcome of utilising experiences

and reflecting on these experiences would lead to individual development. Development is the growth of the individual through change, which is congruent with the humanistic viewpoint (Merriam *et al.* 2007:144-149).

Andragogy, self-directed learning and transformational learning focus on the idea in humanism of developing the potential of the individual. It is important to use adults' prior experiences, making learning relevant to real life and the importance of reflection in development. These components are closely related to three other theories in adult learning, namely experiential learning, situated cognition and critical reflection: from a learning theory perspective these three theories support constructivist principles and are important in adult learning. Two of these, experiential learning and critical reflecting, together with self-directed learning and meta-cognition have been said to be unique and exclusive to adult learning (cf. Chapter 2 Point 2.4.1.3).

As far as ***CONSTRUCTIVISM*** is concerned, *critical reflection*, *situation cognition* and *experiential learning* will be discussed in short (cf. Chapter 2 Point 2.4.2).

Taylor *et al.* (2000:27) define *critical reflection,* as activities in which the individual engages to explore his/her experiences in order to lead to new understandings – it is the reflection on the experience that facilitates the learning.

Merriam *et al.* (2007:145) describe three kinds of reflection, i.e. content reflection (thinking of the actual experience), process reflection (thinking about ways to deal with the experience) and premise reflection (examining beliefs, assumptions and values about the experience). Of these three only premise reflection, where one challenges long-held beliefs and assumptions, will lead to transformative learning (Merriam *et al.* 2007:145). Taylor *et al.* (2000:48) argue that critical reflection fosters an in-depth approach to learning (cf. Chapter 2 Point 2.4.2.1).

According to the *situated cognition approach*, educators cannot assume that learning takes place through abstract lectures or that one can provide context-neutral information to learners. Neither can it be assumed that learning will be transferred to different settings. Learning needs to be contextualised in complex real-life settings and learners need to understand these settings. If educators wish to enhance transfer of learning, they need to stipulate these links to learners (Artess 2003:4; Massyn 2009:136) (cf. Chapter 2 Point 2.4.2.2).

Experiential Learning plays a central role in adult education (Knowles *et al.* 2005:197, Merriam et al. 2007:161). Gravett (2005:15-16) indicates that experience is used in various ways in adult education, for instance, in the beginning of the learning process by looking at prior knowledge, using experiences to link to and reflect on new knowledge, and also to create learning experiences where new knowledge could be tested, evaluated and adapted.

Kolb's model that focuses on experience is based on a constructivist approach, where learners construct knowledge through reflection on their experiences and interactions with others to create deep learning (Gravett 2005:14, Merriam *et al.* 2007:163, Taylor *et al.* 2000:23). Kolb (in Knowles *et al.* 2005:197) describes learning as the process whereby knowledge is created through transformation and experience. The four approaches to learning (concrete experiences, abstract conceptualisation, active experimentation and reflective observation) are divided in two main categories, namely grasping experience (on a vertical axis) and transforming experience (on the horizontal axis). According to Kolb (in Taylor *et al.* 2000:24), for learning to take place, the learner needs to work through all four dimensions of the cycle - it does not matter where in the cycle the learner starts. By implementing Kolb's model, educators can address individual differences, because various learning styles are accommodated in the learning process. Style variety creates awareness of the diverse responses of learners to their experiences (cf. Chapter 2 Point 2.4.2.3).

6.7.1.2 Adult education and adult learning

Adult education (including adult learning principles), the attributes of the adult learner, the education and training of the educator, the adult education facilitator and teaching practice principles.

a) Adult learning principles

(cf. Chapter 2 Point 2.6)

It is of utmost importance for educators to have knowledge about adult learners and their needs to design learner-centred learning opportunities. Merriam and Brockett (1997:8) refer to adult education as the activities that are intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults.

Adult education needs to be inclusive of the following:

- Education should be relevant to the adult learners' life-worlds and the educator should explain the rationale and benefit for engagement to their learners to ensure that they make the connection; also have to assess their learners on real-life tasks;
- Educators should give feedback on their learners' progress and help them to build on their strengths and to overcome weaknesses;
- Educators should ensure a safe environment that is characterised by co-operation and exploration;
- Educators must recognise that adult learners would like to make a contribution to the application of new knowledge and skills;
- Educators must make provision for the fact that adult learners will bring physiological ageing to the learning environment (Gravett 2005:16, Jarvis 2004:145).

b) <u>The attributes of the adult learner</u>

The adult learner is an individual with different experiences, pre-knowledge, life-worlds, life-tasks and life-roles (Gravett 2005:7). Each learner has a unique set of needs, strengths, weaknesses and preferences. Gravett (2005:7) summarised the attributes of adult learners: they are autonomy, responsible and self-determined with a self-concept of being responsible for their own learning and decisions. They need to be respected and acknowledged as human beings.

The educator should ensure, as far as possible, the accommodation of the learner's attributes, preferences and needs. The educator should be experienced and willing to give guidance. This will require learning events that will accommodate independence, responsibility and self-direction through communication between the adult educator and the learner (Vella 1994:189). [cf. Chapter 2, Point 2.6.)

c) <u>The education and training of the educators of adults</u>

(cf. Chapter 2 Point 2.8.1)

According to Van Rooy (2001:62) adult education is the process of promoting and improving all the types of learning with which educators of adults and their learners may be involved. It further refers to the learning activities engaged in by adults in

either a formal or non-formal educational setting for the purpose of affecting personal change and growth. It also refers to the field of academic study that examines the discipline of adult learning and the delivery of learning programmes for adults. This author further emphasises that the roles of ETD practitioners appear to be broadly similar across the field and are clustered around teaching, design and management. Van Rooy (2001:66) states that: … "In higher education contexts, because it is not immediately linked to the workplace, learning programmes tend to be evaluated in terms of whether learners have acquired knowledge rather than whether or not they can apply knowledge."

To teach and train as educator of adults in CPD, it is necessary to offer programmes and content which provide opportunities for applying learning to the workplace contexts.

d) The adult education facilitator

(cf. Chapter 2 Point 2.8.2.)

Knowles (in Jarvis 1996:45) refers to adult education as the art and science of facilitating adult learning. Facilitation is a process of indentifying, and providing, suitable resources that will aid the learning process. Systematic planning is a powerful tool for designing effective, efficient, relevant and innovative learning events. It involves the assessment of the needs of the learner, developing event objectives, formulating an instructional plan, and designing a programme evaluation plan (Scholtz 2005:15).

Facilitators should encourage adult learners to reflect on a particular idea and to analyse it based on their respective experiences, and implement methods to assist health professionals to see the relation between theory and practice. If facilitators aim to provide an efficient and effective service to them they need to involve them in all the stages of a well-planned educational CPD event.

e) Teaching practice principles

(cf. Chapter 2 Point 2.8.3.)

Good teaching practice needs to be developed and supported by an institutional environment and culture that are conductive to learning and depend on factors such as

resourcing, staffing, workloads, venues, libraries, time-tabling, leadership and management, incentives and human resources policies and practices (HEQC CHE 2004:143).

CPD that is a process that is mostly outside formal training and outside graduate training actually demands more mechanisms and support to ensuring good teaching practice. CPD can, however, also be part of formal post-graduate training where the institutional environment and culture can be conductive to learning. The linkage between private providers of CPD programmes and university providers may necessitate further research.

f) <u>Strategies and technologies</u>

According to Scholtz (2005:15) traditional teaching no longer maximises educational value, thus, learner-centred methods should be used more.

In Chapter 2 (Point 2.7) the researcher dealt with a number of educational strategies and technologies, namely self-directed learning and study materials, instructional-design theory to guide the creation of online learning communities; and online instruction in a continuing professional education setting. The researcher did not refer, in the literature review to the more traditional lecturer-centred strategies although it was included in the needs analysis questionnaire survey (cf. Appendix A3, Section B, Question 20) together with other strategies and methods.

[For a more detailed discussion on self-directed learning and online learning please cf. Chapter 2 Point 2.7.]

6.7.2 Findings from the needs analysis questionnaire

The contextualisation of adult education and adult learning was not included in the needs analysis questionnaire, although a small number of factors were included in Section B (Professional Development) of this questionnaire and will be dealt with later (cf. Aspect C Point 6.8).

6.7.3 Findings from the Delphi survey

The Delphi panel of experts made recommendations as far as the contextualisation of adult education and adult learning is concerned.

B1 ADULT EDUCATION AND ADULT LEARNING

It is recommended that the following criterion-statements are essential (typed in bold) or are useful to be included in the model.

B1.1 The attributes of the adult learner:

B1.1.1 Although the attributes of the adult learner depends on their previous experience, exposure and learning style preference, adult learners in general:

- **need to be respected and acknowledged as responsible human beings**
- **have self-determination**
- *prefer autonomy (no consensus, but stability was reached by 70% of respondents that the criterion-statement is useful to be included in the model)*
- *have a self-concept of being responsible for their own learning and decisions (no consensus, but stability was reached by 50% of respondents that the criterion-statement is useful to be included in the model)*

B1.2 Learning events:

B1.2.1 Learning events have to accommodate:

- **a two way communication process between the educator and the adult learner to ensure**
  - independence
  - responsibility
  - self-direction

B1.3 Learning experiences:

B1.3.1 It must be recognised that the adult learner has the following learning experiences:

- **specific attitudes towards learning**
- **pre-conceptions that come into play when knowledge has to be applied**
- a vast array of life experiences

B1.4 Learning process:

B1.4.1 During the learning process adult learners

- **want to participate in the learning process**
- **prefer that learning be facilitated rather than didactic with a synergistic result**

B1.5 Learning facilitation:

B1.5.1 During the learning facilitation process facilitators need to explore learners':

- **experiences**
- beliefs
- **needs**

and utilise and compliment the learners' experiences, beliefs and needs

B1.5.2During the learning facilitation process facilitators need to

- **ensure the relevance of learning content**
- **ensure the applicability of learning content**

B1.6 Learning strategies for adult learners:

B1.6.1 Adult education strategies have to include the following or must emphasise the following:

- **the need for feedback on progress, strengths and weaknesses**
- **learners' contribution to application potential of new learning**
- **adults' contribution of physiological ageing to the learning environment (such as visual, auditive, energy and health deterioration) and the effect thereof on the learning environment**
- **the fact that adults learn best if they feel safe and protected and the facilitator must ensure an environment of co-operation where they feel safe to explore**
- the relevance of education strategies to their life-worlds and they should know the rationale or benefit for transformation or engagement
- all examples and case studies should be from the learners' real-life experiences/life-world

6.7.4 Conclusive remarks

The researcher is of the opinion that the contextualisation of adult education – including the theoretical grounding thereof, as well as the recommendations made by the Delphi experts on adult education and adult learning are of utmost importance and have to be included in the model for CPD (cf. Figure 6.3).

FIGURE 6.3: ASPECT B: CONTEXTUALISATION OF ADULT EDUCATION
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.8 ASPECT C: THE CONTEXTUALISATION OF CONTINUING PROFESSIONAL DEVELOPMENT

6.8.1 Theoretical grounding based on literature

[Please cf. Chapter 2, Point 2.10.1.1; Points 2.10.2 – 2.10.9].

To contextualise and discuss CPD the emphasis will be placed on the following main elements:

- CPD in context : the purpose of CPD
- Models of CPD
- Activities which can contribute to CPD
- Factors affecting CPD
- Support for CPD
- Systems associated with CPD
- Criteria for Effective Continuing Education
- Management of CPD: Guidelines of the HPCSA (2009).

6.8.1.1 *CPD in context: The purpose of CPD*

[cf. Chapter 2, Points 2.10.1 and 2.10.2].

CPD is the learning in which professionals engage in the context of their working lives. It includes the maintenance and enhancement of the knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to their own needs, their employer, the profession and the society. It includes a wide range of learning activities throughout their career to ensure that they practice safely, effectively and legally within their scope of practice.

According to the HPCSA (2009:5) the purpose of CPD is to assist health professionals in maintaining and acquiring new and updated levels of knowledge, skills and ethical attitudes that will be of measurable benefit in professional practice and to enhance and promote integrity. The accepted purpose of CPD is to enhance the quality of performance received by and to the benefit of the client/patient.

There is a distinction between CPD as an attitude of mind and as an act of compliance. The statutory requirement for CPD and the professional bodies' approach should ensure public safety and the enhancement of professional excellence. The motivation for CPD is influenced by various factors such as career development and promotion, the fulfilment of statutory requirements, the desire to learn and to develop with the view of better professional performance and job satisfaction, etc.

6.8.1.2 *Models of CPD*

[cf. Point 2.10.3.]

The different models of CPD include the Input-based model, the Outcomes-model, the Sanctions and benefits model, as well as the Obligatory model.

Health professionals in South Africa follow mainly the Input-based model as this model specifies how much CPD activity should be undertaken over a given period of time in terms of points collected and is linked to recognised learning activities. The focus is more on the activity itself rather than the learning gained and its impact on practice. It further includes also a sanction-type of model where compulsory monitored CPD is emphasised and where non-participation results in "sanctions" that can include loss of membership / professional status. The HPCSA places emphasis on individual responsibility, professional autonomy, openness and flexibility and places the responsibility on the professional to ensure that his/her learning needs are fulfilled, that the learning that took place be transferred to practice and that it will benefit the client/patient.

6.8.1.3 *Activities that can contribute to CPD*

[cf. Chapter 2, Point 2.10.4.]

A wide range of activities can contribute to professional's CPD and there is the expectation that an individual's CPD will constitute a balance of planned formal and informal learning, as well as incidental learning. The choice of CPD activities should reflect the different stages of an individual's career and should focus on the learning achieved and its impact on practice.

6.8.1.4 *Factors affecting CPD*

[cf. Chapter 2, Point 2.10.5.]

There is a need to be aware of both the positive attitudes towards CPD and the factors that facilitate CPD. The inhibitory factors affecting an individual's ability to engage in effective CPD need to be recognised. Factors influencing CPD, for example are, sufficient opportunities, motivational factors to engage in CPD, needs-driven CPD, and logistic factors such as venues, time, cost and learning preferences.

6.8.1.5 *Support for CPD*

[cf. Chapter 2, Point 2.10.6.]

The responsibility for CPD should lie with the individual; however, effective CPD of an individual needs to be planned with and supported by employers and managers and guided strategically by the organisation and by the relevant professional body.

For any organisation, CPD must be managed on a continuing basis through the promotion of learning as an integral component of work and thus, introducing a culture of learning in the organisation, rather than occasional injections of "training". The organisation should have clear strategies to guide the integration between learning and work and appropriate resources to integrate them.

CPD should be linked to broader organisational learning and competitiveness and is likely to be fostered if organisations can see a return on "human investment". Learning organisations with an effective learning environment, will attract active, ambitious learners who would like to foster and encourage learning environments to the benefit of all levels of the organisation. The organisation and the individual have responsibilities around CPD.

6.8.1.6 *Systems associated with CPD*

[cf. Chapter 2, Point 2.10.7.]

An organisation can encourage and enable individuals to continuously learn and develop, but this needs to be initiated from a management level with appropriate resources allocated to training, implementation and evaluation. The integration of various initiatives at both conceptual and practical level may lead to excellence in the management of systems associated with CPD and can include the following, namely: performance appraisal, mentoring, clinical supervision, peer review and portfolio-keeping.

6.8.1.7 *Adult education and adult learning*

[cf. Chapter 2, Point 2.10.8.]

To maintain and encourage quality in all forms of CPD, a set of educational criteria is necessary. Programme designers, course instructors and lectures can ensure quality in the CPD products, those responsible for auditing and administering programmes can check on high standards and participants can assess what they consume.

The CRISIS criteria for effective continuing education are first described by Harden and Laidlaw in 1992. It related to Brookfield's principles of effective practice in facilitating adult learning (Mulholland 1990:70).

These criteria state that CPD must be convenient, relevant, individualised, self-assessing, interesting, systematic and speculative (for full descriptions please see Points 2.10.8.1 – 2.10.8.7).

6.8.1.8 *Management of CPD: Guidelines of the HPCSA (2009)*

[cf. Chapter 2, Point 2.10.9.]

In the document of the HPCSA (2009) namely, Continuing Professional Development: Guidelines for the Health Care Professionals, 10 aspects are discussed in full. These aspects, together with the CRISIS criteria formed part of Section C in the Delphi-questionnaire.

6.8.2 Findings from the needs analysis questionnaire

[cf. Appendix A3, Section B; Chapter 4, Point 4.3.]

Section B of the Needs analysis questionnaire (Appendix A3) deals with issues related to the need for and the factors impacting on Professional Development. Respondents were asked to indicate whether they are keeping abreast of development in their field as far as theoretical and clinical practice are concerned; whether there are sufficient opportunities to keep them informed; whether they experience any stumbling-blocks as far as CPD in concerned; what motivating factors there are for CPD engagement; how they acquire CPD points; and, their preferences as far as venues, fees, time, duration of events and learning situations are concerned.

In Chapter 4 (Point 4.3) the results were reported and discussed (please also see Point 4.7.2.2). From these findings it is recommended that the following issues are included in the model:

6.8.2.1 *A variety of CPD-programmes*

A variety of CPD programmes including strategies, approaches, opportunities and activities to be offered to ensure that the needs of the occupational therapists are met.

6.8.2.2 *CPD programmes to be accessible*

CPD programmes structured as such that it is accessible to occupational therapists.

6.8.2.3 *CPD programmes to be affordable*

CPD programmes to be convenient as far as time, cost, venue and mode of delivery is concerned.

6.8.2.4 *CPD programmes to be relevant*

CPD programmes must include relevant content and must be informative.

6.8.2.5 *Learning situations*

A selection of learning situations to be included in CPD programmes on offer.

Section E of the Needs analysis questionnaire (Appendix A3) deals with issues related to adult education and CPD. Respondents were asked, as mature, experienced adult learners in a profession, which factors are important as far as CPD is concerned and how more effective CPD programmes can be offered to occupational therapists.

In Chapter 4 (Point 4.6) the findings were reported and discussed. A number of these findings have relevance on ASPECT C: THE CONTEXTUALISATION OF CPD. The following recommendations can be included in the model:

- It is recommended that the following important factors as far as CPD is concerned are included:
  - Factors that take the learner's needs into consideration as far as the content and context of CPD programmes are concerned.
  - Factors that take the learner's needs into consideration as far as the CPD process is concerned (including the managing and administrating process by the HPCSA as well as the managing process of CPD programmes).
  - Factors that take the learner's needs into consideration as far as the educational grounding is concerned.
  - Factors that take the learner's needs into consideration as far as the educator of adult learners is concerned.
  - Factors that take the learner's needs into consideration as far as quality is concerned.
- Recommendations on how to offer more effective CPD programmes:
  - It is recommended that a variation of opportunities and activities (of quality) be offered to suit the needs of individual or groups of occupational therapists.
  - It is recommended that CPD programmes of high quality must be affordable, accessible, relevant, interesting, applicable and available.
  - It is recommended that CPD programmes be advertised and published in advance.
  - It is recommended that CPD administration be in place.
  - It is recommended that the focus be on knowledge and skills development and not on the gathering of CPD points.

6.8.3 Findings from the Delphi survey

The Delphi panel of experts made recommendations as far as the contextualising of CPD aspects.

C1 CONTEXTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT

It is recommended that the following criterion-statements are **essential** or are useful to be included in the model.

