

Thesis
3943

**STUDENT SELF-DIRECTION IN THE
THEORETICAL AND PRACTICAL CONTEXTS OF
NURSING/MIDWIFERY EDUCATION**

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THESIS SUBMITTED FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

INSTITUTE OF EDUCATION

UNIVERSITY OF STIRLING

JANUARY 2003

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***I DEDICATE THIS THESIS TO THE MEMORY OF MY BELOVED MAMA
FOR HER UNCONDITIONAL LOVE AND TENDERNESS
THROUGHOUT HER LIFE.***

Acknowledgements

I acknowledge with gratitude the excellent academic supervision which I received from Professor Sally A. Brown and Dr William F. J. Inglis. Development of this thesis to its completion would not have been possible without their conscientious guidance and very constructive criticisms as they examined each chapter. I would also like to express my deepest appreciation for their kind and consistent support during difficult times.

My thanks also go to Miss Elaine Whitefield and Dr H. Staines for their guidance on certain aspects of the computerisation techniques that were unfamiliar to me. My thanks to Dr Leona Elder who proof-read the final document for me.

Finally I would like to thank my family particularly my beloved sister Dr W. L. Kwansa and my friends particularly, Miss Helen Ettles, for the encouragement which I received from everybody.

ABSTRACT

Student self-direction in Nursing Education was explored in this study. Four institutions in the central and eastern regions of Scotland participated. The research participants consisted of cross-sectional year intakes of students undertaking their professional education through the Diploma route and those engaged in Degree level studies. Academic teachers and clinical mentors/preceptors also participated.

Instrumentation comprised semi-structured interview schedules designed for each of the subject groups and a self-rating questionnaire of 56 item Likert-type, five-point scale administered to the students. A total of 130 students completed the questionnaire, 85 of whom were also interviewed. The number of educators who were interviewed was 30.

Content analysis of the interview responses focused on the subjects' conceptualisations of student self-direction, perceptions about the implementation techniques, supervision of the students and the factors influencing these.

Exploratory Factor analysis of the questionnaire responses allowed for extracting the different factor dimensions built into the questionnaire items. Cross-tabulation of the raw data with Two Group Independent T-Test and ANOVA were also produced based on the calculated factor scores for each student. These allowed for establishing how much of the total variance of the factor scores was accounted for by personal and course variables.

The findings from the interviews revealed varied interpretations of the concept. There was evidence to suggest that distinctive differences between the two groups of students were associated with the nature of educational programmes and stage of academic and professional progression. Peer interdependence and participation in peer study groups was more prevalent among the Undergraduates than among their Diploma counterparts. Institutional and statutory influences on student supervision emerged in the theoretical and practical settings and indicated constrained student

empowerment by the clinical preceptors. The systems of academic supervision and facilitation also differed between the two programmes.

The factor analysis yielded 4 main factor dimensions of individuals' perceptions of themselves in the self-directed learning situation and their self-concept of personal autonomy in other aspects of their lives. No association could be established between personal autonomy in the non-academic context and readiness to function in the self-directed, autonomous capacity in the academic context.

This study revealed a need for:

- a re-conceptualisation of student self-direction if the intention is to encourage greater standardisation in its implementation in all the higher academic institutions in Scotland involved in Nursing/Midwifery education.
- appropriate preparatory programmes for educators and students to ensure better insight and understanding of the related concepts and effective implementation of student self-direction.

INTRODUCTION

Synopses of the Different Sections of the Thesis

This thesis presents a detailed examination of student self-direction in Nursing and Midwifery education through combined qualitative and quantitative research study. The investigation involved direct interactions with the students, their academic teachers and their preceptors within the natural settings of knowledge and skills acquisition.

The purpose of the study was to evaluate critically the way in which this educational concept has been interpreted and implemented within the theoretical and practical contexts of learning. It was also to examine the different factors that may have directly or indirectly influenced those processes.

The following synopses present a chapter by chapter overview of the main features of the thesis. The aim is to introduce to the reader the structure and organisation of the content to demonstrate how the different aspects of the research problem were dealt with. It will be noted in the responses quoted that subjects used the terms 'Mentors' or 'Preceptors' depending on the institutions and hospitals with which they were associated. Throughout this thesis the concept of preceptorship will apply based on the argument that the multiple roles include teaching, facilitation, clinical instruction, supervision and assessment of the pre-registration learners. This was considered the more appropriate term because of the strong educational focus of the research topic as opposed to the idea of role model, support and guide in professional development implied in the concept of mentorship. Nursing Education will apply to the broad concept of Nursing and Midwifery Education.

In Chapter One an attempt is made to demonstrate how widely varied are the interpretations

of the concept of self-direction in learning. The related conceptualisations identified from the literature are critically analysed to establish the common elements and the differences that emerge. The operational definition devised in the context of this study is later presented to explicate the underpinning rationales for the research questions and to demonstrate the different dimensions of student self-direction explored in this study. It was also necessary to examine the feasibility of this educational approach within the context of professional practice in general and within nursing education.

The concepts of adulthood, adult learners and adult education are debated drawing on the views and contentions of adult educationists such as Jarvis (1983) to develop an argument on the uncertainty as to how different institutions justify the adulthood of their learners.

Moreover, Bryan's (1991) view that individuals' previous educational and other life experiences are critical to their predisposition to self-direction is also debated. In particular the potential impact of personal motivation and adopted learning styles are explored in relation to individuals' readiness for independent learning at higher academic level. The influence of external motivational factors is debated in relation to claims about adult learners' deep subjective need to be self-directing (Knowles et al., 1984; Brookfield, 1986).

Additionally a situational analysis is used in portraying the theoretical and practical learning climates, the external statutory policies and the nature of professional knowledge in nursing and midwifery. The tension associated with the adoption of student self-direction within an educational context fraught with various constraints of Professional Codes and regulations yet attempting to employ a liberal approach to learning is examined.

Chapter Two presents a progressively developed framework to illustrate the nature of interrelated influences on nursing education and to demonstrate how decisions and policies

from the different levels of the professional structure affect the adoption of this innovative concept. At the institutional level, Council's policy concerning the required level of education is examined. Thus the notion of aspiring to the better standards of higher education based on claims about the benefits of student freedom and flexible interactions with their educators is critically debated.

At the level of the educationists the nature of combined influences from the statutory and institutional levels are analysed. Finally, the impact of the interrelated influences from the statutory, institutional and educationist levels on the students at the receiving end of the policy recommendations is examined.

In Chapter Three a multi-dimensional framework with narrative statements is used to explain the potential effects of extrinsic and intrinsic factors that influence nursing education.

Functional labels are used to explicate the different levels of the organisational and institutional structures. These describe policy decision-makers, policy agents, implementors of policy recommendations and consumers of the statutory policies and the recommendations. These descriptions attempt to portray how each level operated in the process of adoption and implementation of educational policies and other innovative approaches.

The salient policies and regulations proposed by the policy decision-makers are highlighted in order to demonstrate the impact of the status of the policy decision-makers and the nature of authority which they exercise. Similarly the potential factors that affect the way in which the policy agents, the implementors and the consumers responded to the policy recommendations are analysed.

Chapter Four, the methodology chapter, presents a detailed explanation of the research design and the rationales for the methods used in collecting and processing the data. The research questions derive from different dimensions of the problem under investigation. Therefore a comprehensive and definitive explanation of self-direction in learning is proposed to demonstrate the operational definition employed in this study. The chapter begins with a brief overview of the key variables from which the questions derived and in each case the underpinning rationales are explained.

The second part of the chapter explains the plan of investigation and the arguments relating to the choice of study design. A critical discussion of the cross sectional and longitudinal approaches is accompanied by arguments about the rationales for adopting the cross sectional design. A detailed explanation is presented of the stages of development of the interview schedules and the questionnaire administered to the subject sub-group of students.

The following outline presents the broad areas explored in the interviews.

- Part A explored the personal interpretations of self-direction in learning.
- Part B explored the methods of application as well as the reactions and self-directed learning patterns described by the students. The influence of institutional factors including the climate of learning and the extent of students' involvement in decisions about their learning process were also addressed.
- Part C explored the facilitation and supervision practices employed by the educationists and clinical preceptors and the perceived impact on the development of student autonomy and self-direction.
- Part D explored the perceived impact of the external influence of Statutory policies and regulations. The idea was to establish how these affected the educators and students in the implementation of a self-directed learning approach.

In Chapter Five, the technique of content analysis used in this study took account of the verbal expressions of the subjects' personal opinions, attitudes and feelings. Drawing on Yin's (1993) idea, the aim was to adopt a systematic and rigorous approach that ensured that the data were handled and presented, as much as possible, at comparable standards of robustness to that of quantitative data analysis. The main objective was to reduce and structure the data into manageable themes and categories (Brink & Wood, 1994). Additionally the introduction of some quantification in reporting the outcomes of the analysis as proposed by Holsti (1969) allowed for making credible deductions about the subjects' experiences, expressed views and actions. It must be noted that throughout the analysis and the discussion references to expressed feelings and actions are self-reports of how the subjects conveyed their personal experiences and reactions to self-direction in learning. Therefore, such statements refer to how subjects claimed to have felt in given situations or what actions they claimed to take when confronted with specific self-directed demands and challenges. There was no direct observation of actions or behaviours. Therefore, as explained in Chapter Ten, all references to these are the subjects self-report of what they do.

A detailed explication is also presented of the classification scheme and the units of analysis. The stages of formulation of the themes and categories are explained and substantiated by the underpinning rationales, and a framework with relational statements is used to illustrate the inter-relationships among those units of analysis. The final part of the chapter presents a critical debate to justify the decisions and choices made in assessing the validity and reliability of the classification scheme.

The formulation of the themes and categories is followed by analyses of the data from the different groups of subjects. Where the student groups are concerned, the strategy involved

treating the combined data from each year group together then separately from their counterparts on the other programme.

Chapter Six deals with the respondents' conceptualisations of self-directedness in learning.

Whilst Chapter Seven focuses on the operationalisation of self-directed learning in the different settings of the educational programme. The aim was to determine:

- Where the primary responsibility and control over decisions about the learning process was located.
- How familiar students were with the different self-directed learning techniques.
- How practicable was the application of specific techniques of self-directed learning within the theoretical and practical settings.

Chapter Eight deals with the patterns of the students' self-directedness. In this case the analysis focused on two main dimensions of patterns of learning concerning peer interaction and choice of venue or study environment. Where practical skills acquisition was concerned the analysis focused on students' readiness to respond to learning opportunities without waiting to be prompted or directly instructed by their preceptors. Also analysed were the questions as to what extent and at what stages in their educational programmes individuals spontaneously demonstrated specific characteristics of increasing autonomy and self-direction.

Chapter Nine presents analysis of the perceived impact of the supervision provided within the theoretical and practical contexts of learning. In particular the analysis focused on:

- How the academic support was organised to encourage independent learning.
- How the practical supervision was organised to guide and assist acquisition of the practical competencies.

- Whether or not the pattern of supervisor – supervisee interactions were determined by the stage of education of the student.

Chapter Ten focuses on analysis of the data from the self-rating questionnaire administered to the students. Exploratory factor analysis was employed to investigate the perceptions of the students concerning their self-direction in learning. An attempt was made to establish what factors explain specific dimensions of personal autonomy, learning attributes and self-direction. Chapter Eleven deals with the perspectives of the teachers with the aim of analysing their conceptualisations of student self-direction in learning. In addition to their backgrounds and experiences, the teachers' perspectives incorporate their principles and practices based on how individuals interpret the different contexts of teaching (Adler and Goodman, 1985). The key element of this section of the analysis was:

- To establish in what ways the teachers' conceptions influence their facilitation of student autonomy and self-direction.

Chapter Twelve deals with analysis of the different supervision practices employed in the theoretical and practical settings of learning. Therefore the impact of internal and external constraints on perceived supervisory roles and the supervision practices was also analysed. In Chapter Thirteen a critical debate is presented based on the findings from the study to emphasise how specific dimensions of student self-direction are affected by various factors emanating from the different levels of the professional and educational structure. Further argument is used to illustrate how the insight gained might be effectively considered in this educational system. The final section, Chapter Fourteen, presents the conclusions drawn from the findings of this study. Considerations for future studies are also highlighted in a systematic discussion.

CHAPTER ONE

BACKGROUND TO ADOPTION OF THE SELF-DIRECTED LEARNING APPROACH IN NURSING/MIDWIFERY EDUCATION

Introduction

Self-directed learning, as an educational concept, is extensively implemented in several fields of adult education. The pattern, in most institutions, involves implementation of techniques to foster student self-direction within the traditional teacher-directed educational system. In those mixed systems didactic teaching methods such as lectures, laboratory and practical demonstrations, with or without directly supervised practice predominate. This notion of a mixed approach seems to be preferred in many institutions. The reason, apparently, is because these are perceived to allow for unfamiliar and complex material to be introduced before the learners engage in self-directed work (Knowles et.al., 1984; Brookfield, 1986; Stanton, 1988).

Additionally the use of formal lectures is considered by advocates as a more practical means of dealing with large student numbers and delivering a considerable amount of material in situations of time constraint. However, because the lecture method fails realistically to take account of students' personal characteristics such as previous educational backgrounds, learning styles and other relevant life experiences it is perceived as negating the principles of student centredness (James and Jones, 1992). From these arguments it can be construed that adoption of the mixed approach might prove to be potentially more feasible and beneficial when dealing with student cohorts whose previous educational experiences and intellectual capabilities are varied.

The question arises as to whether or not exposure to the mixed approach necessarily helps students with lower intellectual capabilities and preference for the traditional taught educational system to function more effectively. In fact in those cases it could be hypothesised that sporadic implementation of self-directed work within a context of a teacher-directed and didactic educational system, could create undesirable reactions. For example problems of conflict, frustration or even rejection of self-direction in learning could result (Brookfield, 1986).

These issues suggest that the learning approach employed for a particular programme should take account of not only the envisaged educational outcome, curricular content, design and the relevant resources but also the personal characteristics of the learners. This is obviously not easily achievable particularly where large student numbers are involved with excessive demands on the educators who facilitate and supervise the students' learning (James and Jones, 1992).

With these considerations in mind this chapter presents a critical review of the range of conceptualisations of student self-direction based on the principles of adult learning. This allows for examining the rationales for the adoption of this educational concept within nursing education. The intention is progressively to portray the implications (circumstances and potential challenges which the educators and the students face) of implementing the self-directed learning approach. The potential impact of these on their perceptions, reactions, attitudes and practices is examined with regard to future self-direction in post registration education, that is in keeping up-to-date with changes in health care needs, emerging new technology and therapeutic procedures (UKCC, 1994).

The aim, purpose and justification for implementing the self-directed approach is debated in relation to the contexts of theoretical and practical learning. A critical review of the policies and practices which existed prior to the educational reform is also presented. The review includes a consideration of student status and of manpower implications which have evolved with changes in the Health Service. Additionally, the pattern of social transformation and health care needs and demands is explored. Of equal importance, the nature of the educational climate is examined. In this case student demographic profiles and other personal characteristics as well as facilities, learning resources and the policy regulations of the Statutory Bodies and institutional authorities are considered. Finally the nature of the professional knowledge in nursing and midwifery and the implications for the implementation of student self-direction is evaluated. These arguments are progressively developed to demonstrate the reality of implementing student self-direction within nursing and midwifery education.

Range of Definitions of the Concept of Self-Direction in Learning

An extensive review of the literature reveals a diversity of interpretations of the concept of self-direction in learning with clear evidence of considerable uncertainty about the precise meaning of the term (Caffarella and O'Donnell, 1989). Two dimensions of self-direction in learning are notable in the range of definitions. At one end of the spectrum is the view of total student autonomy, in which the individual endeavours to undertake a particular learning venture or to acquire specific knowledge and skills on her/his own without any supervision or guidance (Caffarella & O'Donnell, 1989). At the other end of the spectrum is the view of self-direction with varying degrees of supervision and guidance by the educator and/or other experts (Brookfield, 1986; Knowles, 1975; Knowles et. al., 1984).

Analysis of the various definitions reveals that while some educators are preoccupied by the methods, activities and resources involved in self directed learning, others seem to focus on the attributes that must be fostered or further developed in the learner. In other words the distinction is between self-directed learning as an educational process and self-directed learning as a goal for educational outcome (Boud, 1988). The impact of specific interpretations on learners' reactions and attitudes when engaged in self-directed learning activities are, without doubt, issues of significant academic concern. The level of performance demonstrated by learners and the quality of learning attained from particular interpretations and application must also be considered as matters of academic significance. These could implicate practices that portray elements of programme pedagogy and/or learner pedagogy. It is therefore important to determine what key factors including learner attributes and characteristics predominate in the different interpretations of this educational concept.

Self-directed Learning as an Educational Process.

The notion of self-directed learning as an educational process focuses on the learner's ability to take responsibility and control over his/her own learning. This view is inferred in the earlier definitions, which described self-directed learning as a process in which the learner takes the initiative in determining his/her own learning needs. They also included the learners' ability to identify the relevant learning resources, plan, implement and evaluate the learning (Knowles, 1975). Even though human resource was not explicitly stated in the above definition, the importance of the student's ability to identify and exploit the facilitative role and expertise of the educator and supervisor is now emphasised. Thus later definitions state:

a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating the learning outcomes. (Knowles et al., 1984, p.301)

Other educational researchers who share this view also emphasize the learner's ability to determine limitations in his/her own knowledge and skills. Those definitions go further by suggesting the importance of the learner's ability to use his/her own initiative and creativity in taking appropriate measures to fulfil those learning needs (Moore, 1980; Boud, 1988; Hammond and Collins, 1991; Merriam and Caffarella, 1991).

It is interesting to note that later definitions indicate the change in role of the educator. In this case self-directed learning is described as a process in which the learners are helped to take greater control of their learning. The educator's aim is to empower the students to use the experience gained in improving their life and work situations (Hammond and Collins, 1991; Brockett, 1983). Therefore the essential element in those definitions is the facilitative role of the educator, and the ceding of control to the learner. Additionally the authors imply that the attributes and skills developed through self-directed learning experiences might be transferable to other aspects of life and work. Such capability and control are considered to be crucial to the direction and outcome of this approach to learning. However, the strategies adopted (the ways in which individual students respond and deal with the demands of self-directed work) are influenced by the person's academic capability. Arguably they are also influenced by the learner's willingness to accept personal responsibility and take control over his/her own learning process (Brockett and Hiemstra, 1991).

Self-directedness as a Goal of Educational Outcome

The concept of self-directed learning as an educational outcome relates to the learner's motivation and freedom, independence and primary responsibility in all aspects of the learning process. To be able to exhibit those attributes and function at that level, the student must acknowledge the change in roles of the educator as facilitator and him/herself as a self-directed learner (Boud and Prosser, 1984). Indeed one of the assumptions about adult learners

concerns the learner's self-concept, i.e. the learner's own realisation of her/himself in the capacity of a self-directed learner (Knowles, 1975). However, as experts point out student exposure to the methods and techniques of self-directed learning does not necessarily guarantee that each individual will develop the expected personal and professional characteristics of autonomy and self-directedness (Boud, 1988).

In relation to these claims educational researchers have attempted to distinguish between self-directed learning as a process and self-direction in learning as encompassing both the process and the related personal characteristics of the learner (Brockett and Hiemstra, 1991; Merriam and Caffarella, 1991; Hammond and Collins, 1991). Arguably it is important that educators involved with facilitating and supervising students in their self-directed academic work must gain a clear insight into both perspectives of this concept. Only then would the educators be well enough placed to nurture development of the expected characteristics. They would then be in a position to conduct relevant investigative studies to establish how specific personal characteristics affect students' perceptions about self-directed learning and how they react and behave during such activities.

Self-directed Learning vis-a-vis Learner Self-direction

In distinguishing between self-directed learning and learner self-direction Brockett and Hiemstra (1991) relate the concept of learner self-direction to personal responsibility whereby the individual maintains control over a given learning situation. That includes the learners' reactions and responses to the given self-directed learning situation. The argument, then, is that in situations where the learners perceive the self-directed approach to be imposed on them with no regard for their capabilities or personal learning styles, individuals might demonstrate negative reactions and attitudes.

Similarly student reactions and attitudes might be affected in situations where the learners feel deprived of control of or any involvement in decisions about the learning methods, choice of resources or the environment in which the learning takes place. Boud (1988) cautioned that in such climates students are unlikely to demonstrate the same kind of responsibility that goes with ownership of the decisions and actions involved in their learning process.

Others claim that where the educator consistently retains major control and direction, each stage of the process of developing self-direction in learning becomes disrupted. Taking account of the fact that new and inexperienced students might require different degrees of supervision and assistance from that required by the more experienced self-directed learners, Mezirow (1981) proposes a progressive decrease of student dependence on the educator. This is crucial to development of the kind of self-confidence, and self-reliance required for effective self-direction in learning.

Self-directed learning, on the other hand, is process orientated and refers to the activities in which individuals engage in making good a learning deficit. This involves self-identification of the learning need, planning, implementing and evaluating the outcome and quality of learning gained. The individual may do this with or without seeking the guidance and supervision of an educator (Brockett and Hiemstra, 1991; Knowles et al., 1984). Thus whilst learner self-direction concerns the individual's characteristics, assumption of personal responsibility and engagement in the processes involved, self-directed learning refers to the actions which the individual takes in achieving the desired learning

Student Self-directedness within the Context of Professional Practice.

Another argument that emerges from the range of definitions is that while some educators and students promote student autonomy in learning within the context of formal education, others are strongly critical of that idea. Indeed some opponents are critical to the point of rejecting student self-directedness within the practice settings (Gibbons and Phillips, 1984; Willen, 1984). Certainly the practice settings of most health professional disciplines, including nursing and midwifery, present a particular challenge for fostering self-directed learning. The issue here is that the focus of practice, and indeed the key learning resource, happens to be human beings with complex human needs/demands and varying degrees of dependence (Benner 1984). Therefore the 'trial and error' level at which the novice operates while acquiring practical competencies is especially problematic. The freedom to practice and acquire the necessary professional skills invariably leads to repeated exposure of patients and clients with physical, mental, emotional and/or psychological problems to students for practising various skills. This raises another point of contention. Novices practising at that level require the direct supervision and guidance of the educator or preceptor and other appropriately qualified practitioners. This is crucial until individuals reach a stage at which they are able to perform the required professional skills and competencies safely. Nevertheless the very presence of the educators, preceptors in these settings is seen as negating student self-directedness or student autonomy in learning (Willen, 1984).

The process should enable students to progress gradually from the stage of novice through advancing levels of competence until they no longer require direct supervision. Benner (1984) succinctly describes these stages of progression as novice, advanced beginner, competent, proficient and expert practitioner. Burns' and Grove's (1993) interpretation of Benner's theory is that the process of professional development within the context of clinical practice involves challenging, refining, confirming or disconfirming through the individual's

personal experiences as practitioner. Throughout that process the novice, who initially presented with no professional experience, gradually comes to recognise and intervene in practical situations in clinical practice. Then, using her/his increasing knowledge, the learner demonstrates increasing ability to use personal judgements in setting relevant goals, planning and taking appropriate implementation and evaluative actions. The descriptions of the proficient and expert practitioner portray the increasingly experienced and confident professional with fitting characteristic attributes. She/he is able to take account of all aspects of a patient or client and his/her problems and needs in the planning and implementation of effective individualised care. Various questions arise in relation to these categorisations and these will be considered later in relation to the pattern of progression in students' self-directedness.

A point that seems pertinent here is that the progression implied in these descriptions supports the views of advocates who consider self-directedness as being on a continuum with the teacher-directed approach to learning. They perceive the former as a process which can be implemented not in the literal sense of total student isolation, but with the support and assistance of appropriate experts identified and consulted by the learner at his/her own discretion (Knowles et al 1984; Brookfield, 1986). They also maintain that prior to exposing students to the challenges of self-directed learning, an appropriate orientation must be provided. This ensures that students are aware of the aim and expected learning outcomes of the relevant aspects of the subject or topic that are essential to their professional qualification (Stanton, 1988).

The above discussion presents the argument that the concept of student self-directedness is increasingly being recognised as encompassing multiple dimensions. For example in a discussion about the varied interpretations proposed by different researchers, Candy (1986)

highlights the essential dimensions that have emerged from the different definitions of the concept. In particular he highlights descriptions of student self-direction in terms of independent pursuit of learning opportunities without any form of institutional support. He also highlights descriptions of the concept in terms of learner control, and in terms of the personal characteristics or attributes of the learner. If the background, (educational, social, cultural or other) personality characteristics and attributes of the learner are crucial to effective self-directed learning, then examination of the assumptions about adult learners is warranted in relation to the claims about their self-directed attributes and capabilities.

It is obvious from this discussion how important it is that educators are fully aware of the various modes of learning derived from the interpretations of self-directed learning and the range of other related concepts. These include self-teaching, self-education, self-planned learning and independent or autonomous learning. The common element conveyed from these related concepts is total self-direction in learning with minimal or no intervention from the educator. However the feasibility of that notion in the nursing and midwifery profession appears to be strongly contended because of the nature of the educational system, the nature of nursing knowledge and the associated constraints as will be demonstrated later.

Aim and Purpose of the Change in Nursing Education

The United Kingdom Central Council's (1986) Project 2000 (P2000) philosophy conveyed Council's resolution about the future of nursing education and practice. Council explicitly stipulated the purpose of the envisaged reform as follows:

...to determine the education and training required for the professional practice of nursing, midwifery and health visiting in relation to the projected health care needs in the nineties and beyond and to make recommendations.

(UKCC 1986, p. 3)

Therefore, the education had to be appropriate to prepare the flexible, autonomous and critical minded practitioners capable of meeting current health care needs of society as

anticipated by Council. Council envisaged that the product at the end of the new preparatory programme would be the kind of practitioner who would be capable of performing a wide range of professional activities in both hospital and community settings. This requires that the practitioner keeps up to date with the societal changes, changing health situations, evolving life-styles and patterns of health and disease as well as changes in health care demands.

Additionally the practitioner must be able to demonstrate critical thinking and reflective abilities in practice and the ability to provide sound knowledge-based care with appropriate research application (UKCC, 1985; 1994). It was anticipated that the practitioner would be able to provide required therapeutic education and support based on assessed personal, social and cultural needs. Ability to attend to the physical, mental and psychological problems and needs which the patients and clients present was also considered a fundamental component of the required attributes. It was also envisaged that the practitioner would be appropriately prepared to be able effectively to participate in clinical audit procedures and quality mechanisms in practice (UKCC 1987).

Thus the reformed educational programme was expected to embrace the wider perspectives of academic preparation, development of practical competencies and maintenance of standards of care and cost effectiveness.

Justification for the Educational Reform

Dolan (1993) cited Mason's succinct observation about Project 2000's ownership and rationale i.e. that it be "developed by and for nurses" (Mason 1991). It was thought that this would enhance awareness, responsibility and positive reaction to the project in order to ensure its success. Therefore, appropriate measures in the form of various consultations and roadshows were taken to seek the views of both the practitioners and educators about the existing limitations in the educational system (UKCC, 1985). Council's objectives included

the establishment of a higher educational level of preparation with development of a single level practitioner at diploma level who would be able to demonstrate appropriate professional characteristics. It was also envisaged that the diploma level practitioner would be better prepared than before to question existing practices with a view to instigating change and improvements (UKCC, 1987). In reality there were, and perhaps still are, uncertainties about those proposals both within and outwith the profession. For example, there was a lack of clarity about what constitutes diploma level education. Both Council and the higher educational institutions needed to satisfy themselves about the academic level and standard and quality of the theoretical component. Confidence in the nature and extent of its relevance and applicability to professional practice was also deemed to be crucial.

It is obvious from the above that the change in the education and training system was by no means an overnight incentive but a long-standing and thoroughly examined concern. In the years preceeding the Project 2000 era, various governmental reports highlighted the accelerated rate of constant changes in the social health needs and demands. The reports pointed out that existing curricular programmes were no longer adequate in preparing future practitioners for fulfilling their roles efficiently.

Regarding development of practitioner self-direction and autonomy, Council's paper on New Standards for Education and Practice (1994) emphasised the importance of continuous academic and professional education following registration. It was uncertain as to whether or not the P2000 education proposals would adequately prepare the future practitioner for functioning effectively in an autonomous, self-directing and accountable capacity. What was certain, however, was that, following qualification, the practitioner would be faced with the challenges and demands mentioned in the above arguments. Taking account of this, the Post Registration Education and Practice legislation launched by Council (1994) is also addressed

in this discussion mainly because of its relevance to the notion of transferability of acquired self-directed attributes.

The curricular content, academic level and the different teaching and learning methods of the previous educational system characteristically portrayed didacticism at a level below that of higher academic diploma. More notably this was designed to deliver statutorily prescribed subject content. The newly qualified practitioners emerged from that system of education and moved into the context of service provision. This system had a statutory obligation to protect the public and safeguard patient and client welfare. Despite that, notable gaps existed in the system of education provided. There was an apparent general lack of self-confidence to challenge deficient aspects of their education or question aspects of their practices which they suspected to be inefficient. The attributes of self-direction and the confidence acquired through higher academic level of education were lacking. It became apparent that the system of preparation of the practitioners had to undergo extensive change to reflect those occurring in society and health care demands.

Impact of the Social Health changes on the Educational System

Alongside the emerging social and health care changes various activities were already occurring within the National Health Service Organisation, particularly the rationalisation of hospital and institutional based care with integration of community based care. Additionally various strategies were being employed with a view to developing a new kind of generic practitioner who was expected to adapt and to function effectively within a diverse range of practice settings (DHSS, 1980; 1981; 1984). These measures were attempts to capitalise on the economical use of the available human resources due to a notable decline in staffing levels (Slevin & Buckenham, 1992). There was clearly a need for urgent intervention. It became obvious that if the practitioners were to be expected to function in that capacity then

it was essential to provide the required nurturing experiences to enable them to develop the desired attributes and characteristics of autonomy, critical mindedness and accountability in practice.

Nursing education, however, did not appear to have kept pace with the social changes nor the changes in health technology. It, therefore, was seen as being inappropriate for the ever changing health care needs of society. The impact of these changes on education was concisely stated by Mason when he wrote: "...dramatic social, technological and medical changes ... necessitated a major rethink in the way nurses were educated " (Mason, 1991). In response to these, Council set out to instigate provision of a more feasible and sound professional programme that ensured relevance to the different disciplines.

The need for more extensive intervention in the education and practice policies had now become too critical to be disregarded. It was obligatory for practitioners to be appropriately prepared, educated and trained to a level at which professional autonomy and accountability are maximised.

In its attempt to achieve these, Council delegated its Educational Policy Advisory Committee to explore the systems and advise on more feasible innovative strategies to employ. The Committee, in turn, set about examining and highlighting the deficiencies within the education and practice systems, as a means of substantiating its findings and recommendations. Various interrelated deficiencies were identified within the education and practice systems. However in relation to this study only those specifically relevant to the educational preparation of the students and those concerning the adoption of the self-directed approach will be addressed.

Deficiencies in Development of Student Self-direction

Nurses and midwives are expected to develop and maintain their professional roles as accountable practitioners at qualification. However, one of the main educational deficiencies highlighted by the Educational Policy Advisory Committee was the failure in meeting the students' developmental needs. This was mainly because students were relied upon as an essential labour force in the service provision (UKCC, 1985). The main causal factor of this problem was, as mentioned above, the shortages in the number of trained staff. The scenario depicted busy ward schedules with a team of carers of whom students tended to outnumber the trained staff. Consequently students were often forced to function without the required teaching, supervision and support from the qualified experts (UKCC, 1986).

Furthermore, the scope of student learning, professional socialisation and development was compromised by the practice, in many areas, of being allocated isolated tasks requiring repetitive procedures. As a result students were often deprived of the opportunity of being exposed to the experience of holistic care provision in which the carer made critical decisions based on her/his own judgements (UKCC, 1985; Slevin and Buckenham, 1991). The conclusion is that learners were deprived of being chaperoned, encouraged and guided in relating the learned theories to the realities of clinical situations. If, as previously argued, the experiences and skills gained through exposure to specific learning situations are assumed to be transferable, then it must follow that such educational deprivation would result in stunted development in the students' professional and academic progress.

Based on the above argument it could be concluded that the time had come to curtail the reliance on student labour and the use of unqualified staff in providing care procedures that were often beyond their levels of education and training and beyond the limits of their

expertise. The P2000 educational reform was perceived as a means of rectifying those deficiencies (UKCC, 1985).

Student Self-direction in Preparation for Autonomy in Practice

Within the current sphere of the profession, an aptitude for decision-making is considered to be not just essential but critical for the role and responsibilities which the practitioner must perform. Because of the multi-dimensional nature of professional practice, decision-making skills are particularly tested in the varied range of role functions which the practitioner must perform. Also challenged is the ability to make personal judgements while acknowledging personal accountability in care provision, consumer interest and to the Statutory Bodies through the codes of professional conduct in practice (UKCC, 1994; NBS, 1994; Watson, 1995).

A distinctive element in professional practice that constantly challenges those attributes is the complexity of the clientele with whom the practitioner interacts. People present with various perceptions, beliefs and philosophical principles based on cultural backgrounds, education and other life experiences (Benner, 1984). As previously indicated client problems vary and encompass physical, mental and psychological illnesses which require individualised judgements and attention. Other challenges include the diverse nature of the services, the multiple roles and responsibilities and the complex environments within which practitioners must function (UKCC, 1985; Watson 1995). The practitioner is expected to demonstrate the ability to adapt and respond appropriately to these situations. This requires keeping up-to-date with the emerging professional knowledge and competencies necessary for coping with the changes occurring in all the different dimensions of her/his work (UKCC, 1986; 1994).

One of the major implications of these expectations concerns the continuing and progressive updating of knowledge and expertise in compliance with Council's Post Registration Education and Practice (PREP) requirements (UKCC, 1994). This educational principle implies the need to foster not only the development of students' academic capabilities and self-confidence but also their independence (ENB, 1989). The aim is to enable students to take control and personal responsibility for their learning. Self-directedness, as previously indicated, requires that students are able to identify their personal learning need(s), and take the initiative in planning, implementing and evaluating the learning (Knowles, 1978; Knowles et al., 1984).

Since each of these involves personal judgements and decision-making the potential benefits of development of decision-making skills seem obvious and undeniable. Therefore the fostering of student self-direction is particularly favoured by those educational institutions whose mission focuses on preparation of practitioners for undertaking future roles for which such attributes are required. The rationale for choice of this learning approach is largely based on assumptions about the adult learner's fundamental need and capacity for independence, autonomy and self-direction (Knowles, 1978; Knowles et al., 1984; Brookfield, 1986).

Furthermore assumptions about change in the adult's self-concept, imply that there is a need for independence and a desire to be recognised and treated as a self-directed person. This seems to support the claim that, intuitively, adults have the ability and the inclination for making personal decisions about their own learning process when they engage in specific educational ventures (Knowles, 1978; Knowles et al. 1984). Usually fulfilment of the identified learning need is essential to enable the practitioner effectively to perform a specific role for which the particular knowledge and competencies are required. In relation to this,

Knowles (1978) argues that adults have a problem centred orientation to undertake specific educational ventures.

The question arises as to whether or not the processes involved in self-directed learning do influence development of the attributes and characteristics of autonomy, resourcefulness and accountability for future professional practice. Atkins and Murphy (1993) noted that critical reflection enables practitioners to advance their professional skills. The implication is that reflective practitioners demonstrate ability to evaluate personal effectiveness by analysing their own practice, identifying personal potentials and initiating appropriate actions on recognising gaps in their knowledge and skills (Wallace, 1996). These require individuals' acknowledgement of personal responsibility for their own academic and professional progress. If critical reflection and the related attributes are so vital to the professional development of the practitioner, then the educators face the challenge of fostering student development of these attributes. The questions that arise in this context are as follow:

- To what extent does student exposure to the self-directed learning approach sufficiently prepare them for embracing professional autonomy, accountability and reflective practice?
- Can it be assumed that the acquired experiences and related attributes are transferable skills that are effectively applicable to other life and work situations?
- If so then by what means can these be fostered?

The Implications of Student Supernumerary Status

Among the main educational reform strategies was the proposal to confer student supernumerary status. This move was perceived as being more ethically sound and beneficial for the students. The rationale was to make the status of nursing students comparable to that of students undertaking their professional education in the general field of higher academic

institutions. The critical question however, is whether or not the supernumerary status realistically affords the freedom and flexibility which enables students to engage in self-directed learning activities. A further question relates to the issue of student labour force and whether this strategy necessarily guarantees readily accessible supervision and guidance from the delegated preceptors. These questions and their implications are further examined later.

The above discussion explored the background to the change in educational policies in nursing and midwifery as conveyed in the UKCC's (1986) P2000 document - 'A New Preparation for Practice.' The discussion has focused on key findings from the situational review conducted by Council's Educational Policy Advisory Committee. The recommendations for change based on the identified limitations within the education and practice systems were also taken into account. Among the deficiencies reported was a notable staffing crisis with exploitation of student labour, which was seen as jeopardising student supervision and support and causing threat to the standard of care provision. Taking account of these and other recorded deficiencies, various educational reform strategies were proposed with a view to fostering development of the relevant attributes for professional practice (UKCC, 1985). The report emphasized the attributes relating to self-direction, autonomy, self-confidence, critical reflection and accountability. In view of the fact that these derive from the principles of adult learning it seems appropriate to examine this educational concept.

Rationale for the Adoption of the Adult Learning Principles in Nursing Education

The impetus for adopting student self-direction in nursing education apparently arose from the perceived relevance of the principles of adult learning to this profession's education and practice. The general view in the nursing profession is that the students are adult individuals with similar characteristics of maturity as those in other adult educational sectors. Therefore similarly to other adult learners, nursing students embark on their professional education with

specific intentions, that is, to achieve the required knowledge and competencies that would enable them to practice nursing or midwifery. This reflects the view among adult educational experts that adults come to new learning situations with a readiness to learn in order to fulfil their perceived social roles (Jarvis, 1985).

The P2000 educational philosophy emphasises the need to prepare the students to be able to function in an independent capacity in their future professional roles. This, as already established, implies personal decision-making and acceptance of responsibility and accountability for their own actions. While the ethical implications of client welfare and safety make self-direction and autonomy in learning a controversial ideology, a different perspective on this argument might be worth pursuing. The perceived potential benefit of transferability of the self-directed learning experience appears to have influenced the decision for change in the educational system. It was envisaged that such preparation might adequately prepare the students to enable them independently to apply their acquired knowledge and skills in the care which they provide. It was envisaged that the acquired attributes should manifest in their assessment of patient and client problems and needs and in the planning, implementation and evaluation of their nursing care.

Another argument is that similarly to adults in other educational sectors, nursing students enter their professional education with varied backgrounds of life, education and work experiences (Smith, 1991). Therefore, taking account of the adult learning principle of experiential learning, it is important that these prior experiences are drawn upon in their new learning experiences. This view concurs with Knowles et al's (1984) assumption that adult learners' experiences serve as a rich resource in facilitating the acquisition of new knowledge and skills. Mezirow's (1981) view about adult learners is particularly pertinent to these arguments. He proposed that the concept of andragogy refers to:

an organised and sustained effort to assist adults to learn in a way that enhances their capability to function as self-directed learners.

(his italics p 136 in Tight, 1983)

He therefore postulated explicit recommendations, which included the need to accentuate adult learners' autonomy through a progressive decrease of their dependency on the educator. Additionally he stressed the importance of learners' participation in the decisions about their learning experiences and he advocated facilitation of problem posing and problem solving skills in their learning process. Merchant (1989) concurs in these views by urging that nursing students be exposed to learning experiences that encourage a problem-based approach to learning while they attempt to relate learned theory to clinical practice situations. The assumptions about adult learners and the implications within the context of nursing education are further examined below.

Assumptions about Adult Learners in Relation to Self-direction in Learning

This section examines and debates the significance of personal characteristics of the learner, the concepts of adulthood, adult learners and adult education. Recruits to the professional education of nursing are widely varied in their age, social, cultural and educational backgrounds as well as their academic capabilities and learning styles. In the following discussion the different interpretations of the concepts of adulthood will be examined in relation to the concept of adult learning. This will be followed by an examination of the assumptions about adult learners in relation to self-direction in learning (as proposed by experts such as Brookfield, 1986; Mezirow, 1981; Knowles' 1975) in order to debate the feasibility of these within the context of nursing education.

Many adult educational experts are of the opinion that student reactions to a given learning approach are influenced by the individuals' personal characteristics (Knowles et.al., 1984; Boud, 1988). In relation to this the controversy seems to concern the question of the

adulthood of the learner. While some relate this concept to biological age, others tend to view it as a status characterised by maturity. In this case the concept is related to the individual's ability to demonstrate specific responsibilities and behaviours (Paterson, 1979).

Analysis of the range of interpretations reveals that the concept has been used to signify, not merely the biological distinction between childhood and adulthood, but also the individual's self-concept of her/his physical and cognitive maturation. Additionally the societal expectations of the adult person, in terms of the ability to assume given responsibilities, are also presented. As demonstrated in this discussion, Knowles' (1975) assumptions about adulthood and the adult learner which seem to be based on the individual's view of her/himself are debatable. If the argument about adulthood based on maturity alone is upheld, then closer examination of related key concepts such as adult education and education of adults is critical. This is because the distinction between the two could have significant implications for the design of curricular content of specific programmes and the educational demands to which students are exposed. For example, if the type of learning approach employed (self-directedness or autonomy in learning and self-and peer assessment) is taken into consideration then in each case, pre-determined criteria would be required to judge the extent to which the students' attitudes and behaviours reflect their status of adulthood.