C1.1 The purpose of CPD:

C1.1.1 The broad purpose of CPD

- **is a continuing process that allows individual health professionals to maintain and improve standards of professional practice**
- **through the development of knowledge, skills, attitudes and behaviour**

C1.2 The CPD process:

C.1.2.1 The CPD process is a linear process and includes:

- **a need assessment through identifying weaknesses or areas to be developed**
- **learning outcomes**
- **developing a learning plan**
- **implementing the learning plan (CPD event)**
- assessment (formative and summative)
- **evaluating the CPD event**
- **measuring the outcome of the CPD event**
- **improved competencies**
- **higher quality patient care**

C1.3 Management of CPD

C1.3.1 To manage CPD a thorough knowledge of the definitions, roles and responsibilities of the following is necessary:

- health professional
- accreditors
- service providers
- professional board
- national accreditors forum
- HPCSA CPD committee

C1.3.2 To manage CPD a thorough knowledge of the hierarchy of learning activities is necessary:

- **activities on Level 1 and CEUs allocated**
- **activities on Level 2 and CEUs allocated**
- **activities on Level 3 and CEUs allocated**

C1.3.3To manage CPD a thorough knowledge of the specific regulations and rules on the following is necessary:

- activities that do not qualify for CEUs
- non-compliance
- deferment
- health professional abroad
- retirement, illness and non-clinical practice
- community service
- voluntary removal from register : de-registration
- restoration after erasure

C1.4 Criteria for effective CPD

C1.4.1 The following criteria ensure effective CPD:

- **convenience for the participant in terms of**

  - **time**
  - **pace**
  - **place**
- **relevance to the needs of the participant**
- individualisation to the needs of the participant
- **self-assessment by the participant of his/her own competence**
- **interest in the programme by the participant**
- **a systematic coverage of the topic / theme for the programme**
- **inclusion of grey areas or areas of speculation in the programme**

6.8.4 Conclusive remarks

The researcher is of the opinion that the contextualisation of CPD – including the theoretical grounding thereof, as well as the recommendations drawn from the findings of the Needs analysis questionnaire survey and the recommendations made by the Delphi experts on the contextualising of CPD are of utmost importance and have to be included in the model for CPD (cf. Figure 6.4).

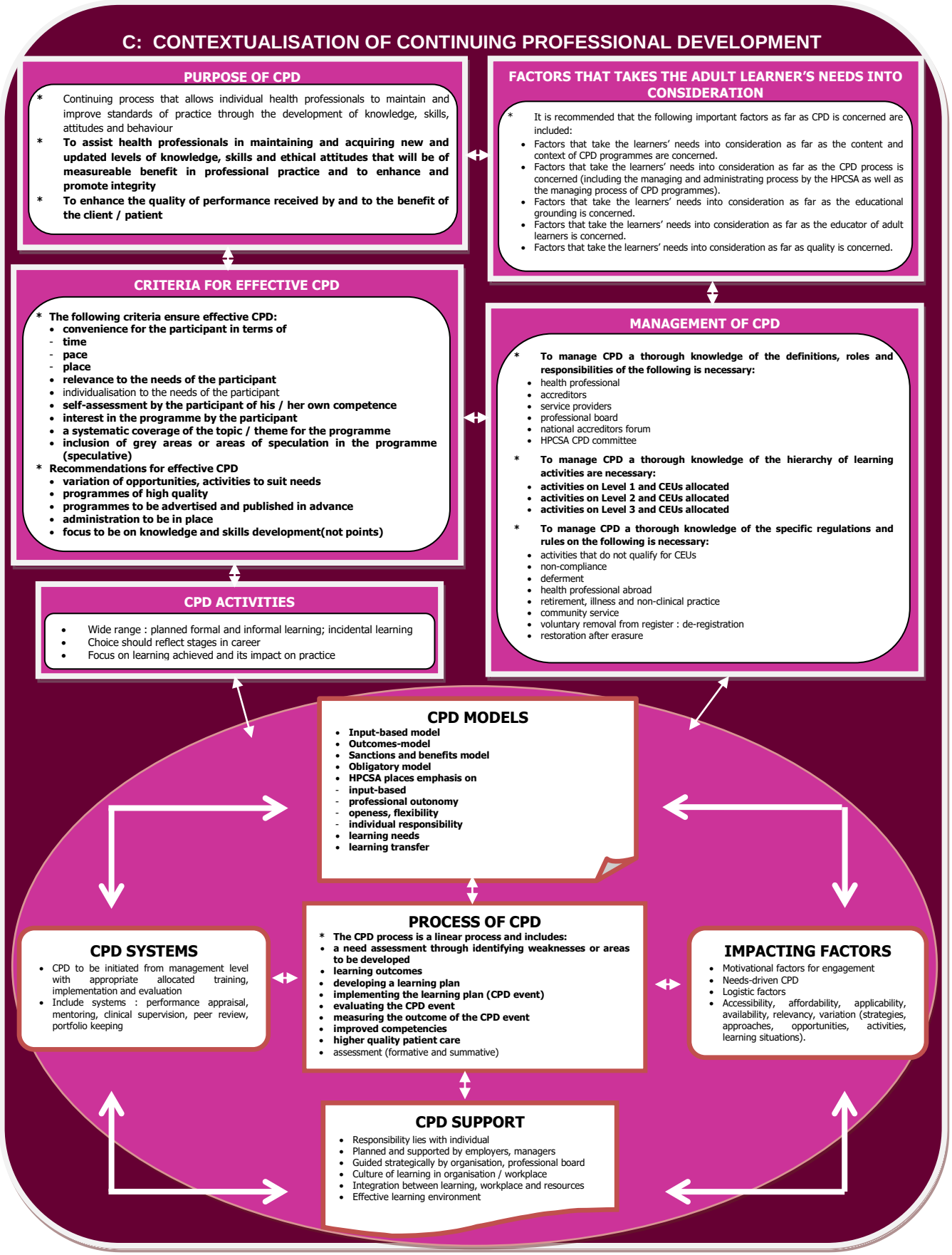


FIGURE 6.4: ASPECT C: CONTEXTUALISATION OF CONTINUING PROFESSIONAL DEVELOPMENT
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.9 ASPECT D: THE DESIGN OF LEARNING

6.9.1 Theoretical grounding based on literature

[cf. Chapter 2, Point 2.5.]

Merriam and Caffarella (in Kiely *et al.*2004) developed a conceptual framework to incorporate the most prominent adult-learning theories with the view to include the different approaches and perspectives to adult learning. This framework was expanded by Kiely *et al.* (2004:18) to include four areas or lenses relevant to adult learning. Massyn (2009:142) further describes and explains that the lenses each provides a different perspective on adult learning, but altogether they provide a holistic view of adult learning. (cf. the Four-lens model, Figure 2.2.) The four lenses represent the adult learner, the context within which adults learn; the learning process and the educator.

6.9.1.1 *Adult learner lens*

[cf. Chapter 2, Point 2.5.1.]

The focus of the lens is the characteristics of the adult learners and includes characteristics such as self-directed learning and an array of experiences, knowledge, skills and behaviour that they bring to the learning environment and context. This lens also focuses on adult development perspectives. The question that could be asked here is: "Who is the adult learner for whom CPD programmes are offered?"

6.9.1.2 *Context lens*

[cf. Chapter 2, Point 2.5.2.]

The focus of the lens is to foster an appropriate learning climate in which learning will take place. Kiely *et al.* (2004:24) distinguish between the interactive and structural dimensions in adult learning: the interactive dimension refers to the relationship between learners, the social surroundings and the physical setting while the structural dimension is concerned with how relationships of power affect the ability of adult learners. The affective-social dimension refers to the psychological safety of the learner

where they can feel trusted and respected (Massyn 2009:144). Gravett (2005:43) argues that the intellectual climate should focus on providing tasks and experiences that challenge the learners with the view to engage with and explore learning. Principles from situated cognition (cf. Chapter 2, Point 2.4.2.2) can embed learning for students in a context that is relevant to them (Massyn 2009:145). The question that could be asked here is : "What are the interactive and structural components in adult learning and how can an appropriate learning climate be developed?".

6.9.1.3 *Process lens*

[cf. Chapter 2, Point 2.5.3.]

In the traditional content model the educator determines the content beforehand and designs the learning around the content in the form of lectures and guides, while in the process model the educator prepares a set of procedures that will be used to involve the learner. The difference lies in the fact that the content model is concerned with the transmission of information, while the process model is more concerned with procedures and resources that will help learners acquire skills and knowledge. (cf. eight steps of the process model, Chapter 2, Point 2.5.3). Both models assume the active participation of the adult learner (Massyn 2009:146). This lens focuses on the design of the learning experience, including principles from transformation learning and self-directed learning. The question that could be asked here is: "How do adults learn?".

6.9.1.4 *Adult educator lens*

[cf. Chapter 2, Point 2.5.4.]

The adult educator lens focuses on the role of the educator in the learning process. Adults prefer learner-centred environments and should be regarded as partners in the learning process (Kiely *et al.* 2004:26). The educator needs to create a learning climate that is conductive to sharing, but challenging enough to encourage critical reflection and a reconsideration of who the student is. Experiential learning provides a framework in which the adult educator can use the learners' experiences in a constructive way that facilitates learning (Massyn 2009:147). The question that could be asked here is : "What is the role of the adult educator in the learning process?".

6.9.2 Findings from the needs analysis questionnaire

[cf. Appendix A3, Section E; Chapter 4, Point 4.6.]

Section E of the Needs analysis questionnaire (Appendix A3) deals with issues related to adult education and CPD. Respondents were asked, as mature, experienced adult learners in a profession, which factors are important as far as CPD is concerned and how more effective CPD programmes can be offered to occupational therapists.

In Chapter 4 (Point 4.6) the findings were reported and discussed. A number of these findings have relevance on ASPECT D: THE DESIGN OF LEARNING and some recommendations can be drawn with the view to be included in the model. When learning is designed for CPD programmes the following must be taken into account:

6.9.2.1 The identification of the **characteristics of the adult learner** as well as the recognition there-of in the designing of learning.

6.9.2.2 The development of an **appropriate learning climate** to ensure relevant learning and reflection is needed.

6.9.2.3 The development of **appropriate learning experiences** with active participation is needed.

6.9.2.4 The identification of **the role of the adult educator** in a learner-centred environment using learners' experiences to facilitate learning.

6.9.3 Findings from the Delphi survey

Aspect D – the design of learning – was not included in the Delphi survey.

6.9.4 Concluding remarks

The researcher is of the opinion that a clear understanding of the design of learning is of the utmost importance and has to be included in the model for CPD (cf. Figure 6.5).

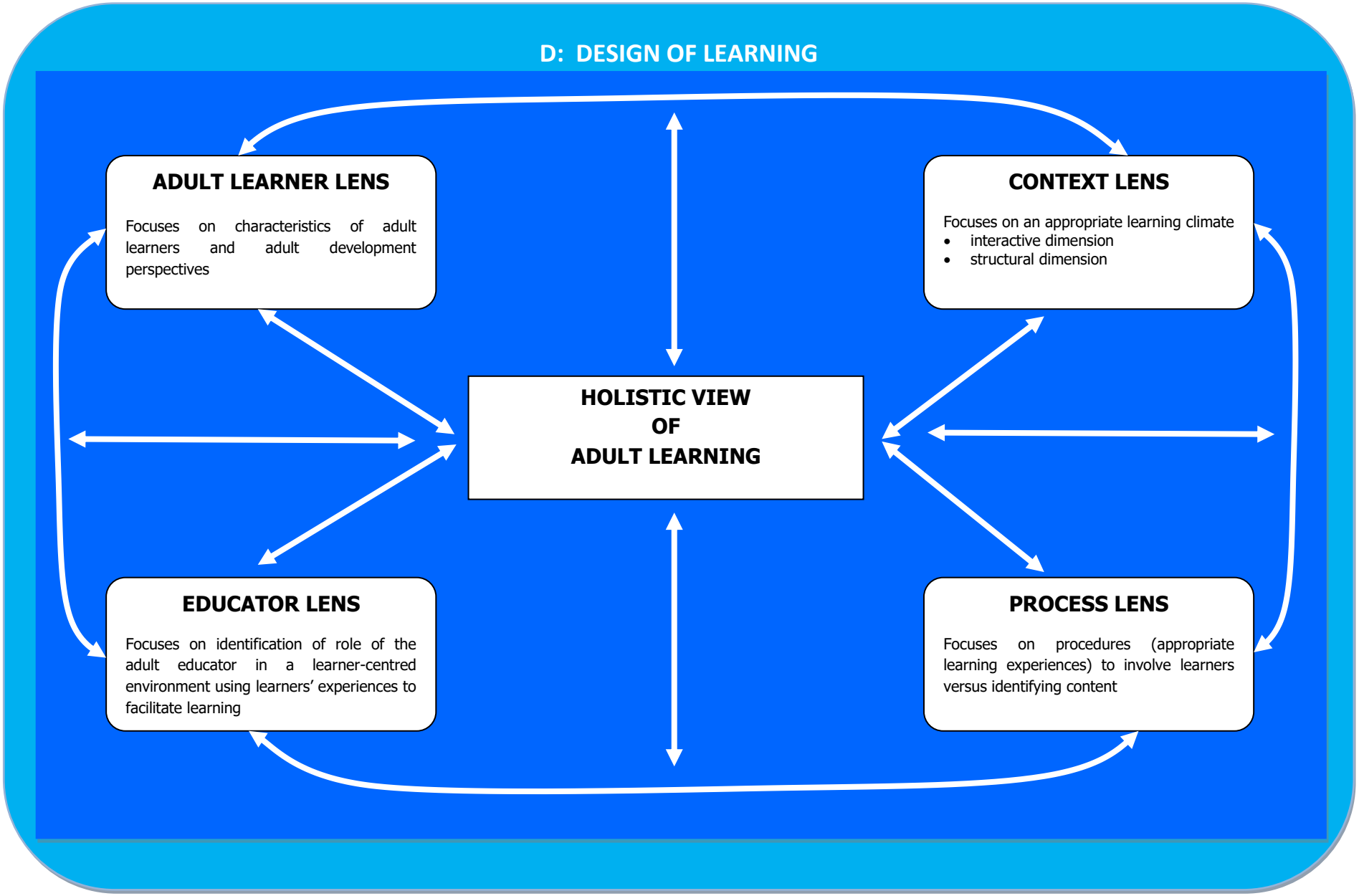


FIGURE 6.5: ASPECT D: DESIGN OF LEARNING
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.10 ASPECT E: THE CONTENT OF CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMMES

6.10.1 Theoretical grounding based on literature

[cf. Chapter 2, Point 2.10.8.]

6.10.1.1 *Relevance of content*

The content of CPD programmes must be relevant and reflect the professional's day-to-day role in health care/practice.

Topics to be addressed should be seen as being of practical importance and dealing with everyday problems rather than just academic interest. Knowledge alone is not enough – the learner must be shown the uses to which that knowledge can be put. A connection between relevance and the perceived needs of users is important (cf. Chapter 2, Point 2.10.8.2). To ensure relevance, materials should be aimed at a particular audience and checked for appropriateness with a target group. Relevance of a programme can be improved by examining the needs of the professional to whom the programme is addressed.

6.10.1.2 *Individualisation of content*

Professionals come from various educational backgrounds and circumstances with different levels of experiences. The variation in individuals' needs can be divided into a number of areas, for example the type of practice, previous experience, preferred learning strategies and methods, learning ability and speed, learning on own or in groups, etc. (cf. Chapter 2, Point 2.10.8.3). Programmes must include aspects that are of interest to the individual / small group of individuals.

6.10.1.3 *Areas of speculation and controversy*

Areas of speculation and controversy should be included in CPD programmes when the content is selected as it will add interest to the programme, it will make the programme credible and relevant to day-to-day practice and that will help the health professional to tackle problems in practice (cf. Chapter 2, Point 2.10.8.6).

6.10.1.4 *Content to be offered in a systematic way*

CPD programme developers should cover the content in a systematic manner and provide all the information that the learners need to know about a particular topic. It need not include all there is to know or even all that is nice to know (cf. Chapter 2, Point 2.10.8.7).

6.10.2 Findings from the needs analysis questionnaire

[cf. Appendix A3, Section C and Section D; Chapter 4, Point 4.7.3.]

This section dealt firstly with the needs of occupational therapists in clinical, business, computers, managed care, ethics, interpersonal skills and personal growth areas.

Secondly, it established what type of educational product/service the occupational therapists would like to be included in a fully inclusive CPD-initiative.

The respondents clearly distinguished between the different options in each area with a clear preference showing that their interest lies in the clinical field or content of programmes in clinical areas.

As far as the choice of a specific educational product/service is concerned a large group identified one-day refresher seminars, newsletters on the latest developments, full journal articles, summaries of latest developments, training workshops and compact disk-based educational programmes.

These important choices must give CPD developers direction in planning CPD programmes, opportunities and activities.

As far as content need 70.00%of the respondents indicated a need for CPD in neuropaediatric, sensory integration and general paediatric clinical areas. More than 50.00%+ of respondents indicated a need for including specific topics in the following non-clinical areas namely business, computer, health policy, ethical, interpersonal skills and personal growth areas. (For detailed information please see Chapter 4, Point 4.4 and Point 4.7.3.2.)

Section D of the Needs analysis questionnaire asked respondents to indicate the appropriateness of various CPD activities.

This section dealt with the appropriateness of various CPD activities as far as the effectiveness of the current products or activities on offer; with the importance of the product or activity for future CPD; and with the necessity of the product or activity for future CPD.

It is recommended that CPD developers look into the findings of this research study as far as the appropriateness of educational products or activities has been expressed. It was clear from the study that there is quite a variation in the effectiveness, importance and necessity of products. The effectiveness can be unsatisfactory, but respondents felt that it is important and necessary to be included in the future and so forth (cf. Table 4.49 for full details).

6.10.3 Findings from the Delphi survey

The Delphi panel of experts made recommendations as far as the need for CPD in specific areas is concerned.

D1 NEED FOR CDP IN SPECIFIC AREAS

It is recommended that the following criterion-statements are **essential** or are useful to be included in the model.

D1.1 Content need

D1.1.1 The following needs must be included (separate or within) in CPD programmes/offerings:

- **clinical needs**
  - **programmes have to include topics on clinical disease areas**
- **Health policy needs**
  - **programmes have to include topics on health policy areas**
- **Ethical needs**
  - **programmes have to include topics on ethical areas**

- Interpersonal skills needs
  - programmes have to include topics on interpersonal skills areas
- *Business needs*
  - *programmes have to include topics on business areas (no consensus, but stability was reached by 40.00% of respondents that the criterion-statement is essential to be included and 40.00% of respondents that the criterion-statement is useful to be included in the model – with 20.00% of respondents indicating no inclusion).*
- *Personal growth areas*
  - *programmes have to include topics on personal growth areas (no consensus, but stability was reached by 30.00% of respondents that the criterion-statement is essential to be included and 50.00% of respondents that the criterion-statement is useful to be included in the model – with 20.00% of respondents that indicated no inclusion).*
- *Computer needs*
  - *programmes have to include topics on computer areas (no consensus, but stability was reached by 20.00% of respondents that the criterion-statement is essential to be included and 40.00% of respondents that the criterion-statement is useful to be included in the model – with 40.00% of respondents that indicated no inclusion.*

6.10.4 Conclusive remarks

The researcher is of the opinion that a clear understanding of the content need in CPD programmes is of the utmost importance and has to be included in the model for CPD (cf. Figure 6.6.)