The diversity of interpretations of adult learning is a clear indication of a need for clarification of this concept. Jarvis (1983) points out that a later definition by Knowles (1980) describes three perspectives of andragogy. These are identified as, firstly a process of adults learning, secondly, a set of organised activities carried out by a variety of institutions to achieve specific educational objectives, and thirdly, as a field of social practice. In these descriptions it can be noted that elements of the first two are notable in many adult educational systems. However, the rather broad concept of the third description does not

appear to be clear enough to relate to any specific educational system although it must encompass the other two concepts. As Jarvis (1983) asserts, there seems to be an alternative view about adulthood that appears to be generally more feasible than others. It states that

...both an individual's own awareness of himself - and other people's perception of him accredit him with a level of social maturity accorded to the status of an adult in that society. (Jarvis, 1983 p 31)

The problem with this view, however, is the element of subjectivity which it conveys.

Another criterion proposed is the notion of post compulsory education, which as it stands, makes no reference to any specific behaviours or responsibilities.

The above arguments suggest uncertainty as to how different institutions justify the adulthood of their learners. On the other hand, some experts question the necessity for clarifying the adulthood of the learners. They argue that the emphasis ought to be put on the processes involved in the education of the students rather than the issue of their adulthood (Legge, 1982). Another contention on Knowles' 1980 view is that when confronted with new, unfamiliar and/or complex materials, or tasks, learners (whether adults or children) are inclined to feel threatened. As a result individuals may demonstrate anxiety and a need to be taught and/or supervised by the expert. This obligation is usually placed on the educator or other qualified practitioner whom the students perceive to have the relevant knowledge, expertise and legitimate authorisation to teach them (Stanton, 1988).

Furthermore, assumptions about change in the adult's self-concept and the need for independence and recognition as a self-directed person are reinforced. This is based on the claim that, intuitively, adults have the ability and the inclination for making personal decisions about their own learning process. In particular this behaviour seems to manifest itself when the adult individual engages in a specific educational venture to meet her/his specific learning needs (Knowles, 1978; Knowles et. al. 1984). Fulfilment of the identified

learning need is vital in enabling the practitioner to perform effectively the specific role for which the particular knowledge and competencies were required. This reflects the previously mentioned assumption by Knowles (1978) that adults have a problem-centred orientation to undertaking specific educational ventures.

Contrasting Views about Adult Learning Theories in Relation to Self-direction in Learning

The earlier proponents of the adult learning principles emphasized the importance of taking account of the students' learning needs and educational outcomes (Hammond and Collins, 1991). This necessitates modifications in the teaching and learning approaches with a shift from the traditional teacher-developed, teacher-implemented and teacher-assessed approaches to Student-centred approaches. In the case of the latter the emphasis is placed on self-directedness in learning. An educational approach of this kind is claimed to reflect the distinct characteristics of adult learners more appropriately. Advocates of humanistic educational processes propose recognition of the learning styles or learning preferences with which individuals enter given educational programmes (Jarvis, 1983). Although apparently valid, these proposals are open to challenge as they raise various questions about how practicable these ideas are and what views and experiences educators and learners themselves have in relation to them.

Implications of Preferred Learning Approaches

Students are noted to demonstrate distinctive approaches to learning. Marton and Saljo (1984) described learning approaches in the following ways. A deep approach to learning refers to the process in which the learner tries to assimilate and make sense of what they read and learn. A surface approach to learning, on the other hand, is related to the learning in which the individual simply focuses on and tries to memorise words and phrases from text. An achieving approach is noted where the student resorts to one or the other approach in different

situations to cope with academic demands such as assessments or pre-determined submission dates for coursework (Biggs and Telfer, 1987). Within the context of student self-direction or autonomy in learning the implication is that individuals are more likely to embrace the deep approach to learning when they take personal responsibility and actively participate in decisions about their own learning process. In contrast students who are constantly exposed to teacher-directed teaching-learning situations might behave differently by adopting the surface learning approach. Evidently those who perceive their educational programmes to be highly demanding might be inclined to adopt the achieving approach to learning (Boud, 1988). The question arises as to whether or not those who learn by the deep approach are necessarily self-directing or autonomous learners.

It is argued that as they become more autonomous and self-directing, adults achieve deeper levels of learning through their independent learning activities than they do in the traditional teacher controlled system of didacticism (Knowles et al 1984; Brookfield 1986). This apparently broad generalisation seems to contradict yet another assumption that adults enter into educational situations with their established learning styles. If so then it could be argued that individuals who tend to perform at the surface level of learning, are unlikely to change that learning style, possibly because they might not have the cognitive ability to achieve a deeper level of learning. In relation to this view some experts propose raising the students' awareness about their own learning styles and about factors in the learning environment which enhance or hinder the effectiveness of their self-directedness in learning (Watkins 1984). This view is inferred in the suggestion that:

In autonomous learning activities and particularly in sessions aimed at developing autonomous learning, such consciousness-raising must surely be even more important. (Higgs, 1988, p 52)

Among other assumptions about the characteristics, perceptions and learning behaviours of adults are claims that adults need to be recognised as being ready, capable and motivated to

take responsibility for themselves and for their learning process (Knowles et al., 1984). This is arguable in view of the suggestion that by being capable and responsible in certain aspects of their lives, adults automatically demonstrate the same characteristics and attributes in the educational context of learning.

The Role of Internal and External Motivators

The claims relating to adult learners' self-concept imply that adults need to be recognised as being ready, capable and motivated to take responsibility for themselves and for their learning process (Knowles et. al., 1984). This suggestion also implies transferability of the acquired characteristics and attributes from one context of learning to another. In reality, however, findings seem to indicate that realisation of the sense of motivation and responsibility becomes manifest only when the learner perceives the relevance, purpose, rationale and benefit of the particular learning venture to be meaningful and acceptable to her/himself (Brookfield 1986). Furthermore, where the motivational factor is job related, (as might occur in situations of further development of specific professional skills or acquisition of specialist, advanced professional knowledge, often for promotional prospects) the timing of the learning is usually planned to coincide with a specific period in the individual's working life. Other life roles such as marital and/or parental commitments might also be determining factors in the adult learner's incentive to undertake a particular learning venture (Brookfield 1986). These claims seem to suggest that the chronological status of adulthood endows the learner with the experience and cognitive ability to identify, prioritise and take appropriate actions in meeting their specific learning needs in any context of learning. Supposedly those actions reflect the adult learner's intrinsic motivation further to develop their professional expertise and/or enhance their academic attainments. This raises the questions as to what extent adults respond to the influence of external motivators; To what

extent the urge to respond to external motivators is comparable to if not stronger than the intrinsic motivation to be self-directing.

Contrary to these claims for motivation in self-direction is the fact that for various reasons not all adults wish for control, responsibility or ownership of all aspects of their lives to be ceded to them. Neither do all adults on entering a new and unfamiliar learning environment feel ready, able and/or willing to take responsibility for their own learning process. If it is important that the student perceives her/himself not merely as an adult learner but equally importantly, as being self-directing then she/he must demonstrate appropriate attributes. The learner must be capable and prepared to take control and accept major responsibility for the decisions and actions relating to her/his acquisition of the relevant knowledge and skills. It is suggested that this requires a "...high degree of self-knowledge and critical awareness on the part of the learners" (Brookfield, 1986, p.124). Indeed Brockett and Hiemstra (1991) also noted that the imposition of the self-directed learning approach on learners in disregard of their cognitive capabilities and preferred learning styles could compromise their attitudes and reactions to their learning process.

Bryan (1991) agrees with the Brunerian argument that personal characteristics such as individuals' predispositions based on previous educational and other life experiences are vital to current learning situations. The assumption is that those previous learning experiences form a significant consideration in determining the type of learning approach to be implemented. This is particularly important where the choice of learning approach is student-centred with self-directedness in learning. Admittedly, there are educators who might take the extreme view of the assumptions about adult learners' psychological need to be self-directing and their desire to be treated as such. Therefore taking the literal sense of that assumption, the extremists might be inclined to detach themselves from their responsibilities to such an extent

as to even neglect their facilitative roles. It is therefore important to investigate whether or not specific measures are taken to establish students' personal characteristics and their adopted learning approaches with a view to matching these to the supervision provided them.

Assumptions of the P2000 Educational Reform Regarding Adult Learning

Project 2000 (P2000) was a reform of British nursing education implemented in the late 1980s – early 1990s because of misgivings about the differing levels of preparation for professional practice that existed at the time. As indicated earlier on page 17, the aim was to provide the kind of education that would continually reflect projected health care needs in society whilst responding to the ongoing changes arising from reforms within the NHS. It was also seen as a way of ensuring that the education of nurses, midwives and health visitors reflected the ongoing developments within the higher academic context. The reform indicated a preference for an education based on the principles of adult learning and student centredness with the implementation of the self-directed learning approach (UKCC, 1985). What is unclear, however, is Council's interpretation of the concept of adult learning. It is also unclear by what characteristics Council accords the student recruits to nursing education the status of adult learners. Also relevant is the question as to whether or not Council's categorisation reflects the educators' perceptions of the students as adults and as self-directed learners. More importantly, to what extent does Council's categorisation reflect the students' own self-concept about their status of adulthood? What behavioural characteristics in their educational process are considered to constitute the affirmation that they are demonstrating the expected responsibilities of adult learners? On the other hand could it be that the views held by Council have been imposed on both the educators and the students who may have, inadvertently, accepted and complied without questioning the empirical basis of that decision?

Council's interpretation of adult learning has direct implications for the implementation of the self-directed learning approach. There is a need for clarification as to whether or not the concept is being used to describe adults undertaking a specific educational venture in particular educational systems i.e. education of adults. Of equal importance, is a need for clarification as to whether or not the concept is being used in reference to a theoretical model of education. Individuals engaged in that type of education might not necessarily demonstrate the characteristics and responsibilities of adults or fulfil the social categorisation of adulthood. The latter concept could embrace what Jarvis (1983) describes as post compulsory education. In those cases although the students might not necessarily have attained the biological maturity of adulthood they would, nevertheless, be expected to behave as adults and cope with the associated demands and responsibilities.

If Council's view is based on adult learning as an educational principle or theoretical model then it could be argued that it falls short of its philosophy of continuing education following registration (the Post Registration Education and Practice concept). Invariably, there might be practitioners who have not developed the appropriate psychological need or readiness to function in the capacity of self-directed or autonomous learners and are therefore unlikely to be able effectively to fulfil the proposed (PREP) requirements. Nevertheless, it could be argued that the theoretical model of education does not appropriately apply to this category of potential learners since they are registered practitioners. Therefore these issues have implications for Council's policy views which underpin the recommendation to adopt this educational concept for the preparation of future practitioners. The interpretations which the institutions and educators employ in designing the curricula and in delivering specific programmes become a significant educational concern.

The Learning Climate

The climate of learning, which encompasses the physical environment, material resources and the facilitative support provided, is another factor that influences student's perceptions and their reactions to self-directed learning (Higgs, 1988; Knowles et al, 1984). The suggestion here is that factors within the setting in which the students function and acquire knowledge and skills influence the way in which they react to self-directed learning. Similarly the type of supervision and support which students receive can enhance or hinder the development of self-directedness, independence or autonomy in learning (Brookfield, 1986). Apart from the material resources and facilities provided within the physical environment, the effect of facilitative and supervisory support on the quality of learning achieved has also been the topic of empirical studies (Merriam and Caffarella, 1991; Brockett and Hiemstra, 1991). Claims about the importance of an environment that affords physical comfort and trusting relationship with the educator or supervisor have been documented in various studies (Knowles, 1984; Higgs, 1988). In nursing education where the learning occurs in multiple settings, students' experiences of self-directed learning cannot be viewed with indifference.

This professional education encompasses the context from which learners acquire the relevant theoretical knowledge which underpins their professional practice and the context within which students develop their practical competencies. This dual feature of the climate of professional education enables practitioners to rationalise and relate different theories and principles of care to the realities of patient and client situations within the different settings of care provision. There is no doubt that the distinct differences in the two environments (for example multiple supervision, type and availability of learning resources, the nature of the learning, competencies to be acquired and amount of freedom and opportunities allowed) might influence the self-directed learning behaviours of the learners. Nevertheless, whether or not there is any difference in student self-directedness between the two contexts, and whether

or not the acquired self-directed skills and attributes are transferable between the theoretical and practical contexts, are issues worth exploring.

Implications of the External Statutory and Institutional Control

Until the launching of the P2000 educational philosophy, the curricular contents of the different nursing disciplines were quite rigidly prescribed. This practice generated several criticisms over the years (Slevin and Buckenham, 1992). Not surprisingly, advocates of the andragogic principles saw the apparent flexibility that accompanied the new educational philosophy as a credible innovation and a significant move in the right direction for change in the educational system. However, because of their obligation to the external statutory authorities, the limits of that flexibility still remained largely outwith the educators' control. Evidence of this is clearly apparent in the overall decisions and actions which the UKCC takes from time-to-time.

The external authority, as might be expected, instigated the innovative change. Characteristically educators in the nursing disciplines tend to rely on the Statutory Authority (and source of the recommendations) to have commissioned the necessary evaluation, review of the relevant literature and the appropriate empirical studies relating to the specific recommendations. This demonstrates the nature of their dependence on the source of external control and authority, that is Central Council, European Community Directives and the National Boards.

The majority of educators presumed that the decision had been based on the widely published assumptions about adult learners. Arguably there is awareness among educators that these assumptions are debatable since some adult learners are found to be incapable of functioning in the self-directed capacity. There is also an awareness that others reject the self-directed

approach in favour of more structured teaching-learning methods (Nolan and Nolan, 1997). Thus the requirements of the Statutory Bodies may clash with the developmental needs of at least some nursing students.

Nevertheless, as demonstrated above, the Central Council through the National Boards invariably retains ultimate control and authority over both the education and practice of nursing and midwifery in monitoring and regulating the standards and quality and the nature and content of all the curricular programmes. As a result, it is unlikely that educators and students will ever have the luxury of total freedom to innovatively manipulate the structure and content of the curricular programmes. This means that unlike many other adult educational sectors the self-directed learning approach has to operate within certain statutory and organisational constraints.

It must be noted, however that even within the general context of higher education, various institutional regulations such as modularisation, semesterisation and assessment regulations also impose certain demands and constraints. These invariably influence the degree of freedom and creativity which educators and students might have in applying particular teaching-learning strategies. Under these circumstances, for example, it is outwith the control of individual educators to determine when and over what period of time a particular theoretical component might be delivered and assessed. Another implication is that educators do not have absolute freedom to determine when a particular practical experience might be scheduled in relation to the delivery of the theoretical knowledge base. Conditions relating to the delivery and assessment must comply with the institution's philosophy and academic calendar, which leaves both educators and students with limited freedom and flexibility in which to operate.

Nature of the Professional Knowledge and its Implications for Student Self-direction in Learning

Each of the nursing disciplines has its own body of knowledge which forms the basis of the particular content of the curriculum. Additionally the complex and rather imprecise nature of nursing knowledge is demonstrated in the multiple dimensions of scientific, psychological, ethical and personal aspects of the disciplines (Benner, 1984; Chinn & Jacobs, 1987; Meleis, 1988). A brief examination of each dimension is presented below.

The Scientific Dimension of Nursing Knowledge

This dimension of professional knowledge is considered to be the type that derives from nursing concepts and theories. These evidently emerge following a series of rigorous research studies conducted within the contexts of education and practice. Critics advocate this source of professional knowledge as the more legitimate scientific means of generating, testing and enhancing what might be perceived as the unique body of nursing knowledge (Fry, 1988).

The Aesthetic Dimension of Nursing Knowledge

The aesthetic dimension of professional knowledge is perceived to derive from the subjective interpretations of the various events and phenomena that evolve within the practical context of nursing and midwifery. The essential element in this case is empathy. This represents the means by which the practitioner attempts to comprehend the perceived realities of patient and client situations in order to respond by appropriate nursing interventions. Advocates of the aesthetic dimension of nursing knowledge describe it as the Art of nursing (Carper, 1978; Chinn & Jacobs, 1987; Meleis, 1991). They maintain that phenomenological psychology utilises methods of hermeneutics in its interpretations. Based on that argument, advocates insist that the concrete experiences acquired from the clinical context and the scope of the acquired professional knowledge of the practitioner are the major strengths of aesthetic knowledge (Benner, 1984). Nevertheless others challenge its credibility because of the

element of subjectivity based on individuals' personal experiences and judgments (Fry, 1988).

The Ethical Dimension of Nursing Knowledge

The ethical component of professional knowledge is perceived to encompass two essential elements. One aspect of this relates to value judgements and compliance with relevant codes of professional conduct in practice while the other aspect relates the subjective reasoning of the practitioner regarding 'right and wrong' (Carper, 1978). This dimension of nursing knowledge has also been criticised for its subjectivity. The contention in this case concerns potential conflicts among practitioners regarding individuals' personal values, principles and philosophy.

The Personal Dimension of Nursing Knowledge

Personal professional knowledge is perceived as 'expert knowledge' and the basis of nurse-client interactions. The general view about this dimension of professional knowledge is that it represents a crucial aspect of the humanistic perspective of clinical practice. This dimension is seen as the essential element that is central to the overall component of the knowledge. The argument is that the personal professional knowledge concerns the practitioner's expert professional judgements and intuition based on her/his accumulated theoretical knowledge and competence. These are perceived to be vital in dealing with the varied needs of human beings who present with different physical, psychological and social problems and needs (Benner, 1984).

From the above explanations it could be argued that acquisition of aesthetic, ethical and personal dimensions of professional knowledge requires advanced levels of expertise in clinical practice. Although these interlink in practice, certain distinctions could be made

based on the particular situations concerned. Aesthetic knowledge capitalises on extensive experience in building a holistic picture of patient and client situations in order to interpret and determine appropriate interventions. Therefore, application of this dimension of knowledge is a constant process occurring in every aspect of patient and client care. This cannot be entirely separated from the intuition that derives from the personal knowledge and experience accumulated over an extensive period of professional practice and which forms the basis of the clinical judgements and actions involved in care provision. However, where the ethical dimension is concerned, specific clinical decisions based on stipulated professional codes or involving personal values and principles only require to be made in client care situations associated with ethical dilemmas.

Implications of Student Self-direction relative to the Nature of Nursing Knowledge

Each of the nursing disciplines has its own body of knowledge, which forms the basis of the particular content of the curriculum. Additionally, the complex and rather imprecise nature of nursing knowledge is demonstrated in the multiple dimensions of scientific, psychological, ethical and personal aspects of the disciplines (Benner, 1984; Chinn & Jacobs, 1987; Meleis, 1988).

Nurse theorists who advocate the credibility of nursing knowledge insist that theory development does not necessarily depend on a single specific source. They maintain that clinical, conceptual and empirical theories all contribute to the credible sources of professional knowledge, (Meleis, 1988) whilst others challenge its credibility because of limited scientifically tested theories (Fry, 1988).

The implications in relation to self-direction in learning are that effective acquisition of each component of professional knowledge requires extensive exposure of the learner to the

appropriate environments. Equally importantly the right kind of supervision and support are vital to the progressive acquisition of the relevant nursing knowledge and professional competence, and are also important for progressive personal development. However, the dilemma in most situations is that various factors create multiple constraints in the learning opportunities available to students. For example, concerning situations of emotional and psychological illness such as clinical depression, the emotive nature of the patient's problems and the need to respect the individual's confidentiality as she/he attempts to disclose deep-seated feelings, would necessitate a one-to-one interaction between the expert practitioner and the patient. This creates a dilemma, not only in terms of the constraint that negates student exposure to the therapeutic situation, but also in terms of depriving them of available opportunities for self-directed learning within that context of clinical practice.

These factors create a climate of multiple constraints within which, as demonstrated above, implementation of self-directed learning might seem impractical, unrealistic and to some, even absurd. Nevertheless this scenario depicts the reality of nursing education.

Implementation of self-directed learning must, invariably, occur within an environment of the traditional teaching-learning system of formal education and within the actuality of the clinical practice settings.

The Need for Investigative Studies in Nursing Education

The nurse educator is confronted with certain major challenges. On the one hand she/he has a responsibility to the statutory bodies and therefore is accountable for ensuring that the prescribed standards and curricular content are fulfilled. On the other hand she/he faces the obligation to ensure that students receive adequate exposure to the knowledge and skills which they require for safe and effective professional practice. Additionally, responsibility to the academic institution that employs her/him requires the educator to respond appropriately

to changing trends in adult education. That includes responding appropriately to the change in role from that of educator with full control to that of facilitator. The primary objective of the latter involves encouraging and supporting the learners to take increasing control and responsibility over their own learning process. In an attempt to deal with these conflicting roles and responsibilities many nurse educators resort to the use of such concepts as “directed self-learning and teacher-induced self-direction” (Slevin in Slevin & Buckenham, 1992, p109). By adopting those concepts the educator attempts to deal with the above tension and dilemma created by the professional ethos and the move to implement an innovative educational ideology. Their intention, therefore, appears to be aimed at modifying the recommended educational concept in such a way as to ensure continued educator control with some element of student self-directedness.

In reality what those rather unconventional concepts and related strategies seem to do is reject the interrelationship between the process of self-directed learning and the personal characteristics that enable the student to function as an effective self-directed learner. This supports evidence of the conflicting views and limited insight that has emerged about the concept of self-directed learning. Based on this finding it could be argued that nursing education appears to prioritise the process at the expense of learner characteristics and the ultimate developmental outcome. Yet numerous studies confirm learner characteristics as the key component of the broader concept of student self-direction in learning (Brockett and Hiemstra, 1991).

Clearly, if effective implementation of this educational concept is to be realised within nursing education then extensive research on this approach in relation to this particular educational system must be regarded as a critical concern. However, although self-directed learning has been considerably researched since the 1970s and 1980s (Merriam and

Caffarella, 1991), studies on this concept within the nursing profession are notably limited. This is mainly because its emergence in this field is relatively recent. So far the related studies that have been conducted have focused on evaluative descriptions of self-directed learning in specific programmes and involving particular student populations. More recent studies include Laszlo and Strettele's (1996) exploratory study on factors which motivate registered practitioners to fulfil their learning needs independently. Similarly to other investigations this study focused on a specific factor, i.e. external motivators, in particular, learning resources. Nixon et. al.'s (1996) comparative study of teacher-directed and self-directed methods focused on clinical skills acquisition. Other studies include Pedley and Arber's (1997) experimental study, which focused on the process of self-directedness and evaluated students' response to self-directed learning in a specific module. Nolan and Nolan's (1997) study explored a rather different perspective, focusing on factors which precipitated the adoption of self-directed learning and student-centered approaches to learning. In this study the researchers argued that uncritical acceptance of these learning concepts was the case within nurse education. As previously indicated, apart from the differences in methodological approaches each of the above mentioned studies appeared to be process focused and limited to specific population sub-groups.

In contrast, within the general field of adult education studies on self-directed learning have presented a more diverse focus and methodology although individual studies tended to address specific perspectives and involved specific student populations. Newble and Clarke (1986), for example, applied Entwistle's (1981) and Entwistle and Ramsden's (1983), tool for assessing study patterns among students in Higher Education, in determining the impact of autonomous learning approaches. That study investigated student freedom in the learning process, that is, choice of subject and topic areas, and personal control and responsibility in the organisation of their own academic work (Boud, 1988). Specific groups such as health

professionals have been the focus of studies to investigate their expressed views about their self-directed learning experiences (Caffarella and O'Donnell 1989). Studies relating to student development and change in their autonomous characteristics include Perry's (1981) investigation. This presented the findings from an investigation on the stages of student development and their perceptions about their personal responsibility for their own learning process. Thus the scope of studies in the general field of adult education reveal that the concept has been investigated from the perspectives of self-directed learning as a form of study, and self-direction in learning as a personal attribute.

Bearing these in mind, this study was designed to explore and describe student self-direction in nursing education. It was the intention to take account of the multiple factors, which influence the learning process and development of the related attributes and learner characteristics as well as their attitudes and reactions to the approach. It is felt that the different perspectives of this educational concept are complementary and therefore essential, not only to the current learning situations, but also to the continuing education and personal professional development of the future practitioner. Account is also taken of the fact that within the current climate of continuous change and innovative practices in education it is important that teaching-learning approaches are explored from all relevant perspectives. It is hoped that the findings from such studies might provide more insight and deeper understanding of students' self-directed learning behaviours.

Summary

This chapter set out to present a picture of the nature and contexts of implementation of student self-direction in learning in order to demonstrate the background to the problem under investigation. To begin with, the varied range of definitions of the concept of self-direction in learning were examined to determine what essential elements were common to and formed

the basis of those conceptualisations. More importantly it seemed necessary to determine in what ways the different interpretations influence the implementation of this learning approach. Thus self-directed learning as an educational process and self-directedness as a goal of educational outcome were explored.

The next main section presented a review of the professional climate within which this concept is employed. Thus it was necessary to examine and debate the nature of the external demands and constraints that influence the implementation of the self-directed learning approach. The evaluation established that adoption of student self-direction in nursing education involves complex factors including the structure of and influence of the external statutory control. The nature and implications of professional knowledge on self-directedness in learning were also examined to establish the tension in the adoption of student self-direction in this profession.

More significantly, this section presented a debate on the reasoning behind the decisive move to adopt the principles of adult learning with particular emphasis on student self-direction.

The argument demonstrates that its timing with the major educational reform in this profession meant that it was received with mixed reactions of uncertainties and conflicts among the educators and learners. Nevertheless, it seems that the concept was embraced with uncritical acceptance, because the Central Council had recommended the approach with a specific objective towards future practice.

Further progression of the argument demonstrates the more positive perspective of the rationale and justification for the adoption of this educational concept. This argument established that multiple limitations in the previous educational system had resulted in its inadequacy for achieving the envisaged goals. It could also be argued that the ideology of

student self-direction and the very nature of nursing knowledge, the environments of competence development and the ethos of the profession create tension and multiple constraints in the achievement of the academic goals

Evidence from various studies revealed that the concept of self-directed learning is perceived as encompassing multiple dimensions (Merriam and Caffarella, 1991; Brockett and Hiemstra, 1991). Among the factors noted to influence the implementation of self-directed learning are the interpretations of the concept, the educational policies and regulations and the characteristics of the learners and educators (Stanton in Boud, 1988; Higgs, 1988).

Thus a study on this topic must be designed to address multiple factors using varied methodological approaches (Merriam and Caffarella, 1991). By gaining more insight and understanding about the factors which favour or hinder student self-direction, both the learners and their educators might be better placed in implementing the approach more effectively. Within the context of this study Brockett and Hiemstra's (1991) conceptualisation is adopted since it is the intention to attempt to determine the link between the students' personal characteristics and their patterns of self-directedness in learning.

The next chapter presents progressive development of a framework to elucidate the interrelationships between the factors which are hypothesised to affect the interpretation and operationalisation of student self-directedness

CHAPTER TWO

FACTORS INFLUENCING ADOPTION OF STUDENT SELF-DIRECTION IN NURSING EDUCATION

Introduction

In the preceding chapter a critical discussion was presented examining the justification for the educational reform and more importantly the rationale for adopting the principles of adult learning and student self-direction. The purpose of this chapter is to develop a framework that will illuminate the different factors premised to have an impact on student self-direction in nursing education. The crux is to examine critically the likely specific influences of:

- statutory control,
- institutional policies and regulations,
- the nature of the professional knowledge and curricular structure,
- characteristics and practices of the educationists and clinical supervisors, and
- students' personal characteristics

on the implementation of the principles of adult learning and self-direction within the education and practice systems.

Evidently the degree of influence and the ultimate effect on the students' self-direction and the quality of learning attained depend on the source and nature of the distinctive factors involved (Candy, 1988; Higgs, 1988; and Heron, 1988). Account must, therefore, be taken of not only the impact but also the interrelationships among all the salient influencing factors (Knowles et.al., 1984; Brookfield 1986). Each source of influence will now be critically examined.

Statutory Control and the Influence on the Education and Practice Systems

There is no doubt that governing bodies in various professional organisations differ in their structure, degree of authority and their functions. This depends on the type of vocation involved and whether or not there are any associated moral and ethical implications. In those circumstances, as is the case in nursing and midwifery, major decisions about its educational programmes and standards of practice are controlled and monitored by the particular professional authority.

Establishment of the United Kingdom Central Council together with the four National Boards created the Statutory structure that, to the present time, governs and regulates nursing education and practice (James and Jones, 1992). Thus the principal function of the Central Council was to institute and, where necessary, improve the educational standards and professional conduct (Nurses, Midwives and Health Visitors Act 1979 and the Nurses, Midwives and Health Visitors Act 1992). The nature and extent of the task that confronted the Central Council in the pre-reform era has already been explored in the preceding chapter. Nevertheless, specific aspects will be reviewed in the first part of this section to clarify and demonstrate Council's position and authority in the actions and decisions involving the educational reform policy.

The Profile of the Education and Practice systems

The characteristics of the nursing education and training systems, up to the pre-reform period, had remained virtually unchanged for several years. As a result many of its traditional practices persisted despite all the various fundamental changes that had occurred in the health care system (Dolan, 1993). The systems had a reputation for being conspicuously hierarchical. Therefore it could be argued that the structure was mechanical and task orientated. Consequently there seemed to be little place for professional initiatives among

practitioners to explore and implement innovative ideas unless these were officially sanctioned within the organisation or discipline. Indeed the situation appeared to be such that many practitioners did not feel empowered enough to put forward what they might have considered to be innovative proposals. The questions that come to mind are:

- What is the nature of the authority which the governing bodies have over the educational institutions?
- In what ways do the rules and regulations that the governing bodies stipulate directly or indirectly affect the ways in which the institutions interpret and implement Council's recommendations?
- To what extent does this external control and authority influence the practices of the educators in terms of their personal interpretations and selection of relevant learning techniques?
- Finally, to what extent do the students' perceptions of the external control and authority influence their reactions and attitudes to the recommended approach to learning – in this case self-direction?

Another perspective of the pre-reform era was that typically the educational systems also reflected the kind of climate where students generally functioned in the capacity of uncritical and unquestioning learners (Naish, 1993). Therefore, the issues of academic interest in relation to this study are whether or not the students were allowed any opportunities to participate in decisions about their learning process but failed to respond appropriately. What were the students' perceptions of the degree of freedom and opportunities allowed them to participate in decisions about their own learning process? How did individuals feel about being asked or expected to participate actively at that level?

Because of the lack of research evidence from the pre-reform era concerning how students perceived or reacted to active participation in decisions about their learning process, these questions remain unanswered. Nevertheless, adult educational experts have appropriately evaluated the critical role of personal involvement in decisions, and individuals' ability to make personal choices within the context of self-direction in learning. Therefore, this study attempted to explore the students' views about their involvement and the degree of perceived freedom to make choices. The debate concerning the impact of student participation in such decisions within adult education has already been presented in the previous chapter. From the available literature it is doubtful as to whether or not such opportunities were given to nursing students in the pre-reform era.

It became clear from scrutiny of the pre-reform situation that unless radical measures were taken to rid the system of what were seen as perpetuating problems, there was a threat of contaminating any reformation attempts (Naish, 1993). Council set out to create a single level registration that afforded flexibility for inter-professional career diversities. The new system had to be responsive in facilitating post registration educational pursuits if the qualified practitioners were to benefit from it.

Decline in Recruitment Rate and Staffing Levels

Consistent decline in the rate of recruitment due to demographic variations of the previous two decades was attributed to a fall in the birth rate (UKCC, 1985). This implied shortages in staffing levels within the systems of service provision. The implication within the educational system related not only to reduced student recruitment rates but also to potential inadequacies in the support provided to students in their learning activities despite, as previously argued, the importance of effective student supervision in fostering development of appropriate attributes for self-direction. However, the limited staffing levels that existed at the time must

have been seen as a definite threat to the achievement of that objective. The question remains, what measures were proposed to rectify this problem? How were the decisions and actions arrived at?

Shift towards Preventive Health and Community Care

The need for a shift towards preventive health with emphasis on community care seemed to be a feasible response in meeting the changing health care needs incurred by the social transformation. However, this strategy undoubtedly implied additional strain on the already threatened staffing levels and the consequent effect on student supervision and support as already indicated above. The concept of community care particularly requires that individuals be able to function in an autonomous capacity within various settings as Council postulated about the practitioner of the 90s (UKCC, 1985). Therefore, of particular relevance within the context of this argument, is the implication for student supervision and the strategies employed in dealing with the associated challenges. To what extent, for example, was the need to foster development of the required attributes addressed? In particular it seems necessary to establish how feasible or otherwise the community environment is for implementing the recommended educational approach. What challenges confront the qualified practitioners in creating an appropriate learning environment within the community that would be conducive to development of clinical, professional decision-making skills? It is also appropriate to examine what challenges face them in fostering student development of self-confidence in using personal judgements while demonstrating accountability for their own decisions and actions.

Economical use of Resources

Perhaps it is not entirely surprising that another objective stipulated economical use of resources (UKCC, 1985). The direct link of this objective with the above mentioned concerns

is clear. While effective provision of care remained a prime obligation, the registered practitioners were faced with additional challenges of keeping up-to-date with emerging professional concepts and technological advances and meeting the demands of the educational reform in terms of preceptorship and mentorship. The ability to identify deficits in their own knowledge and professional competencies, therefore, was vital to the pursuit of courses that appropriately prepared them for accomplishing each of those obligations.

Rationale for the Reform Strategy within the Professional Structure

The educational structure was complex since it embraced a diverse pattern of initial preparation for general nursing and psychiatric nursing with numerous second registrable qualifications. The latter included midwifery, paediatric nursing, district nursing and health visiting. In addition, various diplomas and advanced standing courses such as the advanced midwifery diploma could be undertaken by qualified practitioners (UKCC, Project Paper 9, 1987). This resulted in numerous categories of qualifications and different parts of the register being created in each of the four countries - England and Wales, Scotland and Northern Ireland. A contributory factor was that disciplines such as midwifery, health visiting and district nursing did not consider that other initial programmes provided adequate introductory content and therefore wanted to devise their own. Thus notable overlaps and duplication of initial programmes existed within the educational system. Additionally the maintenance of parallel initial programmes made it impossible to divert from one career path to another. Those wishing to undertake another qualification were required to re-train completely (UKCC, Project Paper 9, 1987).

This situation also involved an uneconomical use of educational resources. Therefore a unified programme of initial preparation seemed a more logical, feasible and practical means of rectifying the situation. Council, therefore, anticipated that a comprehensive introductory

programme of integrated elements might prove more economical, simpler and more flexible apart from the obvious benefits of shared learning for the students. The idea was to include key elements such as basic nursing principles and competencies, together with applied biological, social and behavioural sciences. Reservations were expressed, however, about the threat of dilution of the desired knowledge base. Concerns were also expressed as to how this strategy might affect the differing emphasis in competence acquisition for the different disciplines (UKCC, 1987). The next section examines in what ways Council influences realisation of its objectives through specially appointed groups or committees set up within the structure of the nursing profession.

The Educational Policy Advisory Committee

Taking account of the identified deficiencies in the educational system and specifically in relation to the educational preparation of practitioners, the Central Council clarified its core objectives as follows:

- To conduct a radical review of the existing system with a view to instituting feasible educational policies.
- To determine appropriate evidence based models of education for the different professional disciplines e.g. mental health programmes.
- To examine and design foundation programmes that reflected the European Community Nursing and Midwifery Directives.
- To seek the views of the Health Service and educational institutions through extensive consultations (Dolan, 1993).

The latter objective was particularly relevant to further development of this debate.

Specifically to what extent did the educational institutions actively contribute to the decision to adopt the adult learning principle of student self-direction? The task of executing the proposed objectives was given the title Project 2000 and delegated by Council to its

Educational Policy Advisory Committee (EPAC). In its terms of reference, the committee was charged with three essential elements in its duty. These consisted firstly, of determining the education and training required for the professional practice of each of the nursing/midwifery disciplines. Secondly the committee had to take account of the projected health care needs in the 1990s and beyond. The third essential element in the terms of reference was that recommendations were to be made based on the requirements that emanated from their findings (UKCC, Project Paper 1, 1985).

The content of this remit seemed to imply that Council expected the committee to take into consideration each discipline's core specialist theoretical knowledge base and the practical competencies to be developed. Undoubtedly this must have been intended to ensure that pertinent recommendations could be made. For example, appropriate recommendations were required to guide policies regarding approval of the educational programmes by the relevant statutory bodies. This was deemed crucial to maintain standards through regulation and quality assurance mechanisms. Successful implementation of the philosophy of the P2000 educational reform depended on this. Therefore, questions that were further explored in this review asked: what factors formed the basis of the committee's decisions and judgements and how was the relevant information compiled for their recommendations?

It is also important to establish the empirical basis of the committee's decisions about, for example, the choice of educational models for each discipline. Whether or not the educationists from each discipline were actively involved in determining the educational models is also worth exploring i.e. what opportunities were given to them to actively contribute to the making of such decisions? Were any research studies conducted to test or develop educational models in order to advise the committee on the more feasible type? To what extent were the educationists involved in determining what environment might be

conducive to not only the recommended learning approach but also the nature and scope of content of the particular curricular programme? As Boud (1988) points out personal involvement in such decisions enhances individuals' sense of ownership and motivation to ensure successful outcomes of the related process. The actions taken by the EPAC and, more importantly, how these influenced the interpretation and implementation of its recommendations are further examined below.

The Educational Advisory Sub-Committees

To execute their remit the EPAC, in turn, appointed its own sub-committees and set out to conduct a thorough and systematic examination of the education and practice systems throughout the country. However, assuming that the 'overall professional approach' stated in their remit did include the educational system, the question that arises is, if so, what emphasis did the sub-committee place on scrutinising the educational system? What educational approach was being implemented at the time? What techniques were the educators applying, and what was the sub-committees' conclusions about the practicability and effectiveness of these. Of equal importance is the question as to whether or not student characteristics were specifically taken into consideration and if so what information did the sub-committee obtain?

A second sub-committee was delegated the task of exploring the reactions to previous reports and how practitioners responded to previous recommendations on nursing education. This information was presumably intended to provide the project team with better insight into practices and problems that had existed within the system. Undoubtedly, the set of data obtained must have helped the team to prioritise the major concerns and deficiencies in the educational system and helped to make appropriate recommendations regarding the best solution to employ. How the deliberations regarding this crucial educational issue was

conducted has significant implications because the response was likely to have reflected the focus of specific concern that the practitioners perceived to apply directly to them. For example, how confidently did the educationists and clinical practitioners comment on the theoretical component of the educational programmes as compared to the practical component? How critically did they examine and comment on the learning approach that was being implemented by the educational institutions, and to what extent did they scrutinise the practices of academic and practical supervision and support provided to the students? What emphasis did the practitioners place on the expertise and preparation of those who supervised the students in their learning practical activities?

A third sub-committee examined the implications of foreseeable changes in health care needs and demands over the next two decades. This sub-committee was expected to provide background information for educational decisions and strategic planning on programme development. The content of its remit, therefore, seemed to involve the mammoth task of examining the existing curricula, the emerging health states and disease patterns and the nature of professional support that might be required. These had direct implications for the curricular programme designs and the learning approach that was ultimately recommended. Therefore, active participation of the educators might have been expected since they would have to develop the programmes and implement these based on the adopted educational concept.

The fourth sub-committee focused on the financial and manpower implications of the P2000 education and practice reform. The aim, in this case, was to ensure realistic and cost effective planning, implementation and future developments (UKCC, 1985). The questions raised by this approach include the following:

- How was this remit interpreted and prioritised by this sub-committee?

- To what extent were the educators and students involved in decisions about the structuring of the institutions including, for example, the academic libraries and Information Technology (I.T.) systems with computer laboratories?
- How were decisions made concerning the range and level of expertise of the educationists, the secretarial and clerical support and the required I.T. support?

These are clearly critical to effective implementation of the learning approach because of the likely impact on how the students embraced the adopted educational approach. In particular, apart from the academic support the nature and accessibility to support from librarians and I.T. staff could, arguably, affect students' reactions to their learning process. Therefore the extent to which these were taken into account cannot be disregarded.

The fifth sub-committee undertook the task of determining the characteristics of the practitioner of the nineties. The notion of a 'knowledgeable practitioner' with attributes of critical mindedness, flexibility and adaptability to the changing systems was a crucial issue which required clear interpretation (UKCC, 1985). Was there any empirical basis to the emergence of this concept? What levels of practitioners were observed and what activities were they engaged in while these attributes were being determined? How well informed were the practitioners (who presumably took part in determining the relevant attributes) about this concept and its rationale? What criteria did they use? What consideration did this sub-committee give to the feasibility of creating the kind of environments that might be conducive to fostering development of these attributes within the education and practice settings? If the P2000 philosophy envisaged this future practitioner then the process of development of the required attributes must begin during the educational preparation of the students. Therefore, it is necessary to examine the nature of collaboration, if any, that may have taken place between the educationists and practitioners regarding the required supervision and support. Having adopted the approach, by what means are the students to be

orientated about their need to develop these attributes and how the outcomes might be achieved? Are students made aware of the source of this professional educational requirement, its rationale and implications, and if so what are their attitudes and reactions to this knowledge? The next section examines the consultations and inter-disciplinary discussions relating to the questions that have emerged in the above arguments.