E: CONTENT OF CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMMES

- **Aspects to be taken into account identifying content:**

* Relevance of content
* Individualisation of content
* Areas of speculation and controversy
* Content to be offered in a systematic way
* Variation in type of educational product / service to be included
* Appropriateness of CPD activities (effectiveness, importance and necessity)

- **Content needs to be included (separate or within) in CPD programmes / offerings:**

* **Clinical needs**
- **programmes have to include topics on clinical disease areas**

* **Health policy needs**
- **programmes have to include topics on health policy areas**

* **Ethical needs**
- **programmes have to include topics on ethical areas**

* Interpersonal skills needs
- programmes have to include topics on interpersonal skills areas

* Business needs
- programmes have to include topics on business areas

* Personal growth areas
- programmes have to include topics on personal growth areas

* Computer needs
- programmes have to include topics on computer areas

FIGURE 6.6: ASPECT E: CONTENT OF CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMMES
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.11 ASPECT F: LEARNING TRANSFER TO PROFESSIONAL PRACTICE

6.11.1 Theoretical grounding based on literature

[cf. Chapter 2, Point 2.9.]

Although it is evident that learning occurs during continuing professional development it is less evident whether and how learning is applied in the workplace or practice. Continuing adult education must facilitate the successful performance of practitioners in the professional work. According to Cervero (1988) the application of learning after the programme and the impact of application on learning are indicators of the effectiveness of a CPD programme.

Annett and Sparrow (1985:118) argue that the transfer of learning rests on an understanding of how prior learning influences later learning. Application involves putting learning from CPD programmes into practical contact with intended application settings such as practices, schools or community settings.

Ottoson (1997:1-16) identifies five types of influences that impact on learning transfer and application, namely educational innovation, predisposing, enabling and reinforcing influences (Chapter 2, Point 2.9.1-2.9.5). CPD programme developers should bear knowledge of these influences and application needs to be anticipated during programme design and pursued in programme implementation and evaluation.

6.11.2 Findings from the needs analysis questionnaire

[cf. Appendix A3, Sections E and F; Chapter 4, Point 4.6.]

No direct questions in a separate Section on "Learning transfer to professional practice" were put to respondents in the Needs analysis questionnaire, however, responses from the occupational therapists on questions directed at Adult Education (Section E of Appendix A3) suggest valuable information (Please see respondents own words in Chapter 4, Point 4.6.)

From these findings the following was clear (only a few examples are given here):

- CPD programmes must contain clinical information with the opportunity to apply it and that has to make a difference in service delivery.
- CPD programmes must include opportunities to apply ideas and gained learning to real life situations.
- CPD programmes must ensure best models of practice.
- The relevance of content in CPD programmes must lead to professional gain and integration into practice.

6.11.3 Findings from the Delphi survey

No questions in a separate Section on "Learning transfer to professional practice" were put to the Delphi panel.

6.11.4 Conclusive remarks

The researcher is of the opinion that a clear understanding of learning transfer to professional practice are of the utmost importance and have to be included in the model for CPD (cf. Figure 6.7).

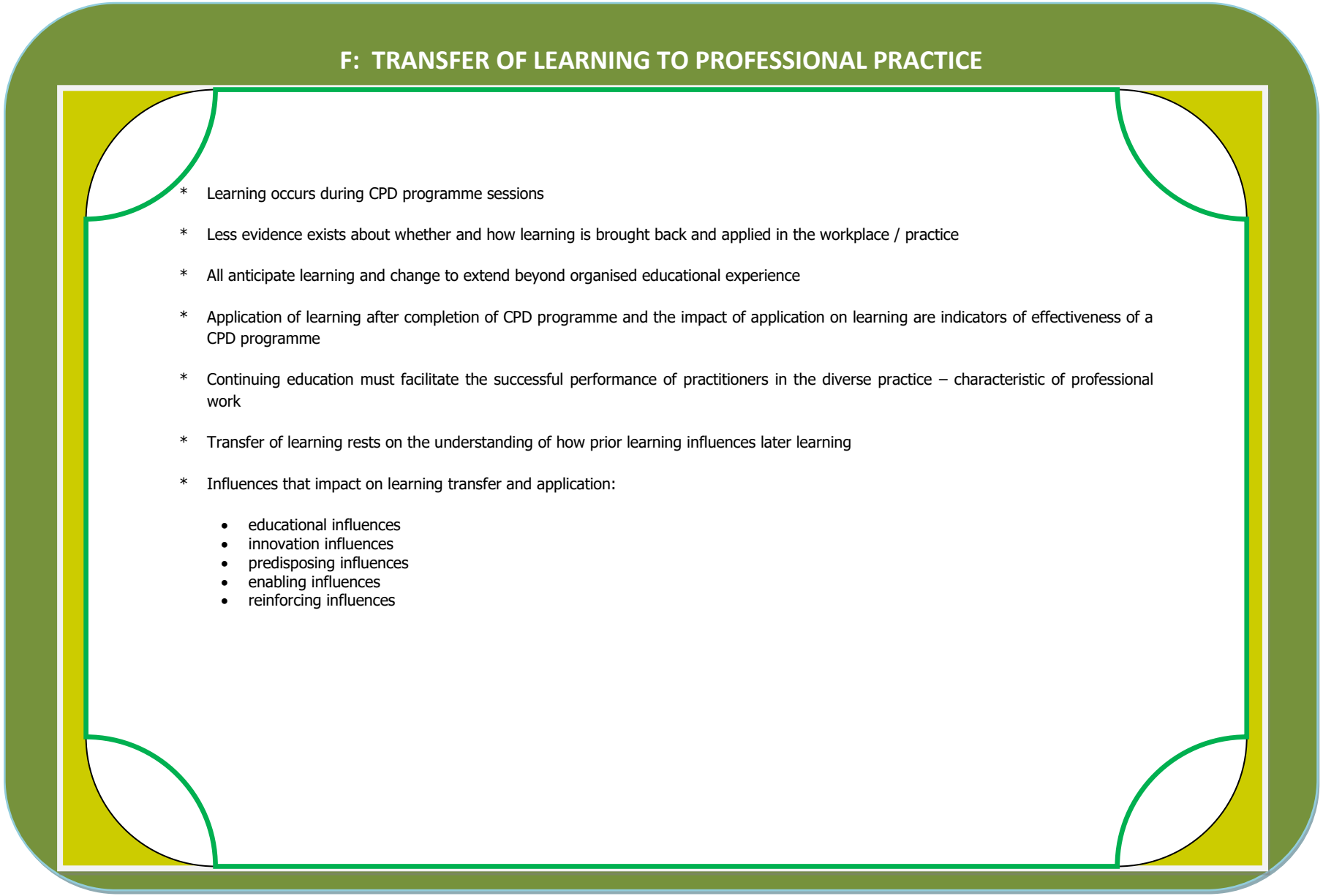


FIGURE 6.7: ASPECT F: TRANSFER OF LEARNING TO PROFESSIONAL PRACTICE
[Compiled by the Researcher, Collender (2011) as part of this Ph.D. project]

6.12 RECOMMENDATIONS MADE WITH REGARD TO THE MODEL

[cf. Figure 6.8.]

In Figure 6.8, A model for CPD, the dynamics of this model is shown by arrows and links between the different aspects constituting the model. The dynamics of the different elements constituting each aspect is described under points 6.6-6.11. The researcher is of the opinion that the linkages between the different aspects and how they impact on one-another, have to be included when the Model will be presented in article-format.

The researcher will endeavour to make a number of recommendations with regard to the model for CPD in Occupational Therapy from an adult education perspective. The researcher does not try to focus on every detailed finding or result from the study, but prefer to place emphasis on a holistic approach highlighting main areas and giving direction to future planning and implementation of CPD programmes.

In line with this argumentation, the reader's attention is drawn to specific results and findings as reported in Chapter 4 and Chapter 5. CPD planners can take notice of these detailed findings when planning programmes for a specific group or in specific circumstances – taking into account the needs of occupational therapists.

Recommendations are made on theoretical grounding from literature, the results from the Needs analysis questionnaire survey as well as from the findings of the Delphi study. All recommendations will make reference to the relevant sections in the thesis.

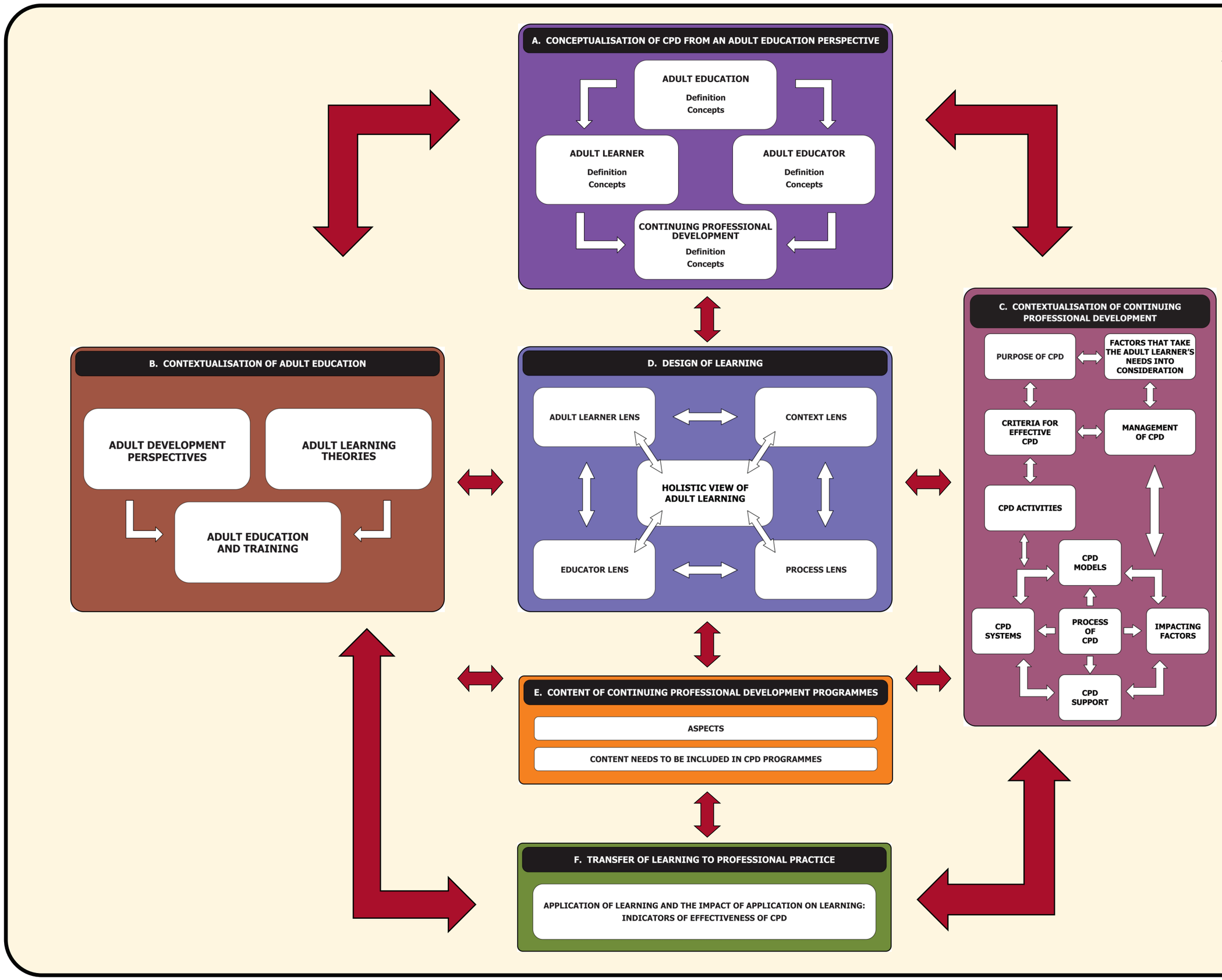


FIGURE 6.8: A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE
[Compiled by Researcher, Collender (2011) as part of this Ph.D. project]

The following recommendations are made regarding the model:

6.12.1 The conceptualisation of Continuing Professional Development from an adult education perspective

To implement and use the model in an efficient and effective way it is necessary to understand and conceptualise CPD from an adult education perspective. This entails the theoretical grounding based on the literature as well as on the findings from the Delphi survey and includes the definitions and relevant concepts such as adult education, adult learner, adult educator and CPD. The model will allow the maintenance and improvement of standards through the development of knowledge, skills, attitudes and professional behaviour. Adult learners with their different pre-knowledge, life-worlds, life-tasks, life-roles and experiences that they bring to the learning environment also have their own set of needs, strengths, weaknesses and preferences – recognising and understanding this will ensure, when implementing the model, that teaching adult learners will be approached in a different way. [cf. Chapter 2, Point 2.2.1 and Point 2.10.1; Chapter 6, Point 6.6.1, Point 6.6.3 Figure 6.2.]

6.12.2 Contextualisation of adult education

To contextualise adult education it is necessary to focus on and understand adult development perspectives, adult learning theories and adult teaching and learning. Adult education perspectives underpin continuing education and professional development and include developmental perspectives as well as the various stages of development. It is an indication of a readiness to learn that would culminate in a *teachable moment* where adults will be motivated to learn. The importance of adult development perspectives is that it provides the educator with knowledge of the life circumstances of adults that lead to a need for further learning. The challenge for adult educators is to understand development well enough to recognise which dimensions are most relevant to a particular group of learners in a particular situation – the occupational therapists undergoing CPD.

The adult learning theories firstly, includes humanism that focuses on developing the potential of the individual: andragogy emphasises the adults self-concept and is based on the ability to take responsibility for own decisions and life; self-directed learning where adult learners take control of their own learning and transformational learning

where adults utilise their experiences and reflect thereon to enhance individual development. Secondly, constructivism – as an adult learning theory – includes critical reflection (reflection on new experiences leads to facilitation of learning); situated cognition (learning needs to be contextualised in real-life settings) and experiential learning (experience is used by looking at prior knowledge, using experiences to link to and reflect on new knowledge).

A thorough knowledge of adult learning and teaching principles, attributes of the adult learner, learning events, learning experiences, learning facilitation and learning process as well as the various strategies and technologies are ingredients that are necessary.

It is recommended that knowledge and understanding form the backbone when planning to implement the model (macro level), a CPD programme/course (meso level) and/or a specific CPD activity (micro level). [cf. Chapter 2, Point 2.3 and Point 2.4; Chapter 6, Point 6.7.1 and Point 6.7.2 and Figure 6.3.]

6.12.3 Contextualising of Continuing Professional Development

CPD is the action of learning in which professionals engage with the context of their working lives. It includes the maintenance and enhancement of the knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to their own needs, their employer, the profession and the society. In includes a wide range of learning activities throughout their career to ensure that they practice safely, effectively and legally within their scope of practice. The purpose of CPD is to enhance the quality of performance received by and to the benefit of the client / patient.

To fulfil the purpose of CPD it is recommended that the model can be implemented taking into account factors that takes the adult learners' needs into consideration, focussing on criteria for effective CPD, the proper management of CPD by authorities and the understanding and evaluation of different support structures needed, the various CPD systems and models as well as to understand the CPD process and its components and their roles. [cf. Chapter 2, Point 2.10.1.1 and Points 2.10.2 – 2.10.9; Chapter 4, Point 4.3 and Figure 6.4; Chapter 6, Points 6.8.1-8.8.3.]

6.12.4 Design of learning

It is recommended that the manager/planner of CPD programmes see the process of the design of learning in a holistic manner; however, it is also of utmost importance to recognise when designing learning activities the need to look into different perspectives as far as the adult learner (focus on the characteristics of adult learners and adult development perspectives); the educator (focus on the identification of the role of the adult educator in a learner-centred environment using learners' experiences to facilitate learning); the context of learning (focus on an appropriate learning climate) as well as, as far as the process is concerned (focus on procedures to involve learners). [cf. Chapter 2, Point 2.5 and Chapter 4, Point 4.6; Chapter 6, Point 6.9.1 and 6.9.2 and Figure 6.6.]

6.12.5 The content of Continuing Professional Development programmes

It is recommended that when identifying the content of CPD the relevance of the content for a specific group must be taken into account, to include content that is also directed to meet the needs of individuals; to also include content that may be controversial and not clear cut and to offer content in a systematic way. It is recommended that a variation in the type of product or service be included and to focus on the appropriateness of CPD activities (effectiveness, importance and necessity).

The study focussed strongly on the abovementioned aspects as well as on the content needs identified by the occupational therapists and was also validated by the Delphi expert panel.

It is recommended that the focus is to include the clinical needs of therapists and that programmes include topics on clinical disease areas, although other needs can be included in CPD programmes, for example programmes may include certain topics on health policy needs, ethical needs, interpersonal skills, business needs, personal growth areas and computer needs. For more detailed information please see relevant sections in thesis. [cf. Chapter 2, Point 2.10.8; Chapter 4, Point 4.7.3; Chapter 5, Point 6.10.2 and 6.10.3 and Figure 6.6.]

6.12.6 Transfer of learning to professional practice

Although it is evident that learning occurs during CPD it is less evident whether and how learning is applied in the workplace or practice. The application of learning after completion of a CPD programme and the impact of application on learning are indicators of whether or not the CPD programme was effective. The transfer of learning rests on an understanding of how prior learning influences later learning – the challenge is to apply the learning that occurs in a real life practical setting. It is recommended that CPD programme developers place emphasis on this aspect of the model and decide in advance how they can facilitate the transfer of learning to professional practice. [cf. Chapter 2, Point 2.9; Chapter 4, Point 4.6; Chapter 6, Point 6.11.2 and Figure 6.7.]

6.12.7 Making adaptions (if needed) for implementation of the model

If an organisation or institution plans to make the model relevant and applicable for their circumstances and to fulfil their specific needs with the view to implement the model, it is recommended that they take the different aspects (as contained in the model) into account in a contextualised way. It must also be kept in mind that the different aspects are aligned with one another. All this is necessary in order to ensure reliability, validity and quality of CPD. [cf. Chapter 6, Figure 6.8.]

6.13 CONCLUSION

In Chapter 6, ***A Model for Continuing Professional Development in Occupational Therapy in South Africa: An adult education perspective***, the model as final outcome of the study was provided, discussed and contextualised in adult education. A number of recommendations were made.

In Chapter 7, Conclusions, recommendations and limitations of the study, a summative discussion, conclusion, recommendations on the study and limitations of the study will be provided.

CHAPTER 7

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

7.1 INTRODUCTION

An in-depth study was done by the researcher with a view to compiling a model for CPD in Occupational Therapy in South Africa from an adult education perspective.

The HPCSA encourages CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also of improving competence and ultimately the performance of the health professional with an end benefit to the patient / client. Adult learners have specific needs and characteristics for which provision has to be made in the designing of CPD programmes.

The aim of this chapter is to provide a brief overview of the study and to present comments and some concluding thoughts on the final findings. The chapter commences with an overview of the study, followed by conclusions drawn, a short discussion on the limitations of the study, the contribution to knowledge and the significance of the study, recommendations on the way forward and a conclusive remark.

7.2 OVERVIEW OF THE STUDY

The research was carried out and completed based on three research questions. The findings of the research served as the foundation for compiling a model for CPD in Occupational Therapy in South Africa from an adult education perspective.

In Chapter 1 [cf. Point 1.3] an outline of the various research questions was presented. The research questions guided the study and shaped the final outcome. In Point 7.2.1 the research questions are reviewed together with the main findings of each research question.

7.2.1 Research question 1

The research question was stated as:

How can CPD be conceptualised and contextualised from an adult education perspective, as the theoretical framework of the study?

The following objective was pursued:

Conceptualising and contextualising adult education and CPD via a literature study, in order to compile a theoretical framework for the study.
This objective addressed research question 1.

This research question aimed to provide the background of the study. In Chapter 2, CPD was conceptualised and contextualised from an adult education perspective. The following issues were dealt with, namely, the conceptualisation and contextualisation of adult education, learning transfer to professional practice as well as the conceptualisation and contextualisation of CPD. The following concepts were defined and described namely **adult education** (cf. 2.2.1.1), **the adult educator** (cf. 2.2.1.2), **the adult learner** (cf. 2.2.1.3) and **CPD** (cf. 2.10). To understand how adult education perspectives underpin continuing education and professional development it was important to give **adult development perspectives** and to describe the various stages of adult development (cf. 2.3). The relationship between the **learning theories** and the **adult learning theory** received attention (cf. 2.4). The prominent theories of adult learning have **humanism** and **constructivism** as a foundation (cf. 2.4.1). Humanism was described in terms of **andragogy** (cf. 2.4.1.1), **self-directed learning** (cf. 2.4.1.2) and **transformational learning** (cf. 2.4.1.2) and **constructivism** in terms of **critical reflection** (cf. 2.4.2.1), **situated cognition** (cf. 2.4.2.2) and **experiential learning** (cf. 2.4.2.3) in relation to adult learning. A conceptual framework to incorporate the most prominent adult learning theories and areas relevant to adult learning was discussed (cf. 2.5). The **four lenses** of this model focussed on the **adult learner** (cf. 2.5.1), the **context** (cf. 2.5.2), the **process** (cf. 2.5.3) and the **adult educator** (cf. 2.5.4).

It is crucial in learner-centred education to have knowledge about learners and their needs, as well as the learning process and strategies for guiding and facilitating learning. **Adult learning principles** (cf. 2.6) were clarified. Adult education **strategies and technologies** were discussed, including **self-directed learning** (cf. 2.7.1), **rationale there-of** (cf. 2.1.1.1), **characteristics** of self-directed learners (cf. 2.7.1.2) and the **development** of self-directed learning (cf. 2.7.1.3) – the **instructional-design theory** to guide the creation of online learning communities (cf. 2.7.2), as well as **online instruction in a continuing professional education setting** (cf. 2.7.3) were discussed.

The education and **training of the adult educator** was viewed from various perspectives (cf. 2.8.1), and the **training of the adult learning facilitator** (cf. 2.8.2) and **teaching practice principles** (cf. 2.8.3) were highlighted.

The importance of whether and how learning during CPD activities is brought back to the workplace and how it could lead to ensuring effectiveness of CPD programmes were discussed, and the **transfer of learning** was emphasised (cf. 2.9).

To contextualise the **purpose of CPD** (cf. 2.10.2), the different CPD models (cf. 2.10.3), **factors** affecting CPD (cf. 2.10.5), the **need** for CPD support (cf. 2.10.6), the different **CPD systems** (cf. 2.10.7) and **CPD opportunities** and **activities** (cf. 2.10.4) were described. The role of **set criteria** (cf. 2.10.8) and **managerial guidelines** to ensure the effectiveness of CPD programmes (cf. 2.10.9) were clarified. An outline of Chapter 2, in the form of a diagrammatic overview, is included in Figure 2.1.

7.2.2 Research question 2

The research question was stated as:

What are the CPD needs of Occupational Therapy practitioners practicing in South Africa; what factors influence CPD; and what is the effectiveness of the various CPD activities offered by providers?

The following objective was pursued:

Compiling a needs analysis for CPD for occupational therapists, identifying factors influencing CPD and determining the effectiveness of various CPD activities for the acquisition of new skills, knowledge and professional behaviour. This objective addressed research question 2.

In responding to research question 2, Chapter 3 described the **design and methodology** employed in the empirical investigation. The **theoretical perspectives** on the research design (cf. 3.2) were provided and it was followed by a explanation of the process of each technique, namely the methodology and procedures designing the occupational therapists' questionnaire, the Delphi questionnaire and the pilot studies, while the sample selection and the data analysis were also described.

The **mixed-methods research** design in this study followed an **embedded design approach** (cf. 3.2.4). This mixed-methods design addresses the aim of the study, namely to develop from an adult education perspective, a model for CDP in Occupational Therapy. An **embedded mixed-method design** was used – a design in which one data set provides a supportive, secondary role in a study based primarily on the other dataset. The overall research project was divided into three phases, namely: Phase 1: A Needs analysis questionnaire survey; Phase II: Delphi survey; and Phase III: Development of Model (cf. Figure 3.4). In Phase I of the research project, the *primary* purpose was to collect quantitative data through a questionnaire survey sent to occupational therapists. The *secondary* purpose was to collect the qualitative data that support and enhance the quality, depth and width of the quantitative data – in most of the questionnaire survey the qualitative data were subordinate to the quantitative data and were used to enhance the quantitative data (except Section E, Appendix A3), where the data was analysed in a qualitative way. The data of the questionnaire survey were analysed separately and interpreted together. In Phase II of the research the *primary* purpose was to collect quantitative data through a Delphi survey directed at a panel of experts. The *secondary* purpose was to collect qualitative data that support and enhance the quantitative data. In the Delphi survey the qualitative data were subordinate to the quantitative data and were used to enhance the quantitative data. The data were interpreted together. In Phase III a model was developed, based on the findings of Phase I and II as well as from the literature review and from the experience and expertise drawn from the research.

The research methods were described – **literature review** (cf. 3.3.1), the **questionnaire survey** (cf. 3.3.2), the **Delphi technique** (cf. 3.3.3) as well as the mechanisms and procedures to ensuring the **quality, reliability** and **validity** of the study (cf. 3.4).

In Chapter 4, the results and **discussions of findings of the questionnaire survey** were given. The **demographic description** of the sample was presented (cf. 4.2); then a section that dealt with issues related to the **need for and the factors impacting** on Professional Development (cf. 4.3); followed by a section on the **content needs** for Professional Development (cf. 4.4); then the **appropriateness** of various CPD activities (cf. 4.5); a section on adult education (cf. 4.5) and then concluded by a **summative discussion** on the overall findings of the questionnaire (cf.4.7).[cf. Tables 4.1 – 4.49 and Figures 4.1-4.14.]

7.2.3 Research question 3

The research question was stated as:

What relevant criteria, based on the needs of adult learners and the principles of adult education, can be used to compile a model for CPD in Occupational Therapy in South Africa and how should the model for CPD be composed in order to be conductive to the development of occupational therapists as lifelong adult learners?

The following objectives were pursued:

Identifying a selection of relevant criteria for CPD in Occupational Therapy by using the literature study and questionnaire surveys, and then to Delphi these criteria with a team of experts.

This objective addressed research question 3.

Compiling a model for CPD in Occupational Therapy in South Africa, with an adult education perspective – based on all the relevant literature cited, the findings of the questionnaire survey and the expert opinions on the selection of criteria submitted to the Delphi panelists as well as on the expertise and experience of the researcher.

This objective addressed research questions 1-3 in view of a holistic and scientific product.

In responding to research question 3, Chapter 5 **described the results and discussed the findings of the Delphi process** (cf. first objective), while Chapter 6 dealt with the model (cf. second objective).

The description and discussion of the Delphi study explained the **design** of the Delphi process (cf. 5.2.1) as well as the **different rounds** in the Delphi process (cf. 5.2.2-5.2.4), followed by a **summative discussion** on the outcome of the Delphi study (cf. 5.2.5; Tables 5.1-5.3).

In Chapter 6, a detailed **discussion on the development of the model for CPD from an adult education perspective** was provided. It includes the **premises** for the development of such a model (cf. 6.2); the **points of departure** for the development of the model (cf. 6.3); the **role-players** in CPD that needed to be recognised and be involved (cf. 6.4) and the **background to the compilation of the model** as well as the **six aspects** that were included in the model (cf. 6.5). Each aspect was described and discussed in a structured way, namely: firstly, the **theoretical grounding;** followed secondly by making reference to the **findings of the needs analysis questionnaire;** followed thirdly by the **expert panel's recommendations;** and fourthly, **concluding remarks** by the researcher (cf. 6.6-6.11; Figures 6.1-6.7).

The researcher endeavoured to make a number of recommendations with regard to the model for CPD – with an emphasis on a holistic approach highlighting main areas with the view to give direction to future planning and implementation of CPD programmes (cf. 6.12 and Figure 6.8).

The aim of Chapter 6 was the **compilation of the model,** based on and from an adult education perspective. This was discussed in detail in Chapter 6.

7.3 CONCLUSION

This study originated from the scholarly work of South African researchers such as Scholtz (2002); Kriel (2003); Schütte (2004); Castleman (2004, 2007); Rammile (2006) and Frick (2007).

No recent study concerning a **needs analysis for occupational therapists** in South Africa has been traced as far as CPD is concerned. Research on the designing of effective learning for occupational therapists as adult learners is limited. There seemed to be **no scientific assessment of the needs of occupational therapists** in South Africa that could form the basis for a model for CPD in Occupational Therapy with regard to content, learning situation and mode of delivery, etc. that is based on adult education theory and principles. This study is based on the **recognition and acknowledgement that a gap existed in the way professional development is offered, programmes are presented and CPD in general is managed**. To **bridge this gap**, the researcher **compiled a model** for CPD, taking into account the needs of occupational therapists and the characteristics of adult learners, and based it on education principles – and aligned it further with the guidelines for CPD of the Health Professions Council of South Africa.

A **combination of methods** was used to generate data and these **findings were interpreted** to form the **basis for compilation** of the model. A detailed description of the **factual aspects** was given in Chapters 4 and 5. In Chapter 6 the **interpretations**, as scientific evidence, converged to compile the model. This was also discussed in detail. It is clear that most of the occupational therapists are of the opinion that **ethical practice** requires consistent and **ongoing commitment** to **lifelong learning**, including the **updating** and **development** of the knowledge, skills and attitudes that underpin **competent practice**. Learning activities in line with **adult education principles** and **greater learner involvement** together with **improved competence** and **performance** will benefit the patient. Information on the content of programmes, learning situations, the articulation of needs and programme objectives will be of value.

The **theoretical perspectives**, based on a thorough literature study and linked to various scholarly contributions of different authors, helped to develop a **conceptual framework** on which the research was based. On the **conceptual level** it became

clear that the meaning of CPD and its importance is of utmost importance to all professional groups. The demand for enhanced quality of CPD initiatives and offerings has to be taken into account and must be focussed on the efficacy and cost-effectiveness of service delivery; however, it also must take the learning needs of occupational therapists into account. The development of a model for CPD is a **first step in this direction**. The **role of academic institutions** as a provider of formal and non-formal CPD programmes is of utmost importance and their **responsibility and accountability** to plan, develop, implement, monitor, evaluate and affect change and ensure quality will make a **significant contribution to health care**.

7.4 LIMITATIONS OF THE STUDY

The researcher recognises the following limitations in the study:

Although the study was clearly demarcated, it became a comprehensive study. The needs analysis questionnaire extended over various fields and focused on a large number of aspects. Although not all the findings from the survey were included in the Delphi questionnaire it was interpreted for the compilation of the final model. The study resulted in a number of **research findings so comprehensive in quantity and quality** that it was not achievable to discuss it in full. These aspects could be addressed when **publications** are prepared.

7.5 CONTRIBUTION OF THE RESEARCH

The researcher is of the opinion that the research made a **modest contribution** to new knowledge. By developing the model the identified gap is bridged. The sound research approach and methodology ensured the quality, reliability and validity of the research. The completed research can form the basis for a **further research agenda**.

The overall goal of the research was to make a **contribution** to the efficient and effective implementation of the CPD system for **occupational therapists** in South Africa through identifying the CPD needs of occupational therapists and ultimately supporting health care in South Africa through adult education. The **value of the study** will be realised in the contribution it will make via recommendations with regard to the **content of programmes, learning situations** and the **articulation of**

needs and **programme objectives**. By doing this, the compliance of occupational therapists to CPD will be supported and the attainment of CPD objectives enhanced with a positive impact on health care in South Africa. **Aspects** of this research as far as adult education is concerned can also be of value to **other higher education programmes**.

7.6 RECOMMENDATIONS

In order for the study to yield **significant and valuable** results, the researcher takes the liberty to recommend the following:

- That the findings of this study be put before the executive management of the School for Allied Health Professions, University of the Free State, as well as before various role-players in South Africa, for consideration, implementation and further recommendations as a way forward, such as submission to the HPCSA.
- To implement the model according to an implementation plan that offers flexible opportunities and be needs-driven.
- To publish articles on the research results and model in accredited subject journals.
- To present research results at national and international conferences.
- To do further research on the impact of the implementation of the model on the attainment of the purpose of CPD.
- To do further research to customise the model to the needs of specific institutions, groups or departments.
- To do further research on the transfer of learning and the actual measurement of CPD's impact on practice.
- To do further research on the role and function of accreditors of CPD programmes to ensure quality.

7.7 CONCLUSIVE REMARK

Introduction of the model will encourage CPD providers to offer learning activities in line with adult education principles and greater learner involvement, with the goal of not only acquiring new information or updating knowledge, but also improving competence and ultimately the performance of health professionals with an end benefit to the patient.

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APPENDIX A

(INCLUDING APPENDICES A1-A3)

APPENDIX A1:	**LETTER OF INVITATION TO PARTICIPATE IN QUESTIONNAIRE SURVEY**
APPENDIX A2:	**FORM OF CONSENT: QUESTIONNAIRE SURVEY**
APPENDIX A3:	**QUESTIONNAIRE FOR OCCUPATIONAL THERAPISTS**

APPENDIX A1

LETTER OF INVITATION TO PARTICIPATE IN QUESTIONNAIRE SURVEY

ADDRESS

Dear occupational therapist

This is a letter to request you to participate in this very important research project.

I am a Ph.D. student in Higher Education Studies at the University of the Free State and I am making a needs assessment of the Continuing Professional Development (CPD) needs of occupational therapists.

I have decided to do my research project on the needs of occupational therapists in CPD – but from an adult education perspective: What are your needs as an adult learner? It is of utmost importance that current CPD programmes satisfy the needs of the target population of whom you are part. Given the compulsory nature of CPD your needs should at least be met. In order to design CPD opportunities to your satisfaction, providers and regulatory authorities should be aware of your needs in terms of content, convenience, relevance and preferred learning situations. By completing this questionnaire, you will enable the researcher to analyse the results and write a report that will be available to all stakeholders. Your co-operation is therefore vital in order to substantiate educational direction and development.

I would therefore like to request you to take part in the questionnaire survey, which is scheduled to take place during the period between 6 April 2009 and 6 July 2009. Should you be willing to participate, please fill in the accompanying consent form and return it, together with the completed questionnaire, to me electronically or by fax as soon as possible.

Thank you for your consideration of this initiative, I am looking forward to hearing from you. Your participation will contribute to the improvement of CPD.

Please note: It is of cardinal importance to obtain a high response rate to ensure the optimum reliability of the results of this survey.

Yours sincerely

Ms M.J. Collender
B. Occupational Therapy (UFS): Magister in Health Professions Education (UFS)
(Student number: 1999241597)
University of the Free State
Bloemfontein 9301

APPENDIX A2

FORM OF CONSENT: QUESTIONNAIRE SURVEY

Date .....

Hereby I, the undersigned, consent to participate in the questionnaire survey, which is scheduled to take place from 6 April 2009 to 6 July 2009.

My full particulars are as follows:

Surname: _____

Full names: _____

Telephone number: _____

E-mail address: _____

_____

SIGNATURE/TYPED CONSENT

I wish to assure you that the information will be treated in a highly confidential manner and that there will be no reference to any names. Thank you in advance for your kind co-operation. Please note that the results coming from this doctoral study will be published.

Yours faithfully

Ms M.J. Collender (Researcher)
(Student number: 1999241597)
Health Sciences Education
Faculty of Health Sciences
University of the Free State
Bloemfontein 9301

REGISTERED PH.D. PROJECT

APPENDIX A3

QUESTIONNAIRE FOR OCCUPATIONAL THERAPISTS

HIGHER EDUCATION PROGRAMME

CENTRE FOR HIGHER EDUCATION STUDIES AND DEVELOPMENT

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

QUESTIONNAIRE

The questionnaire is confidential. There are six sections to be completed.