The Consultations and Inter-disciplinary Debates

Extensive communication exercises were launched to raise the practitioners' awareness of the project developments. The aim was to consult and inform them about the available evidence and obtain their views. Success depended on the practitioners acknowledging Project 2000 as a venture in which they played an active role (Mason, 1991). Additionally, it was thought necessary to further involve the practitioners this time in the debate and the considerations for the policy options (UKCC, 1985). Therefore, the sub-committees faced the challenge of putting forward the alternative proposals in the light of the emerging evidence and presenting convincing arguments to the practitioners. This clearly indicates that Council considered it important that practitioners perceived and acknowledged ownership of the Project philosophy.

There is no doubt that the inclination to accept Council's intent became more obvious when the purpose for the reform was reaffirmed to the practitioners. The aim, as indicated by Council, was not merely to prepare flexible and autonomous practitioners, but equally importantly, that the future practitioner be made aware of the increasingly complex health care needs of the 1990s and beyond (Dolan, 1993). It was only through such awareness that practitioners were likely to appreciate and respond positively in line with the professional regulations that were becoming increasingly manifest. Evidently, faced with the impending change within the profession, individuals began to examine their own levels of knowledge

and expertise. They began to self-diagnose their knowledge and competence deficits, and to seek appropriate post registration education and practice pursuits.

It now seemed obligatory for individuals to seek the means of developing the required attributes to be able to function effectively in the capacity of autonomous, self-directed learners. The acquired skills would also enable them to respond appropriately to the evolving post registration educational regulations. Thus the events of the consultations and inter-disciplinary debates appeared to achieve positive outcomes even prior to publication of the EPAC's comprehensive recommendations. The next section presents a critical examination of these.

Recommendations for the Reform

Among the main issues addressed in the recommendations for the educational reform was the suggestion to curtail students' full involvement in service provision and the implementation of supernumerary status. The intention was to allow more freedom and creativity in the planning and introduction of the recommended adult educational principles. It was anticipated that this strategy might provide better opportunities for acquisition of practical competencies, but also enhancing, where applicable, independent and unsupervised practice of taught skills. The notion of a Common Foundation Programme (CFP) as an initial preparation for all groups of students was to encourage shared learning while at the same time avoiding the problem of duplication of teaching and learning activities. This strategy would achieve the benefit of reduction in time wastage for those individuals who might later wish to pursue post registration educational ventures. The other anticipated benefit related to inter-disciplinary career diversions in which certain curricular elements might have common threads of units of learning for which practitioners might seek credit transfers.

There was also the potential benefit of encouraging practitioners to integrate learned theories and make practical application of the knowledge gained from different subject areas. For example, knowledge gained in behavioural psychology, social policy and life sciences could be effectively used in nursing interventions in assessing, planning and implementing holistic patient and client care. The report recommended development of programmes at Diploma in Higher Education level. Therefore, academic recognition of the P2000 programmes through joint professional and academic validation was also encouraged (UKCC, 1986; Dolan, 1993; Watts, 1992). As previously argued the direct relationship between these strategies and the need to embrace the principles of adult education with emphasis on student self-direction seemed indisputable.

The opportunities presented in those recommendations were accepted keenly and supported by the professional organisations such as the Royal Colleges of Nursing and Midwifery (RCN and RCM respectively). The RCN, in particular had for many years demonstrated a keen commitment to this cause through previous commissions such as the Platt report (1964) and the Committee on Nursing (1972). Additionally, the Judge Commission on Nurse Education (1985) had also conveyed concerns about the problems and limitations of the educational system. Previous RCN initiatives had already debated many of the identified limitations in the educational system. Based on those deliberations the College, at the time, conveyed its proposals. These included the introduction of student supernumerary status, a single level registration and a common foundation programme. The rationale was to create wide ranging opportunities to encourage and motivate students in the development of their professional competencies within cross-disciplinary settings (Dolan, 1993). Thus students undertaking general nursing programmes could negotiate gynaecological and/or maternity care experience within the relevant settings as their alternative placement options. These strategies demonstrate how convincingly Council conveyed its argument regarding how

practical was the need to foster development of self-direction throughout the educational programmes.

The climate of higher education is perceived to nurture student control and personal responsibility in their learning. This seems to be attributed to the relatively flexible ways in which students can interact with their academic supervisors. However, the claim that higher academic students have more freedom for making choices must be carefully examined (Charlwood, 1993). How do the nature of curricula and the structures of the higher academic programmes compare with the curricula and programmes in nursing education? What are the nature of external control, policies and regulations to which compliance is mandatory? Have there been any previous comparative studies to establish what similarities or differences exist within the higher academic and nursing educational systems? Clearly, critical examination of that claim reveals how problematic and questionable this could prove if adopted without careful evaluation but simply because it is a recommendation in the philosophy of the reform.

Collaboration between the Central Council and the National Boards

The following argument is intended to illustrate the way in which the Central Council's policies and regulations cascade down the different levels of the professional structure. It is particularly pertinent, at this stage, to explain the role of the National Boards and how these influence the actual interpretation and implementation of Council's recommendations into curricular programmes by the institutions. The roles of the institutions and the educators who function within the learning environments are later examined since these form the direct links with the students. A diagrammatic illustration in Figure 1 (page 61) depicts the nature of the interrelationship at the policy setting level. The pattern of influence of the Central Council through the National Boards demonstrates the way in which they collaborate in instituting policies and in regulating and monitoring prescribed standards and quality. Through this

mechanism the power of the Central Council in making major decisions about the standard, type and content of the curricular programmes, is notable.

Remit of the National Boards

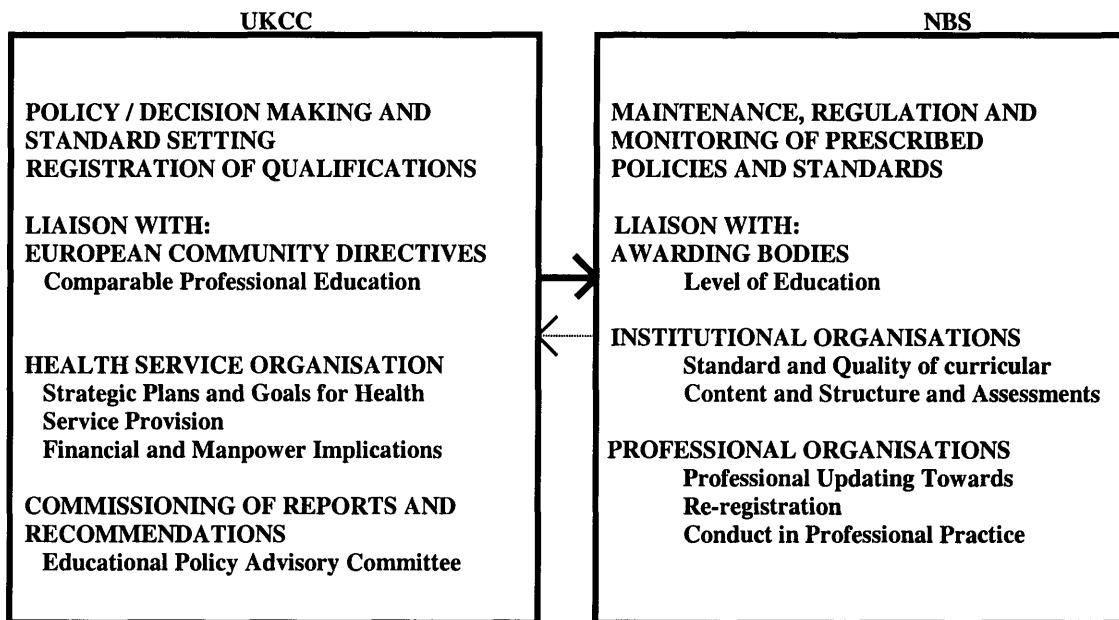
The four National Boards evolved with the Central Council and are answerable to Council for maintaining professional standards for nurses, midwives and health visitors. The UKCC sets the standards for education and practice but the actual regulating and monitoring of the operationalisation of Council's policies at institutional level are delegated to the National Boards.

Thus in collaboration these statutory bodies together are committed to securing improvements within the education and practice systems. In addition to their responsibility to the UKCC, the National Boards have the remit of maintaining links with relevant external organisations.

These include providers of the professional education and other awarding bodies, such as SHEFC, the HEQC and the Royal Colleges of Nursing. Although apparently bureaucratic and complex, this structure invariably proves to be highly efficient in instituting the mission and functions of the Central Council and the National Boards.

Since they are accountable to the Central Council, the National Boards ensure that Council's stipulations of policies and recommendations are appropriately interpreted and put into effect. Thus, for example, in its mission statement the National Board Nursing, Midwifery and Health Visiting for Scotland (NBS) emphasises its commitment to the health of the public of Scotland. It, therefore, declared its overarching aim to promote and secure improvements in the standards, quality and effectiveness of professional education for all the disciplines (NBS, 1994). Figure 2.1 below illustrates the inter-relationship between Council and the National Boards as demonstrated above.

FIGURE 2.1 NATURE OF INTER-RELATIONSHIP BETWEEN THE CENTRAL COUNCIL AND THE NATIONAL BOARDS



In the above discussion an attempt was made to present an overview to explain the extent and nature of the statutory control of the P2000 educational reform and the source of control for regulating and monitoring the standard and quality of the education and practice systems. The question arises as to how informed nursing students are about the statutory control of their education and the impact their perceptions have on the implementation of self-directedness in learning. The following section focuses on the impact of the statutory control on the various institutional factors that potentially influence the self-directed behaviours of the students.

Statutory Control over the Institutions and the Potential Influence on the Curricular Development and Programme Planning

“The UKCC is fully committed to achieving improvements in the education and training environment believing these to be vital if student status is to be effective” (UKCC Project Paper 9, 1987). The Key recommendations of the Central Council’s Educational Policy Advisory Committee were:

- proposals for Higher academic level educational programmes with joint professional and academic validation and access to a full range of educational resources,

- a comprehensive and clearly delineated educational budget,
- educationists with graduate level qualifications,
- a substantial common foundation programme followed by branch programmes allowing scope and opportunities for future specialisation,
- student supernumerary status,
- development of a practitioner who would be competent to assess patient/clients' need and capable of implementing, monitoring and evaluating the care provided,
- development of a practitioner capable of functioning in institutional and non-institutional settings (UKCC, 1986).

These represent some of the challenges which confront the educational institutions involved with the P2000 philosophy. The content outlines the nature of education required for preparing future practitioners and highlights the key practitioner characteristics envisaged. Council's policy in relation to the required level of education urged for the provision of the educational facilities to reflect the better standards in higher education (UKCC, 1987).

This concept of better standards is rather controversial since no tools or pre-set criteria seemed to be provided for determining or measuring achievement of those standards. However, the National Boards' confidence in this notion is demonstrated through their initiative in devising appropriate tools and relevant mechanisms for conducting institutional audits and course approvals. However, the risk of widely divergent interpretations cannot be overlooked. Interpretation of prescribed policies and recommendations within the education and practice systems often creates difficulties. The problem apparently relates to dilemmas associated with various constraints particularly regarding the moral and ethical implications. For example, one of the key principles of the P2000 philosophy concerns the concept of knowledgeable doer. The significance of this concept is conveyed in the UKCC Educational Policy Advisory Committee's notion that:

“The nurse of the future will be a “knowledgeable doer”, able to marshal information, to make an assessment of need, devise a plan of care and implement, monitor and evaluate it.” (UKCC 1987, Project Paper 9, p 5)

Although this statement seems to convey the required characteristics in terms of expected behaviours it fails, nevertheless, to indicate the precise meaning of the concept. Another point of contention is that there is no indication as to what means or processes might be employed to promote development of those characteristics or what level of theory - practice integration categorises the practitioner as such (Watts, 1992). Without doubt this must present a dilemma and a challenge for the educational institutions with regard to interpretation of the concept and the where, when or how aspect of incorporating it into the curricular programmes. The processes involved in fostering and nurturing development of these characteristics also seem obscure. Nevertheless it seems to have been readily adopted in both the education and practice sectors. The description gives no explicit indication as to what might be involved in the integration of the theoretical knowledge and the performance of practical competencies in patient and client care (Watts, 1992). Neither does it give any indication about the implications of that single level practitioner on the standard of professional expertise.

The National Boards' attempt to clarify and minimise this dilemma is demonstrated in their offer of a more elaborate explanation. The essential elements in their statement suggest that professional education should provide sound knowledge on which identified standards of care could be based. They considered this to be critical in complementing skilled practice. In relation to student preparation, the Boards concurred with the RCN and EPAC's view that introduction of the supernumerary status might be a feasible means of facilitating and enhancing the learning process. They urged for shared learning and a student centred approach to be employed and they specifically indicated the need to encourage development of self-direction (NBS, 1992). Although the Boards appeared to favour a flexible and facilitative learning climate and use of innovative teaching methods the degree of freedom

implied in those elements is an issue of interest where the educationists are concerned. The teachers' conceptions of flexibility and facilitation is vital to the way in which they implement related concepts including the self-directed approach, and the way in which they supervise and support students. This proposal indicates a relatively dramatic change in role from the teacher-directed to student centredness with self-direction. However, as previously argued, some educationists seem to convey internal conflict and anxiety about losing academic and professional credibility. The dilemma of ceding control to the students to empower them in making decisions and choices about their educational process appeared to meet considerable reservations. Other related issues are examined in the following section which shows an outline of their operational interpretation followed by a critical debate on the content.

Operational Representation of the National Boards' Interpretation of the Recommendations

As previously noted, the National Boards concurred with the Central Council in its proposals. They translated the recommendations into operational terms to guide standards in practice and form the basis for curricular development and programme planning in education. It was envisaged that the preparatory programmes should enable the future practitioners to:

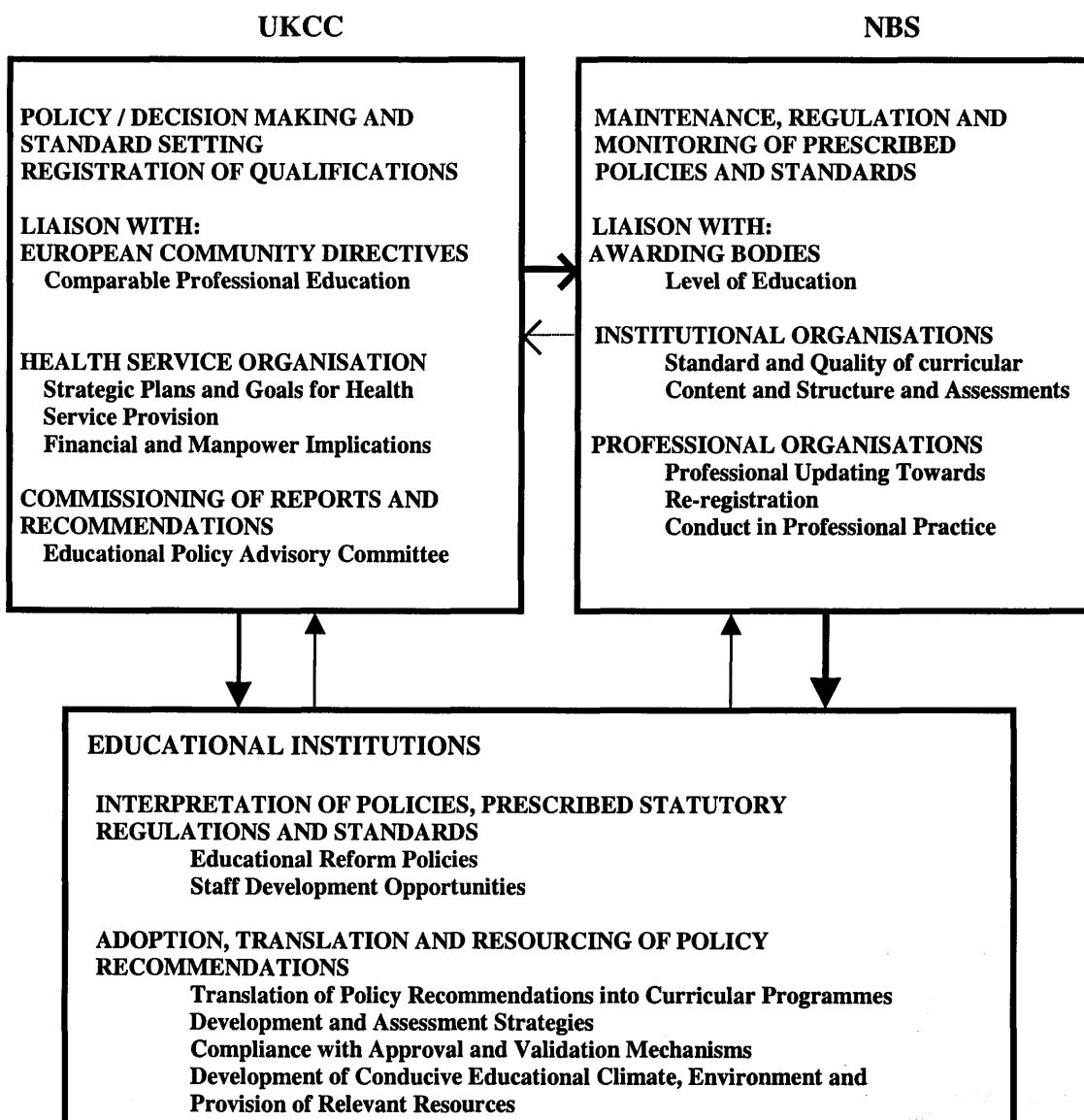
- evaluate the environmental factors which affect health,
- recognise and respond appropriately to factors which contribute to or adversely affect the physical, mental and social well-being of patients and clients,
- evaluate relevant research based evidence with a view to influencing professional practice,
- assess, plan, implement and evaluate care to meet the physical, psychological, social, spiritual and educational needs of patients and clients,
- identify health related learning needs in order to develop health promotion programmes,

- promote maximum self-reliance and employ appropriate interpersonal and communication skills in establishing helpful, caring and therapeutic relationships with patients and clients,
- take judicious measures in independent actions and/or actions by other disciplines,
- accurately interpret and implement prescribed care,
- devise and implement innovative teaching, supervision and assessment methods,
- appropriately delegate and provide required supervision, assistance and monitoring of the performance of relevant team members,
- critically appraise ethical issues in relation to the responsibilities which these might impose on professional practice,
- using appropriate referral mechanisms demonstrate effective inter-professional team approach to aspects beyond own sphere of professional competence,
- evaluate the influence of social, political and cultural factors in relation to care, provision'
- demonstrate compliance with professional legislation (NBS 1990).

These, clearly, impose considerable expectations and commitment which challenge the practitioners' resourcefulness and self-reliance in the way in which they interpret and fulfil these obligations. The Board's strategy in ensuring that development of the required competencies and practitioner characteristics are incorporated in the educational programmes seems logical. The notion reflects the assumption that education primarily aims at nurturing in the individuals, the ability to make decisions about personal thoughts and actions (Boud, 1988). Essentially autonomous individuals ought to have freedom and independence from external authority and be in total control of their own powers. They should be able to act and work as they choose (Gibbs, 1979). This notion seems to reflect the Deardenian view of critical mindedness, a concept that is explained as characteristically involving personal right

to question the justification and underpinning rationales for emerging issues. Furthermore, it conveys the opinion that individuals must have a sense of freedom to refuse agreement or compliance with external requirements which they perceive to be unacceptable to them. That particular point of view, however, implies the highly debatable ethical and moral stance of conscientious objection. It seems to suggest that individuals must be free to define and pursue their personal goals, policies, and plans without external pressures (Dearden, 1975).

FIGURE 2.2 STATUTORY INFLUENCE ON THE EDUCATIONAL SYSTEM



The above argument was an attempt to explicate the statutory influences on the educational institutions and demonstrate the rationale behind the National Boards' scrutiny of the ways in which the institutional authorities interpret and implement Council's policies and recommendations. As previously indicated the Boards achieve this remit through course approval mechanisms and through joint academic and professional validation procedures. Evidence of the Boards' efforts to strengthen the academic standing of nursing education was conveyed in its 1986/1990 Statement of Intent. That statement indicates particular moves to ensure that the management and staffing structures measured up to appropriate standards for providing preparatory courses at higher academic level. Additionally, since alternative approaches to learning seem to be particularly favoured at policy level, considerations of factors such as resource provision within the learning environment seem to have become obligatory. Staff development and enhancement of existing library provisions and other facilities were also indicated as targets that must be achieved. This raises the question as to what measures might educational institutions take to enhance student self-direction in learning.

The factors that have emerged in the above discussion pose various challenges for both the education and practice sectors. This is because successful realisation of the reform proposals would depend partly on their collaboration. Obviously each sector has a crucial role to perform in the development of the characteristics of the future practitioner despite the lack of clarity in the way in which some items were defined. The practitioners' role in the supervision and support of learners is particularly pertinent. The stipulation of formal courses to prepare them for their teaching roles in the practice settings (UKCC, 1986) carries an additional challenge for the educational institutions. In this case they are faced with the responsibility of devising appropriate preparatory courses on mentorship and preceptorship in

student supervision with particular emphasis on helping them to relate the theory to the practical learning situations.

Education and Service Liaison vis-a-vis Integration of Theory and Practice

As has already been mentioned, the use of students as part of the labour force in training programmes before Project 2000 met with strong criticisms. Whilst the practice of task allocation might have been considered by some practitioners as a basis for effective professional socialisation, the argument is that it resulted in fragmentation of care provision. The inevitable implication of this was compartmentalisation of learning in which students demonstrated difficulties in relating their learned theory to the actualities of patient/client care and other aspects of professional practice. Arguably these implied that students were unlikely to have had the opportunity of being involved in provision of holistic patient/client care.

Thus, confronted with the challenge of total patient care in which all aspects of the individual's problems and needs are taken into account, the student would have to rely on the qualified practitioner for guidance. From the perspective of the practitioner her/his obligation to patient and client welfare would necessitate that she/he directly instructs and supervises the student in the assessment, planning, implementation and evaluation of the care provided. In point of fact such a climate proved to be unfavourable for self-direction in learning since it neither offered the students the opportunities nor the freedom to take personal responsibility in exploring client situations. Neither did it offer opportunities for development of managerial and organisational skills at ward level. Conflicting views about this issue can be noted in the following arguments. Whilst some refute the claim that student apprenticeship denies them supernumerary status (Beckett, 1984), others caution about the potentially detrimental effect of that practice on the student's professional development (Boylan, 1982).

Another potential problem is that qualified staff have often faced a conflict of responsibility by having to attend to managerial and organisational demands in addition to their commitment to student supervision and support. Consequently the risk of both functions being inadequately performed or even neglected was a reality. This was one of the combination of factors which provided the incentive for considering implementation of student supernumerary status. The perceived benefits were that this would afford better student supervision and support with significant improvement in their acquisition of practical competencies. Additionally, it was anticipated that this might improve the quality of patient and client care, as it should allow more qualified practitioners with the right level of expertise to provide more direct care. This argument appeared to add more credence to the Central Council's recommendations for educational reform. The factors relating to the educators and the potential influence on students' self-direction, will now be examined.

Interrelationship of the Statutory Control and Institutional Influences on the Educationists

The nature of the Central Council's influence on the educationists is conveyed in its stipulations about the type of environment required for preparation of the future practitioners. Requirements concerning the educationists are considered within the context of major learning resources. Thus the main proposals include teacher - student ratio, type of teacher preparatory programme to be undertaken and levels of qualification expected. Council's stipulation about these was quite clear. The recommendations urged enhancement of teachers' performance and postulated opportunities for them to undertake further training. More importantly, Council urged the institutional authorities to encourage teachers to fully participate in wider educational activities (UKCC, 1986). Concerning levels of qualification, the recommendation was for teaching qualifications to be established at degree level (UKCC,

1986). Similarly to other recommendations, Council conveyed its conviction that these measures should contribute to the success of the educational reform (NBS, 1992).

It seemed logical that educationists were required to attain higher academic qualifications since the P2000 philosophy recommended Diploma in Higher Education and graduate level preparation of nurses and midwives. This higher academic attainment would enable the educationists to cope more competently with the expectations and demands of providing the required academic support for the students. However, the self-concept and self-confidence of the teachers emerged as a particular concern for those who, at the time, felt inadequately prepared for teaching and supervising students at higher academic level. Another concern was that they could foresee the practice which required the nurse and midwife teacher to deal with all or most of the related subjects of a particular programme, being increasingly replaced by subject specialism. Nevertheless, the potential benefit was that this ensured appropriately qualified academics with the relevant knowledge and expertise undertaking delivery of their specialist subjects rather than nurse educators who might not have attained the required subject specialism (Charlwood, 1993).

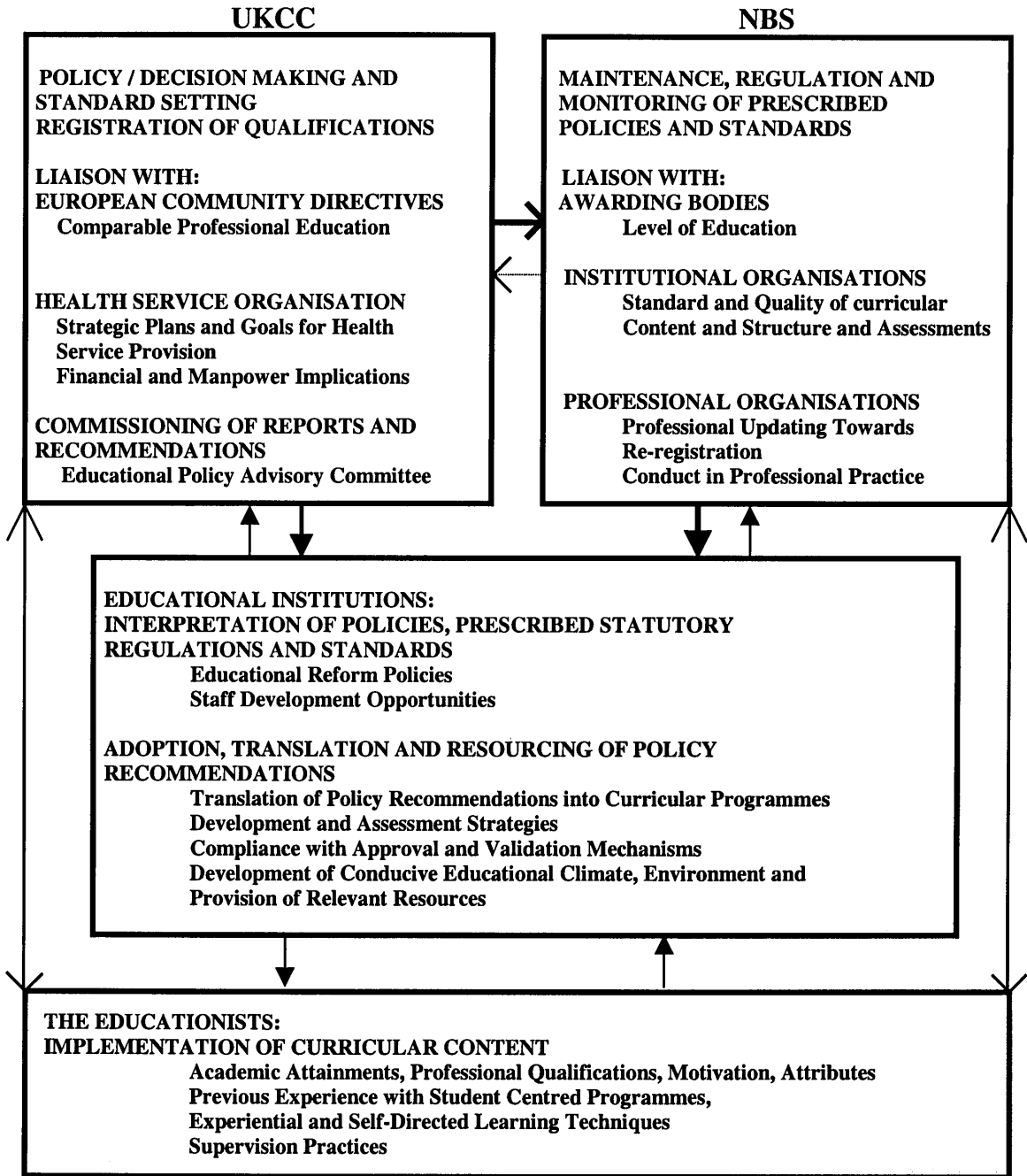
In terms of educator practices the change from the traditional pedagogic practice of didacticism to adoption of the andragogic principles was bound to generate conflict for the reasons already explained. Many educators had come to rely on the former practice based on the argument that it was more likely to guarantee delivery of the prescribed curricular content. Their other argument was that on ethical and moral grounds the pedagogic approach seemed more feasible if account was taken of the nature of the profession in terms of the practice, the knowledge and the type of clientele concerned (Slevin, 1992). In relation to the latter the dilemma appeared to be concern about the potential risk of liberal exposure of patients and clients to the trial and error nature of student learning. Yet they (the patients)

were the principal resource for the students' practical learning experiences. Such views seem to overlook the more flexible model of negotiated or transactional approach to learning, which are perceived to offer a sense of shared ownership of the learning process.

The process enables triangulation of interaction to be established between the educationist, the student and the preceptor to allow readily accessible contacts with one or the other or both educators for required academic and/or clinical support (Slevin, 1992). The argument here is that without appropriate preparation and or prior personal experience and exposure to those methods educators are likely to encounter considerable difficulties with interpreting the recommendations. Therefore, particular threats seemed to relate to the inability to function effectively because of misinterpretation and inadequate implementation of concepts such as student centredness, experiential learning and self-direction in learning.

Figure 2.3 below represents the statutory and institutional influences on the educators as described above. The essential elements indicate that the educationists are the implementors of Council's policies. It was therefore necessary to examine the extent to which the institutional policies and regulations also affect their practices. The nature of influence invariably occurs in a cascading manner, as demonstrated, with more direct influence from the institutions within which they function. The final part of this chapter examines the influence of student characteristics on adoption of the self-directed approach to learning. Attempt is also made to demonstrate the nature of interrelationships between the statutory, institutional and educator influences on the adoption of the recommended approach.

FIGURE 2.3 CASCADING NATURE OF THE INTERRELATED STATUTORY CONTROL AND INSTITUTIONAL INFLUENCE ON THE EDUCATIONISTS



Influence of Students' Characteristics

The potential impact of various personal characteristics on individuals' self-direction has aroused considerable interest in adult education (Brookfield 1986, Brockett and Hiemstra,

1991). The question arises as to which specific attributes potentially characterise self-direction in learning. For example, what educational experiences or backgrounds do self-directed, autonomous learners generally present? More importantly, what cognitive styles or learning approaches do they tend to prefer? Most of the findings from studies relating to student characteristics have yielded widely varying results but this section focuses on the influence of cognitive styles and motivational factors.

Impact of Learning Styles on Self-directedness in Learning

Studies on different learning styles have attempted to explain the processes involved in each case. Therefore, in implementing a given educational approach it seems necessary to establish which learning styles are more conducive to functioning in the particular capacity, e.g. as self-directed or autonomous learners. It is also important to determine the significance of the processes involved in the identified learning style within that context of learning. For example, what is the significance, that is strengths and weaknesses, of the processes involved in field-dependence learning style where self-directed learning is concerned? Of equal importance it is necessary to determine in what ways students presenting different cognitive styles might be helped to cope effectively with the adopted approach. As Tennant (1988) points out, individuals differ in their learning styles. It is, therefore, unrealistic to expect that educationists can design and deliver a programme that meets the learning style needs of all their students. The following section presents a critical examination of the arguments relating to Field dependence and independence within the context of self-direction in learning. Despite the time lapse since Witkin et.al's (1977) studies on this cognitive dimension, the findings seem relevant to the context of this argument.

Impact of Field Dependence and Independence Cognitive Styles on Self-direction in Learning

Tennant's (1988) adaptation of Witkin et. al's (1977) explanation of the cognitive dimension of field dependence and independence is found to be pertinent to the argument presented here. The essential elements of this cognitive dimension are examined and the implications for learners and educators discussed within the context of student self-direction. Regarding how students learn, the main characteristics identified about field dependent learners suggest that they appear to benefit from external reinforcement. This seems to imply that individuals might expect others, such as their academic and practical supervisors, to evaluate their acquired levels of knowledge and standard of practical performance, assess and provide them the relevant feedback. Another identified characteristic suggests that since they tend to find unstructured material difficult to deal with they are inclined to rely on others to take the responsibility of organising the structure and content of the learning material. In essence, they expect their educators to retain control and direction of the learning process. To be able to identify and comprehend concepts they, evidently, need cues that clearly guide or specifically provide them with the particular explanations. Moreover, concerning social learning, the field-dependent individuals are found to function better in learning climates where the codes and regulations are clearly defined. They apparently show a preference for the kind of social contexts where they are unlikely to encounter change from the set norms to which they have grown accustomed (Tennant, 1988).

In contrast to the field dependents, the main characteristics of the field independent learners suggest that they are not, as a rule, reliant on external motivators and usually demonstrate ability to structure and organise the content material to fulfil their own identified learning deficits. Characteristically they are noted to explore and examine a varied range of sources of information and their self-concept enables them to plan, set appropriate goals and implement the relevant learning tasks. They also, evidently, prefer the challenges of discovery and

problem based learning activities. These characteristics of the field-independent learner portray self-discipline, ability to take control, make own decisions and personal choices. All of these are perceived as attributes of learner self-direction. In both the field dependent and field independent learners evidence suggests that individuals respond more positively to their academic work if supervised or matched with educators who have similar cognitive inclinations. Since they tend to acknowledge each other's viewpoints and establish rapport, set goals are more likely to be achieved (Even, 1982; Brookfield, 1986).

Based on the above findings the general view among adult educationists seems to be that successful self-directedness is associated more with the field independent cognitive style than with the field-dependent style (Even, 1982; Pratt, 1984). However, as Brookfield (1986) points out, this point of view seems to conflict with the assumption that self-directed learning involves the adult learner's ability to demonstrate critical reflection. He argues that the same characteristic applies to field-dependence because critical reflection derives from the individual's milieu of acquired knowledge, social values and beliefs, all of which are essentially contextual. If this argument is critically examined in relation to the findings from Witkin et al's (1977) extensive studies, then it could be concluded that both cognitive dimensions of field independence and dependence favour self-directedness in learning. It is quite obvious then, that uncritical adherence to specific points of view could prove detrimental to student learning. The contention here is that the risk of designing programmes based on the cognitive capabilities of the field independent learner to reflect adult educational principles and self-direction could disadvantage students with other cognitive styles. Nevertheless, the evidence from the numerous related studies cannot be disregarded but appropriate academic support should be provided to help such students develop the required attributes for dealing with self-directed work.

Impact of Motivation

Motivation as a critical element of self-direction in learning has also aroused considerable interest in terms of the learner's commitment and self-confidence to engage in self-directed, autonomous learning ventures (Candy, 1987). So far the studies that have explored motivation appear to have focused on the reasons why adult individuals undertake specific courses rather than the drive, incentive and commitment to studying while on a course.

Within the context of this study the latter, that is, the students' motivation to function in the self-directed capacity in identifying and meeting their own learning deficits seems more relevant and has already been addressed. However, findings from Houle's (1961) published report, though rather dated, are briefly referred to here because relevance to this study can be deduced as follows. The study explored factors that led individuals to be continuing learners, and their perceptions of themselves as learners. The three main reasons that emerged were described as goal oriented, activity oriented, and learning oriented.

Within the context of this study the goal oriented element can be seen as having particular relevance to both the pre and post registration students in terms of their perceived needs to achieve specific professional qualification to enable them to practice at specific levels within given specialties. Therefore it could be assumed that their decisions and actions to pursue the relevant courses imply preparedness and personal responsibility to achieve those personal goals. Houle's (1961) interpretation of the activity and learning oriented motivations inferred participation for the sake of the learning activity and for seeking knowledge respectively.

In relation to this study, the main interest is to obtain substantive information about how the students perceive and describe their motivation for fulfilling their studying requirements without being prompted by their educationists. Therefore, an attempt will be made to establish what attributes might emerge from the obtained data. It is thought worthwhile to

establish whether or not the findings might indicate perceived commitment, self-confidence, self-discipline and personal control and responsibility in self-diagnosing and tackling personal learning deficits. These consistently recur in the generally held views about self-directed learners.

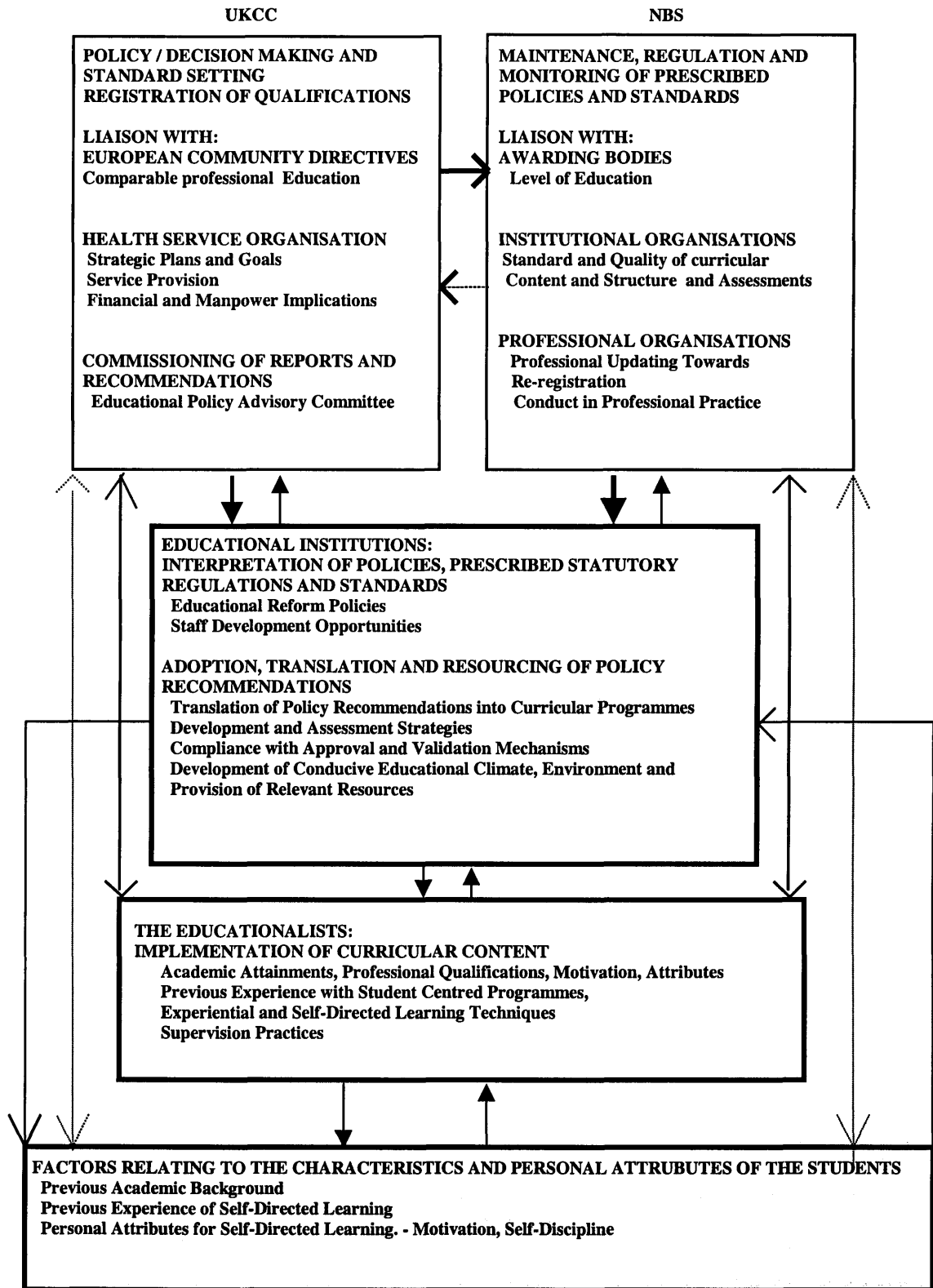
What seems to emerge from the above review is that specific student characteristics are required for functioning in the self-directed capacity. Therefore, it could be argued that certain individuals might not necessarily possess those personal attributes and might, consequently, need to be helped to develop them under appropriate guidance and supervision.

The Central Council emphasised the need for new directions of development in the educational system and that these should reflect a more proactive approach to what a professional is and should do, that is, taking personal responsibility for one's own academic development (UKCC, 1986). Therefore, the significance of extensive studies cannot be overlooked. Figure 2.4 (page 83) illustrates the hierarchical nature of factors which might have varying degrees of impact on learners' self-direction within nursing education.

Other factors that have been explored include learners' readiness, degree of autonomy, age, and socio-economic status (Merriam and Caffarella, 1991). As previously indicated, such studies are notably limited within the education and practice systems of the nursing profession. The contention, therefore, is that if development of autonomy and self-direction are so critical to the personal and professional progress of the practitioner then there is a serious need for multi-dimensional studies to be conducted within the educational context. It is crucially necessary to explore whether or not the self-directed learning approach is beneficial to the preparation of nursing and midwifery practitioners and if so how effectively it can be implemented.

FIGURE 2.4

CASCADING NATURE OF THE INTERRELATED INFLUENCES ON IMPLEMENTATION OF STUDENT SELF-DIRECTION AS AN ADOPTED EDUCATIONAL CONCEPT



Summary

The argument presented in this chapter demonstrates how in its capacity as the overall statutory authority, the Central Council's (1984) intention to conduct a detailed scrutiny of the education and practice systems was achieved. This allowed for appropriate recommendations to be made to guide more realistic programme development. The Central Council set out with a broad objective, clarification of which helped to determine and outline its priorities. In regard to transforming the basis of the educational preparation, Council's interpretation of its mission statement enabled it to ensure establishment of:

- a system of education geared towards meeting future health needs
- a group of professionals able and willing to adapt rapidly to change
- a better relationship between education and service
- a simpler overall pattern of preparation, whilst maintaining and improving standards
- a greater degree of professional unity and constructive participation in health policy (UKCC Project Paper 9, Annexe 1).

As pointed out in the preceding chapter, one of the key motives for the educational reform was to meet current health demands which implied constant change. Council anticipated that practitioners would be able readily to adapt to the climate of changing health care needs, social trends and therapeutic advances. That level of response required the kind of educational preparation that fostered the ability to make personal decisions and choices.

An equally potent influence that could not be overlooked in this context was individuals' personal characteristics particularly the cognitive styles and the nature of motivation with which they embraced their professional education. The field dependent and independent debate highlighted the need for careful consideration to be given to the differences in

cognitive styles and capabilities when adopting specific approaches to learning such as student self-directedness. Therefore, clearly the interrelated influences of statutory decisions, institutional response, and the reactions of educators, students and practitioners seem critical to the implementation of the self-directed approach to learning within nursing education.

The Central Council's justification for its decision on the establishment of a unified profession was to enable the practitioners to benefit, intra-professionally, from the exemplars of each other's best practice. Nevertheless, the structure created further complications. The strategy required appropriate guidelines for standards of care and codes of professional conduct, rules and regulations to be set to guide the practitioners, the institutions and the learners.

Current Demise of the UKCC and National Boards

A proposal in the late 1990s which advocated rationalisation of the rather complex structure of the professional bodies and their statutory regulatory functions resulted in the establishment of a modernising regulation (2002), whereby a single Nursing and Midwifery Council (NMC) has replaced the UKCC and National Boards (NHS Executive 2000). Among the key objectives of this review were the establishment of an educational system aimed at fitness for professional practice based on projected health care needs and establishment of inter-professional education to ensure collaborative practice and effective care delivery (UKCC 1999).

CHAPTER THREE

FRAMEWORK OF EXTRINSIC AND INTRINSIC FACTORS INFLUENCING STUDENT SELF-DIRECTION

Introduction

The previous chapter presented a critical review of the nature of statutory control, over the academic institutions, the educationists and the students. In particular an analytical review was used to demonstrate the way in which these interrelate in their influence on how the educational reform recommendations were interpreted and implemented. This chapter presents a multi-dimensional framework with narrative analysis illustrating the extrinsic and intrinsic factors that potentially affect the implementation of the concepts of student centredness and self-direction in learning. The framework depicts the different perspectives of the structure of the educational system as follows. The policy and decision-makers represent the statutory professional bodies. These are perceived to be the legitimised authorities that not only instigate major changes within the educational system but also direct and monitor the quality standards as previously discussed.

The policy agents represent the educational institutions whose business it is to translate the recommended educational concept and ensure that appropriate provisions are in place for the implementation of the approach. The implementors of policy represent the educators, the lecturers whose responsibility involves developing and delivering the programme content. In addition they are responsible for providing student support in the theoretical aspect of their learning process. The preceptors who provide the practical support within the context of clinical learning also fall into this category. Finally the consumers of policy represent the students who are at the receiving end of the implementation of the learning approach. The

following section examines the component factors, which operate from each of the above perspectives.

Extrinsic Influences on the Students' Self-Direction

From the perspective of the policy and decision-makers the extrinsic factors, within the context of this chapter, embrace the policies and regulations i.e. the innovative educational approach instigated from the statutory level. The specific initiative, in this case, was adoption of the principles of adult learning with student centredness and self-direction in learning. Also included in these component factors are the human resources and material provisions in place within the theoretical and practical settings for facilitating the learning process whilst fostering development of the required attributes. The following section presents a critical examination of the impact of the factors emanating from each perspective.

Factors emanating from the Policy Decision-Makers

The principles of adult learning emerged in the educational system as a recommended approach proposed by the policy decision-makers. This was specifically to reflect the philosophy of the educational reform. The statutory bodies collaborated in determining and conveying what attributes they wished to see developed in the practitioners. Therefore, based on the structure of the educational system it could be hypothesised that the most salient extrinsic factor was the instigation of the adoption of the concepts of student centredness and self-direction in learning.

In relation to continuing education for qualified practitioners, the Post Registration Education and Practice (PREP) philosophy also feasibly falls into the category of the extrinsic factors emanating from the statutory level. The policy decision-makers' guidelines on the preparatory programme stipulated that the relevant key themes should encompass a sound

knowledge base of applied biological, social and behavioural sciences. They also proposed that the Common Foundation Programmes (CFP) should reflect the concepts of health and illness within a practice-based curriculum (UKCC, 1988). As Pendleton (1991) noted, the theme of *general developmental processes* (her italics) emerged in relation to development of the attributes of critical thinking, problem-solving and communication skills. These seem to imply that further development of the students' intellectual abilities with self-direction was deemed a significant factor to be promoted right from the initial stages of their professional education.

Basic nursing skills such as lifting and handling techniques and other procedures that were common to all the branches of care provision were also perceived as an essential part of the theme of developmental processes. As the students progress into their branch programmes the policy guidelines propose development of analytical and evaluative skills in clinical observation and interpretation of clinical phenomena relating to patient and client situations. The varied range of settings of care provision and the differing patient and client circumstances were also key issues that emerged in the guidelines (UKCC, 1988). The implications of these in relation to the adopted educational concept will be debated later.

The key proposals concerning the expectations of the characteristics of the practitioner are further examined below. They suggest the following:

- Practitioners must have a sound theoretical knowledge base, and be able to provide research and evidence-based practice.
- They must be able to demonstrate reflective practice with the ability to analyse critically and evaluate clinical phenomena while continually striving to maintain high standards of care provision.

- They are expected to show awareness of the need to improve and enhance systems of care provision through emerging nursing theories and concepts and innovative mechanisms. For example, to have an appropriate grasp of concepts such as clinical governance, clinical effectiveness and an integrated team approach to patient care.

Essentially what the policy and decision-makers envisage in the practitioners is independence of thought and actions and the ability to demonstrate accountability for their own judgements. The expectation to be adaptable implies that the practitioners must be capable of functioning effectively within the different settings of the hospital and the community care.

Realistically, of course, that depends on the background of professional expertise and individuals' acquired knowledge and competencies. Therefore, to ensure realisation of the above expectations various initiatives are instigated from the statutory level. For example, in 1997 within the area of primary care, the policy decision-makers in Scotland commissioned a survey to be conducted into the educational status and future professional development of General Practice Nursing. The purpose was to identify the training needs for nurses who function within the General Practice sector (NBS, 1999). Although this seems an appropriate move the contention, nevertheless, is that the processes involved in the review and the outcome could have been influenced by the policy decision-makers. For instance, the appointed committee might have been given specific instructions about how to conduct the review, and the Board might have specified the remit of the committee. Thus it could be argued that inevitably the recommendations based on the findings from that review influenced the development of the relevant curriculum and the planning and delivery of the course. It could also be argued that because the source of the recommendation was the statutory authorities, the general perception and response from practitioners was likely to be uncritical compliance to what was perceived as mandatory regulation.

The implication for nurses working within the general practice sector is that to meet their post registration educational requirements for practice it would be necessary to undertake the approved course. Only then would individuals' names be placed on the appropriate section of the professional register to legitimise their competence for functioning as general practice nurses. Thus statutory stipulations are clearly significant external motivators filtered down from the policy decision-makers. To that end they require to be correctly translated and appropriately applied by the institutions in their capacity as the policy agents. It must be noted, however, that policy statements are liable to diverse interpretations (Brockett and Hiemstra, 1991). Dilemmas arise when recommended frameworks or operational guidelines are perceived as mandatory regulations or directives and therefore rigidly adhered to. Nevertheless, it could be argued that this phenomenon appears to be common within the constrained flexibility of the nursing educational system.

To enhance and maintain quality assurance education and professional standards, the policy and decision-makers collaborate in monitoring and regulating the curricular programmes. The priority, undoubtedly, was to ensure that the content and methods of delivery appropriately reflect self-direction in learning. This was evidently mutually beneficial for both the education and practice sectors. Undoubtedly the acquired attributes of independent thinking, ability to make choices, to be self-reliant and act on personal judgements were crucial for functioning effectively within the hospitals and primary care settings (NBS, 1999). Arguably the fact that these were perceived to be transferable attributes that could be carried to future professional development and education was the impetus that prompted the decision-makers to propose that such principles be fostered. The programmes have to be seen to be effective in fostering personal autonomy and accountability in professional practice. The following section examines the perspective of the institutions who represent the policy agents.

The Policy Agents

In the above discussion an attempt was made to highlight the potential influences of statutory policies and decisions on the professional education. The following discussion focuses on the perspective of the educational institutions. In their capacity as policy agents, the institutional authorities face the challenge of correctly translating the policy recommendations into operational terms for implementation. This section examines how the institutions have embraced the educational reform through restructuring and reorganisation of the curricular programmes. In addition, the implications of incorporating the principles of student self-direction are critically debated. As previously noted, the policy decision-makers stipulated that professional education and practice must have a sound knowledge base. Therefore one of the major initial tasks confronting the institutions concerns identification of the key components of the curricular programmes. The nature of nursing education requires account to be taken of the theoretical component and the professional competence required for clinical practice. Therefore, the institutions have to determine what they consider as feasible curricular models for the reform. As Pendleton (1991) points out, a typical curricular programme based on a four-dimensional model of nursing education was identified as an appropriate option. This enabled the institutions to determine what they perceive as the embodiment of the areas of knowledge and experience.

Based on Beattie's (1987) model of a four-dimensional curriculum, Pendleton (1991) demonstrates how the policy agents have translated the recommended curricular components into their programme planning. Each dimension portrays a different aspect of the curriculum.

Thus the dimension of the key subjects indicates:

- the related biological sciences incorporating the elements of anatomy and physiology,
- social and behavioural sciences incorporating applied psychology and sociology,
- concepts of health and illness with elements of handicap and disability,

- processes of nursing and nursing care.

This model is perceived to depict the liberal humanistic approach (Pendleton, 1991).

However, the extent to which the policy agents and their educationists perceive the essential subjects as prescriptive or not might, no doubt, influence how liberally or otherwise they translate these for implementation.

The second dimension portraying practice skills evidently incorporates the essential competencies and attributes required for professional practice. How standardised or otherwise these are perceived to be, might also influence the implementation process with regard to the strategies employed for the students' practical placements and the way in which student supervision and support are organised. The third dimension of the four-fold curriculum model is designated meaningful personal experiences. This portrays the kind of curricular activities designed to encourage students to discuss and develop aspects of their experiences, which individuals perceive might be beneficial to them in their professional development. Within that context institutions, for example, make allowances within the curriculum to enable students to negotiate alternative placements of personal professional interest. The argument, however, is that how realistically this ideal is achieved might depend on how liberally the institutions translate this and the value that it places on this educational concept. To that end it seems necessary to investigate students' perceptions and reactions to the institutional strategies employed to effect this proposal.

Finally the fourth dimension portraying cultural issues, is apparently designed to allow student exposure to the realities of cultural issues inherent within different communities. How creatively this dimension is translated into operational terms and the way in which suggested techniques such as problem-based learning are employed are dependent on particular factors. Arguably the reality is that this might depend on the learning climate and the nature of

resources which the institutions can provide based on the funding available to them. Other equally vital factors presenting major implications include the range of settings within which the students must function. The varieties of patients and clients with whom students must interact in their learning processes also have vital implications (UKCC,1988). Therefore, not only do the policy agents face the challenge of appropriately interpreting the recommended educational policy into the identified four dimensions of the curriculum, they also have to determine the kind of resources required for effective implementation. More importantly, the institutional provisions must take account of the programme content, learning outcomes and the educational goals in relation to the specific disciplines.

There is no doubt that appropriate resource provision is vital to the success of the implementation of student centredness and self-direction in learning (Slevin 1991). Thus included in the factors relating to resources are factors within the specific learning environments. These include the classrooms, discussion rooms, library facilities, Information Technology, computer laboratories and the range of relevant audio-visual learning resources on which students rely while engaged in their learning activities. Specific institutional strategies such as semesterisation, modularisation and assessment regulations have also been included in this category because of the potentially direct impact on the students in their learning process. The argument here is that the highly motivated and relatively autonomous learners might effectively use the time available to them to engage in self-directed learning activities. This may be worth investigating.

The human resources which institutions must provide include the educationists who provide the academic support in terms of teaching and facilitation within the theoretical setting. Evidently they also have an obligation to negotiate and provide appropriate preceptorship training to enable qualified practitioners to provide student supervision and support within the

clinical settings. Arguably the critical issue in both cases is appropriate interpretation of roles so that students understand and accept their role as self-directed learners whilst seeing the educators as facilitators of the learning process (Slevin, 1992). Thus another associated challenge for the educational authorities includes supporting the educationists to undertake appropriate courses of further training to enable them to function effectively as implementors of the policy recommendations. Thus the question arises as to what provisions the institutional authorities do realistically make to ensure that the educators are appropriately prepared to confidently undertake their roles as facilitators and student supervisors. Of equal importance, how confident do practitioners feel following their training, if undertaken, to function in the capacity of facilitator of students' development of their professional competence?

From the above discussion, it seems justifiable that the policy and decision makers perceive it their responsibility to monitor the ways in which the institutions translate, design and implement their strategies. Thus, concerning the above argument the contention is that there must be clearly defined policy recommendations and guidelines for the institutions to operate on if they are to provide effective and systematic education to reflect relevant quality standards. At the same time it could be argued that different institutions set their own policy regulations which, while reflecting the institution's philosophy and mission, presumably also take account of the statutory organisation's philosophical stance. However, an equally important determinant factor seems to lie in the type of educational climate in which the students must function in their self-directed activities. Undoubtedly, the success or failure of the implementation process depends on the institution's ability to create an atmosphere that nurtures progressive development of autonomy, personal responsibility and accountability. The climate must provide appropriate physical environment and opportunities, which encourage student freedom to take advantage of selecting a variety of material resources and

educator support. Therefore in point of argument, the institutional authorities have an obligation to provide appropriate staff development and training programmes to ensure that the implementors of the policies are well informed about the needs of adult learners and the principles of adult education. The importance of supporting the educators to perform their facilitative and supervisory roles efficiently cannot be underestimated (Brookfield, 1986).

Additionally, the institutions must ensure that the necessary facilities are in place to enable the educators to correctly design the relevant programmes according to the institutions' interpretation, and based on their own internal policies and regulations. The value placed on collaboration between the institutional authorities and the policy decision-makers at statutory level is, no doubt, critical. Stakeholders obviously presume that the statutory and the institutional authorities must work together towards mutually beneficial goals, based on shared values and philosophical beliefs. The next section examines the perspective of the implementors of the policy recommendations.

The Implementors of the Policy

As established in the previous discussion, the educators represent the curricular planners who in reality function in the capacity of day-to-day implementors of the policy guidelines for the different professional disciplines. They are therefore answerable to the statutory policy decision-makers as well as to the institutional authorities who employ them. Therefore, it could be argued that they evidently perceive it their obligation to conform to the policy decisions and regulations set at the statutory and at the institutional levels. Nevertheless, as previously argued this could implicate a conflict of interest where implementation of student self-direction is concerned. Arguably the ultimate challenge confronting the educators is ensuring that the curricular design and the actual implementation strategies feasibly and realistically fulfil the principles of adult learning and student self-direction. This raises the

question as to what extent do policy decision-makers and the institutional authorities effectively meet with educators and students to discuss the feasibility of the recommended learning approach.

Some educators hold the view that supervision of self-directed learners is an imposition and intrusion on the learner (Merriam and Caffarella, 1991). The contention here is that the formal educational settings might not necessarily be seen as conducive to self-directed, autonomous learning because they tend to favour educators retaining maximal or total control over the learning process. However, the current trend in adult education advocates involvement of the educator in the capacity of facilitator to support and encourage students to assume increasing responsibility for their own learning. (Knowles et al. 1984; Brookfield, 1986; Brockett and Hiemstra, 1991).

The dilemma for some educators within nursing education is in determining how much or which aspects of the curricular content can be realistically left to the learner to plan, implement and evaluate the learning with little or no educator intervention. The conflict, presumably, is attributable to the fact that in order to interpret appropriately and design the recommended policies, the educators face two major challenges. On the one hand they face the challenge of having to take account of statutory codes and professional requirements. On the other hand they face the challenge of having to take account of the institution's regulations based on philosophical values and set professional academic goals. Thus in those capacities it could be further argued that the educators, in effect, influence policy recommendations and decisions at statutory level. Likewise they also essentially influence the outcomes in terms of realisation of the policy goals. These arguments are based on factors that are likely to influence the statutory and institutional authorities to take relevant decisions and actions concerning the educators. For example:

- their previous academic backgrounds,
- personal experiences of self-direction in learning,
- individuals' experiences in facilitating students' self-directedness in learning,
- the personal values and views which individuals hold about the implementation of the self-directed learning approach within nursing education, and
- their perceptions of the students as self-directed learners.

In the previous discussion, the policy and decision-makers' and the institutional authorities' recognition of their mutually beneficial gain was debated concerning the need for providing appropriate support for further training of the educators. While acknowledging their responsibility to instigate provision of courses of further training for the educators, the policy decision-makers justifiably expect the institutional authorities to respond appropriately. They emphasise the responsibility of the institutional authorities to provide the required support to enable educators to undertake the relevant training. Evidently, it seems vital to both parties that the educators are appropriately prepared for functioning effectively in their supervisory and facilitative roles. Nonetheless, it could also be argued that the educators owe a responsibility to themselves to acknowledge and identify the deficits in their personal knowledge and skills for facilitating student self-direction at diploma and degree levels.

The contention here is that it is critical to the envisaged professional educational goals that the educators demonstrate personal responsibility in ensuring that they are appropriately competent to fulfil those roles. For it could be hypothesised that if educators remain insensitive to factors that potentially promote or hinder students' motivation and interest in self-direction then the process is bound to fail. This raises the questions as to what are students' perceptions of the methods and techniques used in implementing self-direction in their programmes. Additionally, how do they perceive the facilitation and supervision

processes to which they are exposed? To what extent do the educators involve the students in decisions about their own learning process?

These issues are based on the assumption that factors emanating from the ways in which educators function could effectively influence students' attitudes and reactions to the self-directed approach and their development of the related attributes. The following section examines the impact of factors emanating from the students' perspective.

Intrinsic Influences on the Students' Self-direction

Factors emanating from the Consumers of Policy Recommendations

This section examines the personal characteristics and attributes of learners that potentially affect individuals' reactions and behaviours when exposed to the demands of self-directed work. An attempt is also made to establish the interrelationships between the student factors and those relating to the educators, the institution and the statutory bodies. In this context students' personal attributes constitute individuals':

- cognitive disposition,
- academic attainment,
- attitude to self-direction in learning,
- readiness and willingness to take control and accept responsibility for their own learning process,
- motivation and the personal value placed on the professional education, future career and other related life experiences.

The popular assumption that suggests that adults are characteristically self-directing (Knowles et al., 1984; Brookfield, 1986) has been challenged by various educational experts. Brookfield (1986) cautions about formal educational systems where the learning approach

involves a combination of traditional teaching and self-directed learning techniques. His observation is that students with particular preference for structured taught programmes are likely to resent being exposed to self-directed work. Such students invariably react with excessive demands and persistent dependence on the educator for direct instructions on what to do and how to go about it. Evidently the lack of confidence to function in the self-directed capacity could distort individuals' views about their educational experience. In point of fact, student exposure to self-directedness without consideration of individuals' cognitive readiness for that way of learning could result in objection to what they perceive as imposition of an unfamiliar concept. The contention here is that this could prove detrimental to the learning process. Obviously extreme protagonists of the andragogic principles might refute this contention which conflicts with their assumptions. By urging institutional administrators to acknowledge adult learners' deep psychological need to be given control over their own learning process (Hammond and Collins, 1991), they reaffirm the potential risk of stereotyping all adult learners. There clearly seems to be a need to explore the differing cognitive styles with which adult individuals enter their educational ventures in order to identify those who might feel threatened by this mode of learning. Because such students are likely to present strong disinclination to function in the independent capacity and might, in that climate of learning, resort to strategic surface level of learning.

The other potential risk is discontinuation of their professional academic pursuit during the early stage of the educational programme if individuals feel unable to cope with the demands. Ideally it could be hypothesised that if such students were matched to educators with similar cognitive inclinations then their motivation might be maintained as they gradually develop the self-directed attributes. Of course, significant student discontinuation of courses is likely to have implications at all levels of the professional educational structure. Not only would educators be forced to review their implementation practices, but equally importantly the

institutional practices of student recruitment and induction programmes and their curricular development might require to be reviewed. Based on the premise that acquired attributes and personal characteristics of self-direction are transferable to future education and other life situations, this could work to individuals' advantage. Of critical importance is making them aware of the potential benefits of developing these during their education (Brookfield, 1986; Boud, 1988; Merriam and Caffarella, 1991). This knowledge in itself could prove to be a motivating factor in stimulating and maintaining student interest and promoting a more positive attitude to self-directed learning. At the statutory level, the system of monitoring and regulating the quality of educational standards might be forced to take account of any emerging student wastage phenomenon. Whether or not such situations influence future policy decisions and recommendations would, undoubtedly, have vital implications for both the education and practice systems.

Where post registration education is concerned, Ash's (1985) assertion that the variation in inclination for autonomy and self-directedness is attributable to differences in learning needs seems valid. The argument is that these might be influenced by the intended purpose for the particular knowledge and skills. For example, practitioners wishing to function within a specific specialty such as coronary care require to undertake the relevant course of training to acquire the appropriate knowledge and expertise for functioning in that unit. The need to be able to perform safely and competently within that unit could be the key motivator that inspires such individuals to take responsibility for their own learning process. Equally importantly, the timing in which the learning is required for application could, be argued, to be a significant determinant factor. Ash (1985) made the observation that the nature of health professionals' work and the impact on patients' and clients' lives requires continual development and maintenance of high standard of professional competence.

The point being made here is that attainment of that level of expertise requires extensive practice. However, depending on the type of patients, the nature of competence to be developed and the type of procedures involved, the climate could negate student self-direction. Additionally, constraints relating to specific statutory codes of professional conduct and given hospital regulations could also conflict with the notion of unsupervised practice through the self-directed approach to learning. Thus the question as to what extent students actively participate in decisions about their own learning process becomes a significant issue worth exploring.

The factors identified in the above discussion seem to imply two dimensions of student characteristics with one dimension relating to the learning process whilst the other relates to personal attributes of the learner. Brockett and Hiemstra (1991) appropriately distinguish between self-directed learning and learner self-direction in the following way. Whilst they describe the former concept as encompassing the activities in which individuals engage to accomplish given learning tasks, they apply the latter concept to the personal characteristics of the learner. In particular the authors refer to the attributes of capability and willingness to take personal responsibility for the learning process. While acknowledging Brockett and Hiemstra's (1991) conceptual distinction, this study contends that a potential gap could be created in studies designed to explore only one dimension of student characteristics.

Interrelationships between the Extrinsic and Intrinsic Factors

The following framework portrays the interrelationships between the extrinsic and intrinsic factors as debated above. A concise relational statement is also presented as appropriate.

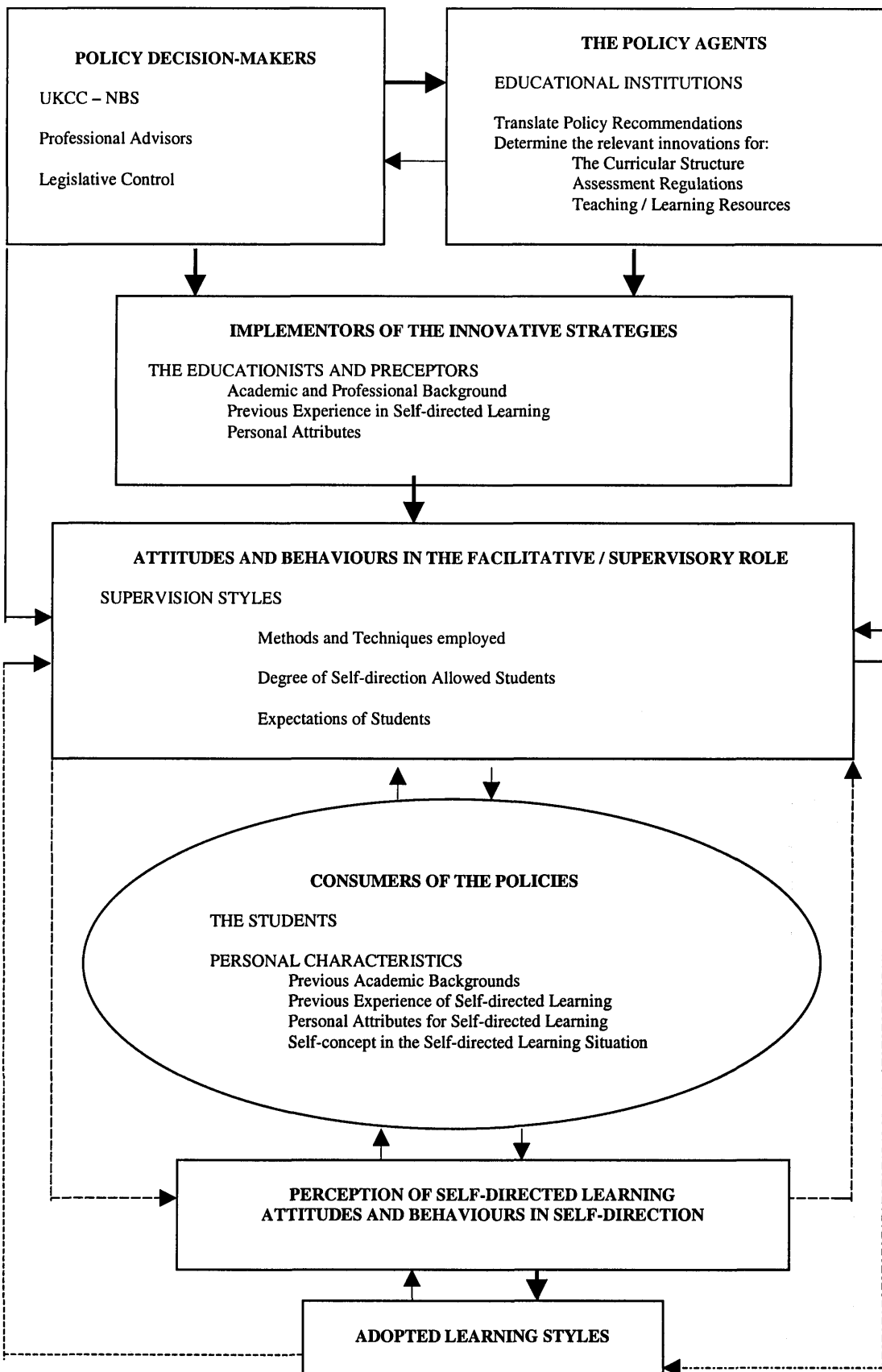


FIGURE 3.1 FRAMEWORK ILLUSTRATING THE MULTI-DIMENSIONAL INFLUENCES ON STUDENT SELF-DIRECTION

Relational Statements to the Framework of Multi-dimensional Influences on Student Self-direction

The framework represents a multi-dimensional schema portraying how student self-direction might be influenced from the different perspectives of the educational structure. The Statutory Bodies represent the **Policy Decision-Makers** who set the professional Rules and determine the Codes of Conduct that regulate Education and Practice. In that capacity, the policy decision-makers are in a position to make recommendations for major innovative changes to effect desired educational reform as proposed by UKCC (1985).

The Institutions function as the **Policy Agents** who have the task of translating policy recommendations into operational terms for implementation. Ultimately, the interpretation will reflect the institutions' philosophy of the professional education while taking account of the attributes of the future practitioner as envisaged by the policy decision-makers. Thus identified, the institutions must design appropriate curricula that will effectively foster development of the envisaged attributes in the future practitioners.

The actual operationalisation of the policy recommendations is effected by the educationists - **The Implementors of the Policy Recommendations** who must function within the Institutional setting, using the resources provided and complying with the prescribed regulations. The educationists, therefore, must creatively determine appropriate methods and techniques for effecting the change in attitudes and behaviours in the consumers of the Policy. At the same time they must take account of the statutory control and professional regulations. Additionally, the educationists and preceptors provide the facilitation and support which the students require in their self-directed learning activities. The style and quality of facilitation presumably reflect the educationist's personal characteristics and values as well as academic and professional background and prior training, if any, for student supervision.

The students represent the **Consumers of the Policy** recommendations and therefore are at the receiving end of the innovative changes of the educational reform. As such they must function within the environment of the institution, exposed to whatever strategies, facilities and learning resources are provided within that educational climate. It could therefore be assumed that the personal characteristics, academic backgrounds and personal values influence the implementation process and the degree and quality of self-directed attributes developed. Thus the schema illustrates the following dimensions:

- Indirect extrinsic influences from the policy decision-makers, that is, the statutory professional bodies who hold the professional and legislative control.
- Direct extrinsic influence from the policy agents, the institutional authorities who translate recommendations and provide the required learning resources.
- Direct extrinsic influence from the implementors of the policy recommendations, the educators who plan and deliver the educational programmes and provide the required academic and clinical support.
- Direct intrinsic influence from the students at the receiving end of the implementation and therefore whose personal characteristics, essentially, influence practices at the different levels and within the educational system.

Summary

This chapter set out to explicate the interrelationships between the factors emanating from the different perspectives of the professional educational structure. The intention was to demonstrate how the component factors affect the implementation process and highlight potential impact on students' reactions to the recommended educational approach. The strategies which individuals are likely to employ in dealing with the related challenges are also of particular interest to this study.

The P2000 educational reform with adoption of the adult learning principles of self-directed learning was based on the envisaged characteristics of the future practitioners. To that end the aim has been to empower students in their learning process to foster development of increasing autonomy with increasing responsibility for their own educational process (UKCC, 1986). It would appear that despite the persistent controversies surrounding implementation of self-directed learning (Brockett and Hiemstra, 1991), the potential benefits of development of the characteristics of autonomy, seem to have made this learning approach the preferred option in this professional education.

As Candy (1988) noted, adoption of this approach requires that appropriate provisions and support are in place. Therefore, it is vital to promote, not just intellectual independence in the identification, planning, implementation and evaluation of the learning process, but also the ability to operate at more advanced levels of independence in professional practice. Certain questions arise for example as to whether or not the particular educational climate and the nature of the curricular content are consistent with the recommended approach of self-directedness and autonomous learning. There is also the question as to which aspects of the curricular content can feasibly be programmed for the self-directed mode of learning. These issues demonstrate the complexity of the processes involved in the adoption, interpretation and implementation of statutory policy recommendation within the educational system. It is, therefore, important that the potential influences from all the different perspectives are carefully investigated. These form the focus of this research study and the aide from which the items of the data collection tools emerged.

CHAPTER FOUR

THE RESEARCH METHODOLOGY

Introduction

As previously indicated the purpose of this research study was to evaluate critically, the ways in which student self-direction has been interpreted and implemented within the theoretical and practical contexts of nursing education and to examine the extent to which different factors have directly or indirectly influenced those processes. Therefore, investigation set out to seek answers to a set of nine research questions formulated to explore the students' and educators' conceptualisations and their expressed views about the:

- concept of self-direction in learning,
- perceptions about its operationalisation,
- effects of the methods of implementation and the factors influencing the students' reactions and patterns of self-directedness,
- facilitation and supervision of the students in the theoretical and practical aspects of their education,
- institutional and external statutory influences on the interpretation and implementation of the concept.

These derived from the following overarching research question conveying the problem under investigation.

Main Research Question

In what ways do personal, institutional and external statutory factors influence the interpretations, implementation and reactions to the concept of student autonomy and self-direction?

This chapter presents a detailed explanation of the research design and the rationales for the methods used in collecting and processing the data. These were directly determined by the nature of the problem under investigation. Since the research questions derived from different dimensions of the problem, this introductory section provides a brief overview of the key variables, which form the basis of the set of research questions. Each question is then justified and substantiated by the underlying rationale.

In order to implement, effectively, a new approach or procedure into a traditionally established system, commitment, proper understanding and accurate interpretation of the new concept are vital. Review of the nursing literature revealed that despite the value placed on self-directed learning, the concept had not been adequately researched. Teachers have always had the responsibility for developing curricular programmes. Invariably part of that remit involves critically examining, interpreting, and implementing statutory and institutional policies and recommendations into relevant programmes. The lack of educational research could be attributed to the diversity of interpretations, application and facilitative and supervisory practices which evolved with student self-directedness in nursing education.

This study was prompted by recognition of the concern and uncertainty which accompanied the implementation of the self-directed learning approach. In essence, the adoption of this educational concept attempted to incorporate a liberal humanistic perspective into what was, traditionally, a pedagogic system of education. There seemed to be general unease about the move to implement the principles of adult learning with student centredness and self-direction in learning and this study attempted to identify and examine the differing reactions and opinions generated as a result. Many educators apparently responded by making compromises in the ways in which they interpreted the concept. Diverse facilitative and supervisory practices were also employed for various reasons. These have been investigated

in this study. In view of the significance of this concept to professional practice, it seemed logical to attempt to explore the full extent to which the climate and ethos of the educational system affected the reactions and practices of the educationists concerning student self-directedness. In an earlier chapter, an attempt was made to demonstrate how widely varied are the interpretations of the concept of self-directedness in learning. As Tennant (1988) pointed out, Self-directed learning had been “articulated in a way which allows seemingly limitless interpretations of what it is and how it should be applied.” (Tennant, 1988 p.7)

Some related conceptualisations by various authors include; Self-Teaching (Tough, 1966, 1978, 1982), Self-directed Learning (Knowles, 1975, 1984, 1990), Self-Initiated Learning (Penland, 1977), Autonomous Learning (Moore, 1980), and Critical Self-directed learning (Hammond & Collins, 1991).

Each of those characterisations indicates, not only the process of knowledge acquisition but also the motive and academic capability of the learner. For example Tough’s (1978, 1982) self-teaching concept implied initiative, independence and personal control over the process of knowledge and/or skills acquisition. Furthermore common to all the different conceptualisations is the liberal humanistic ideal which envisages students having freedom and personal control in determining what they learn and how they go about it. Undoubtedly that ideal would be feasible and applicable in educational contexts designed for student self-directedness in learning. However, within other educational contexts, as is the case in the nursing education and training system, mandatory statutory requirements have to be taken into consideration.

Those requirements emphasise development and enhancement of professional competence. These are fundamental to the function of nurses and midwives. More importantly, the involvement of human life has meant that multiple stakeholders have had direct influence on what professional competence involves. Safe practice has always been of paramount concern. In view of the associated moral, ethical and legal implications involved, protection of the welfare and interest of the public has been a major concern. That has meant that the design, plan and implementation of the curricular programmes have had to reflect specific statutory guidelines and regulations such as the type of theoretical content and required practical component. Again this raises the question as to what impact statutory control and other external influences have on the implementation, and the actual process of learner self-directedness.

A further inference from Tough's (1966, 1978, 1982) findings is that people with the capability and preference for self-teaching, independent or autonomous learning successfully cope with major learning commitments without direct supervision. How realistically this applies to nursing and midwifery students is an issue that seems worth investigating. However, Self-teaching as interpreted by Tough (1982) appears to conflict with the context of nursing/midwifery education because of the imposed statutory-professional constraints.

The notion of learner self-directedness according to Knowles (1975, 1984, 1990) advocates considerable freedom and control in suggesting that the learner may or may not seek or receive supervision and guidance. Although a climate of mutual trust and collaboration are indicated, the question as to whether or not that degree of collaboration could be realistically achieved was considered. The perceptions of the educators and students about each other's roles were also seen as significant in relation to the nature of interactions which occurred and the relationships which developed between the students and their supervisors. It was

necessary to explore what efforts were made to achieve full realisation of the freedom and control which characterise self-directedness in learning despite the different constraints.

Evidently the different conceptions evolved from studies on distinct aspects of the self-directed approach to learning. Nevertheless the distinctive element in all of them is the notion of empowerment of the learner with varying degrees of increasing freedom and control over the learning process.

This study differs from those mentioned by setting out, not to explore a specific aspect of the process of self-directedness in learning, but to examine the multi-dimensional nature of the concept from the different perspectives of this educational system. Adoption of this strategy was based on the assumption that the broader the scope of investigation the more likely it would be to incorporate a wider range of factors which might have differing influences on students' reactions, their attitudes and their patterns of self-directedness in learning.

Based on the above reasoning, the following conceptualisation was proposed by the researcher to demonstrate the varied dimensions of self-directedness in learning as addressed in this study. The intention was to formulate a comprehensive and definitive description which would be a practical and realisable sort of schema representing the complexity of the core concept of this study and the scope of this investigation. Thus this study has related self-directedness in learning to:

A learner-controlled educational concept characterised by specific personal attributes and behaviours. The learners demonstrate a need or intrinsic motivation to learn and continually increase their knowledge and/or skills. They show a preference for independence and freedom in determining personal learning needs. Once the learning deficit is identified the learners proceed to devise and implement appropriate learning activities. The relevant learning resources are personally selected and guidance and support from experts in the academic and practical sectors are sought at the learners' own discretion. Having attained the desired knowledge and/or skill, the learners demonstrate appropriate change in behaviour in their self-confidence and desire to apply the acquired learning in various situations. Additionally they demonstrate spontaneity in objectively evaluating their personal performance based on that learning.

Although relatively long, this rather elaborate and eclectic description seemed more explicit than many other conceptualisations such as those proposed by Penland (1977) and Knowles et al. (1984). What this statement attempted to do was to derive from the problem background, the educational context and the findings from the literature, the nature and particular characteristics of learner self-direction which were considered to be specifically relevant to this study.

Admittedly in professional educational programmes controlled by statutory policies, standards and regulations, this conceptualisation is bound to create tension within the educational context and a dilemma for the educators and students. That would be mainly because of the degree of freedom and independence implied. Nevertheless, in view of the scope of insight being sought through this investigation, the assumptions conveyed in the above statement can be argued to be feasible and realistic. The extent to which the patterns of facilitation and supervision reflected the concept of staged transition from high learner dependence to maximal learner control and autonomy (Moore, 1980) was addressed. It was envisaged that this information might highlight the measures taken to empower the students and encourage autonomy in learning.

The educators' confidence in the students to function in the capacity of self-directed learners was examined. This was based on the assumption that many educationists and students, contended the adoption of that liberal approach which required students to make major personal decisions about their learning. From preliminary informal discussions with the educators, it seemed as though many were not entirely convinced about the students' confidence in identifying learning needs or their capability to plan and implement the learning without supervision or guidance as implied by Knowles (1984, 1990). The general

feeling was that it was inconceivable for students to be given that degree of control and responsibility and expected to attain the depth and breadth of the required knowledge and skills through their own initiative, resourcefulness and self-directedness.

It was important to find out how the different opinions and views held by the educators and students affected the techniques used and the scheduling of the programme timetables. That information might also reveal how much time was allocated for the students to engage in self-directed learning activities. In other words how conducive for self-directedness were the institutional climate and the learning environment? Assumptions about students' rejection of self-directedness in learning based on unfamiliarity with the subjects and/or lack of previous exposure to self-directedness, were explored. This was an attempt to establish whether or not those situations do, necessarily, cause students to show a preference for the teacher directed approach with maximal taught sessions.

Arguably the exact influence of specific factors on students' self-directedness in learning might not be determinable with absolute certainty. Nevertheless it seemed reasonable to assume that certain factors could be identified as having direct influence on students' self-directed behaviours. For that reason apart from examining the interpretations, a range of questions were formulated. It was anticipated that the findings might help to identify more accurately, what factors influence self-directed learning in nurse education. More importantly it might be possible to establish what impact these have on the students' experiences and their reactions.

The Research Questions

The first set of questions was designed to explore conceptualisations. The questions were based on the assumption that people's conceptualisations, that is, the way in which they

perceive and interpret a specific concept or phenomenon, influence their reactions and attitudes to it. It also assumed that the way in which people behave and the way in which they respond to the application of that concept reflects what value they place on it in their particular situations. In order to explore what interpretation(s) form the basis of the implementation of self-directed learning the following questions were addressed:

1. What perceptions do students, educators and preceptors have about the concept of self-directedness in learning?
2. How do students perceive self-directedness within the theoretical context and within the practical context of their education?

It was anticipated that the first question might help to establish what operational interpretations were employed, and whether or not the students' conceptualisation corresponded to that of the educators. If so then what impact did this have on the students' reactions to the methods employed? Secondly in what ways did the educators' interpretations influence the ways in which they organised, facilitated and supervised the students in their self-directed learning activities? The second question went further to find out how the students compared self-directedness within the college setting with self-directedness within the practical settings. This could provide insight into their self-directed behaviours in those settings and into what values and attitudes they might hold in relation to their behaviours and actions.