Office use only
☐☐☐
1 - 3

Section A **Demographics** **This section deals with the personal, professional, employment and geographic profiles** ***For example***	
Please mark the appropriate box with an X:	
1. Gender	
a. Male	**1**
b. Female	**2 X**

Questions **A-1 Personal profile**		
1. Gender		
a. Male	**1**	
b. Female	**2**	☐4
2. Please state your age: **My age: _____**		☐5
3. Please identify your population group (Population group is important for research purposes because of possible variances)		
Black	**1**	
Indian	**2**	
Coloured	**3**	
White	**4**	☐6
Other (Please specify)		

1.			☐7
4. Do you have access to the following? Please indicate your answer			
DSTV	**Yes**	**No**	☐8
Internet	**Yes**	**No**	☐9
TV 3	**Yes**	**No**	☐10
Computer	**Yes**	**No**	☐11
Cell phone	**Yes**	**No**	☐12
Email	**Yes**	**No**	☐13
A-2 Professional profile			
5. Educational background. Please select the applicable option as far as the highest qualification obtained in occupational therapy and state the study field			
Doctoral		**1**	
Master's		**2**	
Bachelor's degree		**3**	
Diploma		**4**	☐14
Please state the discipline:			☐15
6. Educational background. Please select the applicable option as far as the highest qualification obtained in another discipline			
Doctoral		**1**	
Master's		**2**	
Bachelor's degree		**3**	
Diploma		**4**	☐16
Please state the discipline:			☐17
7. Please select all the professional fields in which you have obtained a qualification			
Occupational therapy		**1**	
Educational psychologist		**2**	
Speech therapist		**3**	
Professional Nurse		**4**	
Dietician		**5**	
Physiotherapist		**6**	
Occupational therapy assistant		**7**	☐18
Other (Please specify)			
1.			
2.			☐19
8. I have an interest in the following field(s) of study:			
Management		**1**	
Higher education		**2**	
Health Sciences education		**3**	☐20
Other (Please specify)			
1.			
2.			☐21

A-3 Employment profile			
9. Current industry type. Please select the applicable options			
Public sector		**1**	
Private sector – solo practice		**2**	
Private sector – group practice		**3**	
Private sector – locum		**4**	
Academic institution		**5**	☐22
Other (Please specify)			
1.			
2.			☐23
10. How long have you been working as an occupational therapist in total? (It can include non-concurrent periods)			
			☐☐ 24-25
11. Managerial level. Please select the applicable options			
Do you have management responsibilities?	**Yes**	**No**	☐26
Do you manage other individuals?	**Yes**	**No**	☐27
12. How would you describe your level of management?			
Executive level (e.g. report to owner, shareholders, board of directors)		**1**	
Senior level (e.g. report to CEO/Rector/Chief partner)		**2**	
Middle level (e.g. report to Dean/Director/Head of Department, Senior partner)		**3**	
Junior level (e.g. report to Head of a Division/partner)		**4**	
Not on a management level		**5**	☐28
A-4 Geographic profile			
13. Is your practice/work place located in a			
Rural area?		**1**	
Urban area?		**2**	☐29
14 Is your practice/work place located in a			
Residential area?		**1**	
Commercial area?		**2**	☐30
15. Size of practice. How many patients have you had on the database of the practice you work for the past three years?			
Fewer than 50		**1**	
Between 51-100		**2**	
Between 101-500		**3**	

More than 501-1000	4	☐31

16. How many of the abovementioned number of patients do you see yearly?

Fewer than 50	1	
Between 51-100	2	
Between 101-150	3	
More than 150	4	☐32

17. Patient age profile. Indicate percentage of your patients that are:

	Less than 25%	Between 26-50 %	Between 51-75%	Above 76 %		
Younger than 18 years of age?					%	☐33
Between 19 years and 45 years?					%	☐34
Older than 45 years?					%	☐35

Please indicate your answer with an "x"

18. Describe your practice/work place (for instance in terms of size, population, patients etc.)

☐☐ 36-37

☐☐ 38-39

☐☐ 40-41

19. Public hospital/clinic. In which province is your nearest public hospital or clinic?

Gauteng	1	
North West	2	
Mpumalanga	3	
Limpopo	4	
Free State	5	
Western Cape	6	
Kwazulu-Natal	7	
Eastern Cape	8	☐42

20. Patient disease profile. Please select the <u>five</u> most prevalent conditions in your practice/work place

Psychotic disorders	1
Mental retardation	2
Psychiatric disorders (e.g. depression, anxiety, psychosis, affective disorders, etc.)	3
Stroke (CVA)	4
Burn wounds	5

Spinal injuries	**6**
Head injuries	**7**
Pain	**8**
Developmental delays	**9**
Sensory integration/problems	**10**
Dementia or cognitive disorders	**11**
Blindness and deafness	**12**
Amputations	**13**
Joint problems	**14**
Hand therapy	**15**

☐☐☐ 43-45

Other (Please specify)

1.

2. ☐46

21. How far is your practice/work place from the following services?

	Fewer than 10 km	Between 10 and 40 km	More than 40 km	
Dietician	1	2	3	☐47
Emergency services	1	2	3	☐48
Other occupational therapists	1	2	3	☐49
Pathology laboratories	1	2	3	☐50
Physiotherapists	1	2	3	☐51
Pharmacist	1	2	3	☐52
Subsidised facilities for inpatients	1	2	3	☐53
Non-subsidised facilities for inpatients	1	2	3	☐54
Private primary health services	1	2	3	☐55
Public primary health services	1	2	3	☐56
Psychologist	1	2	3	☐57
Specialised radiology (MR, scan, barium enema, angiography, etc.)	1	2	3	☐58
X-rays	1	2	3	☐59

Section B

Professional Development

This section deals with issues related to the needs for and the factors impacting on Professional Development

1. In your opinion, are you keeping abreast of developments in the field of Occupational Therapy as far as theoretical aspects are concerned?

Yes	**1**
No	**2**

☐60

2. If "yes", state the reason		☐☐ 61-62
3. In your opinion are you keeping abreast of developments in the field of occupational therapy as far as clinical practice is concerned?		
Yes	**1**	
No	**2**	☐63
4. If "yes", state the reason		☐☐ 64-65 ☐☐ 66-67
5. Are there sufficient opportunities to keep you informed?		
Yes	**1**	
No	**2**	☐68
6. State the reason for your answer		☐☐ 69-70 ☐☐ 71-72 ☐☐ 73-74
7. Do you experience any stumbling blocks with regard to your CPD?		
Yes	**1**	
No	**2**	☐75
8. If "yes", state the reason		☐☐ 76-77 ☐☐ 78-79 ☐☐ 80-1
9. What motivating factor(s) should there be for you to engage in CPD? (e.g. certificate, diploma, further accumulative qualification)		☐☐ 2-3 ☐☐ 4-5 ☐☐ 6-7
10. Do current CPD activities on offer meet your needs?		
Yes	**1**	
No	**2**	☐8
11. State the main reason for your answer		☐☐

9-10 ☐☐
11-12 ☐☐
13-14 ☐☐
15-16 ☐☐
17-18 ☐☐
19-20

12. How do you intend to acquire points for CPD in order to maintain your license to practice?

13. Which of the following CPD activities would you prefer to participate in?

Informal activities to acquire points (e.g. study groups, reading professional journals)	**1**	
Formal activities that do not necessarily lead to a formal qualification (e.g. seminars, conferences)	**2**	
Formal activities that lead to a formal qualification	**3**	
All of the above	**4**	☐21
Other: Specify	**5**	☐☐ 22-23

14. Venues: Please indicate your preference with reference to each of the following venues for CPD events:

Place	Definitely not preferred	Not preferred	Neutral	Preferred	Highly preferred	
Conference centres	**1**	**2**	**3**	**4**	**5**	☐24
Hotels	**1**	**2**	**3**	**4**	**5**	☐25
Academic institutions	**1**	**2**	**3**	**4**	**5**	☐26
15. Other preferences (Please specify)						
1.	**1**	**2**	**3**	**4**	**5**	☐27
2.	**1**	**2**	**3**	**4**	**5**	☐28
3.	**1**	**2**	**3**	**4**	**5**	☐29

16. Cost. Are you prepared to pay for CPD opportunities?

Yes	**1**	
No	**2**	☐30

17. If you have answered "Yes" to question 16, what do you regard as a reasonable fee per day?

R100 per day	**1**	
R250/day	**2**	
R500/day	**3**	
R750/day	**4**	
R1000/day	**5**	☐31
Other (Please specify)	**6**	☐32

18. Time. When do you prefer to attend CPD opportunities? (You may have more than one preference)		
Time of year		
January	**1**	☐33
February	**2**	☐34
March	**3**	☐35
April	**4**	☐36
May	**5**	☐37
June	**6**	☐38
July	**7**	☐39
August	**8**	☐40
September	**9**	☐41
October	**10**	☐42
November	**11**	☐43
December	**12**	☐44
No preference	**13**	☐45
Motivate your answer		☐☐ 46-47
Time of month		
1st week	**1**	☐48
2nd week	**2**	☐49
3rd week	**3**	☐50
4th week	**4**	☐51
No preference	**5**	☐52
Motivate your answer		☐☐ 53-54
Time of week		
Saturdays	**1**	☐55
Sundays	**2**	☐56
Weekdays	**3**	☐57
No preference	**4**	☐58
Motivate your answer		☐☐ 59-60

19. Motivation for compliance. Do you attend a CPD opportunity because of:			
Possible reasons	**Yes**	**No**	**Unsure**

Personal interest in the topic	1	2	3	☐61
Price of the event	1	2	3	☐62
Place of the event	1	2	3	☐63
Time of year	1	2	3	☐64
The duration/length of the event	1	2	3	☐65
The presenter	1	2	3	☐66
The content	1	2	3	☐67
CPD points	1	2	3	☐68
Compulsory	1	2	3	☐69
Other (Please specify)				
1.	1	2	3	☐70
2.	1	2	3	☐71

20. Learning situation. Please indicate your preference as far as a learning situation is concerned

Learning situation	**Not preferred at all**	**Not preferred**	**Neutral**	**Preferred**	**Highly preferred**	
Lectures with time for questions and answers of participants but no group work	1	2	3	4	5	☐72
Lectures with involvement of participants through discussions in big group	1	2	3	4	5	☐73
Facilitated workshops where participants work in small groups on given case studies	1	2	3	4	5	☐74
Facilitated workshops where participants work in small groups on cases from their own practices	1	2	3	4	5	☐75
Presentation of research papers with time for questions and answers	1	2	3	4	5	☐76
Distance education with no workshops or lectures	1	2	3	4	5	☐77
Facilitated ward rounds	1	2	3	4	5	☐78
Mentoring in a clinical centre	1	2	3	4	5	☐79
Peer review sessions (Informal discussions with your peers)	1	2	3	4	5	☐80
Other (Please specify)						
1.	1	2	3	4	5	☐1
2.	1	2	3	4	5	☐2

Section C
Content needs
This section deals with the content needs of occupational therapists

1. Content need: Clinical needs. Please indicate your need for CPD in each of the following clinical areas

Clinical disease area	No need at all	Not needed	Neutral	Needed	Highly needed	
Psycho-social	1	2	3	4	5	☐3
Forensic	1	2	3	4	5	☐4
Child psychology	1	2	3	4	5	☐5
Psychiatric disorders (e.g. depression, anxiety, psychosis, etc.)	1	2	3	4	5	☐6
Paediatric	1	2	3	4	5	☐7
Neuro-paediatric	1	2	3	4	5	☐8
Sensory integration	1	2	3	4	5	☐9
Biomechanical	1	2	3	4	5	☐10
Neuro-physiological	1	2	3	4	5	☐11
Community service learning	1	2	3	4	5	☐12
Other (Please specify)						
1.	1	2	3	4	5	☐13
2.	1	2	3	4	5	☐14

2. Content needs. Business needs. Please indicate your need for CPD in each of the following business areas

Business area	No need at all	Not needed	Neutral	Needed	Highly needed	
Strategic planning	1	2	3	4	5	☐15
Financial planning	1	2	3	4	5	☐16
Financial/budget control	1	2	3	4	5	☐17
Leadership	1	2	3	4	5	☐18
Motivation of personnel	1	2	3	4	5	☐19
Performance appraisal	1	2	3	4	5	☐20
Marketing	1	2	3	4	5	☐21
Other (Please specify)						
1.	1	2	3	4	5	☐22
2.	1	2	3	4	5	☐23

3. Content needs: Computer needs. Please indicate your need for CPD in each of the following computer areas

Computer area	No need at all	Not needed	Neutral	Needed	Highly needed	
Internet skills	1	2	3	4	5	☐24

Accounting	1	2	3	4	5	☐25
Database management	1	2	3	4	5	☐26
Other (Please specify)						
1.	1	2	3	4	5	☐27
2.	1	2	3	4	5	☐28

4. Content needs: Health policy needs. Please indicate your need for CPD in each of the following health policy areas

Health policy area	No need at all	Not needed	Neutral	Needed	Highly needed	
Managed care	1	2	3	4	5	☐29
National health policies	1	2	3	4	5	☐30
HPCSA policies and guidelines	1	2	3	4	5	☐31
National health insurance	1	2	3	4	5	☐32
Other (Please specify)						
1.	1	2	3	4	5	☐33
2.	1	2	3	4	5	☐34

5. Content needs: Ethical areas. Please indicate your need for CPD in each of the following ethical areas

Ethical area	No need at all	Not needed	Neutral	Needed	Highly needed	
Perverse incentives (e.g. bribes)	1	2	3	4	5	☐35
Confidentiality	1	2	3	4	5	☐36
Principled underpinnings of ethics in health care	1	2	3	4	5	☐37
Relationship between ethics and law	1	2	3	4	5	☐38
How to deal with ethical dilemmas	1	2	3	4	5	☐39
Informed consent	1	2	3	4	5	☐40
Other (Please specify)						
1.	1	2	3	4	5	☐41
2.	1	2	3	4	5	☐42

6. Content needs: Interpersonal skills. Please indicate your need for CPD in each of the following interpersonal skills areas

Interpersonal skills area	No need at all	Not needed	Neutral	Needed	Highly needed	
Communication skills	1	2	3	4	5	☐43
Debriefing	1	2	3	4	5	☐44

Counselling	1	2	3	4	5	☐45
Negotiation skills	1	2	3	4	5	☐46
Conflict management	1	2	3	4	5	☐47
Other (Please specify)						
1.	1	2	3	4	5	☐48
2.	1	2	3	4	5	☐49

7. Content needs: Personal growth. Please indicate your need for CPD in each of the following personal growth areas

Personal growth area	No need at all	Not needed	Neutral	Needed	Highly needed	
Self-management	1	2	3	4	5	☐50
Time management	1	2	3	4	5	☐51
Stress management	1	2	3	4	5	☐52
Self-assertiveness	1	2	3	4	5	☐53
Other (Please specify)						
1.	1	2	3	4	5	☐54
2.	1	2	3	4	5	☐55

8. What type of educational product/service would you like to be included in a full inclusive CPD initiative? Please indicate your need for each of the following products

Product	No need	Probably not needed	May be needed	Need	Definite need	
A summary of the latest development in your areas of interest	1	2	3	4	5	☐56
Full journal articles in your areas of interest	1	2	3	4	5	☐57
Newsletter on the latest development (courses, seminars, conferences, legislation updates in the health sector, social news, news on developments)	1	2	3	4	5	☐58
Distance learning	1	2	3	4	5	☐59
Access to mentors	1	2	3	4	5	☐60
24-hour hotline with expert clinical advice	1	2	3	4	5	☐61
Access to Telemedicine (the use of information and communication technology to provide and support healthcare activities, when distance separates the participants)	1	2	3	4	5	☐62

Television broadcasting of educational programmes	1	2	3	4	5	☐63
Internet-based conference attendance	1	2	3	4	5	☐64
Internet-based educational programmes	1	2	3	4	5	☐65
Compact disk-based educational programmes	1	2	3	4	5	☐66
Self-assessment of your practice against minimum performance standards, e.g. protocols/guidelines	1	2	3	4	5	☐67
Organised group case/problem discussions	1	2	3	4	5	☐68
Training workshops	1	2	3	4	5	☐69
One-day refresher seminars	1	2	3	4	5	☐70
Evening expert talks	1	2	3	4	5	☐71
Journal clubs	1	2	3	4	5	☐72
Facilitated sessions	1	2	3	4	5	☐73
Other (Please specify)	1	2	3	4	5	
1.	1	2	3	4	5	☐74
2.	1	2	3	4	5	☐75

9. Clinical area of interest and expertise

Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)

Clinical area	Interest area	Expert area	Why expert?	
Psycho-social				☐☐ 76-77
Forensic				☐☐ 78-79
Child psychology				☐☐ 80-1
Psychiatric disorders (e.g. depression, anxiety, psychosis, etc.)				☐☐ 1-2
Paediatric				☐☐ 3-4
Neuro-paediatric				☐☐ 5-6
Sensory integration				☐☐ 7-8
Biomechanical				☐☐ 9-10
Neuro-Physiological				☐☐ 11-12
Community service learning				☐☐ 13-14
Other (Please specify)				

1.				☐15
2.				☐16
10. Health Management area of interest and expertise				
Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)				
Health Management area	**Interest area**	**Expert area**	**Why expert?**	
Strategic planning				☐☐ 17-18
Financial management				☐☐ 19-20
Information management				☐☐ 21-22
Leadership				☐☐ 23-24
Marketing and customer relations				☐☐ 25-26
Human resource management				☐☐ 27-28
Project management				☐☐ 29-30
Monitoring and evaluation				☐☐ 31-32
Other (Please specify)				
1.				☐33
2.				☐34
11. Computer area of interest and expertise				
Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)				
Computer area	**Interest area**	**Expert area**	**Why expert?**	
Internet skills				☐☐ 35-36
Desktop publishing				☐☐ 37-38
Database management				☐☐ 39-40
Word processing				☐☐ 41-42
Worksheet creation				☐☐ 43-44
Network management				☐☐ 45-46
Software programming				☐☐ 47-48
Firewall management				☐☐

				49-50
Data recovery				☐☐ 51-52
Other (Please specify)				
1.				☐53
2.				☐54

12. Health policy area of interest and expertise

Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)

Health policy area	**Interest area**	**Expert area**	**Why expert?**	
Managed care				☐☐ 55-56
Health law and regulations				☐☐ 57-58
Public private partnership in health				☐☐ 59-60
National health policies				☐☐ 61-62
Other (Please specify)				
1.				☐63
2.				☐64

13. Ethics area of interest and expertise

Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)

Ethical area	**Interest area**	**Expert area**	**Why expert?**	
Perverse incentives (eg. bribes)				☐☐ 65-66
Confidentiality				☐☐ 67-68
Principled underpinnings of ethics in health care				☐☐ 69-70
Relationship between ethics and law				☐☐ 71-72
How to deal with ethical dilemmas				☐☐ 73-74
Informed consent				☐☐ 75-76
HIV/AIDS and ethics				
Other (Please specify)				
1.				☐77
2.				☐78

14. Interpersonal area of interest and expertise

Please indicate your area of interest and expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)

Interpersonal area	Interest area	Expert area	Why expert?	
Communication skills				☐☐ 79-80
Debriefing				☐☐ 1-2
Counselling				☐☐ 3-4
Negotiation skills				☐☐ 5-6
Conflict management				☐☐ 7-8
Other (Please specify)				
1.				☐9
2.				☐10

15. Personal growth area of interest and expertise

Please indicate your area of interest an expertise (not more than three) and state why you are regarded as an expert in this/these field/s (experience and academic achievements/qualifications)

Personal growth area	Interest area	Expert area	Why expert?	
Self-management				☐☐ 11-12
Time management				☐☐ 13-14
Stress management				☐☐ 15-16
Other (Please specify)				
1.				☐17
2.				☐18

Section D

Appropriateness of various CPD activities

This section deals with the appropriateness of various CPD activities

First indicate how effective (=E) the current products/activities on offer are, secondly how important (=I) each of these products (activities) are for the future,

and thirdly, how <u>necessary</u> (=N) the specific products and activities are for the future.

Effectiveness of current CPD product/activity
4 = extremely effective (those currently offered are extremely effective)
3 = effective (those currently offered are effective)
2 = less effective (those currently offered are less effective)
1 = not effective at all (those currently offered are not effective at all)

Importance of product/activity for future CPD
4 = extremely important (must be a product/activity to be offered)
3 = important (must preferably be a product/activity to be offered)
2 = less important (may possibly be left out as a product/activity to be offered)
1 = not important at all (can definitely be left out as a product/activity to be offered)

Necessity of product/activity for future CPD
4 = extremely necessary (is a definite required product/activity to be offered)
3 = necessary (is preferably be a product/activity to be offered)
2 = less necessary (may possibly be left out as a required product/activity to be offered)
1 = not necessary (can definitely be left out as a required product/activity to be offered)

A summary of the latest development in your areas of interest	E	4	3	2	1	☐19
	I	4	3	2	1	☐20
	N	4	3	2	1	☐21
Full journal articles in your areas of interest	E	4	3	2	1	☐22
	I	4	3	2	1	☐23
	N	4	3	2	1	☐24
Newsletters on the latest development (courses, seminars, conferences, legislation updates in the health sector, social news, events, etc.)	E	4	3	2	1	☐25
	I	4	3	2	1	☐26
	N	4	3	2	1	☐27
Distance learning activities/courses/programmes	E	4	3	2	1	☐28

	I	4	3	2	1	☐29
	N	4	3	2	1	☐30
Access to Mentors	E	4	3	2	1	☐31
	I	4	3	2	1	☐32
	N	4	3	2	1	☐33
24-hour hotline with expert clinical advise	E	4	3	2	1	☐34
	I	4	3	2	1	☐35
	N	4	3	2	1	☐36
Access to Telemedicine (the use of information and communication technology to provide and support healthcare activities when distance separates the participants)	E	4	3	2	1	☐37
	I	4	3	2	1	☐38
	N	4	3	2	1	☐39
Television broadcasting of educational programmes	E	4	3	2	1	☐40
	I	4	3	2	1	☐41
	N	4	3	2	1	☐42
Internet-based conference attendance	E	4	3	2	1	☐43
	I	4	3	2	1	☐44
	N	4	3	2	1	☐45
Internet-based educational programmes	E	4	3	2	1	☐46
	I	4	3	2	1	☐47
	N	4	3	2	1	☐48
Compact disk-based educational programmes	E	4	3	2	1	☐49
	I	4	3	2	1	☐50
	N	4	3	2	1	☐51
Self-assessment of your practice against minimum performance standards, e.g. protocols/guidelines	E	4	3	2	1	☐52
	I	4	3	2	1	☐53
	N	4	3	2	1	☐54
Organised group case/problem discussions	E	4	3	2	1	☐55
	I	4	3	2	1	☐56
	N	4	3	2	1	☐57
Training workshops	E	4	3	2	1	☐58
	I	4	3	2	1	☐59
	N	4	3	2	1	☐60
One-day refresher seminars	E	4	3	2	1	☐61
	I	4	3	2	1	☐62
	N	4	3	2	1	☐63
Evening expert talks	E	4	3	2	1	☐64
	I	4	3	2	1	☐65
	N	4	3	2	1	☐66
Journal clubs	E	4	3	2	1	☐67
	I	4	3	2	1	☐68
	N	4	3	2	1	☐69
Facilitated sessions	E	4	3	2	1	☐70
	I	4	3	2	1	☐71
	N	4	3	2	1	☐72

Opportunities to do service learning in community settings:						
Primary care hospitals	E	4	3	2	1	☐73
	I	4	3	2	1	☐74
	N	4	3	2	1	☐75
Community clinics	E	4	3	2	1	☐76
	I	4	3	2	1	☐77
	N	4	3	2	1	☐78
Other community facilities	E	4	3	2	1	☐79
	I	4	3	2	1	☐80
	N	4	3	2	1	☐1
Other (Please specify)						
1.	E	4	3	2	1	☐2
	I	4	3	2	1	☐3
	N	4	3	2	1	☐4
2.	E	4	3	2	1	☐5
	I	4	3	2	1	☐6
	N	4	3	2	1	☐7

Section E
Adult education
This section deals with adult education

1. According to your own opinion, as a mature, experienced person (adult learner) in a profession, which factors are important to you as far as CPD is concerned?

2. According to your own opinion, please make recommendations as to how more effective CPD programmes can be offered for occupational therapists

Section F
Please add any comments, if you wish to do so as far as topics relating to this questionnaire (Add extra pages if necessary)

Thank you for your participation
Monique Collender

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APPENDIX B

(INCLUDING APPENDICES B1-B2)

APPENDIX B1: LETTER OF REQUEST TO DELPHI PANELISTS

APPENDIX B2: FORM OF CONSENT FOR DELPHI PANELISTS

APPENDIX B1

LETTER OF REQUEST TO DELPHI PANELISTS

Dear Colleague

REQUEST TO PARTICIPATE IN A DOCTORAL STUDY ENTITLED:

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

I am writing to request your assistance in a study I am conducting regarding CPD in Occupational Therapy in South Africa based on an adult education perspective. Please regard this letter as an invitation to participate in this research study. I am requesting the involvement of a limited number of experts in the field of CPD, Occupational Therapy Education and higher/medical education.

Currently I am writing a thesis to obtain a Philosophae Doctor in Higher Education Studies in the Faculty of Humanities, University of the Free State (Student Number : 1999241597).

My promoter:
Prof. A.C. Wilkinson
Head: Higher Education Studies
Faculty of Humanities
University of the Free State
Bloemfontein, South Africa.

Co-promoter:
Prof. M.M. Nel
Head: Health Sciences Education
Faculty of Health Sciences
University of the Free State
Bloemfontein, South Africa.

Currently there is no formal model for CPD for Occupational Therapy based on an adult education perspective. No recent study concerning a needs analysis for

occupational therapists in South Africa has been done either. In addition, there seems to be no optimal and satisfactory/complacent scientific assessment available of the needs of occupational therapists in South Africa that could form the basis for a model for CPD with regard to the content and learning situations in programmes for CPD, based on an adult education perspective.

Occupational therapists wish to pursue CPD activities, further training activities, relevant courses, post-graduate studies, and so forth; however, only a number of suitable or clinically-relevant programmes (opportunities) are offered to address their needs as adult learners and to afford them the opportunity to expand their scope and enhance their knowledge and skills in order to make a more meaningful contribution to their profession in general and, more specifically, to their field of practice.

The questions the researcher endeavours to answer are:

1. *How can CPD be conceptualised and contextualised from an adult education perspective, as the theoretical framework of the study?*

2. *What are the CPD needs of Occupational Therapy practitioners practicing in South Africa; what factors influence CPD, and what is the perceived effectiveness of the various CPD activities offered by providers?*

3. *Which relevant criteria, based on the needs of adult learners and the principles of adult education, can be used to compile a model for CPD in Occupational Therapy in South Africa and how should the model for CPD be composed in order to be conducive to the development of occupational therapists as lifelong adult learners?*

The overall goal of the study is to make a contribution to the effective and efficient implementation of the CPD system for occupational therapists in South Africa

through identifying the CPD needs of occupational therapists and ultimately to supporting health care in South Africa through education.

The aim of the study is to develop a model for CPD in Occupational Therapy based on adult education principles. It is therefore necessary to determine the needs for CPD of occupational therapists registered with the HPCSA with regard to content, cost, time, CPD activities, learning situations and mode of delivery in order to improve the effectiveness and efficiency of CPD programmes for the therapists if necessary.

To attain the aim, the following objectives were or will be pursued:

1. *Conceptualising and contextualising adult education and CPD via a literature study, in order to compile a theoretical framework for the study.*
   This objective addresses research question 1.

2. *Compiling a needs analysis of CPD for occupational therapists, identifying factors influencing CPD and determining the effectiveness of various CPD activities on the acquiring of new skills, knowledge and professional behaviour.*
   This objective addresses research question 2.

3. *Identifying a selection of relevant criteria for CPD in Occupational Therapy by using the literature study and questionnaire surveys, and then to Delphi these criteria with a team of experts.*
   This objective addresses research question 3.

4. *Compiling a model for CPD in Occupational Therapy in South Africa, with an adult education perspective – based on all the relevant literature cited, the findings of the questionnaire survey and the expert opinions on the*

selection of criteria submitted to the Delphi pannelists as well as on the expertise and experience of the researcher.
This objective addresses research questions 1-3 to form a holistic and scientific product.

The methods used, which form the basis of the study, comprise a literature review, and as the empirical study – a questionnaire survey, as well as a Delphi technique.

The Delphi technique is employed as the final methodology for this research. This method utilises a consensus-building approach among individuals with recognised experience and advanced knowledge in a particular subject area. It is a recognised scientific method of gathering data and the Delphi technique has been proven to be a sound and effective research process, particularly in terms of health research where predictions concerning possible health interventions and strategies are required.

The Delphi technique seeks expert opinion, as critical decisions require critical thinking and reasoning. The technique provides a rigorous and systematic strategy in collecting and disseminating such critical information. The technique allows for individuals to participate in decision-making without having to travel. The Delphi technique can be described as a method that is used to obtain the most reliable consensus of opinion of a group through a series of intensive questionnaires interspersed with controlled feedback. **Consensus** is defined according to the literature of Larson and Wissman (2000:45) where 80% of the participants vote on a specific item within the same value of the three-point scale. According to Dajani, Sincoff and Talley (1979:83) **consensus** is assumed to have been achieved when a certain percentage of respondents falls within a prescribed range for the value being estimated.

The technique involves questioning of the individuals while avoiding direct confrontation of group members with one another. Participants will not be asked to

simply choose from a number of alternatives, but will be required to make an evaluation based on clearly defined areas. Approximately two to three rounds will be executed because the positions are usually unlikely to change after two to three rounds. **Stability** is described as the natural tendency of opinions of experts to centralise (Linstone & Turoff 1979:277). Stability can be declared when movement of the opinion of the group as a whole has reached stability.

The process is anonymous in that only the researcher and promoters will have access to aspects such as the origin of the feedback and the responses. The findings of each round of questionnaire implementation will be processed and the prepositions will be edited accordingly, whereafter the questionnaire will be sent to the respondents once again for comments and rating. The consolidation and assessment processes alternate until only that on which consensus has not been reached is retained. Thus, for each round the Delphi questionnaire becomes much shorter.

A model for Continuing Professional Development (CPD) in Occupational Therapy in South Africa based on adult education perspectives will add strength and value to professional development in Occupational Therapy.

I would therefore like to request you to take part in the Delphi process, which is scheduled to take place from November 2009. The researcher would like to emphasise once again that it is of the utmost importance that no discussion takes place with regard to the content of the Delphi questionnaire, as this will hamper the research process.

Should you be willing to participate, please fill in the accompanying consent form and return it to me electronically or by fax as soon as possible. The first round will take no more than 30 - 45 minutes of your time while a follow-up round may only take 15 - 20 minutes.

Thank you so much for your consideration of this initiative - I am looking forward to hearing from you soon. Your participation will contribute to the improvement of professional development in Occupational Therapy.

Yours sincerely

Ms M.J. Collender (Researcher)
Student Nr. 1999241597
Faculty of Health Sciences
University of the Free State
P.O. Box 339
Bloemfontein 9301

Telephone number: 0828721865
E-mail address: moniscol@yahoo.com
Fax: 051 - 4443505

APPENDIX B2

FORM OF CONSENT FOR DELPHI PANELISTS

Date .....

Hereby I, the undersigned, consent to participate in the Delphi process, which is scheduled to take place from November 2009 to ± the 2nd week of February 2010.

I also undertake to ensure that my participation in this process remains confidential and that no information from the research process is divulged.

Surname: _____

Full names: _____

Official position: _____

Postal address: _____

_____

E-mail address: _____

Tel. number: _____

_____

SIGNATURE/TYPED CONSENT

I wish to assure you that the information will be treated in a highly confidential manner and that there will be no reference to any names. Thank you in advance for your kind co-operation. Please note that the results coming from this doctoral study will be published.

Please return this form on or before 20 November 2009. My full particulars are as follows:

Postal address: Health Sciences Education
Faculty of Health Sciences, G14
University of the Free State
P.O. Box 339
Bloemfontein 9300
Telephone number: 0828721865
E-mail address: moniscol@yahoo.com
Fax: 051 - 4443505

Thank you in advance for your kind co-operation.

Yours faithfully

Ms M.J. Collender (Researcher)
(Student number: 1999241597)

REGISTERED PH.D. PROJECT

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APPENDIX C

(INCLUDING APPENDICES C1-C3)

APPENDIX C1:	**LETTER TO DELPHI PANEL ROUND ONE**
APPENDIX C2:	**QUESTIONNAIRE FOR DELPHI PANEL ROUND ONE**
APPENDIX C3:	**FEEDBACK ON ROUND ONE**

APPENDIX C1

LETTER TO DELPHI PANEL ROUND ONE

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Colleague

Thank you for agreeing to participate in this Delphi research process. We now have all participants on board! Attached please find the first-round questionnaire for the Delphi process. Thank you for setting aside time to complete this document and for returning it to me. I appreciate your willingness to participate in this research. The attached questionnaire was compiled after conducting a thorough literature review as well as from sone of the findings of a questionnaire to registered occupational therapists.

Information on the structure of the Delphi questionnaire

The structuring of the questionnaire has been developed in order for you to offer your opinion regarding the relative importance of the listed criteria. These criteria are all envisaged to contribute to the compiling of a model for continuing professional development (CPD) in Occupational Therapy in South Africa from an adult education perspective. The questionnaire contains numbered statements that also provide the opportunity to offer additional suggestions and comments. The questionnaire is subdivided into five sections from A through to E. In each section precise statements are provided that indicate the specific theme of that section to you.

Procedure of the Delphi Process

The opinion of each participant is needed with regard to the importance of each criterion for such a model. All information provided and opinions offered by all

participants will be treated as strictly confidential. Please note that no respondent will know the identity of any other respondent. Only the researcher and supervisors will have knowledge of the identity of the respondents. In terms of the research process, please ensure that you keep all information pertaining to this research and questionnaire confidential. This will also be applicable to the subsequent rounds of the Delphi process. The Delphi process has been proven to be a very useful research tool, and particularly in terms of health-based research where predictions and strategies concerning health and health education are developed. **The researcher would like to emphasise once again that it is of the utmost importance that no discussion takes place with regard to the content of the questionnaire, as this will hamper the research process.**

The Delphi process is conducted in such a way that feedback will be provided to all participants. The researcher will indicate outcomes of each statement in the follow-up rounds.

Please attend to all the points.

Please complete the questionnaire as follows:

Each statement must be evaluated in respect of its importance as an aspect or criterion that must be included in the model for Continuing Professional Development (CPD) in Occupational Therapy in South Africa based on an adult education perspective. Please indicate your opinion on the three-point Likert scale provided. These points are defined as follows:

1 = Essential (This criterion must **DEFINITELY BE INCLUDED** in the model).

2 = Useful (This criterion **CAN BE INCLUDED** in the model).

3 = Unnecessary (This criterion must **DEFINITELY BE EXCLUDED** from the model).

If possible, please complete the questionnaire in its electronic form. If, however, you prefer to print it out and complete it in paper format, please feel free to do so.

In both cases please respond to all the points by placing an X over the specific number of your choice in the scale provided with each statement. Space is also provided in each section for any further comments that you would like to make regarding that particular section.

The questionnaire in this round takes up to 30 - 45 minutes of your time. Please contact me if anything is unclear to you. Thank you for agreeing to sacrifice your time in support of this important initiative.

Thank you in anticipation.

Ms M.J. Collender (Researcher)
(Student number: 1999241597)
Health Sciences Education
Faculty of Health Sciences
University of the Free State
Bloemfontein 9301

My promoter:

Prof. A.C. Wilkinson
Head: Higher Education Studies
Faculty of Humanities
University of the Free State,
Bloemfontein, South Africa.

Co-promoter:

Prof. M.M. Nel
Head: Health Sciences Education
Faculty of Health Sciences
University of the Free State,
Bloemfontein, South Africa.

PLEASE NOTE:

Save the attached Delphi Questionnaire as a Word document on your computer before completing it. Send the completed questionnaire back to us as an attachment to an e-mail message nelmm@ufs.ac.za or fax it back to 051 - 4443505.

APPENDIX C2

QUESTIONNAIRE FOR DELPHI PANEL ROUND ONE

	SECTION A **CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS**				
	This section deals with the description of the concepts CPD, adult education as well as an adult learner. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
1	**CONTINUING PROFESSIONAL DEVELOPMENT**				
	The concept CPD can be described as follows:				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
a	CPD is a continuous process				
	• outside formal training	1	2	3	
	• outside graduate training	1	2	3	
b	It allows an individual health professional				
	• to maintain standards of clinical practice	1	2	3	
	• to improve standards of clinical practice	1	2	3	
c	Through the development of				
	• knowledge	1	2	3	
	• skills	1	2	3	
	• attitudes	1	2	3	
	• behaviour	1	2	3	
2	**ADULT EDUCATION**				
	The concept adult education can be described as follows:				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
a	"The activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults" (Merriam & Brockett 1997:8)	1	2	3	
3	**ADULT LEARNER**				
	The concept adult learner can be described as follows:				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	An adult learner is an individual				
	• with different experiences	1	2	3	
	• pre-knowledge	1	2	3	
	• life–worlds	1	2	3	
	• life tasks	1	2	3	
	• life-roles	1	2	3	
b	Each adult learner has a unique set of				
	• needs	1	2	3	
	• strengths	1	2	3	
	• weaknesses	1	2	3	
	• preferences	1	2	3	
4	**ANY FURTHER COMMENTS ON THESE CONCEPTS**				

SECTION B
ADULT EDUCATION AND ADULT LEARNERS

This section deals with adult learning

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
5	**ATTRIBUTES OF THE ADULT LEARNER**				
	Adult learners				
a	prefer autonomy	1	2	3	
b	responsibility	1	2	3	
c	self-determination	1	2	3	
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	
e	need to be respected and acknowledged as responsible human beings	1	2	3	
6	**LEARNING EVENTS**				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Learning events will have to accommodate				
a	independence	1	2	3	
b	responsibility	1	2	3	
c	self-direction	1	2	3	
d	learning through two-way communication between the educator and the adult learner	1	2	3	
7	**LEARNING EXPERIENCES**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The adult learner has				
a	A vast array of life experiences	1	2	3	
b	specific attitudes	1	2	3	
c	pre-conceptions that come into play when knowledge has to be applied	1	2	3	
8	**LEARNING PROCESS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult learners				
a	want to participate in the learning process	1	2	3	
b	prefer that learning should be facilitated rather than be didactic with a synergistic result	1	2	3	
9	**LEARNING FACILITATION**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Facilitators need to explore learners'				
a	experiences	1	2	3	
b	beliefs	1	2	3	
c	needs	1	2	3	
d	and utilise and compliment those mentioned in a-c	1	2	3	
e	and ensure relevance of content	1	2	3	
f	and applicability of content	1	2	3	

10	LEARNING STRATEGIES FOR ADULT LEARNERS				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult education strategies should be aimed at including the following/must emphasise:				
a	must be relevant to learners' life-world and learners should know the rationale or benefit for transformation or engagement	1	2	3	
b	all examples and case studies should be from the learners' life-world	1	2	3	
c	feedback on progress, strengths and weaknesses	1	2	3	
d	learners want to contribute to application potential of new learning	1	2	3	
e	assessment should be done on real-life tasks	1	2	3	
f	adults bring physiological ageing to the learning environment such as visual, audio, energy and health deterioration and therefore the learning environment should take this into consideration	1	2	3	
g	adults learn best if they feel safe and protected and the facilitator must ensure an environment of co-operation where they feel safe to explore	1	2	3	
11	ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS				

SECTION C
CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT

This section deals with the contextualising and conceptualising of CPD aspects.