The next set of questions focused on personal characteristics. The reasoning behind those questions was based on the assumption that people's self-concept as self-directed learners reflects the way in which they perceive themselves in terms of their academic capabilities, how they organise their studies and the way they learn. Additionally, experiences in previous education have relevance to the context of this argument. Thus whether or not those

educational experiences involved self-directedness in learning, in what form and to what extent, ought to be explored. It is important to identify and analyse what impact previous educational experiences might have on individuals' attitudes and reactions to subsequent self-directedness in learning. That information might be applicable to the notion of transferability of the acquired attributes and skills. It could help in predicting how the future practitioners might cope with situations which require independent thought and decision-making or how they might behave in future academic programmes involving learner self-directedness.

Further analysis of that data could be carried out in an attempt to establish whether or not a relationship exists between previous educational experiences - perceptions - reactions - attitudes and patterns of self-directedness. The relevance of this is based on the fact that the Post Registration Education and Practice regulations requires practitioners to keep up to date with emerging theories in professional practice in order to enhance their existing knowledge and expertise (UKCC, 1995). It is vital, therefore, to determine how realistically the acquired attributes and skills of autonomy and self-directedness in learning might be transferable to future work and other life situations.

Personal characteristics are important indicators of readiness for self-directedness in learning. Therefore different conceptualisations tended to imply that primarily students require self-confidence for engaging in this approach to learning. They also require initiative, spontaneity, a preference for functioning independently and a need for freedom in making personal choices relating to the learning process.

These attributes depict the learners' claims of ownership on the learning process, and consequently, their accountability for the personal decisions and actions which they took. In relation to these the question posed was:

3. What personal characteristics do students, educators and clinical mentors and preceptors believe to influence self-direction in learning?

The learning process is a crucial aspect of the learners' reactions and coping mechanisms exhibited when engaged in self-directed work. Actual learner decisions and actions are involved in recognising personal learning needs, devising, implementing and evaluating the learning achieved. Also it could be argued that the critical indicator that learning has occurred is the individual's ability to translate and apply the acquired knowledge and skills in different situations. These are demonstrable attributes, which enable both students and the educators to judge what progress is being made in the development of autonomy and self-directedness.

Therefore the question posed was:

4. What self-directed attributes and skills do students, educators and preceptors consider as indicators of progression from the stage of dependence to the stage of independence?

As previously argued, the context of learning was equally important as it related to all the different factors which affected the students' attitudes to self-directedness in learning, and the patterns and attributes they demonstrated. Thus it related to the theoretical learning which occurred within the college setting and the practical skills acquisition with development of professional expertise, which occurred in the varied practical settings. These two different sectors – the theoretical and practical - provided the appropriate environments within which feasible and conducive climates had to be created to encourage learner self-directedness. Therefore the material resources available within those environments, which the learners selectively use in effecting the learning process were also considered important in this study.

To explore these, another set of questions was designed focusing on the students' experiences and views about the different ways in which self-directedness was applied in their educational programmes. Whether or not they considered the methods of application to be feasible and effective might provide information about the way in which individuals responded or reacted to the different techniques of application. Of equal importance, the extent to which they were involved in decisions about the choice of methods of application and how they claimed to have felt about that was considered worth exploring. This might yield insight into what impact that student involvement in decisions about various aspects of their learning process has on their commitment to the self-directed approach.

5. What were students' experiences and views about the different self-directed learning methods and techniques employed in their educational programmes?

The students' views about the place of self-directedness in their assessment strategies and the related institutional regulations were explored. The intention was to try and establish their perceptions of how self-directed projects were incorporated into the assessment strategy, their views about the ways in which these were organised and the impact on development of their self-directedness.

From the perspectives of the facilitators and supervisors, questions were posed to identify, from their facilitative practices, what self-directed learning methods they perceived to promote development of the desired attributes. These were also designed to find out their perceptions of how the students reacted and responded to the different strategies and methods of self-directedness in learning. Thus the question posed was:

6. What institutional factors or provisions did students consider to enhance or inhibit an individual's motivation for self-directedness in learning?

Directly related to the project assignments, their views were also explored about the material resources available to them within the college environment and within the practice settings. This information was sought to try to establish their awareness of the variety of resources within the different learning environments. Their experiences in using those resources, and their views about how accessible and beneficial they found these was also explored. From this information it was anticipated that the factors students considered to encourage or hinder their self-direction within the learning environments of theory and practice could be determined.

Of equal importance it seemed reasonable to find out what value the students placed on the types of assessments which required them to choose their own topics. On what did they base their decisions about topic selection? What were their views and experiences about having to explore the background literature and other resources related to their selected topics and make personal decisions about the planning and organisation of the scope and depth of the content? How did they perceive these personal efforts to influence their learning process? The question related to these was:

7. In relation to the concepts of deep and surface levels of learning, what were students' experiences and views about the impact of self-directed problem-based learning projects and other techniques on their learning and comprehension?

The support and supervision provided to the learners was equally important to take into account with regard to the potential impact on the development of independence and self-directedness. This information was also intended to find out how student self-direction was fostered and nurtured within the college and practical settings. Thus the experiences of facilitation, supervision and support were explored from two perspectives with a view to determining the nature of interactions established in the student-supervisor relationships.

From the perspective of the students this might help in determining what types of supervision they received and their perceptions of what impact these had on their development of self-directedness. It was important to establish in what ways different supervision practices either hindered or encouraged and empowered students in becoming increasingly autonomous and self-directing.

From the perspectives of the educators and clinical mentors and preceptors, the questions were designed to find out their perceptions of their facilitative and supervisory roles and the different practices which they employed. These issues were addressed in the question:

8. What facilitative and supervision practices do educators and clinical mentors and preceptors employ in fostering development of the attributes of autonomy and self-directedness in learning?

It was also important to determine how the educators perceived the students in relation to self-directedness and what value they placed on this as an educational approach within nursing education. It was equally important find out how much commitment was put into the roles of facilitation and supervision. Taking this further, the personal experiences of the supervisors with regard to self-directedness in their previous education and practice was also explored. The information was used in determining whether or not there was a relationship between previous personal experiences - perceptions - commitment to student self-directedness and the supervision styles employed. The question to address these was posed as follows:

9. What were the experiences and views of the educators, and preceptors about facilitating, supervising and supporting students in their self-directed learning activities?

Having clarified the basis for the research questions the details of the study design were developed as presented in the next section.

The Research Design

The impetus for selecting the research design and methodology for this study arose from a concern to develop in-depth understanding of how students, their educators and clinical mentors and preceptors made sense of their experiences of self-directedness in learning. That required, as indicated in the research questions, exploring how they reported to have thought, felt and acted in response to the day-to-day demands and challenges of this educational approach.

To that end it became necessary to determine the most pertinent means of identifying what factors, within and out-with the learning environments, influenced the students' experiences, reactions and patterns of self-directedness in learning. It was important to establish the views and practices of the educationists and preceptors, who supervised and facilitated the learning process. An attempt had to be made to compare the perceptions of both students and facilitators about self-directedness in the theoretical context within the college settings with their perceptions about self-directedness in the practical context within the realities of patient and client care settings.

Furthermore it was necessary to establish how, in their individual roles, the students, the supervisors and facilitators, responded to self-directedness in those settings. In other words, the design and methodology had to provide feasible means of finding out:

- what strategies of self-directedness the students claimed to adopt in each setting,
- what facilitative practices the supervisors claimed to employ and

- whether or not those self-directed patterns directly related to any particular perceptions and/or other specific factors.

It was, therefore, necessary to encourage them to articulate their personal views and experiences about self-directedness in each of those settings.

Since all of these aims involved exploring conceptions, direct experiences, decisions and actions, it was important that the selected design and methodology were considered to be adequately robust and sensitive in providing valid and reliable information. For that reason the alternative approaches of cross sectional and longitudinal designs were thoroughly examined.

The Cross Sectional versus Longitudinal Design

The choice of research design was based on arguments about the main distinguishing features of the cross sectional and longitudinal techniques. In particular, the processes of identification of the study subjects and the timing of the data collection were crucial to the selection of the design. It was particularly important that account was taken of the potential risks of subject wastage and the difficulties relating to long-term access to subjects for repeat data collections.

In relation to the timing of information gathering, the arguments on the main differences between the two techniques were as follows. While the cross sectional design allowed for snapshot data collection at one point in time, the longitudinal design involved repeated data collections at different times over a prolonged period in the study (Cohen and Manion, 1989; Fraenkel and Wallen, 1993; Burns and Grove, 1993; Robson, 1993). Arguably by focusing on the same research subjects over an extended period, the longitudinal design might have the advantage of allowing individual differences emerging during the process of the study to be

detected. For example, the strategy could allow changes in subject characteristics, perceptions and self-directed attributes occurring during the course of the investigation to be studied.

However, another distinctive difference between the two was that unlike the longitudinal cohort design, the cross sectional approach could provide a wider variety of subjects. In that way more extensive range of information could be obtained and more varied changes identified than might have emerged from a longitudinal cohort study, focusing on a single group of subjects.

Despite its advantages, certain limitations associated with the longitudinal cohort design necessitated careful reconsideration of its use in this study. The following section presents a brief overview of the theoretical basis of the longitudinal design and the associated limitations which led to the abandonment of that design.

Advantages of the Longitudinal Cohort Design and the limitations within the context of this study

In its initial stages this study seemed to afford the opportunity to determine developmental changes, establish differences among individuals and identify causal factors. Therefore the longitudinal research design was originally considered as an appropriate means of conducting this investigation. Cohen and Manion (1989) asserted that:

cohort studies conducted on representative samples of populations are uniquely able to identify typical patterns of development and to reveal factors operating on those samples which elude other research designs. (Cohen and Manion, 1989, p 72)

The original decision to employ the longitudinal cohort design was made on the basis that it would allow an identified group of subjects to be studied from the commencement to the completion of their education and training. It was envisaged that the prolonged period of

subject involvement in this strategy might have enabled differences among individual students in their self-directedness in learning to be identified and explored.

In particular it was considered important to explore the causal relationships which became manifest in the students' self-directed experiences. The intention was to demonstrate how change in the students' conceptualisations of self-directedness and their perceptions of themselves as self-directed learners, affected their sense of independence, initiative and styles of learning (Cohen and Manion, 1989). These seemed to be significant on the basis that they might provide insight into the impact of student exposure to self-directed learning activities over a period of time. Furthermore the technique was seen as a potential means of seeking answers to the question as to whether or not the acquired skills and attributes were transferable between different learning situations.

Additionally, this design might have allowed identification of possible causal relationships where change in one variable might be identified as having brought about specific change in another variable (Cohen and Manion, 1989; Robson, 1993; Fraenkel and Wallen, 1993; Burns and Grove, 1993). The practical usefulness of this might have been justifiable in this case if the study had involved introduction of a specific, perhaps new, interactive teaching-learning process and facilitative techniques in the curricular programme of an identified student cohort. In that case, the longitudinal design might have lent itself to observing the impact of the new approaches on development of the self-directed attributes in those students over a given period of time. It might then have been possible to determine the causal relationships that emerged in the students' perceptions, perhaps their patterns of self-directedness, learning styles and overall academic progress as a direct result of the new concepts.

An incidental but potential advantage that might have occurred among the study participants would have been that some participants might have become more aware of their self-directed

limitations. Consequently they might have attempted to modify their patterns of self-directedness during and as a direct result of participating in the study. In other words drawing attention to self-directed learning would inevitably create the conditions that might lead to change in their patterns of self-directedness.

Issues Relating to the Selection of the Cohorts for the Longitudinal Study

Taking account of the diploma and degree level studies, two separate cohorts of students were identified to participate as the research subjects. The timing of the subject selection was scheduled to take place in late first year, about eight to ten months following commencement of their programmes. The rationale was to allow for that period of transition and initial socialisation during which students became more familiar with the structure and content of their educational programmes. Students have been found to wait to this stage before taking it upon themselves to select, plan, and implement aspects of their programme content based on personal learning needs and interest (Knowles et al., 1984; Boud 1988).

A more pressing concern was that the profiles of student intakes could vary from year to year as a result of organisational and institutional changes in recruitment policies and entry requirements. Differences in the profile of students also meant that a particular cohort could be more dependent on the educators than previous or subsequent intakes.

Issues Relating to Data Collection in Longitudinal Cohort Studies

Three phases of data collection were scheduled for late first, second and third year. This necessitated structuring of the different dimensions of the concept of student self-directedness to take account of the professional context, the related policies, regulations and the actual organisation of the programme.

Each Phase involved, first, administration of a structured self-rating questionnaire followed by interviewing of the subjects as a means of encouraging them individually to talk about their self-directed experiences. This strategy was intended to identify and monitor the students' development of the self-directed attributes and skills and to find out how they perceived their experiences and personal progress. It was hypothesised that by those stages the students should have become more familiar with the structure and content of their programmes and therefore it was a feasible time for exploring their responses and self-directed learning patterns. It was also assumed that the one-year intervals between the phases of data collection would have been sufficiently long to avoid subject recall and superficiality or inaccuracies in their responses. At the same time the likelihood of subjects becoming familiar with the content of the questionnaire and/or the interview schedule by the third year, was a potential risk that had to be considered with the repeated exposures. There was also the risk that some students might discuss those items, which caused them concern, with their colleagues and create suppression of information in subsequent interviews.

Limitations relating to the Timing

Apart from the concern about the extended time lapse as indicated above, another concern was ensuring that the timing for collection of each set of data allowed for various changes in the programme plans for the subsequent years. This meant that arrangements for interviewing subjects could not be planned at the outset. The relatively long time span of data collection was a major factor which influenced individual students not to commit to participating in the study. The potential risk was that agreed commitments to participate in the study from its beginning to the end could not be honoured, for various personal reasons.

Loss of Subjects

The problem of subject wastage was one of the major concerns about adoption of this design. Reasons for subject withdrawal included heavy academic workload, assessment demands and repeated exposure to involvement in research studies. Student overexposure to research was particularly prevalent as a result of the trend of undergraduate and post-graduate level studies being undertaken by some of the teachers. Since most of the degree programmes involved submission of research dissertations, the implication for the students was repeated participation as research subjects in various studies. Invariably several studies in this context tended to focus on educational processes and therefore necessitated use of student subjects.

A particular problem encountered in seeking access was that the request for access was dependent on how many education research activities were ongoing at the time. In view of these problems the appropriateness of the cohort design proved to be seriously unpredictable and questionable in terms of soundness and credibility. The problems were enhanced by the fact that several students were unmotivated to participate because of unfamiliarity and lack of commitment to the visiting researcher.

Although few in number, some subject losses did occur even at the outset between the initial researcher-student contact and the first phase of the data collection. These were attributed to apparent demands of practice placements combined with preparation of course assignments. There was also an incident in which a member of the teaching staff discouraged the students from participating in a study being conducted by an external researcher. That event seemed to create uncertainty among the students, which resulted in withdrawal by several subjects who had originally agreed to participate. Another issue was that once exposed to the content of the interview schedule some students demonstrated concerns about their loyalty to their institution and were, therefore, reluctant to commit to further involvement in the study.

This section began with a brief comparative review of the cross-sectional and longitudinal designs. The theoretical advantages and the associated problems that would have resulted from use of the longitudinal cohort design have been presented in a critical discussion explaining why it was not considered feasible for this study. The following section will present the rationale for opting for the cross sectional design, the perceived benefits for this study and a detailed explanation of the strategies employed in developing the different aspects.

Rationale for Adopting the Cross-sectional Design and the Benefits for this study

Selecting subjects at various points in the process will provide important information about the totality of the process, even though the same subjects are not followed through the entire process. (Burns and Grove, 1993, p 297)

Benefits of using a Cross sectional Study Design

One of the major factors which influenced selection of the cross sectional design was that rather than focusing on a single cohort of students throughout the entire study, this technique allowed for more scope and flexibility. The intention was to involve a larger and more varied group of students in the study. It was envisaged that the scope of information obtained directly from a larger number of students might contribute towards the trustworthiness of the research findings (Cohen and Manion, 1989). Robson (1993) advocated the importance of larger sample size in cross sectional studies in ensuring a high degree of confidence.

By allowing for subjects to be drawn from the different population sub-groups, the cross sectional design ensured that subjects from each cohort of student intakes were involved in the study. The strategy enabled appropriate representation of all the different sub-groups within the student population to be realised, thus reflecting the current profiles within the student population. It also allowed for the different stages of educational progress together

with the different levels of socialisation and competence acquisition to be investigated in relation to the development of their professional careers.

The potential threats to sample size as a result of reluctance to participate, inaccessibility to subjects or sudden withdrawal from the ongoing study was less likely to occur than in a longitudinal study. This is mainly because students perceived the 'one off' approach to data collection as being less demanding on their time and therefore more acceptable to commit to. For that reason the cross-sectional technique seemed more likely to secure the co-operation of subjects (Robson, 1993). The intention was to ensure that through careful, non-biased selection of the study subjects together with a carefully devised and well-organised data collection process, robustness and credibility could be maintained throughout the study. Another major advantage of the cross sectional study is that the data is being collected from different year groups but within a common chronological context. In contrast, in longitudinal studies some aspects of the environment change over time and it is often unclear which of these aspects of change is the crucial factor affecting how students think about their work and how they respond to the related demands. On the other hand, it could be argued that in cross sectional studies changes in the programme could result in the later stage cohorts having been exposed to a different curriculum and/or set of activities from that of the earlier stage cohorts. However, it could also be argued that where adoption and implementation of an educational concept is concerned, changes in the implementation practices are likely to apply to all existing cohorts. In this study no significant changes occurred in the implementation of student self-direction in this professional educational context.

In relation to permission for access, the dilemma that arose was that regarding the original consent the director of education of one of the institutions had reserved the right to review that decision. The conditions which were emphasised as potential factors that might lead to

change in the agreement included increase in demands on the students, change in the structure of the programme or significant change in the profile of the student intakes. A situation which did arise was that a change in the staffing structure necessitated review of the negotiated access.

The Research Subjects

In terms of levels of academic study the pre-registration programmes comprised two groups of student populations. These included those undertaking their education and training through diploma programmes and those on degree programmes.

Profile of the Subject Sub-group of Students

To achieve a sound cross-sectional selection of research subjects, students were drawn from the two population groups of diploma and degree programmes. At the time of the study the proportion of diploma students to degree students entering first year was approximately 4:1. The following strategy was employed in the selection of the research subjects to reflect the realistic strata of all the year groups in the student population.

Cross-sectional Subjects from the Diploma Group comprised:

Students in late first year

Students in late second year

Students in late third year

Cross-sectional Subjects from the Undergraduate Group comprised:

Students in late first year

Students in late second year

Students in late third year

Students in late fourth year

The Researcher - Student Contact

In order to become familiar with the different institutional settings and establish a rapport with the potential research subjects, pre-study visits were made to the four different institutions. These were arranged through permission for access and formal appointments. Additionally, the educational programme schedules had to be taken into account to ensure that the timing of the visits coincided mainly with the tea, coffee and lunch breaks in order not to disrupt any teaching-learning schedules. In most cases both educators and students willingly offered a short period of time for the researcher-student interaction. These opportunities were used to provide information about the study, its background and purpose. Explanations were also provided about what would be expected from potential participants in the study. This was followed by an opportunity for the students to seek further clarification on any related issues of interest or concern to them.

It became necessary to emphasise to the students that preference for the self-directed approach to learning or dislike of it were not special conditions or criteria for taking part or not taking part in the study. This issue arose because some students' reluctance to participate was based on the way they perceived how self-directedness affected them. It was important to impress on them that different points of view were being sought regarding individuals' perceptions and personal experiences of the self-directed approach. Other recurrent concerns raised by students included:

- concerns about divulging information that might imply disloyalty to their colleges
- how much time would be involved, the amount of content of the questionnaire and interview schedules and whether or not there would be further demands for subsequent data collection

- how flexible the arrangements were for the interviews
- the timing of the interviews in relation to practice placements and course assessments.

Each of these issues was sensitively addressed and individual questions answered.

The Proportions of Research Participants

Taking account of the proportion of diploma and undergraduate students in the identified population, the size of the subject sub-groups were as follows:

15 Subjects from each year of the diploma student population, giving a total of 45.

10 Subjects from each year of the undergraduate student population, giving a total of 40.

The following table shows the numbers of students and academic teachers chosen from each educational institution to participate in the main study.

Table 4.1 Location of the Interviewees Relative to the Educational Institutions

| INSTITUTION | LOCATION | EDUCATIONAL PROGRAMME | STUDENTS | ACADEMIC TEACHERS |
|--------------------|-----------------|------------------------------|-----------------|--------------------------|
| A | Central | Diploma | 15 | 4 |
| B | Central | Diploma | 15 | 3 |
| C | Eastern | Diploma | 15 | 3 |
| D | Eastern | Degree | 40 | 5 |

Profile of the Subject sub-group Academic Teachers and Preceptors

Identification of the above sub-group of research subjects was simply guided by the specific roles which they were performing at the time of the study. The educationists involved were functioning in the capacity of programme tutors, class tutors, module co-ordinators, and/or personal tutors and supervisors. The titles varied in the different institutions involved.

Similarly the title of preceptors, clinical mentors and clinical supervisors varied in the different institutions. The total number of academic teachers who participated in the study was 15.

10 were involved with Diploma programmes and

5 were involved in Undergraduate programme.

The selection of the academic teachers involved consultation with all available members of staff to ensure coverage of all the existing programmes in which the subject group of students were involved. Those who finally participated were teachers who expressed a willingness to participate and were judged to have sufficient experience to be able to comment in an informed way on the research problem, that is individuals who fulfilled the criteria outlined in the profile of the subject group of educators (page 129).

The number of preceptors involved in the study was 15, five from each of the three National Health Service Trust Hospitals within which the students received their practical experiences. Similarly to the academic teachers, selection of the preceptors involved consultation with appropriately qualified clinical staff who were available at the time. The process was not based on any personal characteristics of individual preceptors. More importantly, the final selection was based on individuals who had undertaken the required preparatory course for preceptorship, and who expressed a willingness to participate, thus reducing the numbers to that required for the study. The following table shows the number of preceptors in each hospital involved in the main study.

Table 4. 2 Location of the Preceptors Relative to the Hospitals

| HOSPITAL | LOCATION | PRECEPTORS |
|-----------------|-----------------|-------------------|
| a | Central | 5 |
| b | Central | 5 |
| c | Eastern | 5 |

Although most of those approached were willing to participate in the study, the organisation of time for the interviews proved to be difficult at times for two main reasons. Researcher – subject contacts often had to be re-scheduled because of the individuals’ institutional commitments, conferences, study days, sickness or urgent need for annual leave for various personal reasons. On occasion this led to withdrawal and other educators or preceptors had to

be approached to replace the losses. From the perspective of the researcher the main difficulty was commitment to a very demanding full-time job. A timetable of the instrument trials in relation to progression of data collection is later presented.

Strategy for the Data Collection

The Instrumentation

Two data collection instruments were used in this study in an attempt to address the different dimensions of self-direction in learning. The alternative methods used were self-reporting, through a five point scale questionnaire and direct questioning through interviewing by the researcher. It was hoped that the two techniques might achieve the intended purpose of generating a broad scope of information about the subjects' personal interpretations of their particular educational experience (Polit and Hungler, 1993).

The self-rating scale allowed the subjects personally to indicate how they perceived themselves in relation to their self-concept, perceived capabilities and attitudes to self-directed learning. An original intent to use the Self-directed Learning Readiness Scale developed by Guglielmino (1977) was abandoned because of notable limitations. A critical analysis and evaluation of that instrument showed that the content was neither feasible for the context of this study nor relevant to the backgrounds of the target population. Several developments had occurred in adult education since that instrument was devised. Although it could have been implemented to test the degree of validity of this investigation, that information could not have been used for making inferences about the population of students. Relevance was crucial to the selection of the data collection instruments for this study and therefore it was necessary that alternative tools be used. As Mathers and Huang pointed out, "Questionnaires should only be for purposes for which they were designed!" (Mathers and Huang, 1998, p 142)

The interviews, on the other hand, enabled the subjects to articulate their personal views and experiences of self-directedness in the different aspects of their educational programmes. Interview schedules were also devised for the educators and preceptors to explore their conceptualisations, facilitative and supervisory roles and how they perceived the students' self-directed capabilities.

This section provides a detailed explanation of the structure and component of each instrument and the underlying rationales for exploring the specific issues in each main item. Since the instruments were new and purposely devised for this study, arguments supporting the development and implementation processes are also presented. Copies of the initial and final versions of the instruments together with the covering letters are enclosed as Appendices 2-7.

Development and Implementation of the Student Questionnaire

The questionnaire used in this study was designed in the format of a five-point 'Likert-type' scale (See Appendix 4.i). The purpose was to explore quantitatively and evaluate the students' dispositions towards self-directedness in learning and their perceived academic strengths and weaknesses. The structure and format drew on the Personal construct approach which enabled each subject to indicate his/her perceptions, personal attitudes, and preferences of learning approaches (Fraenkel and Wallen, 1993; Polit and Hungler, 1993; Cormack, 1996).

Structure and Content of the Questionnaire

Construction of the five-point scale questionnaire took account of the following key issues.

It was important that:

- the items were directly related to the research problem and the topic area under

investigation.

- relevance to the educational context was realised.

Thus from the various sources of the literature, a thorough and systematic review was carried out to highlight the different views and theories proposed by advocates of the self-directed learning approach in adult education.

Among the propositions examined were:

- Knowles' (1975, 1984, 1990) assumptions about adult learners' emotional and psychological need to be self-directing,
- Chene's (1983) assumption that learning in adulthood reflects the maturing process whereby the individual becomes increasingly autonomous and self-directing,
- Danis and Tremblay's (1987) contention of the view that adult learners pre-plan their learning in a linear pattern,
- Brookfield's (1986) and Boud's (1988) suggestion about adult learners' need for freedom to select topic and learning resources,
- Pratt's (1988) conception about autonomy in learning being a situational attribute rather than a general trait,
- Caffarella and O'Donnell's (1989) view about self-directedness being a personal attribute,
- Brockett and Hiemstra's (1991) notion that adult learners assume responsibility for their own thoughts and actions and
- Grow's (1991) assumptions about staged self-directedness and the need for matching stages with appropriate supervision styles.
- Ferrier et al.'s (1978) Claim based on the McMaster University project was also examined in relation to the influence of personal characteristics such as age, academic capability, problem-solving ability, commitment, creativity and leadership potential.

Additionally, in order to formulate appropriate items which made sense to the target populations of the students, extensive discussions were carried out. The organisation and pattern of the discussions were informal and opportunistic and did not involve any specific format. Individuals and focused captive groups were engaged in those discussions whenever possible. That strategy was a way of 'brainstorming' to find out individual's personal opinions and their attitudes to self-direction in learning (Robson, 1993). By encouraging people to talk about their personal experiences and/or feelings about this particular educational approach it was possible to identify issues of specific concern to them and the coping strategies which they adopted. The reasons which students expressed for adopting specific study or learning practices were also noted. It became obvious that a considerable number of students had concerns about the idea of having to cope with autonomous or self-directed academic work. Therefore the manner in which they articulated those concerns, the language and expressions used were also carefully noted in order to devise clear and unambiguous questionnaire statements in familiar language.

In view of the fact that the questionnaire was designed to explore students' dispositions to self-direction in learning, the first part focused on their personal characteristics. Thus demographic details such as gender, age, educational attainments and job experiences were explored although most of these were not used in the later analysis in this study. The remaining items consisted of several statements, which addressed key attributes such as independence, self-confidence, initiative, and ability to make choices, take control, and accept responsibility for personal judgements and decisions. By producing a range of statements on each of those key items, it was hoped that the sensitivity of the questionnaire to discriminate between individual participants would be enhanced (Robson, 1993). Both positive and negative statements were formulated and the response categorisation system employed reflected the fixed alternative statements method, where the respondents selected

from the degrees of agreement indicated. The initial items generated were subjected to a series of validity testing by educators and pilot-testing on representative groups of students until the final set of relevant positive and negative statements were identified. Although no numerical values were placed on the categories of the items in the pilot and final questionnaires, the alternative responses ranged from **strongly agree** to **strongly disagree**. A midpoint neutral category of **not sure** was included to allow for uncertainties. An explanation of the phases involved is presented below. This includes a sample of items from the pre-pilot questionnaire showing the amended items as they appeared in the final questionnaire.

Validity and Reliability Testing

The aim was to ensure that the content of the questionnaire actually assessed students' self-concept, capabilities and attitudes to self-directedness in learning. It was also important that any relationships, which emerged from the findings, would be applicable to other student groups with similar profile within similar educational contexts. The stages of validity testing are explained below. For each of the validation exercises the assessors involved were supplied with information about the background to the area of educational concern and the problem under investigation. Their main tasks involved assessing the relevance of the items to independence and inclination to self-directedness in learning, determining what related attributes were inherent in the items of the five-point scale and rating degree of relevance of each item to an identified attribute. The instruments with attached covering letters were distributed directly to the assessors and suggested dates for return mutually arranged.

Stage One

The initial list of items which, were generated from the informal discussions were administered to four teachers located in an institution other than those involved in the main study and who were familiar with the educational concept under investigation. The idea was

to engage subject experts to examine and comment on the adequacy of the instrument. In the first instance, the independent assessors were instructed to indicate the nature of the attitude conveyed in each statement towards self-direction in learning. For example if the item was considered to reflect a positive attitude to self-directed learning then a tick [✓] was to be placed in the relevant box where 1 indicated strongly positive, 2 = positive, 3 = neither positive nor negative, 4 = negative and 5 = strongly negative. This strategy helped in determining the balance in the range of items in terms of preferences in learning patterns and personal autonomy. Those items which were identified by the majority of the assessors as difficult to assess were reviewed or discarded.

That initial content validation was followed by another evaluation in which the principle of Waltz and Bausell's (1981) Index of Content Validity (CVI) was adopted in rating the degree of content relevance of the other questionnaire items. This system was also applied to the items of the interview schedules. In this validation exercise, Lynn's (1986) technique which drew on this principle was employed where scores of 1, 2, 3 and 4 were allocated as follows:

- 1 = Not Relevant
- 2 = Somewhat relevant, item in need of revision
- 3 = Relevant but requires minor modification
- 4 = Relevant and succinct

Application of this system was repeated again for the following reason. Since sets of items in the instrument were constructed to reflect different dimensions of personal autonomy and patterns of self-directedness, this strategy allowed for assessing which items the judges might link to specific dimensions. Therefore, the technique allowed for ensuring that the sample of items that were finally selected sufficiently covered the range of self-directed characteristics built into the questionnaire. Two lecturers in the field of higher education were involved in this process. They were located in a University other than the higher academic institution

involved in the main study. The degree of inter-rater agreement was determined by noting the proportion of items rated as 3 or 4 by both judges. Using this process, the necessary modifications improved the inter-rater agreement raising the final CVI based on ratings of 3 or 4 to an acceptable proportion as agreed by both independent judges and the researcher. Conventionally a CVI value of 1.00 indicates perfect inter-rater agreement on the content relevance and validity of the instrument (Waltz and Bausell, 1981). Account was taken of the limitations of this technique that CVI could be inflated by chance based on the number of rating categories and the processes employed in the rating system.

Stage Two

Another assessment was conducted in the form of a pre-pilot testing as follows. The items which were considered as being highly relevant were selected and organised into a questionnaire format with five categories of fixed alternative responses. Each category was allocated a score which was weighted on a continuum of 1, 2, 3, 4 and 5 with the higher score of 5 representing the strongly positive responses while 1 represented the strongly negative of responses (Robson, 1993).

The questionnaire was then administered to another independent group of assessors all five of whom were teachers. Although these exercises only provided face and content validation it was, nonetheless, a useful means of establishing value judgement of the items from the perspectives of individuals with the appropriate educational expertise.

Profile of the Independent Assessors

The teachers were approached on the basis of specific characteristics. They were all directly involved with the target population of students and the context of the research study.

Additionally, three of those educationists had themselves conducted studies on related

concepts, student centred learning, distance learning and open learning, and were considered, therefore, to be in a position to make value judgements on the content relevance of the questionnaire.

The above validation processes enabled the researcher to identify, for the final questionnaire (See Appendix 6.ii), fifty-six items, which were rated as being relevant, clear and unambiguous. In the original versions (See Appendices 4.i and 6.i) amendments were made to the content and structure of the first parts exploring the subjects' demographic details. Items addressing the educational background were amended to reflect, more realistically, the current educational structure and qualifications attained. Additionally, the sub-sections containing items relating to perceptions about material resources, facilitation and supervision and peer interactions were considered to be out of context and therefore removed. Other items that were found to overlap in the different sections were also removed. Some of these were considered to be better explored in more detail through the interviews.

The main amendments to statements in the five-point scale involved restructuring to ensure clarity and minimise ambiguity in an attempt to avoid variations in interpretation by the respondents. The following tabulated representation shows a sample of the pre-pilot items and the amendments made to these. The left side of the table shows the items as they appeared in the first part of the pre-pilot questionnaire whilst the right side shows the amended items as they appeared in the final questionnaire.

Table 4.3 Sample of Items from the Pre-Pilot and Final Questionnaires showing Amendments

| PRE-PILOT QUESTIONNAIRE ITEMS | FINAL QUESTIONNAIRE ITEMS |
|--|--|
| I like being allowed to choose a topic that hasn't been taught in class and explore it in depth at my own pace. | <i>I find satisfaction in being allowed to choose a topic that hasn't been taught in class and explore it to the depth that I can, at my own pace.</i> |
| I learn better when someone takes me aside and goes through things with me on a one-to-one basis. | <i>I learn better when someone takes the time to through things with me on a one-to-one basis.</i> |
| I prefer independent learning to taught sessions where both the pace and content are controlled by someone else. | <i>Self-directed learning is more convenient and beneficial to me than taught sessions where teachers control both the pace and content.</i> |
| I find learning through group work good, particularly when we are left to explore and discuss a topic by ourselves without any direct guidance from the teacher. | <i>I enjoy learning through group work, particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher.</i> |
| I like working independently on self-selected topics because exploring it in depth helps me to further develop my skills in use of computers and the library database systems. | <i>I normally set aside time to go and read journals and search through the Database systems and I do this whenever I come across something that interests me, not just for the purpose of coursework.</i> |
| When doing my course work or an essay I tend to rely on just my lecture notes and handouts because I find searching through the database systems too tedious. | <i>I tend to rely on lecture notes and handouts because I find it boring and tedious searching through the literature and Database systems.</i> |
| I prefer the discovery learning technique where I have to find out all the relevant information about a specific problem and put forward an argument in a discussion. | <i>Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to the specific problems is quite good.</i> |

Development of the Interview Schedules

The preliminary stage of development of the interview schedule commenced with extensive review of the literature as described in the questionnaire development. This was mainly to determine the requisite component of the schedule. In addition a series of in-depth and unstructured focus group discussions were conducted involving students, teachers, and preceptors. The rationale for using the social interaction groups was to provoke expression of the participants' thoughts and feelings relating to their experiences of self-directed learning. The interactions served as means of identifying and examining what conceptualisations and attitudes people had about self-directed learning and what their experiences had been with its implementation.

The group sizes ranged between three to six at a time. Whilst the student groups comprised about six participants it was only possible to meet with three to four teachers or preceptors at a time during their normal coffee breaks. Average duration of the interactions was about thirty minutes. The emerging key issues were recorded by note taking although the actual

interviews conducted on individual subjects in the main study were tape-recorded. Details of the latter are presented later.

Certain limitations of focus group interactions had to be carefully considered even in these circumstances when the data collected were to be used for the construction of the schedule rather than directly as findings. For instance, intimidation, compliance and conformity had to be guarded against (Carey and Smith, 1994). It was important to ensure that those individuals with strong personal assumptions and biased views did not dominate, suppress, or influence the views of other group members. Sim (1998) cautioned on the tendency to surmise that opinions and attitudes which emerged from focus group interactions represented the general views of all the members. In an attempt to minimise those problems, homogeneity of the focus groups was maintained (Merton and King, 1990), in that the different groups involved in this phase of the study consisted of individuals of similar academic backgrounds. Where the students were concerned, the aim was to select subject-groups at the same stage in their educational programmes. Equally importantly, group membership was not determined through any formalised selection strategy that might have created feelings of group members having been imposed on each other. Spontaneity in the group members' contributions was crucial if authentic data with consensus views were to be obtained. Since the research problem was a topical concern at the time, it was important that the information generated from those interactions was genuine and directly relevant to what the study aimed to explore.

Initially the teachers were targeted for the focus-groups for the reason that they were the academics directly involved with the students within the field of education concerned in the study. In that capacity, they had the direct responsibility for planning and developing the curricular programmes as well as facilitating and supervising the students. They were considered therefore to be in a better position to talk about the implications of the

implementation of self-direction in learning and how the students responded to it. The approach was informal with meetings at mutually arranged times when at least three or more teachers could be involved. As previously indicated, the duration of the discussions was kept short in order to sustain their motivation and interest to participate.

The actual interactions involved a process of discourse in which specific aspects of the topic were introduced. For example:

- What self-directed learning methods did individuals tend to foster?
- What were their reasons for employing the identified methods?
- How did the students respond to the different methods?
- In what ways did they find specific methods such as Negotiated Learning Contracts influenced the development of the attributes of student self-direction?

Student focus groups were engaged in similar discussions to identify issues of particular concern to them. For example:

- What were their conceptualisations of self-directed learning?
- How did they feel about it as a means of acquiring professional knowledge and skills?
- What were their views about specific self-directed learning methods?
- How did they react to the application of different methods?
- Why did they react in a particular manner to specific methods?
- What resources within the college helped them to learn independently?

Once the issue was introduced to the group, members were allowed to express and articulate their thoughts and feelings in their own words (Holloway and Wheeler, 1996; Burns and Grove, 1993) with minimal interruptions while notes were taken of the key points expressed.

It was crucial that the language used in formulating the questions in the final interview schedules were found to be recognisable within the educational context, common to all the subject sub-groups in the target populations, readily understood and not intimidating. For example, it was necessary to ascertain that self-directed learning was a concept not only familiar to the tutors and students within the college settings but equally familiar to the staff in the practical settings. It was also important that issues were not misconstrued because of multiple interpretations of specific terminology used (Burns and Grove, 1993).

The idea of focus group involvement proved to be particularly effective in generating a broader scope of personal opinions and attitudes to self-directed learning. Shared views and experiences were also evident in the manner in which individuals concurred or even contradicted each other's viewpoints. What became distinctly obvious was that individuals felt free to articulate what they genuinely thought or felt and actually did. Additionally it was possible to deduce from their expressed views and experiences how their actions and behaviours reflected their interpretations. For example, the teachers talked about the constraints within the educational settings which influenced their facilitative and supervisory practices. There was no evidence of subjects' attempts to impress by providing particular information because the individual(s) considered that to be the expected response (Cormack, 1996).

The informality and unstructured nature of those discourses meant that the duration, the scope and depth of the views that emerged were quite varied from group to group. This helped the design of the schedules, which addressed varied and yet relevant dimensions of student self-directedness in nursing education. It was important to control and direct the discussions in order to ensure that what was said had direct theoretical relevance to the study.

Coincidentally, the participants demonstrated apparent academic and personal interest in the research topic by the way in which they spontaneously returned to different aspects of the topic at unplanned encounters with the researcher. Since the purpose of the focus group discussions was to generate ideas for developing the interview schedules, these responses of the participants contributed significantly towards achievement of that objective. The various interrelated concepts which emerged from those encounters also contributed to the items of the interview schedules.

Structure and Content of the Interview Schedules

Three interview schedules were developed to represent the perspectives of the students, their tutors and their preceptors who functioned in the capacity of facilitators and supervisors (See Appendices 7.i, 7.ii, 7.iii). The interview schedules consisted of four parts, each part addressing a specific dimension of the educational concept. The content took direct account of the research problem and the educational context of the study. That ensured that the items in the schedules derived from not only the theoretical construct used in the questionnaire but also the following claims from case study reviews and research findings by various authors.

Brookfield's (1985) case study review claims the following:

- Individuals with previous experience of self-directed learning in other contexts positively respond to the challenge of having to plan, implement and evaluate their own learning process.
- Students present different levels of self-directed learning capabilities.
- Forcing students to function in the self-directed capacity could create a hindrance rather than encouragement.

- Despite being committed to its principles, teachers with limited knowledge and experience of this educational concept find themselves at a disadvantage when confronted with the responsibility of facilitating and supervising students engaged in self-directed learning activities.
- Some students demonstrate resentment and rejection of self-directed learning, when they perceive the control and responsibility over the learning process to be forced on them.

Other Theoretical Bases of the Schedules include following:

- Brookfield's (1986) observation that an individual's self-concept as self-directed learner might not necessarily predict actual performance when he/she is exposed to the demands of self-directed work.
- Additionally, there is a suggestion that self-directed learners require a high degree of self-knowledge and critical awareness.
- Slevin and Lavery's (1991) and Slevin's (1992) proposal for balance of control and consideration of transactional learning model with shared decision-making between the student and educator.
- Caffarella's (1983) and Caffarella and Caffarella's (1986) contention that negotiated learning contracts do not necessarily influence students' perceptions, readiness or competence for self-directed learning.
- Ferrier's (1978) and Emblen's (1990) proposal of the importance of students being able to determine their personal learning needs, select appropriate learning resources and evaluate personal progress.
- Boud's (1988) advocate for prior preparation during formal education towards self-directedness in life-long learning.
- Boud's (1988) view about students taking significant responsibility for their own learning in addition to the instructional supervision which they receive.

- Bright's (1988) suggestion that account is taken of a student's self-concept, thought processes and attitude to learning.
- Bailey's (1983) and Kolb's (1984) theorisation that experience, cognition, perception and behaviour are interrelated and crucial to the process of experience-centred learning.
- Bailey's (1983) and Burnard's (1989) claim about the importance of personal contact with the learning environment and exposure to appropriate stimulation in enabling the learner to become committed to his/her own learning process.
- Boud's (1988) and Brookfield's (1985) assertion that based on the realities of curricular imperatives, assessment regulations and grading policies, the institutional context strongly influenced the extent to which real self-directedness in learning could be achieved.
- Boud's (1988) claims about the benefits of self-and peer assessments.
- Boud and Prosser's (1984) assertion that students need to acknowledge the change in roles of facilitators and self-directing students.
- Mezirow's (1981) proposal for progressive decrease of student dependence on the educator.
- Watkin's (1984) and Higgs' (1988) studies concerning the importance of raising the students' awareness to their personal learning styles and what factors in the environment enhance or hinder their self-directedness.

These ideas directly reflect the different dimensions of the self-directed learning approach as well as indicating the assumptions about self-directed learners. Therefore the propositions formed the theoretical underpinnings from which the framework of the study, research questions and interview items derived. Robson (1993) maintains that this process can be very effective because it indicates the essential elements on which attention should be focused in the analysis of the data. For that reason, used as the basis of the interview items they do provide substantive content for the schedules.

Layout of the interview schedules

In view of the number of subjects targeted, the sensitivity of the topic and the potential risk of respondents digressing from the issue under discussion, semi-structured schedules were devised to direct and control the sequence of the interview. Each main aspect of the topic was opened with an introductory statement and simple comments were used to focus attention on the central point being addressed in the particular item. Specific prompts were also devised but the initial reaction of the respondent, the content of the response or the direction, which it appeared to be taking, guided the use of these. Closing statements were also made at completion of each major part of the interview (Robson, 1993). The content of each of the four components of the interview schedules will now be described.

Part A: Personal Interpretations of Self-directed Learning.

This section was designed to explore the respondents' conceptualisations of self-direction in learning, their experiences of its application and their expressed views of its effectiveness. Thus respondents were asked their understanding of the concept and how they felt about the different methods employed for its promotion. These methods included:

- personal initiative of particular learning ventures which involved
- self-reliance, autonomy and independence
- collaborative group interactive activities
- seminar presentations
- negotiated learning contracts.

Here the specific methods were itemised as prompts to encourage the respondents to express their views and experiences of each, firstly as a means of self-directedness and secondly more generally as a method of learning.

Part B: Items Relating to the Methods of Application and Patterns of the Students' Self-directedness

This section explored the learning patterns which the students adopted in their self-directed activities. The educationists were required to reflect on what self-directed learning patterns they had observed students adopting, whereas the questions posed to the students required them to report their personal preferences, and the reasons for their particular choices.

The Influence of Institutional Provisions

In an attempt to establish whether or not the setting, learning environment, and institutional provisions influenced student self-directedness, respondents were prompted to reflect on firstly the theoretical setting, then the practical settings. Specific statements were used to encourage them to articulate their perceptions. For example:

- how they felt in the different settings,
- what decisions they made,
- what actions they took and
- what their reasons were for the specific actions and attitudes which they reported.

Practical examples, scenarios, and patient and client care dilemmas depicting the realities of each setting were also used to provoke reflective thoughts and responses. Guided in that way, the respondents were able to explain how they actually felt and acted within the practical settings when confronted with challenges and demands requiring critical thinking, independent thought and reflective analyses of the particular situations (Tennant, 1990).

Impact on the Students' Self-directed Learning Patterns

Examples of the issues explored in this section required explanations of preferred study patterns and what factors influenced those. Thus although the broad statement was:

- Tell me a little about your study pattern.

This was followed by a prompt, which encouraged the respondents to, for example:

- Explain exactly how the individual organised a typical study session,
- describe factors which influenced their decisions about the choice of place, topic selection and decisions about the learning resources.

Personal efforts and initiatives in self-directedness were also explored with questions such as

- Can you tell me what measures you normally take by way of preparation before going to new placement areas?

Further questioning in relation to this issue enabled the respondents to explain what actions individuals took in developing their self-directedness and how self-confident they felt about the responsibility of making critical decisions and taking independent actions. To explore this more realistically a clinical scenario was used to pose a dilemma that required independent judgement. That was to encourage them to articulate how they perceived the situation and the extent to which they related their actions to self-directedness in learning.

An attempt was also made to establish how the respondents compared self-directedness in the practical context of clinical settings with self-directedness in the theoretical context of the college setting. This was to determine whether or not specific perceptions influenced particular self-directed behaviours in the different settings.

Impact of the Assessment Strategies

The views and experiences about the assessment strategies were sought to try and find out what impact the related workload made on the patterns of self-directedness and styles of learning. Student perceptions of, and reactions to self-and peer assessments were thought to be equally important because of the claims about these in self-directedness and autonomy in

learning. Among the set of prompts were questions, which explored how they judged their practical performances and what value they placed on self-assessment.

Involvement of Students in Decisions About their Learning Process

The extent to which students were involved in decisions about their own learning was also explored to examine their views and experiences of this practice. Therefore from the perspective of the students various items were designed to explore in what ways they participated in decisions about their own learning.

These items were designed to try and analyse the extent of actual involvement, for example topic selection, choice of teaching-learning methods and assessment strategies. It was considered significant to establish how they found being involved in such decisions and choices particularly in relation to their empowerment and development of their self-directedness. From the other perspective, it was significant to establish the extent to which the teachers actively involved students in decisions about their education and training. How they perceived the students to respond to this was also considered important and therefore explored.

Part C: The Facilitation and Supervision of the Students' Self-direction in Learning

The purpose of this section was to identify and examine the facilitation and supervision provided to students in their self-directed activities. The questions were designed to seek respondents' perceptions and their experiences of the supervision and facilitation practices and the impact of these on the students' self-directedness in learning. Thus from the perspective of the supervisors, their personal experiences of the facilitative and supervisory roles were investigated. Their perceptions of the students as self-directed learners were also sought to see how these influenced their supervision practices. The students' perceptions of

the supervision provided in the college and practical settings were explored together with their expectations of the educators.

Student – Supervisor Relationships

The nature of relationships which developed between the student and individual supervisors required to be analysed. It was anticipated that the findings might provide insight into the type of facilitation and supervision provided. Additionally, the influence of the specific facilitation and supervision practices on the development of self-directed attributes could also be analysed. Thus among the questions posed were:

- What did the day-to-day interactions between the students and their supervisors involve?
- and
- What measures were taken to encourage student autonomy and self-directedness in learning?

Part D: External Influences

The final part of the schedules set out to identify and examine the influence of external control and institutional regulations on students' self-directedness in learning. Therefore items were designed to find out the respondents' perceptions of:

- how the statutory and legislative control influenced the content and structure of the curricular programmes
- whether or not the perceptions of the external authorities influenced attitudes to the implementation of the self-directed approach to learning
- what their views were about the institutional provisions and learning resources within the different settings and
- how conducive were the atmosphere and provisions for promoting self-directed learning.

To avoid repetition the validity and reliability testing of the interview schedules are more appropriately addressed in the next chapter under development and validity, reliability testing of the categorisation scheme. The initial face and content validation of the interview schedules was conducted at the early stages of development of the research instruments. For that validation the CVI system, as previously described, was employed in assessing the scope of coverage and relevance of the items to the research topic.

Amendments to the Interview Schedules

In the pre-pilot interview schedules no prompts were used. Similarly, the versions that were initially pilot tested were mainly statements that were not supported with prompts. The idea was to present the interviewees with concise questions or statements and allow them to talk. It was noted, however, that without the prompts or further probing some respondents did not fully answer the question or address the issue adequately. Another problem was that some questions were found to be rather complex, too formal or not clear and required to be clarified. Therefore, generally the amendments to the interview schedules involved restructuring of some of the statements and elaboration of items using prompts or additional statements to achieve further probing. This enhanced clarity and helped to obtain the desired full responses.

In the educators' and preceptors' interview schedules, other amendments to the first parts involved inclusion of questions to explore individuals' personal experience of self-directedness in learning. It was also considered important to explore what preparatory programmes individuals had received for implementing, facilitating and supervising students in their self-directed learning activities.

Pilot Testing of the Instruments

The Student Questionnaire

The pilot testing of the final questionnaire was conducted on two groups of students.

These students did not participate in the main study. The pilot group was instructed to:

- note how long it took to complete the questionnaire,
- comment on the clarity of the items,
- identify any ambiguous items,
- identify any items which they objected to answering.

The students' reactions to the questionnaire items were noted and verbal feedback obtained at the end of each testing session indicated that overall the content was perceived to be realistic and acceptable. An occasional comment made in passing by students, was whether or not certain items had been included to test that the responses were genuine.

The Interview Schedules

Similarly to the pilot testing of the questionnaire the pilot group involved in testing the interview schedules were not involved in the main study. Five students from each year group of Diploma students and three from each of the Undergraduate year groups were interviewed. Where the academic teachers and preceptors were concerned, two from each educational programme and four preceptors were involved at the pilot stage. Two of the preceptors were based at the Central Region and two at the Eastern region. The dates and times for the interviews were negotiated and each subject was interviewed separately.

The initial intention was to plan the visits by the researcher to coincide with programme timetables in order to interview students of the same year intake consecutively followed by the next group during the weeks when they were based in the academic settings. This was to avoid the unpredictability of student availability in the areas of clinical practice. However, a

small number of interviews did take place in the clinical areas during times when the preceptors felt that the ward was not busy but this idea was abandoned after the pilot study.

The interview procedure for the main study involved each sub-group of participants being interviewed during an identified period of time. Thus the interviews of the student groups were conducted first, followed by the academic teachers. Finally the preceptors were interviewed.

Interviews were conducted on an individual basis and, as far as possible, a scene of a quiet and unthreatening environment was established. All the assurances about confidentiality and anonymity were reaffirmed to put the interviewee at ease. This was vital because unless appropriate trust and rapport were ensured respondents might be inclined to feel intimidated and withhold information (Robson, 1993). To begin with, the interviewee was given a brief explanation of the process with an overview of the four main sections of the schedule. They were also reminded of the estimated duration of the interview. It was felt necessary to give each person an opportunity to clarify any issues before commencement of the interaction. Every effort was made to keep the interaction as informal as possible in order to encourage the subject to talk freely. All the participants agreed to the use of an audiotape recorder with the assurance that its sole purpose was to collect accurate information.

Once the opening statement to the main item was introduced, the subject was allowed to respond without further interruption although appropriate support cues were provided whenever necessary as a way of guiding and encouraging the respondents. The prompts were used only when there was a need to do so and occasional probes as deemed necessary (Robson, 1993). At conclusion the subject was thanked and asked if there was any additional idea which they felt could have been included in the study. This simple gesture of courtesy

was appreciated by most of the respondents although the majority of them did not feel that any significant issues had been omitted. The overall timing of instrument testing and progression of the data collection is represented in Table 4.4.

Table 4.4 Overall Timing of the Instrument Development and Testing Relative to Data Collection.

| YEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-------------|--|-----|---|-----|-----|-----|---|-----|--|-----------------|-----|-----|
| 1994 | Preliminary Exploration of the Topic of Educational Concern. Contacts and Informal Discussions with Identified Focus Groups. Negotiations for Access | | | | | | | | | | | |
| 1995 – 1996 | Development Validation and Amendment of Pre-Pilot Versions of the Instruments. Researcher – Subject Contacts and Informed Consent | | | | | | | | | | | |
| 1997 | Pilot Testing of Student Questionnaire, followed by Trial Interviews of Students, Academic Teachers and Preceptors | | | | | | Further refinement and Testing of the Instruments | | DATA COLLECTION FROM THE SUBJECT GROUP OF STUDENTS | | | |
| 1998 | DATA COLLECTION FROM THE SUBJECT GROUP OF STUDENTS AND COMMENCEMENT OF TRANSCRIPTION OF THE INTERVIEW DATA | | | | | | | | | | | |
| 1999 | DATA COLLECTION FROM THE ACADEMIC TEACHERS | | | | | | TRANSCRIPTION CONTINUED | | | DATA COLLECTION | | |
| 2000 | FROM THE PRECEPTORS | | TRANSCRIPTION AND DATA PROCESSING CONTINUED | | | | | | | | | |

Limitations of the Data Collection

Apart from having to comply with individual subjects’ availability, the rather sporadic pattern of data collection resulted from the demands of the researcher’s full time academic work. Various other constraints did emerge at work that created a hindrance to the data collection. The geographical distance and location of the research settings and access to subjects also contributed to difficulties in fulfilling arranged meetings.

Ethical Considerations

Each of the Colleges of Nursing involved in the research was consulted and concluded that it did not require formal scrutiny by their Ethical Committees. In addition to this consent and in fulfilment of Stirling University’s regulations concerning postgraduate research studies a detailed proposal was submitted at the outset and accepted by that University.

Additionally, permission for access was sought from the head of each of the institutions involved, both in the pilot and main studies. Questions that arose included the researcher’s

intentions concerning institutional and curricular policy regulations, information about student records and the timing of data collection. Following concern about the researcher's access to student records, requests for these data were dropped. In relation to the timing of the data collection, the main concern was potential disruption of patient care and possible redirection of student attention during clinical placements. Equally importantly, potential disruption of educational activities during the periods of theoretical input had to be addressed. The researcher's assurance that she would avoid such disruptions was acceptable. The strategy was to collect the data during periods identified by the year tutors and preceptors as suitable and at specific times agreed with the individual subjects.

Of particular importance, were appropriate measures taken to obtain the informed consent of the students and tutors from whom data were collected . Direct contact was made with each of the subject groups and relevant information about the study was provided regarding the nature of the research study and its purpose,

- the nature and extent of involvement of individual students and tutors.

Particular emphasis was placed on an assurance of respect and protection of confidentiality and anonymity.

In accordance with the Data Protection Act, all subjects were made aware of, and consented to, the primary data being available only to the researcher and only for the period to the end of analysis. Following that, the primary data would be destroyed. Copies of the letter to seek permission for access and the subject consent form are enclosed as Appendices 1.i and 1.ii.

Summary

This chapter presented a detailed explanation of the methodological strategy. The underpinning theorisations and related rationales were argued looking at the research

questions, plan of the investigation and the ethical considerations. The next chapter presents a detailed explanation of the strategy for the content analysis.

CHAPTER FIVE

STRATEGY FOR THE CONTENT ANALYSIS

Introduction

In determining the strategy for processing the interview responses account had to be taken of the nature of the data to be analysed and the scope of the content. The volume of content was extensive because of the large schedule, proportion of open-ended questions and variations in the additional information supplied by individual subjects. The primary aim was to become thoroughly familiar and conversant with the content of the responses in order to be able to reduce and structure it into manageable categories and themes (Brink & Wood, 1994). To achieve that task the process of qualitative content analysis was employed based on the following characteristics and rationales.

The process of content analysis has been defined in various ways as shown below.

More recent definitions suggest that it involves:

The process of structuring unstructured data...

(Brink & Wood, 1994, p215).

A research method that uses a set of processes to make valid inferences from text ...

(Weber, 1990, p 9)

A research technique for making replicable and valid inferences from data to their context.

(Krippendorf, 1980, p 21)

These ideas are derived from the views of earlier content analysts such as Holsti (1966) who described the technique as a multi-purpose method used, particularly, for analysing a broad spectrum of problems. The relevant communication is used as the basis of inference.

Holsti further postulated that qualitative content analysis involved

...the drawing of inferences on the basis of appearance or non appearance of attributes in messages. (Holsti, 1969, p10)

The recurrent elements in these definitions are:

- i. The making of inferences from the research data. In particular, using the content of the information obtained from the study subjects in making credible deductions about their experiences and actions.
- ii. The emphasis on the context and basis of the data, in other words, the source and nature of the content of the information from which the inferences must be derived.

In this case inferences are derived from the expressed views of the students of how various factors in the theoretical and practical contexts of nursing education interrelate in influencing the process of self-directed learning. The content of the interview responses could be seen as contributing significantly to the relevance and authenticity of the overall findings from the study.

- iii. Additionally, the process of content analysis requires that account be taken of the mode of communication, the verbal expressions of the subjects' personal opinions, attitudes and feelings.

The aim was to adopt a systematic and rigorous approach to processing the data from this study. Lindkvist (1981) argued that by adhering to a systematic approach the researcher is able to determine authentic interpretations and distinguish these from inappropriate and irrelevant interpretations. It was crucial to ensure that the data were handled and presented, as much as possible, at comparable standards of robustness to that of quantitative data analysis. As Yin pointed out: "Qualitative research also can be...data driven, outcome oriented and truly scientific." (Yin, 1993, p 57)

Initially a qualitative approach was employed. However, the intention was ultimately to introduce some quantification in reporting the outcomes of the content analysis. Indeed, drawing on the conceptions of various content analysts, Lindkvist (1981) concluded that content analysis is:

... Principally a technique for quantitative analysis of extensive texts within the framework of a communication model.

(Lindkvist in Rosengren, 1981, p 26)

The strategy employed in this study reflected Holsti's (1969) suggestion that:

The content analyst should use qualitative and quantitative methods to supplement each other. It is by moving back and forth between these approaches that the investigator is most likely to gain insight into the meaning of his data.

(Holsti, 1969, p 11)

Although this idea was expressed three decades ago the principle, nevertheless, was deemed to be sound and applicable to this study. It seemed logical to examine what meanings individuals ascribed to the concept of self-direction, what impact their perceptions had on their self-directed patterns, and the perceived functions and benefits of that learning approach. It was envisaged that this interview data would allow relevant conclusions to be drawn and inferences made with accuracy and confidence as Lindkvist (1981) suggested. This analysis attempted to capture the multi-dimensional perspectives of student self-direction in nursing education as sought by the research questions and demonstrated in the framework of the study.

It was also important to establish the students' subjective views of what factors they perceived to influence their experiences of the implementation of the self-directed learning approach. The quantitative process allowed for the frequency of occurrence of specific relevant expressions to be determined from the responses of the different subject groups. Details of the system of categorisation employed will now be explained. Key concepts and specific labels occurring within the text are underlined.

The Data Reduction Process

The process of categorisation is critical to content analysis because the categories must convey the core substance of the investigation (Nachmias & Nachmias, 1992). It was also vital that the categories reflected the context within which the relevant events occurred. Thus the aim of the analysis was to use the content of the information obtained from the subjects in making credible deductions about their experiences and attributes. In particular the idea was to establish how various factors in the theoretical and practical contexts of their education interrelate in influencing the students' self-direction in learning. The initial stage of the content analytic process involved determining the largest body of content material to be searched for the specific characteristics. This involved careful and judicious identification of appropriate information bearing sections within the responses. This helped to define and portray the key dimensions of the adoption and implementation of the self-directed learning approach.

The above process was followed by methodically examining each component of content material to determine the relevant boundaries and explicit specifications of what properties would serve as indicators of particular self-directed attributes. It, therefore, helped in extracting clearly identifiable self-directed or dependent attributes. It was vital to ensure, for example, that the indicators signifying autonomy and self-direction distinctly differed from those signifying combined dependent and independent attributes or constant dependence on educators' direction and control of the learning process.

The final stage of the process involved deciding on how to select the smaller codable units of analysis. Thus specific words, phrases and sentences were carefully examined within the context of the identified body of content material in the response. These were then used as the basis of describing specific self-directed attributes reported by the subjects.

Therefore the system employed took account of the research topic, self-direction in nursing education, its theoretical basis, the content of the related framework and the research questions. Account also had to be taken of the way in which specific statements were made. This means that essentially the focus of the above processes was on the content of the interview responses rather than on any pre-determined set of categories.

The Classification Scheme and the Principle of Units of Analysis

The following system of classification was employed to ensure that appropriate components from the data were placed in relevant categories to derive meaningful information from the findings. Apart from portraying the purpose of the research study these units also formed the basis of the empirical findings which emerged from the data. As Krippendorff pointed out:

... the general recommendation is to aim for the empirically most meaningful and productive units that are efficiently and reliably identifiable and that satisfy the requirements of available techniques.

(Krippendorff, 1980, p 64)

It was therefore, important to devise relevant and stable categories in an attempt to achieve high content reliability. The process involved repeated trials with constant reviews of the categorisation scheme to identify and rectify emerging ambiguities. The following discussion presents explication of how each component unit fitted into this content analysis and the rationales for the choices made.

The Unit of Themes

The themes represented the largest component of the content material, which were examined to determine the personal attributes, perceptions and the expressions used by the subjects in conveying their experiences and views. Thus from the first part of the data identifiable themes included conceptualisations, operationalisation and effectiveness of self-direction in learning that is, concept, process and outcomes. The fourth theme encompassed student supervision and support. These themes allowed for demonstrating the contexts within which

subsequent units of analysis, the categories, occurred. As Holsti pointed out this type of unit represents "... the largest body of content that may be searched to characterize a recording unit." (Holsti, 1969, p 118)

As the above statement implied, the scope of context that might have to be searched varies, ranging from sentences, to paragraphs or even entire documents. In this study, the scope of contexts involved the different sections of the interview schedules and the full responses to the individual items represented the body of content examined.

The idea of using themes alone as the units of analysis was originally considered. However, the contexts and scope of content of the themes proved to be too large and complex. A tentative attempt to employ that strategy was associated with recurrent problems of ambiguity and therefore questionable reliability. This problem was partly attributable to the occurrence of multiple categories and overlaps occurring within certain themes resulting in confusion about into which theme to place the categories. Consequently, repeated reviews and modifications of the rules were necessary until appropriate units were formulated. Based on the argument that these could distort the findings, the original intention to use themes alone had to be reviewed despite Krippendorff's (1980) assertion that:

Context units neither need to be independent nor separately describable.
They may overlap and contain many recording units.
(Krippendorff, 1980, p 59)

The alternative idea was to employ a more systematic scheme of different levels of units in which the themes represented the broad contexts from which the other related units derived. They therefore formed the major sources of the main categories allowing gradual, more consistent data reduction to be achieved.

The following section presents the formulation of the categories based on the themes. This is followed by a brief discussion of the designation of units of analysis. An exemplar is used to illustrate how this system reflects the system described by content analysts such as Krippendorff (1980). Additionally a sample of responses has been quoted to demonstrate and clarify the sources from which the categories were drawn.

The Unit of Categories

As units of analysis, the categories represented the essential elements, that is, the specific attributes identifiable within the themes. As such they had to have clearly defined boundaries depending on the series of events which they were designed to describe. Since different categories could occur within the same theme it was necessary that explicit specifications were made of what properties served as indicators of each particular category (Robson, 1993). For example within the theme - conceptualisation of self-direction in learning two main categories - intrinsic motivation and extrinsic motivation were identified in the subjects' responses. Categorisation of the former depended on the occurrence of appropriate indicators in study patterns such as independence with spontaneity in personal decisions and actions. On the other hand the indicators signifying constant dependence on educators' decisions and actions were placed in the extrinsic category. Exemplars of these are presented later.

The Unit of Sub-Categories

Development of the sub-categories enabled smaller, more codable and unambiguous units to be identified from the themes (Krippendorff, 1980). They represented the specific indicators of the main categories. Thus drawing on Holsti's (1969) assertion that this unit of analysis served as "...the specific segment of content that is characterised by placing it in a given category." (Holsti, 1969, p 116)

Accurate specification of these smaller units of analysis was vital to the findings from this study. The aim was to avoid placing specific properties or indicators of a particular category into those of other themes because that could result in misinterpretation of the research findings (Holsti, 1969). Although individually the sub-categories on their own were unlikely to generate meaningful information from the data they did interlink nonetheless, with other sub-categories within the particular theme in yielding meaningful information. In this analysis the sub-categories served as the codes for describing the different dimensions of intrinsic and extrinsic student motivation. They conveyed connotations of self-diagnosis of learning deficits and personal decisions about what learning resources, what goal and what plan of implementation and evaluation were portrayed in the learning process. Therefore, careful examination of words, phrases and sentences within the responses was systematically carried out to identify the relevant indicators which effectively linked up to form the substantive categories in the themes.

It was equally important to take account of words and expressions with multiple meanings. Thus regarding expressions such as self-motivation, self-diagnosis of learning deficits and self-identification of relevant topics which portray intrinsic motivation with independent actions, the emphasis was placed on the body of content within which they occurred. This enabled appropriate decisions to be made as to whether or not the content of a particular response, phrase or sentence was recorded as favourable or unfavourable. In this way it was possible to identify the dimensions of positive and negative inclination to function in the self-directed capacity.

The rules about formulation of the sub-categories, the indicators or properties of the main categories, had to be explicit to minimise inconsistencies in the categorisation system. Thus rather than subjective interpretations, the principle of appearance or non-appearance of

attributes was employed where actual occurrence of specific indicators determined the relevant category.

Summary of the Inter-relationships between the Units of Analysis

Essentially each of the units described above might have been capable of generating relevant information about different dimensions of student self-direction. However, what this study aimed to capture was a holistic picture that is, the internal and external influences, the practices, experiences, reactions and actions associated with the self-directed approach to learning. Attempts to generate the desired information from each separate unit proved impractical because of the scope of context and problems of similar sub-categories occurring in different units and creating overlaps. A more practical and feasible strategy was to employ inter-related units of analysis at different hierarchical levels. Some responses presented conflicting attributes and reactions to different dimensions of self-direction. An example of this was where the student demonstrated a willingness and ability to identify personal learning deficits but habitual reliance on the educator to provide reference lists with direct guidance, supervision and assistance.

For me self-directed learning is when you've got an interest in an area and after you've had the background knowledge – you go to the library and do more research. You do need that background knowledge. It's necessary, because otherwise you don't know which aspects to study or where to look for the information that you need – so you need the guidelines and references.

(1st Year Diploma Student)

As I see it you have a subject that you want to learn and you go and find out about it. The problem is you're never sure ... if you've got it right – if you're going about it the right way. Somebody's got to tell you – go over it with you – check that you've got it right.

(2nd Year Diploma Student)

Clearly, the content of such responses conveyed negative inclination to self-directedness but other elements also indicated some degree of positive inclination e.g.

... you have a subject that you want to learn and you go and find out about it ...

(2nd Year Diploma Student)

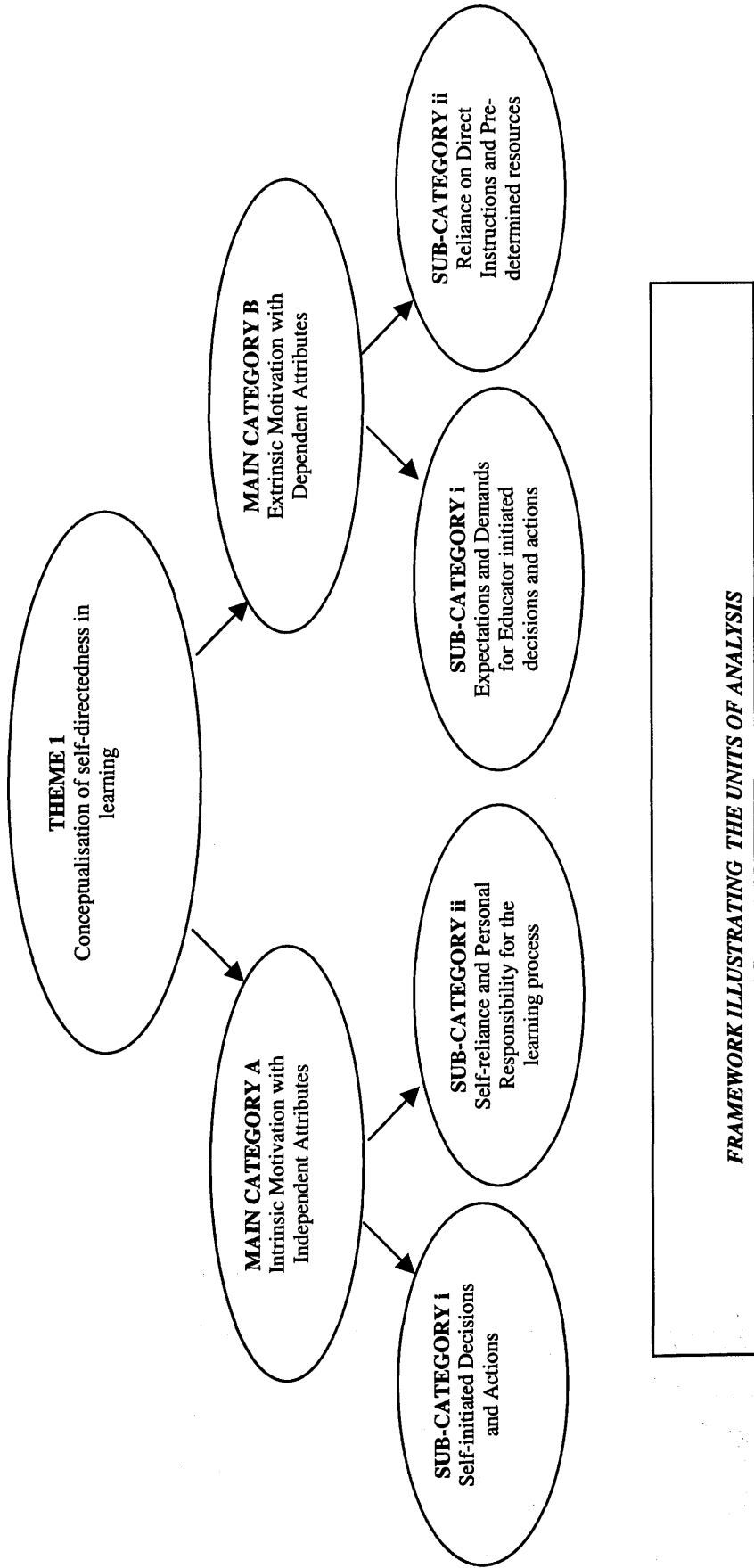
... you've got an interest in an area...after you've had the background knowledge – you go to the library and do more research.

(1st Year Diploma Student)

These statements conveyed some initiative in the initial actions of self-diagnosing the learning needs or topic of interest. The difficulty with such responses, however, was in determining precisely in which categories to place them. The decision about whether or not to code the responses as representing negative inclination to self-directed learning had to take account of the context within which the specific message occurred and the way in which it was conveyed.

The multiple units of analysis explained above enabled the characteristics of each level, the themes, main categories and sub-categories, to be individually demonstrated and to show how they interlink with each other. Apart from demonstrating that the sub-categories were properties of the main categories, the process also depicted how the main categories within themes interlinked in yielding relevant information. Figure 5.1 represents a framework exemplifying the hierarchical structure of the units of analysis employed in this classification scheme.

Figure 5.1



Use of Exemplars in Clarifying the Framework of the Units

The following section presents an exemplar of the way in which the main and sub-categories in each theme interrelated in yielding relevant information. A sample of responses has been used to demonstrate the positive and negative inclinations to self-direction in learning. Responses that implied independence and positive inclination to self-direction and those which conveyed high dependence and negative inclination to self-direction have been appropriately categorised as follows.

Theme I: Conceptualisations of Self-direction in Learning

- This theme concerned the personal interpretations of the key concept which formed the substance of the investigation.

The theme and its related categories reflected individuals' personal interpretations of the concept of self-direction in learning. The emphasis was on establishing the extent to which individuals saw themselves as the initiators, manipulators and beneficiaries of the self-directed learning process. Perceived attributes of resourcefulness and creativity in identifying and rectifying personal learning needs were also taken to be indicators of this theme.

These arguments were based on the assumption that personal interpretations and understanding of a particular concept potentially influence the way in which individuals respond to the demands of the situation (Moore, 1980; Brockett, 1983; Boud, 1988; Hammond & Collins, 1991; Merriam & Caffarella, 1991). This category took account of all references to the principal initiator and manipulator of the learning process. It was therefore devised to explore whether or not those references indicated self-diagnosis of the learning deficit, self-selection of appropriate learning resources and personal decisions and actions in fulfilling the desired learning.

Based on the above, all responses with connotations of positive inclination to self-direction in learning, self-initiated decisions and actions, were categorised as Intrinsic Motivation with independent actions. Within the same theme responses with connotations of negative inclination to self-direction in learning, educator initiated decisions and actions, were categorised as Extrinsic Motivation with dependent actions.

Where the sub-categories were concerned extraction focused on specific expressions used by the students in conveying personal actions such as self- diagnosis of learning deficits and self-selection of relevant topics, or reliance on educators to determine the learning deficits and the relevant topics.

Thus the above explanation demonstrates how the sub-categories were developed and how they interlinked in the formulation of the main categories.

Category A. – Intrinsic Motivation with Independent Learning Attributes

Sub-Categories:

i. Self-initiated decisions and actions

Typical responses that portrayed connotations suggestive of this sub-category were expressed in the following ways:

It's learning that you decide to do yourself. ... if you say – I want to learn that topic – say for instance, I wanted to learn the digestive system...you go and do it nobody tells you to do it. You go to the library get the right books – say a couple of physiology books, simple ones ... not the heavy stuff, and you read it up until... until I think I understand it. That's my understanding of self-directed learning.

(2nd Year Undergraduate student)

Self-directed means being motivated to carry on with your own learning and have some degree of being able to teach yourself rather than learning what somebody tells you. Using different means and ways – like studying – using different resources ... in the library. To me that's self-directed learning.

(3rd Year Diploma Student)

Thus in self-diagnosing their learning deficits the content of the responses suggested

that individuals felt free to personally determine the topics which they perceived to be of particular significance or interest to them. In this case of critical importance was the element of spontaneity in the way in which the individuals demonstrated initiative in the learning process.

ii. Self-reliance and personal responsibility

This sub-category emerged in relation to the spontaneous act of students personally selecting the appropriate learning resources including a personal search and self-identification of the relevant references. The individual's ability to plan and implement the learning was also a significant indicator of his/her independence in the learning process. The following examples convey such connotations:

It's learning that you decide to do yourself. ... if you say – 'I want to learn that topic'... say for instance, you wanted to learn the digestive system...you go and do it nobody tells you to do it. You go to the library get the right books – say – a couple of physiology books, simple ones ... not the heavy stuff, and you read it up until ... until I think I understand it. That's my understanding of self-directed learning.

(2nd Year Undergraduate student)

My understanding of self-directed learning is working...working on my own using my own learning method which works for me and helps me to teach myself something ... from a book maybe and teach myself effectively.

(2nd Year Diploma Student)

Self-directed means being motivated to carry on with your own learning and have some degree of being able to teach yourself rather than learning what somebody tells you. Using different means and ways – like studying – using different resources ... in the library. To me that's self-directed learning.

(3rd Year Diploma Student)

In the above responses apart from the personal decisions in selecting relevant resources, planning and implementing the learning process the subjects conveyed a willingness to accept responsibility for their own learning process. Other connotations suggested personal control and discretion in seeking assistance from the educator if and when they felt they needed to do so.

In contrast to the above classification indicating attributes of positive inclination to self-direction in learning the following section presents characteristics portraying negative inclination in terms of dependency on the educators.

Category B. – Extrinsic motivation with dependent Attributes

Sub-Categories:

i. Expectations and demands for educator initiated decisions and actions

These categories were designed to describe situations in which the educator was the initiator of the decisions and actions involved in the learning process. These suggested a preference for structured instructions and direct supervision by the educators. The content of the responses conveyed the perception that it was the educators' responsibility to determine learning deficits and the relevant topics to study. As compared to the earlier categories, the characteristic attributes in this case portrayed lack of spontaneity and lack of personal decisions in the learning process. One such response stated:

... being given a topic that they want us to learn about and going away to look it up – but they do tend to give us references or objectives for the topic that they want us to do. Without those I find it difficult. You're not entirely sure what the end product is to be...what I need to know to apply it ... when you're working ... kind of thing.

(1st Year Diploma Student)

Despite the apparent lack of spontaneity conveyed in such responses, many students seemed to believe that they were in essence functioning in the self-directed capacity. To them, the acts of choosing from lists of topics provided by educators and following stipulated directions and guidelines in their learning activities constituted self-directedness. The option to choose from the list of predetermined topics seemed to be equated to personal decisions, personal choices, freedom and independence in the learning process. That notion is, of course, arguable as it would not normally be considered as valid interpretation of self-directed learning.

The expectation that time had to be formally allocated for the learning activities and the claim that deprivation of that essential study time created a hindrance to self-directedness, are also elements indicative of the dependency described in this category. The following responses portray the above mentioned characteristics:

We're given a subject to research and basically study in our own time. I find it easier if there's a learning package – it's easier – and I think if they expect us to get the work done then they have to – like give us library time. I think library time's really necessary otherwise it's difficult to get the work done – but sometimes library time gets taken up in tutorial or something but nobody says – right you can have – like – the next period or something. So you get stressed and – well, it's – very difficult.

(2nd Year Diploma student)

Well, Self-directed learning – you get set topics at tutorials – sometimes we're given the topic but sometimes we get a list to choose from – so we get the topic and time allocated in the time-table to go to the library and do the literature review then write an essay or something.

(2nd Year Diploma Student)

The first of these two responses seems to indicate a conscious shift of responsibility from student to educator. The statement ...if they expect us to get the work done then they have to ... implied reluctance to engage in self-directed activities while at the same time suggesting student perceptions that the educator had an obligation to ensure that formal arrangements were made for this learning process.

ii. Reliance on guidelines, instructions and pre-determined resources

This sub-category portrayed the tendency constantly to depend on the educator for direct instructions and assistance. Additionally it related to student expectation to be supplied with the relevant reference lists compiled by the educators for studying the topics determined by the educators. These connotations have been underlined in the following responses:

Self-directed learning is – em – being given a topic or a pack in class to go and work through. Usually they give you references and then they just touch up the major aspects, then say – the rest is in your book. Some give you one book but it's not flexible enough. Sometimes when you come back to give feedback you find that they've looked at another book so they tell you – no, that's not right and – you're like? ? I mean it's up to them to give us the right information, tell us what to go and look up, go over it, make sure we've got it right – you know – there and then, and – em – if not then tell us. I mean if nobody tells you then I don't see how they can expect you to know, right?

(1st Year Diploma Student)

It's the situation where students are given a topic and instructions to go and then work on their own – but there's also the need for support and guidance.

(1st Year Diploma student)

My understanding is that – em – you're given guidelines on a subject – what aims and objectives and some teaching – then you go and find out more – but it has to be flexible.

(2nd Year Diploma student)

To me I'd say that you'll be given basic guidelines telling you – er – the best way – the best places to find information about a particular topic.

(2nd Year Diploma student)

These implied the perception that provision of reference lists, direct instructions and supervision of the learning process were critical indicators of the educators' facilitative role.

Theme II: Operationalisation of the Learning Approach

- This theme embraced the practices and implementation of self-directed learning in the theoretical and practical contexts of the educational programme and the degree of student involvement in decisions about the choice of methods and techniques of implementation.

The theme represented the cognitive and affective strategies involved in the implementation of student self-direction within the theoretical and practical aspects of their education. The rationale for the inclusion of this theme and associated categories was to establish how individuals felt about the implementation of the learning approach within the college and practical settings.

The underlying assumption for the categories within this theme was that positive or negative perceptions about this learning approach and the strategies employed in its application could influence student ability to independently apply the different methods in their learning process. The question as to whether or not the learning atmosphere could influence individuals' perceptions and self-confidence in functioning in the self-directed capacity might also prove to be a significant finding. Therefore, it was envisaged that the categories could generate information to establish what influence the location or setting within which the learning took place had on the individual's acceptance or rejection of the adopted approach (Watkins, 1984; Higgs, 1988).

The techniques of self-direction in learning, for example, group interactive learning, and seminar presentations, emerged as the main categories relating to operationalisation of the learning approach. The sub-categories were developed according to the context of the analysis. These included the implementation practices within the different educational settings. An illustration of these is presented below.

Category A. – Group Interactive Learning

Sub-Categories:

- i.** Applicable in only theoretical setting
- ii.** Applicable in only practical settings
- iii.** Applicable in both theoretical and practical settings

Category B. – Seminar Presentations

Sub-Categories:

- i.** Group seminar presentations
- ii.** Individual seminar presentations

As previously explained the formulation of the categories was based on what was said and the way in which the particular view was expressed. The focus in this case was on the perceived effectiveness of the different learning techniques employed in promoting self-direction in learning.

Theme III: Effectiveness of the methods of implementation and the factors influencing students' reactions to the self-directed learning approach

- This theme encompassed the benefits and functions of the methods of implementation, individuals' reactions to the demands of the self-directed approach and the learning styles adopted in coping with those demands.

The theme was designed to determine the perceived functions and benefits of each method as a way of self-directedness in learning. It focused on outcomes. For example, was the method perceived as an effective means of fostering self-reliance, independence, student satisfaction and motivation? On the other hand, were the processes involved in the application of the techniques seen as creating hindrance and high dependence on educators because of the associated demands? (Knowles et al., 1984; Boud, 1988; Merriam & Caffarella 1991).

It could be argued that students' perceptions of the associated workload potentially influence their attitudes, commitment and self-directed learning pattern and learning styles. Better insight could be gained therefore, about the quality of learning achieved through this approach (Boud, 1988). The extent to which individuals regarded self-direction as a transferable attribute and long term benefit could also prove to be a significant finding about the impact that this approach had on learners. The categorisation was as follows.

Category A. – Acquisition of theoretical knowledge

Sub-Categories

- i. Comprehension**
- ii. Recall**

Further clarification of the degree and quality of understanding and recall, were described as deep or superficial and long-term or short term respectively.