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

12	THE PURPOSE OF CPD				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The broad purpose				
	• of CPD is a continuing process that allows individual health professionals to maintain and improve standards of professional practice	1	2	3	
	• is achieved through the development of knowledge, skills, attitudes and behaviour	1	2	3	
13	THE CPD PROCESS				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The CPD process is a linear process and includes:				
a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	
b	learning outcomes	1	2	3	
c	developing a learning plan	1	2	3	
d	implementing the learning plan (CPD event)	1	2	3	
e	assessment (formative and summative)	1	2	3	
f	evaluating the CPD event	1	2	3	
g	measuring the outcome of the CPD event	1	2	3	
h	improved competencies	1	2	3	
i	higher quality patient care	1	2	3	
14	**MANAGEMENT OF CPD**				
	To manage CPD a thorough knowledge of the following is necessary:				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	Definitions, roles and responsibilities of the				
	• health professional	1	2	3	
	• accreditors	1	2	3	
	• service providers	1	2	3	
	• professional board	1	2	3	
	• national accreditors forum	1	2	3	
	• HPCSA CPD committee	1	2	3	
b	Hierarchy of learning activities				
	• activities on Level 1 and CEUs allocated	1	2	3	
	• activities on Level 2 and CEUs allocated	1	2	3	
	• activities on Level 3 and CEUs allocated	1	2	3	
c	Specific regulations and rules on				
	• activities that do not qualify for CEUs	1	2	3	
	• non-compliance	1	2	3	
	• deferment	1	2	3	
	• health professionals abroad	1	2	3	
	• retirement, illness and non-clinical practice	1	2	3	
	• community service	1	2	3	
	• voluntary removal from register: de-registration	1	2	3	
	• restoration after erasure	1	2	3	
15	**CRITERIA FOR EFFECTIVE CPD**				
	The following criteria ensure effective CPD				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	Convenience for the participant in terms of				
	• time	1	2	3	
	• pace	1	2	3	
	• place	1	2	3	
b	Relevance to the needs of the participant	1	2	3	
c	Individualisation to the needs of the participant	1	2	3	
d	Self-assessment by the participant of his/her own competence	1	2	3	
e	Interest in the programme by the participant	1	2	3	
f	A systematic coverage of the topic/theme of the programme	1	2	3	
g	Inclusion of grey areas or areas of speculation in the programme	1	2	3	
16	**ANY FURTHER COMMENTS ON CPD**				

SECTION D
NEED FOR CPD IN SPECIFIC AREAS

This section deals with various content needs for CPD.

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

17 CONTENT NEED

The following needs must be included (separate or within) in CPD programmes/offerings

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	Clinical needs:				
	• programmes must include topics on clinical disease areas	1	2	3	
b	Business needs:				
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				
	• programmes must include topics on computer areas	1	2	3	
d	Health policy needs:				
	• programmes must include topics on health policy areas	1	2	3	
e	Ethical needs:				
	• programmes must include topics on ethical areas	1	2	3	
f	Interpersonal skills:				
	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	

18	ANY FURTHER COMMENTS ON CONTENT NEEDS

SECTION E
ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA FROM ADULT EDUCATION PERSPECTIVES

This section deals with aspects that should be addressed in the model

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
19	ASPECTS TO BE INCLUDED IN MODEL				
	The following should be included:				
A	CPD from an adult education perspective: clarifying the concepts	1	2	3	
B	Adult education and adult learners	1	2	3	
C	Contextualising and conceptualising of CPD aspects	1	2	3	
D	Content need for CPD in specific areas	1	2	3	
20	ANY FURTHER COMMENTS ON THE ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD				

THANK YOU FOR PARTICIPATING IN THIS STUDY

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APPENDIX C3

FEEDBACK ON ROUND ONE

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Delphi Participant

Thank you for agreeing to participate in this Delphi process. Attached please find the results of the first round of the Delphi process. This feedback is sent to you for the sole purpose of providing you with the results regarding the first round. YOU NEED NOT DO ANYTHING WITH IT.

According to Larson and Wissman (2000:45) consensus is reached where 80% of the participants indicate the same value (to a specific item) as their choice. In round one of the Delphi process, out of 93 statements, consensus was reached on 55.9% of these statements. For round two, only the remaining statements are left for your consideration.

All the statements on which consensus have been reached, have been shaded in the attached feedback on round one. All the comments received from all participants are included. The questionnaire for round two of the Delphi process will reach you today. It includes only those questions on which consensus have not been reached. It is, therefore, a much shorter questionnaire.

Thank you

Ms M.J. Collender
(Student number: 1999241597)

REFERENCE LIST FOR FEEDBACK ON ROUND ONE

Larson, E. & Wissman, J. 2000. Critical academic skills for Kansas Community College graduates: A Delphi study. Community College Review. 28(2):45.

QUESTIONNAIRE FOR DELPHI PANEL ROUND ONE : FEEDBACK

	SECTION A **CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS**				
	This section deals with the description of the concepts CPD, adult education as well as an adult learner. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
1	**CONTINUING PROFESSIONAL DEVELOPMENT**				
	The concept CPD can be described as follows:				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	**Own words of panelists** Comments
a	CPD is a continuous process				
	• outside formal training	1	2	3	This includes both under- and postgraduate training. You can do formal training after your basic degree e.g. M or PhD and that is also CPD activities. However, I see these activities as formal training and CPD is "inside" formal training, not only "outside".
	• outside graduate training	1	2	3	CPD happens only after your initial qualification.
b	It allows an individual health professional				
	• to maintain standards of clinical practice	1	2	3	One would assume that this is true, but there is no guarantee that CPD has any overflow into practice. Attending a course or reading does not ensure better practice, but it does hope that you may be more critical of your own practice.
	• to improve standards of clinical practice	1	2	3	
c	Through the development of				
	• knowledge	1	2	3	
	• skills	1	2	3	Maybe if the CPD activity allows for practice opportunity. But there are very few such CPD activities.
	• Attitudes	1	2	3	Useful but hard to achieve through CPD and also to measure.
	• behaviour	1	2	3	Useful but hard to achieve through CPD and also to

					measure
2	**ADULT EDUCATION**				
	The concept adult education can be described as follows:				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	"The activities intentionally designed for the purpose of bringing about learning among those whose age, social roles or self-perception define them as adults" (Merriam & Brockett 1997:8).	1	2	3	
3	**ADULT LEARNER**				
	The concept adult learner can be described as follows:				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
b	An adult learner is an individual				
	• with different experiences	1	2	3	
	• pre-knowledge	1	2	3	I assume it is different.
	• life-worlds	1	2	3	I assume it is different. I don't understand this term!
	• life tasks	1	2	3	I assume it is different.
	• life-roles	1	2	3	I assume it is different.
c	Each adult learner has a unique set of				
	• needs	1	2	3	
	• strengths	1	2	3	
	• weaknesses	1	2	3	
	• preferences	1	2	3	
4	**ANY FURTHER COMMENTS ON THESE CONCEPTS**				

	SECTION B **ADULT EDUCATION AND ADULT LEARNERS**
	This section deals with adult learning Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).
5	**ATTRIBUTES OF THE ADULT LEARNER**

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult learners				An adult learner is a very interesting concept. Not all adults are adult in their learning.
a	Prefer autonomy	1	2	3	While these are all theoretically true in my experience, they are not always true in practice. It depends on their background.
b	Responsibility	1	2	3	It depends on their background.
c	self-determination	1	2	3	It depends on their background.
d	have a self concept of being responsible for their own learning and decisions	1	2	3	It depends on their background.
e	need to be respected and acknowledged as responsible human beings	1	2	3	The second statement has a different response "useful"
6	**LEARNING EVENTS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Learning events will have to accommodate				
a	Independence	1	2	3	I agree with all these but designing something that meets these criteria is one issue. Ensuring that all OT's have this kind of attitude is completely different. Different backgrounds and learning style preferences need to be accommodated.
b	Responsibility	1	2	3	Different backgrounds and learning style preferences need to be accommodated.
c	self-direction	1	2	3	Different backgrounds and learning style preferences need to be accommodated.
d	learning through two-way communication between the educator and the adult learner	1	2	3	Not always true. If you read a journal article or a book this may not be possible, but some discourse often helps learning. But it is not essential.
7	**LEARNING EXPERIENCES**				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The adult learner has				
a	a vast array of life experiences	1	2	3	
b	specific attitudes	1	2	3	
c	pre-conceptions that come into play when knowledge has to be applied	1	2	3	True for all learners – not only adult learners.
8	**LEARNING PROCESS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult learners				
a	want to participate in the learning process	1	2	3	
b	prefer that learning should be facilitated rather than be didactic with a synergistic result	1	2	3	Not always true. Some adults based on their past experience expect this.
9	**LEARNING FACILITATION**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Facilitators need to explore learners'				
a	experiences	1	2	3	
b	beliefs	1	2	3	
c	needs	1	2	3	
d	and utilise and compliment those mentioned in a-c	1	2	3	In principle yes, but you can't meet all peoples' individual needs all of the time. So it becomes a little impractical.
e	and ensure relevance of content	1	2	3	These 2 are probably the most important.
f	and applicability of content	1	2	3	These 2 are probably the most important.
10	**LEARNING STRATEGIES FOR ADULT LEARNERS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments

	Adult education strategies should be aimed at including the following/must emphasise:				
a	must be relevant to learners' life-world and learners should know the rationale or benefit for transformation or engagement	1	2	3	I do not know what this means in the context of CPD. I changed rational to rationale.
b	all examples and case studies should be from the learners' life-world	1	2	3	Preferable, but is that possible? I believe adult learners can learn a lot from the life-world of others with different worldviews. Sometimes it is also good to expose learners to contexts that are outside their own life-worlds, e.g. 80% of therapists work in settings where only 20% of the population needs their services. Some of them are not even aware that 80% of the population that needs their services are just next door to them. So I think they need to be exposed to other life-worlds as well.
c	feedback on progress, strengths and weaknesses	1	2	3	How can this be achieved?
d	learners want to contribute to application potential of new learning	1	2	3	CPD is a forced situation that OT do not voluntarily want to do. They have to do it. That in my opinion influence the extent to which a person is committed to contribute and participate actively. That is true, but if you are an older therapist and were never exposed to new theories, you do need to get the opportunity to obtain this knowledge in order to keep the standard of practice high.
e	assessment should be done on real-life tasks	1	2	3	Yes, it should. I think this is not always possible. I work with distance education students and it is not possible to observe them in real-life tasks. However, with the kind of assignments required from them, I can ascertain the level of knowledge, synthesis and evaluation thereof the particular cases posed.
f	adults bring physiological ageing to the learning environment such as visual, audio, energy and health deterioration, and therefore the learning environment should take this into consideration	1	2	3	It has not been by experience that this is necessary. If I can use the same example of the distance education students – if you need to read something on the computer or

					a re-print of an article make sure the font is big enough and the quality of the print is clear. It is these "small" things that can irritate a student immensely and eventually impact on the learning experience.
g	adults learn best if they feel safe and protected and the facilitator must ensure an environment of co-operation where they feel safe to explore.	1	2	3	Such support engenders dependency and keeps people in their comfort zone. Most effective learning takes place when people are challenged to think and do outside of their comfort zone. It is good to pull them out of their comfort zone. Learning is change and change is not easy. You need to confront the adult learner with e.g. ethical issues where they need to think holistically about the case. I use the word "case" synonymous for clients or patients.
11	ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS				

	SECTION C **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**				
	This section deals with the contextualising and conceptualising of CPD aspects. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
12.	**THE PURPOSE OF CPD**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The broad purpose				
	• of CPD is a continuing process that allows individual health professionals to maintain and improve standards of professional practice	1	2	3	This is what is desirable. But I am not sure that the way it is structured is achieving this. At best it can try to keep a practitioner up to date and hopefully thereby improve practice.
	• through the development of knowledge, skills, attitudes and behaviour	1	2	3	Could change knowledge and skill. Not sure about the rest.

					Ideally CPD should develop all four aspects, but in practice 'attitudes' receive least emphasis.
13	THE CPD PROCESS				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The CPD process is a linear process and includes:				It has not been my experience that CPD is a linear process. I believe reality for many people is to utilise opportunities as these arise – not always needs (in terms of deficits) driven.
a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	CPD implies that the person will do this for themselves but they do this. It is a very insightful and self critical practitioner that does this. A need assessment is good; however, sometimes a person does not know that she/he does not know because their level of knowledge about a particular field is so poor. They need a wide exposure of new developments to trigger their interest.
b	learning outcomes	1	2	3	Very important.
c	developing a learning plan	1	2	3	
d	implementing the learning plan (CPD event)	1	2	3	If this means that the person must actively seek out activities that would fit the learning plan, she/he has set out.
e	assessment (formative and summative)	1	2	3	OTs may well avoid this kind of situation where they are tested to determine their knowledge/skill etc. Need to think carefully on how to do the assessment as explained earlier. You do not want to burden a few therapists with doing just assessments for the CPD activities. Then you will never have time for your own work. Need to be smart and have a trusting philosophy that people will do what is required of them without over assessment.
f	evaluating the CPD event	1	2	3	
g	measuring the outcome of the CPD event	1	2	3	Nice idea but how would you

					measure that unless there is some kind of summative evaluation and evaluation of their clinical work afterwards? Yes, this is important but sometimes the outcomes can only be measured after a period of time. Who is going to monitor this change? You need to evaluate the weighting of this step.
h	improved competencies	1	2	3	You would hope that this could be achieved but it is not measurable or guaranteed.
i	higher quality patient care	1	2	3	You would hope that this could be achieved but it is not measurable or guaranteed.
14	**MANAGEMENT OF CPD**				
	To manage CPD a thorough knowledge of the following is necessary:				
		ESSENTIAL	USEFUL	UNNECESSARY	From whose experience – do you mean personal management of CPD or management by Professional Board? I answered these questions from a personal perspective (in other words, managing your own CPD points and activities). Comments
a	Definitions, roles and responsibilities of the				These are all important. I think this could be documented and sent to each therapist for information. It is not a necessity. The therapist who is participating with professional development of her own profession is already well informed.
	• health professional	1	2	3	
	• accreditors	1	2	3	
	• service providers	1	2	3	
	• professional board	1	2	3	
	• national accreditors forum	1	2	3	
	• HPCSA CPD committee	1	2	3	
b	Hierarchy of learning activities				In general I think it is a good idea that each individual should manage his/her own CPD activities and we (you) can maybe develop a sort of a format on which they can write down and calculate their yearly CEUs.

	• activities on Level 1 and CEUs allocated	1	2	3	
	• activities on Level 2 and CEUs allocated	1	2	3	
	• activities on Level 3 and CEUs allocated	1	2	3	
c	Specific regulations and rules on				
	• activities that do not qualify for CEUs	1	2	3	From personal experience, I know that people tend to attend activities only when there are CEUs involved. Not that I do agree with this practice!
	• non-compliance	1	2	3	If a course demands of a person to attend a certain percentage then there should be strict rules about compliance.
	• Deferment	1	2	3	
	• health professionals abroad	1	2	3	Only essential for health professions abroad. They have their own system going there. I know about the UK.
	• retirement, illness and non-clinical practice	1	2	3	People who face these issues can find out relevant information. If you are retired or not working any more, then I do not see the need for them to accumulate CEUs any more.
	• community service	1	2	3	This is an important point that was never mentioned before. Need to demarcate the type of services for CEUs.
	• voluntary removal from register: de-registration	1	2	3	Yes if a person is changing jobs e.g. becoming a rep and does not want to come back to the profession, then there must be this opportunity. However, they must know the consequence of this decision.
	• restoration after erasure	1	2	3	
15	**CRITERIA FOR EFFECTIVE CPD**				
	The following criteria ensure effective CPD				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
a	Convenience for the participant in terms of				
	• time	1	2	3	If it is difficult and costly then it will be difficult to implement. This is important especially for those people not living in the bigger cities.
	• pace	1	2	3	This is important. Especially for those people not living in

					the bigger cities.
	• Place	1	2	3	This is important especially for those people not living in the bigger cities.
b	Relevance to the needs of the participant	1	2	3	
c	Individualisation to the needs of the participant	1	2	3	CPD activities must be presented to the broader group of participants. If an individual wants to go into specifics, she/he must enrol for formal degree courses.
d	Self-assessment by the participant of his/her own competence	1	2	3	With the guide of good matrixes.
e	Interest in the programme by the participant	1	2	3	
f	A systematic coverage of the topic/theme for the programme	1	2	3	I am not sure what this means and the implication for the diverse needs of OTs.
g	Inclusion of grey areas or areas of speculation in the programme	1	2	3	May encourage critical thinking, but may not be popular.
16	**ANY FURTHER COMMENTS ON CPD**				

	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	These are all good topics, but will not be the interest of all the participants. A good CPD programme will allow for a variety of activities. Comments
a	Clinical needs:				
	• programmes must include topics on clinical disease areas	1	2	3	These would allow for a variety of CPD needs, but this is not a comprehensive list and some OT may need/want completely different things.
b	Business needs:				
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				Perhaps computers in terms of technical equipment and software training for use on such equipment.

	• programmes must include topics on computer areas	1	2	3	
d	Health policy needs:				
	• programmes must include topics on health policy areas	1	2	3	
e	Ethical needs:				
	• programmes must include topics on ethical areas	1	2	3	Since everybody has to have ethics points this is essential.
f	Interpersonal skills:				
	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	Not sure what this refers to so I can't think that it is important.
18	**ANY FURTHER COMMENTS ON CONTENT NEEDS**				

SECTION E
ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA: FROM AN ADULT EDUCATION PERSPECTIVE

This section deals with aspects that should be addressed in the model

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

	ASPECTS TO BE INCLUDED IN MODEL	ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The following should be included:				
A	CPD from an adult education perspective: clarifying the concepts	1	2	3	Must understand the concept.
B	Adult education and adult learners	1	2	3	You would assume and hope that all OTs are adult learners. Important for the development of the profession.
C	Contextualising and conceptualising of CPD aspects	1	2	3	Sounds grand but what does it mean on a practical level?
D	Content need for CPD in specific areas	1	2	3	This is probably what is needed.
20	**ANY FURTHER COMMENTS ON THE ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD**				

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX D

(INCLUDING APPENDICES D1 – D3)

APPENDIX D1: LETTER TO DELPHI PANEL ROUND TWO

APPENDIX D2: QUESTIONNAIRE FOR DELPHI PANEL ROUND TWO

APPENDIX D3: FEEDBACK ON ROUND TWO

APPENDIX D1

LETTER TO DELPHI PANEL ROUND TWO

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Delphi Participant

Once again I would like to thank you for your willingness to participate in this Delphi process and the feedback that you gave regarding round one of the process. All comments are welcome and will be discussed in the thesis.

Attached please find the 2nd round of the Delphi process. I have not included any of the questions of the questionnaire on which consensus was reached in the first round. You will therefore see that this questionnaire for the 2nd round is much shorter than the one for the first round. Consensus was reached on 55.9% of the statements in the first round.

Purpose of the questionnaire for Round 2:

The questionnaire in this round is structured in such a way that it can determine your opinion regarding all the statements (criteria) on which consensus **was not reached** during the first round. This questionnaire contains the numbered statements and provides opportunities for reconsideration and additional comments and suggestions. All sections and statements are numbered exactly the same as in the first round.

Instructions for completion of the second round:

As mentioned above, the attached questionnaire for round two contains only those statements on which consensus was not reached in round one. For the purpose of this Delphi process consensus is defined according to the proposals of Larson and Wissman (2000:45) where 80% of the participants vote on a specific item within the same value of the three-point scale.

Please use the following scale again:

1 = Essential (This criterion must **DEFINITELY BE INCLUDED** in the model).
2 = Useful (This criterion **CAN BE INCLUDED** in the model).
3 = Unnecessary (This criterion must **DEFINITELY BE EXCLUDED** from the model).

During this second round, you are allowed to change your opinion if you feel like doing so. You can therefore assign a different level of importance to any of the statements, should you think it appropriate.

Please indicate your choice for the statements in round two by once again placing an X over the number of your choice. You also have an opportunity for expressing any comments that you deem necessary. **Please attend to all the points in the questionnaire.** We are aiming at obtaining consensus on each statement throughout the questionnaire.

Please keep in mind that your response remains anonymous (and confidential and will be known only by the researcher and her supervisors).

The completion of this second round questionnaire should not take you longer than ± 20 minutes.

If possible, I would like to receive feedback on this round not later than Tuesday, 15 December 2009, please.

Once again thank you for your willingness to be of assistance in this research.

Kind regards

Ms M.J. Collender

REFERENCE LIST FOR LETTER TO DELPHI PANEL ROUND TWO

Larson, E. & Wissman, J. 2000. Critical academic skills for Kansas Community College graduates: A Delphi study. *Community College Review.* 28 (2): 45.

APPENDIX D2

QUESTIONNAIRE FOR DELPHI PANEL ROUND TWO

SECTION A
CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS

This section deals with the description of the concepts CPD, adult education as well as an adult learner.

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

1 CONTINUING PROFESSIONAL DEVELOPMENT

The concept CPD can be described as follows:

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	CPD is a continuous process, and it could be				
	• outside formal training	1	2	3	
	• outside graduate training	1	2	3	

3 ADULT LEARNER

The concept adult learner can be described as follows:

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	An adult learner is an individual				
	• with different experiences	1	2	3	
	• pre-knowledge	1	2	3	

4 ANY FURTHER COMMENTS ON THESE CONCEPTS

SECTION B
ADULT EDUCATION AND ADULT LEARNERS

This section deals with adult learning

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

5	ATTRIBUTES OF THE ADULT LEARNER				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult learners in general				
a	prefer autonomy	1	2	3	
b	Responsibility	1	2	3	
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	
6	LEARNING EVENTS				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Learning events will have to accommodate to a greater or lesser extent				
a	independence	1	2	3	
b	responsibility	1	2	3	
c	self-direction	1	2	3	
7	LEARNING EXPERIENCES				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The adult learner has				
a	a vast array of life experiences	1	2	3	
9	LEARNING FACILITATION				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Facilitators need to explore learners'				
b	Beliefs	1	2	3	
10	LEARNING STRATEGIES FOR ADULT LEARNERS				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult education strategies should be aimed to at including the following/must emphasise:				
a	must be relevant to learners' life-world and learners should know the rationale or benefit for transformation or engagement	1	2	3	
b	all examples and case studies should be from the learners' life-world (real-life experiences)	1	2	3	
e	assessment should be done on real-life tasks where/when relevant	1	2	3	
11	**ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS**				

SECTION C
CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT

This section deals with the contextualising and conceptualising of CPD aspects.

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
13	**THE CPD PROCESS**				
	The CPD process is a linear process and includes:				
a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	
c	developing a learning plan	1	2	3	
d	implementing the learning plan (CPD event)	1	2	3	
e	assessment (formative and summative)	1	2	3	
14	**MANAGEMENT OF CPD**				
	For authorities (e.g. councils, boards, managers) to manage CPD, a thorough knowledge of the following is necessary:				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	Definitions, roles and responsibilities of the				

	• health professional	1	2	3	
	• accreditors	1	2	3	
	• service providers	1	2	3	
	• professional board	1	2	3	
	• national accreditors forum	1	2	3	
	• HPCSA CPD committee	1	2	3	
c	Specific regulations and rules on				
	• activities that do not qualify for CEUs	1	2	3	
	• non-compliance	1	2	3	
	• deferment	1	2	3	
	• health professionals abroad	1	2	3	
	• retirement, illness and non-clinical practice	1	2	3	
	• community service	1	2	3	
	• voluntary removal from register: de-registration	1	2	3	
	• restoration after erasure	1	2	3	
15	**CRITERIA FOR EFFECTIVE CPD**				
	The following criteria ensure effective CPD				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
c	Individualisation to the needs of the participant	1	2	3	
f	A systematic coverage of the topic/theme for the programme	1	2	3	
g	Inclusion of grey areas or areas of speculation in the programme	1	2	3	
16	**ANY FURTHER COMMENTS ON CPD**				

	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
b	Business needs:				
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				
	• programmes must include topics on computer areas	1	2	3	
f	Interpersonal skills:				

	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	
18	**ANY FURTHER COMMENTS ON CONTENT NEEDS**				

SECTION E
ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA FROM ADULT EDUCATION PERSPECTIVES

This section deals with aspects that should be addressed in the model

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
19	**ASPECTS TO BE INCLUDED IN MODEL**				
	The following should be included:				
B	Adult education and adult learners	1	2	3	
20	**ANY FURTHER COMMENTS ON THE ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD**				

THANK YOU FOR PARTICIPATING IN THIS STUDY

QUESTIONNAIRE FOR DELPHI PANEL ROUND TWO : FEEDBACK

SECTION A
CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FROM AN ADULT EDUCATION PERSPECTIVE: CLARIFYING THE CONCEPTS

This section deals with the description of the concepts CPD, adult education as well as an adult learner.

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

1 CONTINUING PROFESSIONAL DEVELOPMENT

The concept CPD can be described as follows:

		ESSENTIAL	USEFUL	UNNECESSARY	Own words of panelists Comments
a	CPD is a continuous process, and it could be				
	• outside formal training	1	2	3	
	• outside graduate training	1	2	3	

3 ADULT LEARNER

The concept adult learner can be described as follows:

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
a	An adult learner is an individual				
	• with different experiences	1	2	3	
	• pre-knowledge	1	2	3	

4 ANY FURTHER COMMENTS ON THESE CONCEPTS

SECTION B
ADULT EDUCATION AND ADULT LEARNERS

This section deals with adult learning

Please indicate how important each of the following statements is according to the following scale:
1 = Essential
2 = Useful
3 = Unnecessary
Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).

5 ATTRIBUTES OF THE ADULT LEARNER

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult learners in general				
a	prefer autonomy	1	2	3	I am not sure from experience that they are true, but they are useful. It depends on their previous experience; exposure and learning style preference.
b	responsibility	1	2	3	It depends on their previous experience; exposure and learning style preference.
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	It depends on their previous experience; exposure and learning style preference.
6	**LEARNING EVENTS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Learning events will have to accommodate to a greater or lesser extent.				
a	independence	1	2	3	It depends on their previous experience; exposure and learning style preference.
b	responsibility	1	2	3	It depends on their previous experience; exposure and learning style preference.
c	self-direction	1	2	3	Depends on what it is. It depends on their previous experience; exposure and learning style preference.
7	**LEARNING EXPERIENCES**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The adult learner has				
a	a vast array of life experiences	1	2	3	
9	**LEARNING FACILITATION**				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Facilitators need to explore learners'				
b	Beliefs	1	2	3	
10	**LEARNING STRATEGIES FOR ADULT LEARNERS**				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	Adult education strategies should be aimed at including the following/must emphasise:				
a	must be relevant to learners' life-world and learners should know the rationale or benefit for transformation or engagement	1	2	3	Wording very complex.
b	all examples and case studies should be from the learners' life-world (real-life experiences)	1	2	3	May be impossible if you have a heterogeneous group. Must be real-life experiences, but not necessarily from the person's own life-world.
e	Assessment should be done on real-life tasks where/when relevant	1	2	3	Nice, but may be impractical.
11	**ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS**				

	SECTION C **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**
	This section deals with the contextualising and conceptualising of CPD aspects. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).
13	**THE CPD PROCESS**

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The CPD process is a linear process and includes:				The need to accumulate points may detract from this.

					I disagree with the idea of linearity of this process. It is a cyclic process, if it was linear it had an end and continuous indicates it is never ending.
a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	This implies much more to formal education.
c	developing a learning plan	1	2	3	This implies much more to formal education.
d	implementing the learning plan (CPD event)	1	2	3	This implies much more to formal education.
e	assessment (formative and summative)	1	2	3	This implies much more to formal education.
14	**MANAGEMENT OF CPD**				
	For authorities (e.g. councils, boards, managers) to manage CPD a thorough knowledge of the following is necessary:				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
a	Definitions, roles and responsibilities of the				
	• health professional	1	2	3	
	• accreditors	1	2	3	
	• service providers	1	2	3	
	• professional board	1	2	3	
	• national accreditors forum	1	2	3	
	• HPCSA CPD committee	1	2	3	
c	Specific regulations and rules on				
	• activities that do not qualify for CEUs	1	2	3	
	• non-compliance	1	2	3	
	• deferment	1	2	3	
	• health professionals abroad	1	2	3	
	• retirement, illness and non-clinical practice	1	2	3	
	• community service	1	2	3	
	• voluntary removal from register: de-registration	1	2	3	
	• restoration after erasure	1	2	3	
15	**CRITERIA FOR EFFECTIVE CPD**				
	The following criteria ensure effective CPD				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
c	Individualisation to the needs of the participant	1	2	3	The individual has choice to attend relevant activities.
f	A systematic coverage of the topic/theme for the programme	1	2	3	I don't understand what this means.
g	Inclusion of grey areas or areas of speculation in the programme	1	2	3	I don't understand what this means.
16	**ANY FURTHER COMMENTS ON CPD**				

	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
b	Business needs:				CPD activities covering these topics are acceptable – an OT would have to decide if it would be of value to him/her. It should not be mandatory like it is currently the case with ethics.
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				
	• programmes must include topics on computer areas	1	2	3	
f	Interpersonal skills:				
	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	
18	**ANY FURTHER COMMENTS ON CONTENT NEEDS**				
	SECTION E **ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD IN OCCUPATIONAL THERAPY IN SA FROM ADULT EDUCATION PERSPECTIVES**				
	This section deals with aspects that should be addressed in the model Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
19	**ASPECTS TO BE INCLUDED IN MODEL**				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The following should be included:				Not sure included into what? Assuming you mean into a CPD programme for Adult Learners.
B	Adult education and adult learners	1	2	3	You should include adult learning strategies but to say that the person is an adult learner, is a fallacy even although they may be in the adult years.
20	ANY FURTHER COMMENTS ON THE ASPECTS THAT SHOULD BE ADDRESSED IN A MODEL FOR CPD				

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX D3

FEEDBACK ON ROUND TWO

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Delphi Participant

Thank you for agreeing to participate in this Delphi process. Attached please find the results of the second round of the Delphi process. This feedback is sent to you for the sole purpose of providing you with the results regarding the second round. YOU NEED NOT DO ANYTHING WITH IT.

According to Larson and Wissman (2000:45) consensus is reached where 80% of the participants indicate the same value (to a specific item) as their choice. In round two of the Delphi process, out of the remaining 41 statements, consensus was reached on 30 statements (73.1%). Thus, after round two of the Delphi process, out of 93 statements, consensus has been reached on 88.2% of the total number of statements. I have shaded all the statements on which consensus have been reached.

For round three, only the remaining statements are left for your consideration. This short questionnaire will reach you today.

Thank you.

Ms M.J. Collender

REFERENCE LIST FOR FEEDBACK ON ROUND TWO

Larson, E. & Wissman, J. 2000. Critical academic skills for Kansas Community College graduates: A Delphi study. *Community College Review.* 28 (2): 45.

APPENDIX E

(INCLUDING APPENDICES E1 – E3)

APPENDIX E1: LETTER TO DELPHI PANEL ROUND THREE

APPENDIX E2: QUESTIONNAIRE FOR DELPHI PANEL ROUND THREE

APPENDIX E3: FEEDBACK ON ROUND THREE

APPENDIX E1

LETTER TO DELPHI PANEL ROUND THREE

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Delphi Participant

Once again I would like to thank you for your willingness to participate in this Delphi process. All comments are welcome and will be discussed in the thesis.

Attached please find the 3rd round of the Delphi process. **This may be the final round.** I have not included any of the questions of the questionnaire on which consensus was reached in the second round. You will therefore see that this questionnaire for the third round is much shorter than the one for the previous round. Consensus has been reached on 88.2% of the total statements.

Purpose of the questionnaire for Round 3:

The questionnaire in this round is structured in such a way that it can determine your opinion regarding all the statements (criteria) on which consensus **have not been reached** during the second round. This questionnaire contains the numbered statements and provides opportunities for reconsideration and additional comments and suggestions. All sections and statements are numbered exactly as in the previous rounds. Please look at all these questions again, and confirm whether you stand by your opinion as a final decision.

Instructions for completion of the third round:

As mentioned above, the attached questionnaire for round three contains only those statements on which consensus was not reached in round two. For the purpose of this Delphi process **consensus** is defined according to Larson and Wissman (2000:45) where 80% of the participants vote on a specific item within the same value of the three-point scale.

Please use the following scale again:

1 = Essential (This criterion must **DEFINITELY BE INCLUDED** in the model).
2 = Useful (This criterion **CAN BE INCLUDED** in the model).
3 = Unnecessary (This criterion must **DEFINITELY BE EXCLUDED** from the model).

During this third round, you are allowed to change your opinion if you feel like doing so. You can therefore assign a different level of importance to any of the statements, should you think it appropriate.

If you prefer to stand by your previous answers or decided that you will not change your answer after this round (round three) and that you stand by it, please reply in written format that it is your choice.

Stability is described as the natural tendency of opinions of experts to centralise (Linstone & Turoff 1979:277). Stability can be declared when movement of the opinion of the group as a whole has reached stability.

Please indicate your choice for the statements in round three by once again placing an X over the number of your choice. You also have an opportunity for expressing any comments that you deem necessary. **Please attend to all the points in the questionnaire.** We are aiming at obtaining consensus on each statement throughout the questionnaire.

Please keep in mind that your response remains anonymous (and confidential will be known only by the researcher and her supervisors).

The completion of this third round questionnaire should not take you longer than ± 10 minutes. There are only 11 statements!

If possible, I would like to receive feedback on this round not later than Monday, 7 February 2010, please.

Once again thank you for your willingness to be of assistance in this research.

Kind regards

Ms M.J. Collender

REFERENCE LIST FOR LETTER TO DELPHI PANEL ROUND THREE

Larson, E. & Wissman, J. 2000. Critical academic skills for Kansas Community College graduates: A Delphi study. *Community College Review.* 28 (2): 45.

Linstone, H.A. & Turoff, M. 1979. Introduction. In H.A. Linstone & M. Turoff (Eds). *The Delphi Method. Technique and application.* London: Addison-Wesley. 3-12.

APPENDIX E2

QUESTIONNAIRE FOR DELPHI PANEL ROUND THREE

	SECTION B **ADULT EDUCATION AND ADULT LEARNERS**				
	This section deals with adult learning. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
5	**ATTRIBUTES OF THE ADULT LEARNER**				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
	Although the attributes of the adult learner depends on their previous experience, exposure and learning style preference, adult learners in general:				
a	prefer autonomy	1	2	3	
b	responsibility	1	2	3	
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	
11	**ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS**				

	SECTION C **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**				
	This section deals with the contextualising and conceptualising of CPD aspects. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
13	**THE CPD PROCESS**				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
	The CPD process includes:				

a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	
c	developing a learning plan	1	2	3	
d	implementing the learning plan (CPD event)	1	2	3	
e	assessment (formative and summative)	1	2	3	
	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
b	Business needs:				
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				
	• programmes must include topics on computer areas	1	2	3	
f	Interpersonal skills:				
	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	
18	**ANY FURTHER COMMENTS ON CONTENT NEEDS**				

THANK YOU FOR PARTICIPATING IN THIS STUDY

QUESTIONNAIRE FOR DELPHI PANEL ROUND THREE : FEEDBACK

	SECTION B **ADULT EDUCATION AND ADULT LEARNERS**				
	This section deals with adult learning. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
5	**ATTRIBUTES OF THE ADULT LEARNER**				
		ESSENTIAL	**USEFUL**	**UNNECESSARY**	Comments
	Although the attributes of the adult learner depends on their previous experience, exposure and learning style preference, adult learners in general:				
a	prefer autonomy	1	2	3	I cannot agree with in general it is an assumption – with my experience in specific settings whether organisational or cultural it will be driven by the elements of experience of the learner, exposure – if the adult has no experience in the subject in an environment of zero tolerance for error the learner does not prefer autonomy and learning style preference.
b	Responsibility	1	2	3	
d	have a self-concept of being responsible for their own learning and decisions	1	2	3	
11	**ANY FURTHER COMMENTS ON ADULT EDUCATION AND ADULT LEARNERS**				
	SECTION C **CONTEXTUALISING AND CONCEPTUALISING OF CONTINUING PROFESSIONAL DEVELOPMENT**				
	This section deals with the contextualising and conceptualising of CPD aspects. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
13	**THE CPD PROCESS**				

		ESSENTIAL	USEFUL	UNNECESSARY	Comments
	The CPD process includes:				
a	a need assessment through identifying weaknesses or areas to be developed.	1	2	3	
c	developing a learning plan	1	2	3	
d	implementing the learning plan (CPD event)	1	2	3	
e	assessment (formative and summative)	1	2	3	I am not sure how CPD can do formative assessment unless it is a formally organised course with evaluation procedures built into it.
	SECTION D **NEED FOR CPD IN SPECIFIC AREAS**				
	This section deals with various content needs for CPD. Please indicate how important each of the following statements is according to the following scale: 1 = Essential 2 = Useful 3 = Unnecessary Please mark the appropriate block with an X. Mark only one of the three choices (Essential, Useful, Unnecessary).				
17	**CONTENT NEED**				
	The following needs must be included (separate or within) in CPD programmes/offerings				
		ESSENTIAL	USEFUL	UNNECESSARY	Comments
b	Business needs:				
	• programmes must include topics on business areas	1	2	3	
c	Computer needs:				
	• programmes must include topics on computer areas	1	2	3	
f	Interpersonal skills:				
	• programmes must include topics on interpersonal skills areas	1	2	3	
g	Personal growth needs:				
	• programmes must include topics on personal growth areas	1	2	3	
18	**ANY FURTHER COMMENTS ON CONTENT NEEDS** **Learners can then select from the comprehensive package what they want to attend.**				

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX E3

FEEDBACK ON ROUND THREE

A MODEL FOR CONTINUING PROFESSIONAL DEVELOPMENT (CPD) IN OCCUPATIONAL THERAPY IN SOUTH AFRICA: AN ADULT EDUCATION PERSPECTIVE

Dear Delphi Participant

Thank you for agreeing to participate in this Delphi process. Attached please find the results of the third round of the Delphi process. This feedback is sent to you for the sole purpose of providing you with the results regarding the third round. YOU NEED NOT DO ANYTHING WITH IT.

According to Larson and Wissman (2000:45) consensus is reached where 80% of the participants indicate the same value (to a specific item) as their choice. In round three of the Delphi process, out of 93 statements, consensus was reached on 94.6% of the total number of statements. On five statements stability was reached (cf. Appendix E1 for definition).

I have, once again, shaded all statements on which consensus have been reached in the attached feedback. This was the final round as stability was reached on the outstanding statements on which consensus was not reached (Linstone & Turoff 1979:277).

Thank you for your participation in the study.

Ms M.J. Collender

REFERENCE LIST FOR FEEDBACK ON ROUND THREE

Larson, E. & Wissman, J. 2000. Critical academic skills for Kansas Community College graduates: A Delphi study. *Community College Review.* 28 (2): 45.

Linstone, H.A. & Turoff, M. 1979. Introduction. In H.A. Linstone & M. Turoff (Eds). *The Delphi Method. Technique and application.* London: Addison-Wesley. 3-12.