Category B. – Acquisition of practical competencies

Sub-Categories:

- i. Attentive and responsive
- ii. Non-committal

These portrayed dimensions of individuals' readiness and self-confidence to respond to the range of learning opportunities which they encountered in the areas of clinical practice. The responses were examined for expressions portraying preparedness to respond to learning opportunities, highly guarded responsiveness with dependent actions, or responsive but demonstrating considerable reliance on supervisory support.

Theme IV: Student supervision and support within the theoretical and practical contexts of their Education

- This theme addressed the perceptions about the facilitative and supervisory practices employed in promoting the students' self-direction in learning.

The categorisation took account of the nature of supervisory support provided by the academic teachers in relation to the theoretical aspect of the students' learning. Account was also taken of the nature of support provided by the clinical mentors and preceptors in guiding and assisting the students in their independent efforts to develop their practical competencies. The above strategy was based on the argument that the nature of facilitation and supervisory interactions to which the students were exposed potentially influenced their reactions to self-directedness in the different contexts of their education. Thus the categorisation was as follows.

Category A. – Systems of Contact

Sub-Categories

- i. Open door system

- ii. Appointment system
- iii. Mixed open door and appointment system

The above categories were intended to address the prevalence and influence of the specific system on the students' reactions to the academic supervision provided.

Category B. – Reasons for Contact

Sub-Categories:

- i. Academic guidance
- ii. Academic guidance and placement issues
- iii. Support with placement issues
- iv. Default on supervisory support

These categories reflected mainly the discretionary contacts which individuals made.

Category C. – Nature of the Interactions and Perceived Impact of the Facilitation and Supervision on the Students' Self-directedness.

Sub-Categories

- i. Inflexible interaction with no empowerment
- ii. Versatile interactions with liberal empowerment
- iii. Varied interactions with guarded empowerment

The emerging sub-categories described the dimensions of interactions and student empowerment that occurred.

To assess the appropriateness and relevance of the categorisation scheme it was necessary to examine the validity and reliability of the classification process. The following section discusses the various approaches examined and the strategies employed.

Strategies for the Validation and Reliability Testing

Validation of the Classification Scheme

Unlike the general conception of validity as the extent to which a research instrument measures what it is designed to measure (Burns & Grove, 1993), this term has been interpreted in different ways in content analysis (Andr n, 1981). Weber (1990) distinguished between two types of validity. In relation to general research methodology, Brinberg and McGrath (1982) described validity as a correlation between, for example, the key concept of the research problem and the relevant research method. However, where content analysis is concerned, the emphasis in validation seems to be placed on different aspects of the categorisation scheme. This may depend on the source and type of data, the structure and function of the categorisation scheme and the information to be derived from the data. Some experts emphasise relevance by arguing that the category formulation process must be directly pertinent to the characteristics of the data. In that way each emerging category depicts the context of the specific part of the data (Krippendorff, 1980).

Others emphasise the extent to which the categorisation scheme yields realistic and trustworthy findings (Weber, 1990). Krippendorff's (1980) argument, in relation to relevance, was that:

- a) the findings from content analysis must portray the actual phenomenon being investigated, and
- b) the processes involved must reflect the nature and context of the data.

While these propositions focus on relevance, Weber (1990) argued further:

To assert that a research result based on content analysis is valid is to assert that the finding is... generalisable beyond the specific data, methods, or measurements of a particular study. (Weber, 1990, p 18)

Generalisability in the above statement emphasises the importance of the categorisation scheme yielding trustworthy results and proving to be applicable to similar research studies. Various approaches to validation in content analysis were examined to determine appropriate procedures for these interview data. The following section discusses the validation procedures employed. These included assessment of the face validity of the content of the interview schedules at the initial stage of development of the instruments. Other validation procedures, namely construct, correlational and predictive, were examined at the content analytic stage and are, therefore discussed in relation to the categorisation schemes. In each case, the rationale for employing or rejecting the procedure has also been explained.

The Process of Content Validation

This validation approach examined the extent to which the content of the interview schedules addressed not only the topic under investigation but also the scope of coverage of the different dimensions of the topic (Holsti, 1969; Fraenkel & Wallen, 1993). This approach was adopted at the initial stages of instrument development.

It was important to ensure that the range of items contained in the instruments was varied and comprehensive enough to provide plausible evidence about student self-direction in nursing. It was also important to demonstrate that the content and format of the schedules were consistent with the core concept of the research problem and that the items derived from its underlying theories. Furthermore, it was crucial to ensure logical structure of the format taking account of the different dimensions of student self-direction within the theoretical and practical contexts of learning. Essentially, the subjects' familiarity with the research problem had to be demonstrated and the language used in the schedules had to reflect what the study participants were familiar with.

It was felt that by posing each question separately the subjects were likely to focus their responses by answering each question in turn. In this way, each issue was individually and properly explored. It was important that the subjects did not in any way feel intimidated. Instead, the aim was to encourage them to converse, reflect on their experiences and express their perceptions while sharing their personal opinions with the interviewer. The relevant amendments and the additional prompts are shown in the final versions of the interview schedules enclosed as Appendices 7.i – 7.iii

The validation process involved the following steps. Three independent judges deemed to be well informed about the problem under investigation – student self-direction in nursing education – were approached about participating in the validation exercise. Two other experts in adult education from the higher academic sector also participated. The credibility of the independent judges was crucial since they had to be adequately informed about this particular research topic. (Holsti, 1969; Fraenkel & Wallen, 1993). As previously explained, each of the judges was provided with the definition of the core concept of the research topic as proposed by the researcher based on the underlying theory and context of the study. Additionally they were informed about the purpose and nature of the study, the research questions, the interview schedules and the profiles of the study subjects. Finally, they were also supplied guidelines of what was required of them. That is to examine the relevance, in terms of the nature and context of the data. Thus they were asked to comment on:

- the extent to which the items contained in the schedules appropriately addressed the student self-direction in nursing education,
- the extent to which the content realistically reflected characteristics of the study subjects,
- the appropriateness of the language, format and clarity of the items and of crucial importance,

- whether or not the categorisation scheme represented, adequately, the different dimensions of student self-direction, in particular, the phenomenon conveyed by the specific themes.

The system of CVI, as described previously, was found to be applicable to this validation process and was, therefore, applied to the content validation of the interview schedules. An outline of the main elements of their comments is presented below. Where necessary samples of the questions are stated to substantiate the explanation.

- a. There was general agreement that the scope of coverage adequately addressed theories relating to student self-direction and the different dimensions of this approach within nursing education.
- b. It was also felt that the questions appropriately explored students' attributes, and were likely to encourage the study participants to express their personal opinions about their self-directed learning experiences.
- c. With regard to the language and clarity of the interview items, there were suggestions that although the questions were generally clear, further improvement could be made. It was felt that the structure of some sentences appeared to be too formal as compared to the type of language normally used by the target population of students.

An example of a question that was found to be too formally constructed was:

- What is your conceptualisation of self-directedness in learning?
- d. Other questions were identified as being rather extensive and could confuse the subjects. For example:
 - To what extent do you engage in self-directed learning activities without being asked to do so by a tutor or clinical supervisor and how do you decide what topic to learn and what learning resources to use?

On receipt of the comments the relevant amendments were made and further examined carefully before the pilot testing. The language and structure of the questions in the final

interview schedules were made more conversational using familiar words and expressions as well as short problem scenarios. For example the above questions were reformulated in the following ways:

- Could you tell me what self-directedness in learning means to you?
- Have you ever learned a topic from your programme totally by yourself, where you had to set your own objectives, plan and learn about the topic without any input in the classroom setting?
- Tell me more about that personal decision and action.
- For example – what prompted you to learn about that topic?
- How did you determine which specific topic to study?
- Once you had identified what you needed to learn, what exactly did you do – did you seek further guidance from anybody – say a tutor or preceptor – tell me what exactly you needed help with.

In relation to patterns of self-directed learning an alternative question was worded as follows:

- While studying if you came across something which has not been taught in class, for example, the physiology of breathing, which would help you to understand what is wrong with a particular patient, what action are you likely to take?

This replaced the question:

- To what extent do you normally depend on other people for guidance and help with your studying or when preparing your assignments?

The Issue of Construct Validation

This procedure was employed to establish the extent to which the categorisation scheme appropriately measured the different dimensions of the core concept of the study (Fraenkel & Wallen, 1993). This substantiated the function and significance of the previously mentioned operational definition.

The core concept and related theories served as substantive references and the basis of the category formulation process. The construct validation allowed for establishing the links between the emerging categories and the content of the conceptual framework of the study. In

this way it was hoped to demonstrate that the research findings were authentic and theory related, thus providing clearer insight and understanding of the problem under investigation (Andrén, 1981).

Another aspect of construct validation examines the extent to which the newly devised scheme corresponded to other existing, previously validated schemes (Weber, 1990). That process of construct validation was found inappropriate for this study because of the difficulty in finding an equivalent categorisation scheme against which the newly devised one could be measured. Arguably, even if an alternative scheme had been identified its degree of validity might have proven difficult or impossible to assess. Therefore this process of validation was not carried out in this study.

The Issue of Correlational Validation

Similarly to the preceding validation processes, correlational validation also relied on the theory upon which the categorisation was based. However, in addition this process required that the context of the data, the structure, function and method of measuring specific characteristics must correspond and yield findings that correlated in both the newly devised and existing schemes.

Although this might have been a strong validation process to employ, a search through the literature failed to reveal other existing categorisation schemes that were relevant to this study. Neither did the context, underlying theories or the characteristics measured in related published studies adequately correspond to those in the new instruments. As previously demonstrated, examples of the related studies reviewed Laszlo and Strettele's (1996) exploratory study on factors which motivate registered practitioners to fulfil their learning needs independently. That study focused on external motivators particularly learning

resources. Nixon et al.'s (1996) comparative study of teacher-directed and student self-directed learning methods focused on clinical skills acquisition. Pedley and Arber's (1997) experimental study which evaluated students' response to self-directed learning in a specific module, concentrated on the process of self-directedness. Nolan and Nolan's (1997) study addressed rather different dimensions by exploring the factors, which hastened the adoption of the self-directed learning and student-centred approaches to learning. The latter researchers challenged the uncritical acceptance of these learning concepts into nurse education. As already indicated, none of the above mentioned studies were found to have used content analytic technique for processing the data.

The Issue of Predictive Validation

Predictive validation was examined with a view to applying it for the following reasons. Weber (1990) maintained that the process involved the making of predictions from the situation on which the study was based to not only future situations but also present situations. Therefore, in this case predictive validation might have allowed the making of inferences about the effects that factors within the theoretical and practical learning environments have on students self-direction. Krippendorff (1980) explained that:

...a content validity may be said to have predictive validity if its inferences can be shown to exhibit both high agreement with ... phenomena that it claims to predict in the context of its data and low agreement with phenomena it intends to discriminate against.

(Krippendorff, 1980, pp 166-167)

This suggests that in addition to the research problem, conceptual framework, research instruments and the categorisation scheme, other conditions required to be fulfilled in the application of this validation process. That is, it required demonstrating that the specific phenomena, attributes and nature of the data did match adequately in both the current and the predicted situations. Krippendorff (1980) emphasised that the predictions derived through the research method had to agree with directly observed facts. Since this study set out to explore

and describe the different dimensions of a given phenomenon, predictions could not have been made until analysis of the data had been completed. Therefore, application of this validation process was not feasible in this content analysis.

The Reliability Testing

Similarly to validation, establishing the reliability of the categorisation scheme was critical to this study. The scheme had to be applicable to each of the three different sets of interview data obtained from the subject sub-groups of students, educationists, and the preceptors. Krippendorff (1980) described three types of reliability in relation to content analysis. This section discusses the processes involved in each procedure and the rationale for employing or rejecting it.

Stability

This reliability procedure is based on the test-retest principle to establish how consistently a categorisation scheme yields relevant results each time it is applied to similar data. It requires that the same coder(s) be presented with the categorisation scheme on two different occasions, which reflects the definition of stability as “the degree to which a procedure is invariant or unchanging over time.” Krippendorff, 1980, p 130)

The potential risk of employing this process was reduced adherence to the categorisation rules, as the coders became increasingly familiar with the content classification process (Weber, 1990). However, the rationale for employing this procedure was that it allowed for constantly observing how consistent each coder was in the way in which they interpreted and applied the rules throughout the categorisation process. This enabled the investigator to clarify and eliminate ambiguities in the rules while reviewing and strengthening the process. The decision was also based on the argument that it should be possible to achieve compliance

and objectivity if, as was the case in this study, the individuals involved had adequate experience with content analysis and remained reasonably conscientious with the rules.

Reproducibility

Reproducibility required that two or more independent coders in different circumstances apply the categorisation scheme. The perceived advantage of this over the stability test was that rather than the same coder(s), the involvement of different coders might have provided broader and more objective perspectives to the quality of the categorisation scheme. In testing this, three educationists from a nursing educational institution that is, the background of the research problem, were presented with a small sample of the interview data together with the categorisation rules. They were simply instructed to:

- examine each response separately then,
- determine whether or not the content indicated a preference for self-direction or a preference for educator direction of the learning process

They were supplied with a list of categories as follows:

- 1.a Self-diagnosis of the learning need.
- 1.b Dependence on the educator to determine the learning need.
- 2.a Personal decisions about identification of the relevant topic and selection of the learning resources.
- 2.b Reliance on the educator to determine the topic and learning resources etc.

However, the instructions were found to be insufficiently specific or unclear and this led to differences in interpretation. Therefore, the rules and the format of the recording system had to be reviewed as necessary until the coders found them reasonably clear to follow. To record their findings they were supplied with an appropriate proforma indicating the themes, main categories and the sub-categories as shown below.

Figure 5.2 System of Recording the Categorisation of the Conceptualisations

THEME 1: CONCEPTUALISATIONS OF SELF-DIRECTEDNESS IN LEARNING

MAIN CATEGORIES:

- A. Intrinsic motivation with independent actions.**
- B. Extrinsic motivation with dependent actions.**

SUB-CATEGORIES

A. Intrinsic Motivation with Independent Actions B. Extrinsic Motivation with Dependent Actions

| Subject | i. Self-initiated Decisions and Actions | ii. Self-reliance | iii. Personal Responsibility and Ownership | i. Expectation and Demands for Educator Initiated Decisions | ii. Reliance on Guidance, Instructions and Pre-determined Resources | iii. Perceived Educator's Responsibility for the Learning Process |
|---------|---|-------------------|--|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |

Their instructions were to:

- examine each of the samples of responses item by item.
- determine what was said and how the specific views and experiences were conveyed paying attention to the sentences and words used by the respondents.
- record by placing a tick in the appropriate columns what personal attributes and characteristics were indicated in the response in relation to the particular theme.

For example if in relation to **personal interpretation of self-directedness in learning** the response indicated self-diagnosed learning need, and self-identification of the relevant topic and learning resources then these should be recorded by placing the tick under the categories of **Self-initiated decisions and actions** and **Self-reliance** respectively.

The coders were asked their personal opinion as to whether or not the descriptions of the categories were relevant and whether or not they might have described them differently. All three of them felt that the descriptions were reasonably appropriate. The idea was to test the clarity of the rules and the range of categories that emerged. This exercise was followed by another situation in which the investigator worked systematically through the content classification with two other educational researchers from the higher academic sector. Thus the coders, the location and the circumstances were varied as indicated by Krippendorff (1980). This enabled the reproducibility of the categorisation scheme to be tested. The outcome of that test and the actions taken are discussed below.

One problem that arose related to lack of clarity about the units of analysis. An attempt to adopt the terms **context**, **sampling** and **recording units** in the classification scheme resulted in difficulties in clarifying what they represented. Therefore, to simplify the content classification, an alternative structure was devised comprising three interrelated hierarchical levels of units described as:

- i. Themes
- ii. Categories
- iii. Sub-categories.

Another ambiguity that emerged was an overlap between two of the themes namely:

- a. Effectiveness of the methods of self-directed learning and
- b. Impact of the approach on students' learning attributes.

The first was intended to generate categories relating to the outcome of the implementation practices while the second was intended to generate categories relating to the consequential reactions resulting from the perceived work load and demands of self-directed work.

However, following considerable discussions a single theme was formulated focusing on the effects of the implementation process.

Apart from those adjustments only minor intercoder disagreements emerged. These appeared to reflect differing institutional ethos between the nursing colleges and the higher academic institutions rather than personal or academic factors. The notable difference was that the coders from the higher academic sector had educational research expertise and personal experience with content analysis. However the coders from the colleges of nursing admitted to limited exposure to content analysis.

Accuracy

Two critical requirements for this reliability test are:

- a. That the categorisation scheme had been previously tested, for example, to establish its degree of reproducibility.
- b. That an existing standard of categorisation can be identified which is based on theory that is relevant to the context of the research data.

As Krippendorff (1980) observed from other studies, those requirements did prove difficult to achieve particularly where this newly devised categorisation scheme was concerned. Even though attempts had been made to test the degree of reproducibility, no existing standard of category formulation could be identified with an underlying theory that appropriately related the research problem or the context of this particular research data. For that reason accuracy as a form of reliability testing was not applicable to this study.

From the reliability tests described above, although the initial problems of inconsistencies and disagreements could be attributed to differing interpretations among the coders, content

classification schemes in general have also been found to have limitations that contribute to poor reliability (Krippendorff, 1980). Initially, ambiguities in the categorisation scheme contributed to misunderstanding and varied interpretations of the rules. However, these were resolved through modifications and re-testing of the rules to ensure standardisation in the categorisation process. The way in which categories were formulated, the language used, and the relevance to the context of the data had to be made clear and specific. Furthermore, as argued in the above sections, comprehensive explanations were vital in justifying and substantiating the scheme and the extent of inter-coder agreements. A diagrammatic illustration is presented in Figure 6.3 overleaf showing how the themes, categories and sub-categories interlink with each other. Capital Roman numerals have been used in labelling the themes, the main categories are labelled with capital letters and the sub-categories and related sub-divisions are labelled with small Roman numerals and small letters respectively.

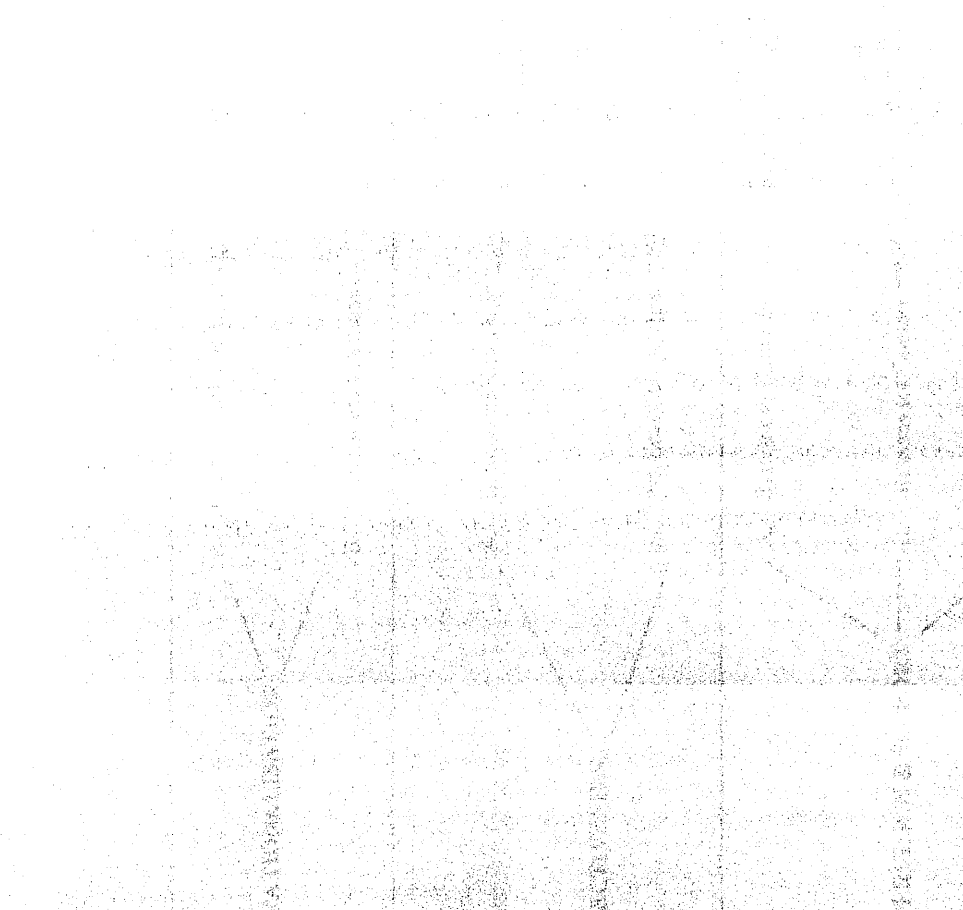
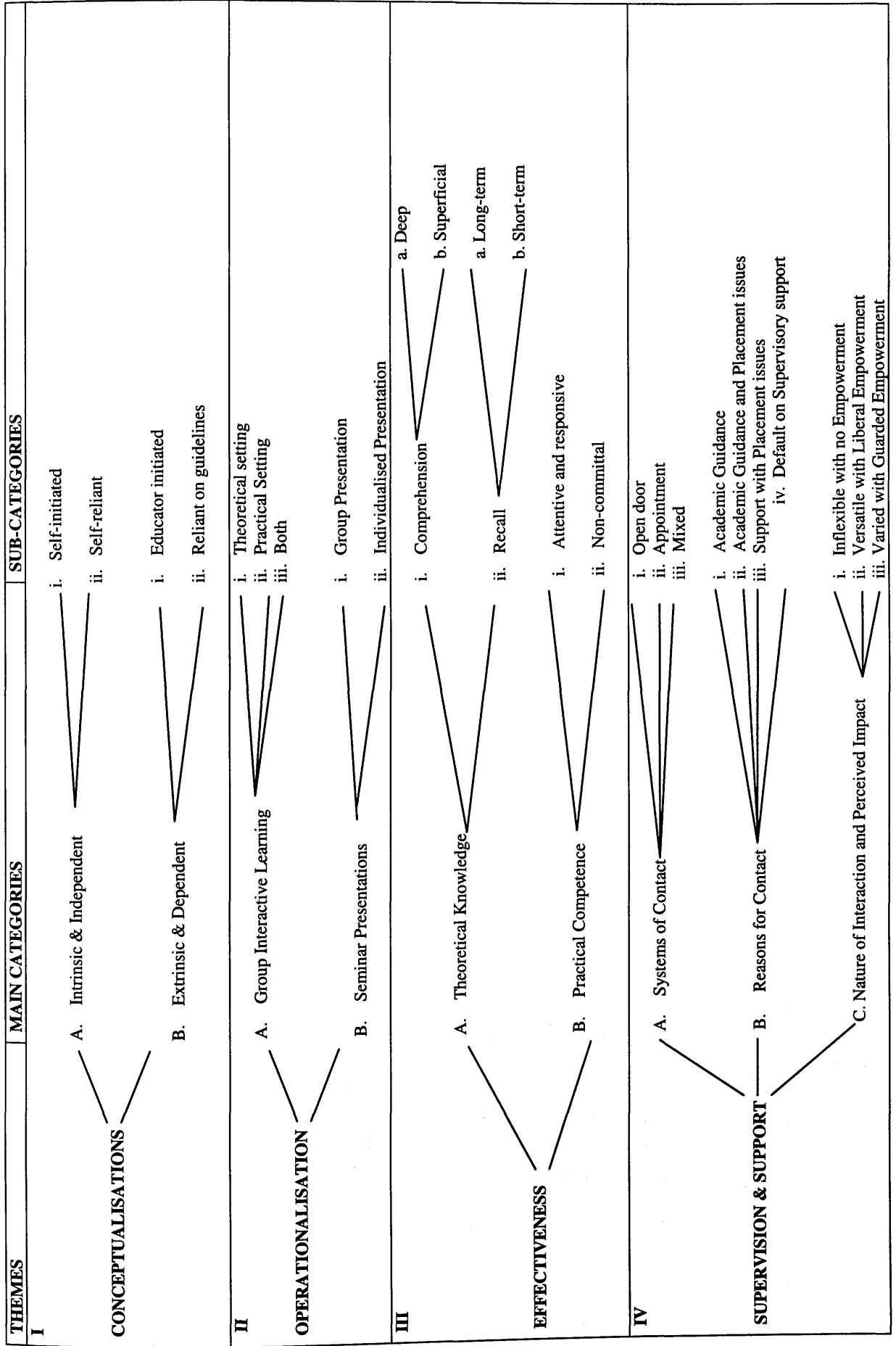


Figure 5.3 DIAGRAMMATIC ILLUSTRATION OF THE STAGES OF DEVELOPMENT AND INTERLINKAGES BETWEEN THE THEMES AND CATEGORIES



Summary

This chapter set out to explain the processes employed in developing the content classification scheme. The aim was to employ an adequately robust system of analysing the interview data. Therefore, the combined strategy of quantitative and qualitative techniques was used to capture the multi-dimensional perspectives of student self-direction in Nursing education.

In the processing of the data, as demonstrated in the relevant sections, the sources and formulation of the themes and categories were demonstrated and substantiated with direct quotations from the responses. The system of tabulation of the categories allowed for presenting the range of expressed views as well as the emerging patterns of respondents' self-directed characteristics. For example, from the theme Conceptualisation of self-directedness in learning the two main categories that emerged described Intrinsic and Extrinsic motivational behaviours. The sub-categories however, depicted the actual behaviours in specific terms and expressions describing the acts of personal decision making or reliant behaviours and the perceived control and responsibility for the learning process.

The theme Operationalisation of the learning approach encompassed the expressed views of the subjects concerning the techniques and various practices that were employed in fostering self-direction in learning. The intention was to explore how students felt about the 'self-directed' techniques to which they were frequently exposed in their learning activities.

The categories that emerged from the theme Effectiveness of the methods of application and the impact on students' self-directed learning behaviours, described the specific methods e.g. group interactive, seminar, reflective or negotiated learning contract techniques. Thus, apart from categorising the type of learning techniques, other sub-categories reflected the subjects' views and experiences regarding the frequently applied techniques. The assigned categories described the quality of learning gained by distinguishing between the degree of understanding, that is, thorough or superficial with long-term or short-term recall respectively.

The chapter also presents explication of the processes employed in the validation and reliability testing and the relevant rationales critically debated. The argument showed that whereas the processes of content and construct validation seemed feasible for this content analysis, the correlational and predictive processes did not appear to be applicable to this data. In relation to the reliability testing, while stability and reproducibility appeared feasible, accuracy did not.

The following chapters provide detailed explanation of the findings from the systematic processes employed in the content analysis of the interview data. The technique of chi-square statistical analysis was originally used to demonstrate the proportion of respondents who fell into each category and more importantly to try to establish the significance of the results and whether or not there were associations between the related findings. However, a notable limitation was that many of the calculations did not yield significant results because of the modest numbers of subjects involved in the study. Additionally, the numerous tables and related chi-square calculations have been omitted from this report as they were considered a potential distraction to the reader. It was therefore decided to present only the detailed narrative account of the findings in the relevant chapters.

CHAPTER SIX

THEME I CONCEPTUALISATIONS OF SELF-DIRECTION IN LEARNING

Introduction

A comparative analysis of the students' responses as articulated in the interviews is presented in this chapter. In the previous section, variations in the characteristics of the responses were established and relevant categories formulated from the identified themes. This section sets out to analyse the students' conceptualisations of self-direction in learning. The aims, therefore, were firstly, to present and explain the range of data obtained from the respondents from each year-group of students. The intention was to analyse the combined data from the first-year diploma and undergraduate students, followed by the second, third and fourth year-students. Specifically the aim was to demonstrate the distribution of the responses across the content categories and show what proportion of students from each programme fell into each category.

Equally importantly, it was intended to demonstrate the differences that emerged. For example, how big in proportion were the differences between those who portrayed characteristics of independent learning characteristics and those who portrayed dependent learning characteristics? Since the majority of responses fell into categories indicating constant dependence and reliant patterns of learning the question arose as to what the implications might be with regard to perceptions about first-year students' self-directed capabilities.

Secondly, the aim was to examine the data from each Diploma group separately from that of the corresponding Undergraduate group to obtain a picture of the attributes and patterns of self-directed learning within each group. This was to be followed by a comparative picture of the two groups of respondents at the same stage in their academic and professional education.

By comparing the responses from each diploma group with those of the corresponding undergraduate group, the aim was to demonstrate in what ways the self-directed characteristics of the first year diploma group differed from or were similar to those of the first-year undergraduate group. In doing these a more comprehensive and realistic picture of first-year students' self-directed profiles could be presented.

A third aim was to establish differences in self-direction attributable to academic progression and development of professional competencies. In order to generate realistic information about changes occurring as a result of this factor it seemed more appropriate to compare the first and final-year groups rather than every successive year of student groups. To that end the responses obtained from first and third-year diploma groups and first and fourth-year degree groups were examined to capture the differences in perceptions regarding self-directedness between the entry and exit stages of the educational programmes.

Finally, in an attempt to determine differences that occurred between the two extremes of student groups, the portrayed self-directed characteristics of the first-year Diploma group were compared to that of the honours level Undergraduate students in fourth year. The aim was to present the widest comparison of conceptualisations and reactions to self-directedness in learning to demonstrate the polar extremes of differences among the study participants.

Qualitative Content Analysis of the Responses from the Successive Year Groups

As indicated earlier the total number of first-year respondents in the study was 25, 15 diploma and 10 degree level students. This section discusses the range of responses from the combined group which fell into the different content categories. The discussion begins by examining, and analysing the responses from the entire first-year group of diploma and degree respondents followed by analysis of the responses within each separate group. Finally a comparative analysis is presented with particular emphasis on the emerging differences between the two groups of first-year students.

Relevant arguments are presented in explaining the stages of analysis, the different techniques involved and the underlying rationales. The analysis took account of the following main issues. Apart from the fact that the data were organised into categories three key intentions also applied.

i. To compare how many respondents reported learning characteristics which placed them in specific key categories portraying:

- Autonomous and Independent learning attributes

or

- Educator-dependent learning attributes

There was, however, a small proportion of respondents in the dependent group who conveyed a combination of dependent and independent attributes. This created a dilemma as to into which categories to place such respondents. In order to present realistic findings it was deemed feasible to create a third category rather than the original idea of placing those respondents into the dependent categories. Further detail of this is presented later. The third category was labelled:

- Mixed dependent and independent learning characteristics

Other rationales underpinning the analysis were as follows:

ii. To identify prevalent learning patterns and establish whether or not a difference existed between the groups with regard to how consistently they reported characteristics of *self-directedness* or constant dependence.

iii. To establish whether or not there was any association between various factors such as self-directed, independent learning attributes and

- age,
- current programme of education
- perceived impact of self-directed demands in the assessment strategies
- the nature of supervision practices,

In this case the intention was to establish whether or not there was any relationship between the respondents' conceptualisations of self-directed learning and the type of educational programmes in which they were engaged. Although the nature of the specific relationship might not be evident from these findings it was anticipated that that could be investigated separately in other future studies. Using the two main variables, student group and the categories of motivation exhibited, separate contingency tables were developed to compare the responses from each year group of Diploma and Undergraduate participants.

Qualitative Content Analysis of the Responses from the First-Year Groups

- Categories:**
- A. Intrinsic motivation with independent characteristics
 - B. Extrinsic motivation with dependent characteristics.
 - C. Mixed motivation with independent and dependent characteristics

The findings from the qualitative content analysis revealed that on the whole respondents were located either at the independent or dependent end of the spectrum with only a small proportion located midway between the two. Those at the dependent end were most likely to be diploma students, whilst the larger proportion of the Undergraduates were located at the independent end of the spectrum. When asked what self-directed learning meant to them, the reaction of some respondents indicated apparent inner conflict. They appeared to be ill at ease with the notion of student autonomy with control and responsibility over their own learning process. For that reason rather than self-directed learning, they opted to explain the concept of "directed learning" implying that the ultimate responsibility and control remained with the educators. They therefore portrayed not only an expectation for the educators to diagnose their learning needs and deficits but also reliant dispositions in their learning. Examples of the responses are used to support and explain the emerging findings. To ensure correct interpretation, the distribution of each student group was examined horizontally across the

rows to establish what proportion portrayed specific characteristics or dimensions of the given theme.

The content analysis showed that only a small proportion of the first-year Diploma students, 2 of the 15 students, conveyed independent learning characteristics. The majority, 10 students, conceptualised self-directed learning in terms of applying instructions and resources provided by the educator. For example:

Personally I need a lot of direction about the topic, project – whatever - before I can do it,...'cause I find it hard – you can't just get up and say – right, I'm going to study this or that. You need somebody to tell you ... what to go and read up, which aspects to concentrate on, what depth, where to look for the information - that sort of thing.

(1st Year Diploma student)

Being given an outline of a task. Self-directed learning means students being guided in their learning, being given the task and opportunity for support, then I'd go and research and report my findings. As long as I get the guidelines for the aim and where I am heading I'd feel very confident doing that.

(1st Year Diploma student)

By contrast, a larger proportion, 5 out of the 10 first-year Undergraduates, described self-directed learning in terms of self-initiated decisions and actions in the learning process. The responses conveyed intrinsic motivation with learners' readiness and willingness to take personal responsibility in self-diagnosing and fulfilling their own learning needs and deficits.

The following were examples of their interpretations:

Seeing a gap in my knowledge, going to the library filling that gap...not just relying on lectures, you really have to read further...taking it upon yourself to....

(1st Year Undergraduate student)

They clearly recognised that the onus was on the learner to identify and use the relevant learning resources. A motivation to review programmed topics before attending lectures was also reported, although by only one in five of the first-year Undergraduates. That characteristic was not portrayed among their Diploma counterparts. One respondent explained:

...got to read up for the lectures,...what I do is check the timetable, see which topic, then go and look it up in the textbooks and journals....

(1st Year Undergraduate Student)

In relation to dependence on educator direction, although 3 of the 10 first-year Undergraduates portrayed similar conceptualisations as their Diploma counterparts, they

nevertheless conveyed recognition that the responsibility for their own learning process largely rested on themselves. Individuals argued:

... you are given direction about the programme and you are expected to find out about it. Mostly, we do get direction and the reading material, which is what it should be. You have a large responsibility for your learning but to self-direct you need to be told what it is that you are expected to learn and how to go about it. You also need to be told if you learned it correctly...if you got it right.

(1st Year Undergraduate Student)

It means...being told what you have to learn and given guidelines to go and look it up yourself. I was quite frightened at first, doing it because the first year at University you don't really have a clue, and so I was a wee bit...scared at doing that myself...because the lectures...they didn't seem to relate to the subject.

(1st Year Undergraduate Student)

The small proportion, 2 of the 10 first-year Undergraduates, who were located midway between the two ends of the spectrum portrayed independent and dependent learning attributes. The content of their responses showed that they did portray an initial expectation to be told or guided about what topics or subject areas they were required to study. However, they also conveyed awareness of personal responsibility for the learning process and ability to take appropriate actions, including self-selection of the required learning resources, in fulfilling specific deficits. The initial dependence which they exhibited appeared to be associated with ensuring that what they studied directly drew from the curricular content.

The learning effort had to be perceived by them to be worthwhile and leading to achievement of the ultimate goals. That initial dependent characteristics could, therefore, be attributable to uncertainty and lack of familiarity with the curricular content. This probably explained why individuals conveyed a need for assurance that they were on the right track and studying topics that were pertinent to the academic and professional qualifications.

A lot of subjects,...they are different, you haven't done them before, so finding information on something I hadn't done before was quite scary. You have to make sure you're...learning the right stuff.

(1st Year Undergraduate Student)

Preoccupation with the related assessments also emerged as a key motivational factor that prompted individuals instinctively to engage in independent learning activities without expecting to be instructed or directed by educators. For example:

You get a list of topics, you're supposed to choose one and...go and work on it. I think it's good because if you self-direct you can understand it more. It...slots into place more and you do touch on other areas not taught in college. I did that with the nervous system, I did that and I was glad because then, when we did it in class it wasn't difficult...I could follow it 'cause I'd done it myself before we had the lecture and then it came up in the exam.

(1st Year Undergraduate Student)

The response quoted above conveyed a mixed attribute of dependence and independence.

On the one hand, there appeared to be a lack of spontaneity in the initial diagnosing of the learning deficit and the identification of the relevant topics to be studied. The educator initiated and acted on those decisions. However, the students' responses also conveyed unprompted decision-making and spontaneity in the subsequent actions taken. They recognised their personal responsibility for their own learning process and were prepared therefore, to expend further effort in fulfilling all the related aspects of the learning. Contacts with personal tutors and/or supervisors were discretionary and self-determined with the assurance that "...there is help if you need it."

In the above response recognition of the lack of knowledge about the nervous system and the personal decision and actions taken to fulfil that learning deficit, were clearly unprompted, but reliance on lists supplied by educators was also implied. Nevertheless, such responses were also placed in the category of intrinsic motivation with independent attributes based on the argument that both groups of respondents reported certain similarities:

- a. They both reported a conception of self-directed learning as involving learner's personal responsibility and control over his/her own learning process.
- b. Both groups indicated perceived readiness and ability to identify subsequent learning deficits that they encountered, select the relevant resources and implement the desired learning tasks without the educator's prompting or instructions.

The combined findings showed that 5 of the 15 Diploma students fell into the category of independent learning characteristics with ten students indicating characteristics that are more dependent. Among the first-year Undergraduates, whilst 7 reported personal decisions and

actions in their conceptualisations, only 3 of the 10 students portrayed dependent learning attributes.

The findings from this qualitative content analysis revealed that the first-year Diploma and Undergraduate students did not differ in their conceptualisations about self-directed learning. Since the two programmes operated on the same directives from the professional statutory authorities, the question arose as to whether or not the students' conceptualisations were influenced by the ethos of the profession itself.

Qualitative Content Analysis of the Responses from the Second-Year Groups

The overall picture showed that similarly to the first-year students, the second year respondents were also located at the independent or dependent end of the spectrum. Again, a greater proportion of the Diploma students was noted to be located at the dependent end of the spectrum. Reading across the rows and focusing on each student group in turn, the findings revealed that only a small proportion, 2 of the 15 second-year Diploma students portrayed independent learning characteristics. The following were the ways in which they conveyed their perceptions and self-concept in the self-directed learning situation:

It means sort of going away and doing extra work by yourself, looking out for topics that you haven't always covered in class or that you haven't covered fully in class. Well – the essay I'm doing in Adult Nursing at the moment wasn't actually covered in class, the subject, but that was what I wanted to do. I selected the topic myself. I don't know – it just seemed ~ interesting to me so I decided to do it. ...I felt confident but I just checked as well – just to make sure it was going to be within what we were supposed to be doing.

(2nd Year Diploma Student)

...I've also, you know, did things that I'd missed in class. I didn't want to have to go back and do the whole block so I did it myself, ...from...textbooks...it was mainly because I'd missed it and obviously because I thought it was quite important that I had to know it and I didn't want to just take someone else's notes or whatever, so I thought I better learn it myself and so, ...I went to the library and got some books....

(2nd Year Diploma Student)

Approximately half of that group, 8 of the 15 students, interpreted the concept in terms of students working on instructions and resources provided by the educators.

Well... from experience here – it's just really... we'll be told certain topics... a topic and learning outcomes that at the end of studying it we should know, and... with these topics and list of references whatever, we have to go about it our own ways and find things out in the library and stuff like that... there's been a few things that we've been told to study on our own that we were to bring back into the classroom and... discuss as a group.

(2nd Year Diploma Student)

...to me I believe that it is getting a topic then going and researching it to as much depth as you are capable of doing. ...it depends on the situation. If you're given a topic you develop that and you go and do your directed study for that...but if not...if you're allowed to go and pick a topic, then you...just go and pick whatever topic and you research it yourself. I did that for cystic fibrosis.

(2nd Year Diploma Student)

The remaining 5 of the 15 second-year Diploma students described mixed independent and dependent learning characteristics as the above responses conveyed. By contrast, there was balance between the proportion of second-year Undergraduates located at the independent characteristics end of the spectrum and those located mid-way at the independent and dependent characteristics point of transition. These accounted for 4 out of the 10 in each case showing a 10% increase in the proportion of second-year students who described independent learning characteristics For example:

It's learning that you decide to do yourself, like if you say, I want to learn about this topic, you go and do it, nobody tells you to do it. ...it's doing precisely what you need to learn and filling your gaps in your understanding, going to the library, ...there was one place you had to go and find the topics for the lectures, so you can do that sort of thing.

(2nd Year Undergraduate Student)

The above response from a second-year student portrayed recognition of self-reliance and awareness of personal responsibility in the learning process. However, there were other responses which, while conveying that recognition, still described dependence on the educator to determine and direct fulfilment of the learning needs. The following is an example:

...we're given a topic by a tutor to go and do the background work and we're supposed to come back and...give feedback. It's like a goal to work to... But I think self-directed learning is also being motivated to learn or teach yourself something. Like for instance, I learned a lot about wound care from the computers and I also got information from things like charts and the reps' products and then when I did my presentation and produced the different things to the class I felt quite satisfied with myself.

(2nd Year Undergraduate Student)

In the above examples, although the respondents conveyed initial dependence on the educator to either tell or guide them about what subject area or topics to learn, they also reported an inclination to take some initiative. Individuals portrayed some degree of willingness and the capability in certain situations to identify topics of personal interest and select the relevant resources for the learning process. Furthermore, they indicated independently planning and

implementing the related learning tasks. This partial acceptance of the responsibility to take measures in rectifying personal learning deficits was similar to that reported by the first-year respondents who fell into the mixed category of independent and dependent learning attributes. Similarly to the result of the analysis of the data from first-year students, the conclusion drawn from the result of the second-year students' data was that there was no relationship between the educational programme being undertaken and their conceptualisations of self-directed learning. The next section presents the analysis of the responses from the third-year Diploma and Undergraduate students.

Qualitative Content Analysis of the Responses from the Third-Year Groups

Although the distribution of the third-year students across the categories did not differ significantly from the second-year students, there was a notable difference, nonetheless in the manner in which the third-year students articulated their interpretations. Typically, those who fell into the independent and mixed categories portrayed spontaneity in their responses with regard to how they determined and set about fulfilling their own learning needs. For example:

Self-directed learning is when you go away and study something by yourself. ...we hadn't had anything about diabetes, if you do come across it, and it's on the ward, well, when you're on the wards you want to gain a bit of knowledge and understanding of what the patients have...you want to be a better nurse, and for your own sake as well.

(3rd Year Diploma Student)

These respondents made it a point of explaining the motivational factors that prompted their decisions and learning characteristics. Individuals demonstrated increasing awareness of the relationship between theory and practice by explaining actions taken when they encountered unfamiliar clinical problems. The responses conveyed a characteristic preparedness to take personal responsibility for acquiring the professional knowledge and competence that would enable them to function effectively. The following was a response portraying the kind of mixed independent and dependent learning attributes that differed from the ways in which the second-year students expressed their conceptualisations.

I think it's when you're given basic information but you have to go and learn it in a way, which will make you understand it.... There's been things which I've seen in the clinical areas which we haven't actually covered in university and I've gone over it myself, because I want to find out more about it even though we have not actually done the theory. Because I feel that a lot of times, ...we would see things

out in the clinical areas that we hadn't been taught about and we would have to go out and learn for ourselves. I think you have to do that just so you understand and you can relate the theory to the practice situation, which seemingly does help you remember it. Well, if I've been out in the clinical areas and I've seen something, I'll go home and look it up and I'll maybe make notes and then bring it back to the mentor the following day and show her what I've learned to see if I've learned it correctly.

(3rd Year Undergraduate Student)

The manner in which the third-year students used their own experiences in portraying self-directedness in learning implied a change not only in their perceptions but also in individuals' reactions to this mode of learning. They also conveyed less reliance on educators and institutional provisions as the primary resource for professional knowledge and skills. Individuals described their inclination and capability to independently identify and explore varied resources as they evolved from the initial stage of dependency. The need and expectation to be prompted, directed or instructed at all times became replaced by a different kind of incentive as portrayed in the following response:

...it means just going out and finding information on your own. You're in University now, you should be able to do your own studying without being told every time what to go and study. Some things we get the basics. It's good as a guideline but you also have to do a lot on your own. I looked up homeopathic treatment and aromatherapy. ...because it's different from the conventional treatments. ...I went to a nursing exhibition last year and there was an aromatherapy stand and I got information from there, which led me to find someone who lives in Newton Mearns and she sells oils for pregnant women. I have learned quite a bit, on my own, about this treatment and I would like to go to Glasgow for my alternative placement.... It gave me a great deal of satisfaction...going to find out, not only the fact that I was interested in the subject but actually having the motivation to go and do it. I am quite satisfied that I've done it all on my own.

(3rd Year Undergraduate Student)

The findings from this content analysis indicated that while the proportion of Diploma students located at the independent end of the spectrum remained unchanged, there was a notable increase by 20% in the proportion that conveyed mixed learning characteristics.

A similar pattern of distribution emerged among the third-year Undergraduates with a constant proportion at the independent end while the mixed attribute end showed an increase by 10%. Only one in ten of this group indicated a consistent reliance on educator direction in their conceptualisations. Similarly to the preceding groups, there was no relationship between the educational programmes in which they were engaged and the third-year students' conceptualisations of self-directed learning. It also indicated that there was probably no

significant difference in the Diploma and Undergraduate students' perceptions and reactions to this mode of learning as they progressed towards the final stage of their professional education.

Qualitative Content Analysis of the Responses from the Fourth-Year Students

The responses from the fourth-year Undergraduates were analysed in isolation, as there was no counterpart Diploma group with whom to compare. The intention was, nonetheless, to compare their conceptualisations to those of the first-year groups. It was anticipated that this might help to establish whether or not and to what extent educational progression might have influenced the students' conceptualisations of self-directed learning. To that end, the responses from the first and fourth-year Undergraduate students were examined across the content categories.

Comparison of the Polar Groups of Students

The content of their responses suggested that a large proportion, 6 of the 10 fourth-year Undergraduates, were located at the independent attributes end of the spectrum. Again, the characteristic portrayal of personal responsibility and the need to make immediate application of the learnt theory were notable in the ways in which they used their personal experiences to illustrate their conceptualisations. The following response was an example of the consistent reference to rectifying knowledge deficits to make better sense of clinical problems and the nursing interventions employed.

I think it's in relation to trying to learn more, ...study yourself...go and follow up different lines. I looked up something on radiotherapy ward. I think it was looking after the patients at that stage and not really fully understanding their treatment, and I thought, well, ...to give them the best care then I had to take that initiative to find out why they were feeling the way they were, the symptoms they were experiencing, just what their treatment involved. ...it gave me a better picture of their care and why the staff were doing what they were doing.

(4th Year Undergraduate Student)

Moreover, relevance to the curricular content and the need to be able to function effectively in the professional capacity emerged as equally major concerns for this group of final phase students. As one individual explained:

It means just going yourself and finding out what you need to know and use it in relation to what you're doing in the course.... It's got to be that what you read about is something that you're working with, conditions that you are nursing in the clinical area or a procedure which is used in the ward, and I read up on that before I go.

(4th Year Undergraduate Student)

Another emerging difference in these responses as compared to those of the first-year students was the motivational factor involved. Whereas the first-year independent attribute group implicated course assessments as their main incentives for engaging in self-directed learning activities, the fourth-year students' conveyed different preoccupations. The following response portrayed the recurrent incentives, that is, knowledge deficit, need for immediate application, relevance to the curricular content as indicated above.

...basically it's when you take it upon yourself to learn something. For me it was TPN, (Total Parenteral Nutrition) we had a lot of them in the ward, the sisters there had no protocol, nothing, I asked but people were telling me verbally but that was no use. So my preceptor suggested I did a project. It was such a vast subject so I decided to look at what was there in the ward, look at the information about the patients' conditions, assessment of the patients' nutrition, go into more depth – that sort of thing. I felt it was beneficial for myself. It was something I wanted to do

(4th Year Undergraduate Student)

Fulfilment of academic and professional curiosity also emerged in the fourth-year students' explication of self-directed learning. Not only did individuals convey a need to find answers to questions such as why the patients felt or behaved the way they did and why the staff took certain decisions and actions but also for their own benefits, implying future professional practice. Taking account of these the following section presents a critical analysis based on the nature of responses to establish whether or not there might be an association between progression in terms of stage of education and students conceptualisations of self-directed learning.

The qualitative findings from this section of the content analysis indicated that among the two extreme polar groups, first-year Diploma and fourth-year Undergraduate students, there was sufficient evidence that progression influenced individuals' conceptualisations of self-directed learning. Where the participants of this study were concerned, the views and reactions of the Honours level Undergraduates regarding self-directedness distinctly differed from those of the first-year Diploma students. The same content analytic process was employed to establish

whether or not this argument applied to the first and final-year students within each programme.

Comparison of the First and Third-year students in each Group and the First and Fourth-Year Undergraduates

The within-group results indicated that similarly to those for the first and fourth-year Undergraduates, the findings from the first and third-year students on each educational programme did not show a relationship between progression and stage of education and students conceptualisations of self-directed learning. This raises the question as to whether or not this could be associated with an inherent cultural factor specific to the educational programme.

Summary

This chapter set out to examine and compare the Diploma and Undergraduate students' conceptualisations of self-directed learning. The content analysis of the responses suggested the following:

- There was no relationship between students' interpretation of the concept and the programme of education being undertaken by them.
- Nevertheless, certain consistent differences were notable between the two groups of students in that the Diploma students, on the whole, appeared to portray greater dependence on educators' control and direction than did their Undergraduate counterparts.
- There was supportive evidence however, that for the extreme polar groups, the first-year Diploma and the fourth-year Undergraduate students, progression probably influenced students' conceptualisations. However, this could be a composite effect of smaller differences between the years of progression as well as the type of programmes in which these students were engaged rather than any single isolated factor. Therefore student perceptions and ability to function in the self-directed capacity appeared to be influenced

by multiple factors including academic maturation and development of professional competence.

CHAPTER SEVEN

THEME II OPERATIONALISATION OF SELF-DIRECTED LEARNING WITHIN THE DIFFERENT EDUCATIONAL SETTINGS

Introduction

A comparative analysis of the views of the Diploma and Undergraduate students as articulated in the interview responses is presented in this chapter. Its focus is the implementation of the different learning techniques designed to promote self-direction in learning. The main intentions of the analysis in this chapter were as follows.

- To determine how familiar the students were with given self-directed learning techniques and how at ease they felt with the implementation of these in their learning process.
- Of equal importance, the analysis explored in what learning situations students might spontaneously embrace specific techniques in their learning activities. The intention was to deduce from that information which techniques might be independently employed by individuals in their future professional education.
- Furthermore, the analysis sought to establish who generally determined what learning techniques to employ and took primary control over decisions concerning the implementation process. Also addressed was the question of whether the source of control and the method of implementation influenced students' attitudes and reactions to specific techniques.

The Students' Perceptions about Implementation of the Group Interactive Learning Technique

Perceptions of the Diploma Students

The content of the responses revealed that group interactive learning was the most regularly implemented technique in the Diploma programmes. Seminar presentation was also reported but student exposure to that mode of learning was perceived to be relatively sporadic. The

responses cited below represented the ways in which the Diploma students expressed their views regarding how regularly the two techniques were implemented in their programmes.

Well, we've got presentations this week.... Thanks goodness we only have to do one seminar...we hardly do seminars.

(1st Year Diploma Student)

We do a lot of group work...I would say that we're always doing group work...not so much seminars but, yeah, quite a lot of group work. ...I think we've, so far, only done two seminars ...if we can call them that. Yeah, just the two times when we presented different bits of the topic. But it was quite all right, I think...certainly our one went quite well.

(2nd Year Diploma Student)

Perceptions of the Undergraduate Students

In contrast to the above, the first and second-year undergraduate students reported that the two techniques, group interactive learning and seminar presentations, received equal emphasis in their programme. Thus unlike the Diploma group, the Undergraduates were required to do relatively more seminar presentations during their first and second years. They felt that this pattern arose from discrete decisions in the different divisions about the assessment of specific modules rather than giving consideration to the overall workload on the students.

The following were typical responses indicating frequency of exposure to the two techniques.

I think, well, to me I can't remember ever getting...seminars as they do in this university and I think they give us a lot. I mean from the different modules.

(1st Year Undergraduate Student)

...We get seminars from all the lecturers – well when I say all, I mean the majority, and they're all different...from different subjects...nursing, behavioural sciences, life science....

(2nd Year Undergraduate Student)

The third and fourth-year Undergraduates reported two factors that distinctly differed from years one and two in their exposure to self-directed learning activities. One of the main differences, as indicated in the following responses, was that more self-directed learning was required of them as the course progressed.

When I think about it I know in second year before Christmas we had quite a lot but this year it seems even worse.

(3rd Year Undergraduate Student)

A lot, actually, quite a bit of the theory involves self-directed things and in the past couple of years, in year three and now in year four there's been lots more self-directed.

(4th Year Undergraduate Student)

In year four a lot, especially in what we've tried this year with the first three weeks before Christmas, I mean it was basically all self-directed learning, presenting things as well as the research things.

(4th Year Undergraduate Student)

This late-phase Undergraduate group described additional demands on them in their seminar presentations. Rather than the group seminar technique reported by the first and second-year students, they reported being exposed to individualised seminar presentations in which each person functioned as the sole presenter. Nevertheless, despite the apparent anxiety the students responded positively to the associated demands. They, in fact, indicated that the technique influenced their reactions by encouraging them to devise their own creative strategies for dealing with the demands of those learning situations. The following were typical responses.

A lot of times you do the seminar and it's just yourself presenting. ...it can be really anxious... I actually feel better with a group.

(3rd Year Undergraduate Student)

Sometimes, not often, but sometimes I've seen us presenting to the class just us, and there's no lecturer there but the class will fire questions at you. It can be really hard going but in fourth year, you're supposed to be at the stage where they expect you to do... your own stuff, like choose your own topic, and it's got to be relevant otherwise nobody's going to listen to the presentation.

(4th Year Undergraduate Student)

Everybody's got to do it, eventually, and so it's...you have a responsibility to the class...and after presenting, you get them to ask you questions. If it's two of you it's not too bad but... it's just yourself.

(4th Year Undergraduate Student)

These responses somehow helped to establish how the Diploma and Undergraduate students compared in terms of the extent to which each group was exposed to the implementation of this technique. It was also possible, as demonstrated above, to determine how the two groups differed in their reactions the group interactive technique of learning.

The Students' Perceptions about Implementation of the Seminar Technique

The aim was to establish whether or not there was an association between students' exposure to a particular practice of implementation of the seminar technique the educational programme in which they were engaged. The two variables examined were Implementation Practice and the Student Groups.

The findings from this qualitative content analysis indicated that where seminar presentations were concerned, there was a relationship between the implementation of the technique and the educational programme being undertaken. The suggestion was that the students engaged in the Undergraduate programme were more likely to be exposed to individualised seminar presentations. As previously demonstrated this phenomenon was associated with the stage of education because the responses indicated that more frequent exposure to individualised seminar presentations occurred during the late phase, third and fourth years, than during the early phase. The other emerging difference concerned the degree of control and responsibility allowed them. However, before analysing the student's perceptions about personal responsibility their views about the feasibility of the different techniques were examined as follows.

The Students' Perceptions about the Practicability of Group Interactive Learning and Seminar Presentations within the Theoretical and Practical contexts of Learning

The implication from the students' responses was that the environment of theoretical learning was more conducive to the application of group interactive learning and seminar presentations than were the practical settings. The students evidently based their opinions on whether or not they were familiar with the specific technique and the setting(s) within which they had been exposed to its implementation. Generally, their exposure to group interactive learning and seminar presentations occurred within the college settings.

The following narrative account presents the separate findings for the Diploma and Undergraduate groups regarding their perceptions of the applicability of the different techniques within the theoretical and practical settings. The distribution of each group of students across the different categories are now examined.

- Categories:**
- A. Applicable in only the Theoretical Settings
 - B. Applicable in only the Practical Settings

C. Applicable in both the Theoretical and Practical Settings

Differences between the two groups showed that 8 of the 45 Diploma students described the ward areas as equally appropriate for group interactive learning activities. However, none of them considered seminar presentation in those settings to be practicable. As one student explained:

I think group work in the college works better. ...but in practice placement – I mean you can't have group work – it just won't work. I mean... people go on different shifts, and I mean, some placements there might be two or three of you but usually you're on different shifts. Even when you meet...you can't go off and do that sort of thing because it's busy, – or... the preceptors want you to go and do something or see something. ...We never get to do group work when we go out on placements the way we do in college. It's the same with seminars we've never done them in the wards. ...I mean it's possible to be working on a topic that...you do your research and things like that for presenting when we come back to college but they don't get us to present seminars when we're out there. I don't think the ward areas are suitable for that sort of thing.

(3rd Year Diploma Student)

Among the Undergraduate students, only 7 of the 40 students in this group perceived the clinical settings as appropriate for group interactive learning activities. The proportion that considered those settings as conducive for the application of seminar presentations was even less, only 5 out of the 40 students. One student stated:

We get quite a lot in college – we don't, actually, do group work in placements. ...I think it would be very difficult to get the work done if they give you group work when you're working in the wards or out in community placement. ...You don't have the same contact with the rest of your class. ...You also need somebody there, to see to it that groups are doing what they are supposed to be doing. Then there's the feedback session and all that, but if the tutors are not there and the preceptors are too busy I can't see group work happening. You need somebody there to guide the groups and...listen to feedback. I would say that if they gave us seminars there would be real problems. They're far better done in the University when everybody's around.

(3rd Year Undergraduate Student)

I think probably having group work type of discussion, learning in the wards might be good. If we... discuss some of the conditions and the procedures and things like that. But I also think that would be difficult because of the shifts and...also because you never know when the ward's going to be busy. I think it would really depend on which ward we're meant to have the group work. I can also see a few problems...like the lecturers don't come to the wards very often,...fair enough the preceptors are there, we've all got our own preceptors, but...everybody might be...doing something different with their own student and so I really can't see any of them organising group work or coming to listen to us presenting seminars.

(3rd Year Undergraduate Student)

The responses revealed that where group interactive learning and seminar presentations were concerned the students associated applicability of the technique in the practical environment with availability and involvement of their own peers. Therefore, although it could be argued that the practical settings offered the ideal learning resources, such as actual clients and patients with actual clinical problems, a large proportion of the students did not describe the

ward areas as conducive to the implementation of the two techniques. Two factors emerged from the responses as hindering the use of group interactive learning and seminar presentations in the practical settings. One factor was that it was not possible for peer groups to meet for the interactive learning activities because they were allocated to different shifts. The other factor was that the lecturers only visited sporadically and were not readily accessible within the practical settings to co-ordinate, supervise and evaluate the learning process. This finding indicated that generally, students did not spontaneously organise group interactive learning activities independently of their educators.

The Students' Perceptions about Implementation of the Technique of Negotiated Learning Contracts

The responses revealed a significant lack of student exposure to negotiated learning contracts. Most of the respondents who reported some degree of familiarity with this mode of learning were from the Diploma group. They accounted for 9 of the 45 students, 4 of whom indicated only sporadic exposure to it. In each case the respondent described the implementation as having occurred in the clinical settings and having been initiated and controlled by the preceptors. The following responses convey those perceptions.

Yeah, I vaguely remember them mentioning it at the induction when we started the course but there was so much to take in, I forget what was said about contract learning. I don't think that would appeal to me. Certainly nobody's ever mentioned or... given me a contract to sign that ...I must learn something. You ... you do get asked to go and look up something and maybe write down and then come back and...they check that you got it right – I've had that but it didn't involve – I mean there was no contract or anything serious like that. I can't really say that it works better in college or the wards because as I say I haven't really had that before.

(2nd Year Diploma Student)

What – do you mean...a real contract that they get you to sign? ...no I can't say that I have heard that way of self-directed learning. I ... don't think I like the idea of a contract. I think it would put you under pressure. I think I would feel harassed and stressed if somebody forced a contract on me. I think I might even resent it and to be honest I can't see it working.

(3rd Year Diploma Student)

This pattern was similar to that reported among the Undergraduates who reported familiarity with the technique, 5 of the 40 students. Only 3 students from the entire group of respondents claimed to have had actual exposure to its implementation within the practical settings. Individuals were, therefore, unable to comment confidently about the feasibility of the

technique within the different learning environments. The following example represents the views expressed about negotiated learning contracts.

I think it's where... you want somebody to teach you something and you set a time and meet and ...you both agree to do it... you agree to ...meet and the time is set aside and they try and keep the appointment to be there ...to teach you or show you how to do something. I'm only guessing because I haven't done it myself but I think that's what it would involve. ...I think it would probably work if we had that with the personal tutors and I also think if the preceptors did that then you would get all your objectives.

(2nd Year Undergraduate Student)

It was evident from the responses that the concept was loosely interpreted and the implementation practices varied widely. The practices described did not portray full and active participation of the students with joint decisions between supervisor and supervisee. Nevertheless, some educators were reported to allow varied but minimal degrees of student involvement in aspects of the related decisions. Clearly, the practices portrayed misconceptions and indifferent interpretations of negotiated learning contract.

Conventionally negotiated learning contracts entail mutual agreements between students and their academic or practical supervisors. The process requires the drawing up of a learning contract but more importantly the technique allows for students to actively share in the control over decisions about their own learning process. It should, therefore, encourage students to take primary responsibility in identifying their own learning deficits and fully contributing to the related decisions. Therefore, students and educators must effectively collaborate in setting the expected goals and learning outcomes. Additionally they should come to an agreement about the choice of learning resources. Evaluation of the learning is also achieved through similar collaboration (Spradley, 1981; Knowles, 1986).

However, as the content analysis revealed, not only was the contractual element disregarded in the interpretations but other essential elements of the concept were also omitted. The responses implied negative reactions to the technique mainly because individuals felt threatened and intimidated by the idea of engaging in a contract. Since the students and their

educators shared similar reservations to enter into contractual arrangements, it could be argued that the degree of commitment described was obviously not binding.

Nature of the Negotiations

Generally, the process described involved the preceptor determining the specific learning deficit or asking the student to indicate his/her learning need. The need identification was based on the prescribed practical objectives and learning outcomes for that area of practice placement rather than an independently determined learning deficit. A typical practice scenario is presented below.

Contract learning it's not a thing that they do in placement. My mentor in community, when I started my community placement – she...looked at my blue book, looked at all the learning outcomes – like the community outcomes, then she sort of told me what we – I had to achieve and things like that. She sort of said – like we'd get this and that done this week and that done next week so she sort of worked through my objectives in the blue book – but there was no big deal ...contract the way you put it. But she sent me to go and research on something before. She asked me something about a procedure, and I didn't know because I hadn't seen it done before. So she sent me to look it up then we...discussed it the next shift.

(1st Year Diploma Student)

The organisation of the learning process was also described as being mainly controlled by the preceptors who determined when and where the associated learning activities took place.

Student contribution to the related decisions was evidently minimal. The responses presented below were typical of the opinions expressed.

Yeah, I had that once when I was in surgical. My preceptor was really great. We went through my objectives and then we both agreed on... what I had to achieve. Then he ... we ticked off the things that I hadn't done before, and I was given the chance to say what I hadn't been shown...how to do something ...you know a procedure or something. So he said, Right, go and find out when this patient needs to have that done next time, ...we set the time and everything and...that's how he showed me how to do things.... That...was the only ward I had that sort of arrangement... I think that helps to get your objectives. We both...he had committed to teach... and he kept his promise and I kept my part, sort of thing. ... I didn't have to sign anything.... I don't think you need to be made to sign a contract to gain your knowledge...I doubt that it would work.

(3rd Year Undergraduate Student)

Often what I do is I let them know what I need to achieve whenever I start my placement. Then I sort of arrange...I approach someone to show me, most of the time it's been my preceptor but sometimes it's the staff I'm working with. It works if the ward's not too busy, but then again...if they're too busy then you can't get them to teach you. I would call it arranged teaching but, it depends, even if they promise to teach you,... you may not get taught what you arranged if the person is not interested or if the ward gets busy. If it's a busy area then you can forget it, 'cause nobody will have time to do arranged teaching, it's not possible. We do something like that, in a way, with the project tutors but again they don't make you sign a contract or anything.

(3rd Year Undergraduate Student)

None of the Diploma respondents described exposure to negotiated learning contracts in their interactions with their academic supervisors and therefore could not appraise its feasibility within the college environment. However a considerable proportion, 20 of the 40 Undergraduates, mainly the third and fourth-year students described a pattern of negotiated or arranged consultations with their project supervisors. Although the content of the responses indicated varied practices, the findings suggested that generally the students initiated the negotiations. They contacted their academic supervisors with self-determined learning needs but the actual control of the interactions, the direction, and decisions about the outcome of these varied with the educators. For example:

We don't do real contract learning with the project supervisors but sometimes you want to go and see them for a wee help...clarification about your project. Maybe the guidelines are not very clear...you phone and go and see them for clarification...what exactly is expected...or find out if you're on the right track. Then they'll maybe ask you to...let them see what you have done before you go on with the next bit. So you're given another appointment and you maybe try and keep it. They'll maybe write down what you discuss when you see them but we don't sign – there's nothing in writing about a contract.

(3rd Year Undergraduate Student)

Rather than devising a contractual strategy, the essence of the interaction as portrayed in the above response enabled students to seek academic guidance from their project supervisors. However, similarly to the misconceptions noted within the practical learning environments the practices within the theoretical environments were devoid of the essential elements of negotiated learning contract. The next section of this content analysis deals with student perceptions about the implementation of the reflective learning technique.

The Students' Perceptions about Implementation of Reflective Learning Technique

In contrast to negotiated learning contracts, the respondents reported fewer reservations about reflective learning. The responses revealed misconceptions about the technique of reflective learning as a way of self-directedness. The expressed views indicated that application of this technique was more prevalent in the undergraduate programme than it was in the diploma programme. Both groups described what they perceived as reflective learning sessions usually taking place within the college or university environments. Only a small proportion, 9 of the

45 Diploma respondents, reported occasional reflective learning sessions taking place within the areas practical learning. A large proportion, 36 students from this group did not readily recognise the concept and therefore could not describe the process involved. However, once the interviewer explained the concept to respondents they were able to substitute the familiar terminology, that is, feedback sessions, and describe the ways in which the technique had been interpreted and implemented in their programmes.

Yes, I've had that before. I take that to be...the feedback session, which you have at the end of placement and the preceptor asks you, how you feel you've done in that area. I see it as the time when, I suppose you use your assertion to make points that...you feel they could have done more for you, or how you feel they could have helped you. It can be nerve racking. I think it depends how well you think you've done yourself. It can be nerve racking but they're good. We don't have them formally in college, just informally...after coffee break if you happen to meet somebody then you might talk about something that happened in the ward, things like that.

(1st Year Diploma Student)

We did a bit of feedback sessions in first year but we don't get them any more. I didn't find it useful because it was always...a waste of time. It was just, How did you get on, how did things go? There was no time allocated for that either so you didn't learn anything just people moaning about their placements.

(2nd Year Diploma Student)

Another finding was that the Diploma respondents described their reflective sessions as events, which occurred when they returned to college at the end of the period of placement. It was obvious from their responses that the group reflective sessions to which they were exposed were relatively sporadic and unscheduled. For example:

Not really, no, there isn't an arranged session although we do all talk about things to each other...look what happened to me...informally if there's been a problem of some kind with a particular...placement in a particular area.... Hopefully people with the problem will come back at the beginning of the four weeks and not at the end of it when it would be too late to do anything about it, but there isn't an actual time when we finish a placement that we are allocated time to say, Yes, I've had a problem with this, or looking back, Yes, it was a good experience. As a learning experience I don't think we learn anything very much from those sessions. I think it's more a case of learning...you might have an absolutely rotten time but other people have too and come through it, and you will too...and it gives you a wee bit, kinda confidence again

(3rd Year Diploma Student)

Unlike their Undergraduate counterparts only a small proportion of this group described individualised reflection with their preceptors. The findings from the Undergraduate respondents showed that while certain implementation practices were similar there were also certain distinct differences from those reported by the Diploma group. The Undergraduates referred to their reflective sessions as Half study days and described formally scheduled times on specific days during the week when these took place, that is:

Yeah, we do have days when it's arranged...for us all to come in and just so everyone can see how each other's getting on. We are supposed to meet for half study days every week but some folks don't bother.

(3rd Year Undergraduate Student)

Similarly to the Diploma group the actual venue for these arranged sessions of reflection occurred in the theoretical setting of the college "... we also get the half study days in college...."

(1st Year Undergraduate Student)

The nature of the interactions in terms of format and the issues that emerged were similar to those portrayed by the Diploma group. The Undergraduates also perceived sessions which took place within the college settings as opportunities for expressing personal grievances. Therefore, they tended to focus on problems encountered in their placement experiences as opposed to appraising all aspects of their professional socialisation with patient and client care situations as the central theme. The following were typical responses.

...usually we just talk about what placements we were on and then what the different places were like and...whether we were enjoying it or not. I thought it was quite good because we were getting to hear what everybody else was experiencing....

(1st Year Undergraduate Student)

The half-study days we talk about this and that...like how everybody's getting on etc. and people go on a bit if they've had...problems...like having problems with the preceptor or a particular staff.

(2nd Year Undergraduate Student)

We just...talk about different experiences we've had and things like that. I think we do gain from it because you're learning from other people's experience and if that experience happens to you then you'll maybe know how to deal with it better.

(3rd Year Undergraduate Student)

Similarly to the Diploma students, the Undergraduates described informal reflective discussions during their social encounters. However, the spontaneity of this activity was in contrast to their perceptions about other forms of group interactive learning activities in which they invariably saw a need for educator control and direction.

We do it ourselves when we go out; we sit and talk about it all the time....

(3rd Year Undergraduate Student)

All the Undergraduates who reported exposure to the reflective learning technique within the practical settings, described these as part of their day-to-day interactions with their preceptors

which usually occurred on a one-to-one basis. These were generally initiated and controlled by the preceptors. However, a small proportion of respondents did indicate that occasionally some form of group reflection did take place when their personal tutors visited them during practice placements.

... sometimes some of the preceptors do...if quite a few things happened in the week...then when it's not very busy they'll ask how you felt about a particular thing...or if there was anything you didn't understand. That sort of thing, but it's not everybody who would...do that. Sometimes too it's ...when they're doing your objective book they ask you how you found the ward but that's all.

(2nd Year Undergraduate Student)

In practice placement we don't often, just sometimes preceptors will put all in groups and if there's a certain procedure going on they'll make you go and watch it and then sometimes...if we're coming back we'll talk about it amongst ourselves. It's never formally set out; it's always informal.

(2nd Year Undergraduate Student)

Student Reactions to the Perceived Control over Implementation of the Learning Techniques

The qualitative content analysis showed that the common practice in the Diploma programme was that the educators retained control over the learning process. They made the decisions about what techniques were used in achieving the learning tasks and how specific techniques were implemented. Consequently, the students portrayed reliance on that practice. For example:

Usually you're split into small groups. ...and you're given a topic to go and discuss. Then you come back and do the feedback. It may be the same day or another day. But it works quite well. I suppose if you organise yourselves you tend to go with your friends, if the teacher's organising she'll maybe mix you in more. It also helps ...there's more control and not too much conflict and that sort of thing.

(1st Year Diploma Student)

As conveyed in the following response the third-year Diploma students also depicted the presence and ultimate control by the educators as essential. Their attempts to justify the need for the educator's presence during the group activities were notable.

I definitely think that the tutor should be there...They need to be there, ...for the feedback and things like that. I mean you can't be expected to do group work if there's not going to be a feedback session. Without the feedback people are not interested, there's no motivation.

(3rd Year Diploma Student)

Another emerging finding was that a considerable proportion of the students portrayed a concern that particular group members, for example individuals with dominant personalities often hindered achievement of the learning task. For example:

...sometimes it's ...it depends, personality and human characteristics is very important in teamwork...I mean, you always find in a group some more dominant than others, who will eventually guide or lead or control the group, and sometimes it just doesn't work at all.

(2nd Year Diploma Student)

Therefore the presence of the educator was seen as crucial to effective functioning of the group members. This was necessary they felt, to discourage indifference and non-participation.

I think sometimes I find it a hindrance. ...but I think it really depends who you're doing the group work with, because I think some, depending who you're working with, I think some of the people can just hold you back or you end up doing their share of the work... people, I think, don't look at it seriously enough. So I think it depends.

(3rd Year Diploma Student)

The early-phase Undergraduates portrayed concerns and needs similar to those of their Diploma counterparts. In particular, they indicated an expectation for the educators not only to give specific instructions and guidelines but also to delegate the roles and functions of the group members. Individuals felt that this was necessary to control attitudes within the groups and ensure achievement of the learning task. One student noted:

Normally we're told what to do and I think we need that to keep on track. When the topic's decided for us and the lecturer's there it's good because you can always ask if you're not sure about something or if ...the guidelines are not clear or you don't understand what it is that you're supposed to be doing. You can always check with them. They are there to keep everybody right and listen to the feedback from all the teams. I think it's quite good, in a way, when the lecturer is there because, as I say, you don't wonder off and she's there and she can point you in the right direction. Also I think you need them there to keep a wee bit of authority

(1st Year Undergraduate Student)

In contrast to the views of the early-phase Undergraduate and the Diploma group, the third and fourth-year Undergraduates reported being exposed to situations which forced them to take control and responsibility for their own learning process. In response to the challenges that confronted them, they described various strategies which they used in dealing with the associated demands. For example:

I think it makes you, sort of want to pull your weight... We did group work the other day and we had to look at the professional and unprofessional aspects, myself and some of the other girls had been working on the topic. We shared out the workload right from the start. We said, okay, this needs to be covered

and we drew a sort of diagram and branch points from the central topic and then took it to the lecturer and they checked that everything was okay, that we were going along the right lines. Then we went away, each individual, and read up, prepared, asked folk, if necessary, what their ideas were, met up again and sort of put it all together. We tried to combine sort of, theories from the lectures, tutorials, and we also used things that had come up in some of the previous seminars so we had lots of information for the feedback session.

(3rd Year Undergraduate Student)

Taking account of this phenomenon the question arose as to whether or not there was sufficient evidence that individuals developed personal responsibility and self-reliance as a direct result of such exposures. On the other hand, could this be attributable to academic and professional progression from the early phase of first and second years to the late phase of third and fourth years? This was not entirely clear. However, what the respondents did convey was that personal control and responsibility encouraged individuals to collaborate in the organisation and achievement of the learning task. As one student explained:

... Everybody's willing to go and put in the effort that's needed, for the group work to be effective. ...if you're looking at a patient...who has a certain illness, somebody could go away and look at the symptoms, somebody could go and look at the treatment...and then link it back to the central thing that you're looking at in the first place. In most of the things that I've come across in the past couple of years, third and fourth years, the lecturers have just sort of said, okay, there's a topic, or list of topics and left us to get on with things.

(4th Year Undergraduate Student)

Another emerging contrast between the early and late-phase students was that the third and fourth-year Undergraduates conveyed a need to take personal responsibility for their own learning process. They acknowledged having reached the stage of development and academic progression where they felt that it was expected of them to take responsibility and control over their own learning. This view was expressed in the following ways:

I think students should be able to organise themselves. I don't think they need an actual lecturer to say – Right, X go into this group, Y go into that, because it's immature, but I think then if they are nominated into specific groups then they should be able to structure themselves and say – Right, you look at definitions, you look at advantages – and stuff like that. I think the group should do their own organising because if they know each other and they know who's good at giving feedback, obviously that person should be the one to represent the group.

(3rd Year Undergraduate Student)

... by this stage I think we're all at a standard that we should be able to go and do it and I think it's worked really well.

(3rd Year Undergraduate Student)

It can be really hard going but in fourth year, you're supposed to be at the stage where they expect you to do...your own stuff – like choose your own topic, and it's got to be relevant otherwise nobody's going to listen to the presentation. You don't want to make a fool of yourself either.

(4th Year Undergraduate Student)

What these responses suggest is that student control over the learning process varies between the student groups and is apparently influenced by the stage of education. This content analysis used the expressed views about the seminar technique as the exemplar in demonstrating how students reacted to the different sources of control.

Analysis of the Students' Reactions to the Source of Control over Implementation of the Seminar Technique

The two variables used in this qualitative content analysis were Source of control over implementation of the learning technique and Student inclination to use creative strategies in dealing with the learning tasks. The analysis took account of the combined first and second-year Diploma and Undergraduate groups plus the third-year Diploma students. As previously explained these comprised fifteen students from each cohort of the first, second and third-year Diploma group giving a total of 45. Ten students from each cohort of the first and second-year Undergraduates made up the remaining 20. The rationale for these combinations was that exposure to the techniques involved the whole class. Therefore, the expressed views represented the groups' account of implementation of the techniques.

It also became apparent that the source of control over the learning technique depended on the implementation process. For that reason the whole group of the first, second and third year-Diploma students was recorded under the category of Educator Control of group seminar presentations since they all described that practice. Likewise all the first and second year-Undergraduates, who also described a similar practice, were recorded in the same category. Consequently, the obtained frequency for that category was 65. The total number recorded in the category of Student Control of individualised seminars presentations 20, represented 10 each from the third and fourth-year Undergraduate group who reported that practice.

The findings from this qualitative content analysis suggested, that when the students were exposed to the demands and challenges of personal responsibility and control over implementation of the learning technique, such as seminar presentations, individuals

demonstrated self-reliant attributes. They were inclined to employ creative self-directed strategies in dealing with the learning task.

Summary

This chapter set out to explore the students' perceptions about the implementation of the different techniques employed in fostering self-direction in learning. Their familiarity and opinions about the implementation of the identified learning techniques were analysed and their reactions to the source of control examined.

The qualitative findings revealed the following:

- Group interactive learning was the most regularly applied self-directed technique in the Diploma programmes.
- Seminar presentation was reported to be only sporadically applied in the Diploma programme. In contrast the first and second-year undergraduate group reported equal emphasis on the two techniques in their programme.
- Reflective learning and negotiated learning contracts were reported to be even less regularly employed than the above two techniques. Both groups of students conveyed lack of familiarity with the latter two techniques.

A noteworthy finding was that the two groups of students used different terminology to describe reflective learning. The implementation practices did not reflect regularly organised learning situations in which students felt encouraged to critically examine their concrete experiences. However, both groups of students reported that they did spontaneously and independently engage in some form of reflection during their social interactions although they did not regard those situations as learning opportunities. Rather they saw these as opportunities to 'off-load' grievances or talk about the traumatic experiences which individuals had encountered.

In terms of regularity of implementation, the responses indicated relatively more frequent exposure of the Undergraduates than their Diploma counterparts to what was loosely interpreted as reflective sessions. This difference was apparently attributable to formally scheduled sessions in the Undergraduate programme whereas the sessions that took place in the Diploma programme were described as sporadic.

The students' perceptions regarding the practicability of implementation of the different techniques were based on the context and setting within which they had been exposed to the process. For that reason, they perceived the theoretical settings as the more appropriate environment for implementation of the techniques because that was where they had been exposed to the techniques.

Control over implementation of the learning techniques as demonstrated through the seminar presentations evidently depended on the practice employed, the programme and stage of education. There appeared to be a relationship between the source of control and students' inclination to employ creative strategies in dealing with the learning task. Educator controlled group seminar presentations were found to be common to the Diploma programme and the early-phase Undergraduate programme, whereas individualised presentations were the practice commonly employed in the late phase of the Undergraduate programme.

CHAPTER EIGHT

THEME III

STUDENT PERCEPTIONS ABOUT THE IMPACT OF THE TECHNIQUES EMPLOYED IN PROMOTING SELF-DIRECTION IN LEARNING

Introduction

A comparative analysis of the views of the Diploma and Undergraduate students as articulated in the interview responses is presented in this chapter. The preceding chapter presented an analysis of the students' perceptions about the implementation of the different learning techniques used in encouraging self-direction. Their expressed views about the feasibility of these in the theoretical and practical settings and their reactions to the source of control over the learning process were also analysed.

The main purpose of this chapter is to:

- analyse the students' views about how the different techniques affected the way they learned
- establish the extent to which these promoted independence and self-direction
- establish whether or not there was a relationship between progression in terms of the stage of education and professional development and individuals preparedness to engage in self-directedness in learning.

It was important to know if the students considered independence in learning as advantageous or disadvantageous in the acquisition of theoretical knowledge and practical competencies.

The relevant interview items addressed the following:

- Patterns of self-directedness, that is, how individual's planned and implemented their learning activities.
- The behaviours and attitudes demonstrated in response to the perceived workload and the impact of this on individuals' decisions about the choice of learning strategies.

- Perceptions of factors in the theoretical settings which influenced the quality of learning gained through specific self-directed techniques.
- Perceptions of factors in the clinical settings that enhanced or constrained students from independently identifying and exploiting the learning opportunities which they encountered and from using specific self-directed learning techniques.

Use of a client care scenario enabled this researcher to analyse how spontaneously individuals responded and took advantage of those situations. For example, how the student might react to the dilemma of being faced with patient need for an urgent care procedure which she/he felt capable of performing but no qualified staff was readily available to supervise. The idea was to explore the potential for unprompted response to demands of patient and client care provision. The assumption here was that positive reactions may indicate the individual's recognition of the value of self-direction as a way of independently enhancing the rate and scope of own:

- i. acquisition of theoretical knowledge and
- ii. development of professional competencies.

Similarly to the previous analyses, a detailed descriptive account was crucial to the content analysis of this data. The following discussion demonstrates the different reactions described by the students.

Patterns of Self-directed Learning

The main objective was to investigate the students' reactions and views about the institutional provisions designed to promote self-direction in learning. Although various patterns of self-directedness were portrayed, the trends showed two distinct characteristics among both groups of students. In order realistically to demonstrate these trends, the habitual patterns which the students described were categorised. Factors taken into account were:

- the usual choice of venue for studying,
- who participated in the learning activities,
- the nature of interdependent learning patterns that evolved among the students,
- whether or not individuals made purposeful use of study schedules or timetables, and
- the actions individuals took if they came across new and unfamiliar terms or concepts which they did not understand while studying.

Choice of Study Venues

All the respondents reported using various materials from their institutional libraries as learning resources whether they studied within the college setting or elsewhere. Therefore rather than the extent to which they used different learning resources, this content analysis aimed at investigating the extent to which they used the library environment for studying and the factors that influenced their choices.

A considerable proportion from both groups claimed that in between class contact times they habitually studied in their institutional libraries. However, the pattern of this behaviour changed after the normal college hours when most of the students reported that they habitually went home to study. Based on these responses the following two categories were devised:

- i. Study at home
- ii. Study in the institutional library

The findings from this qualitative content analysis revealed that among the Undergraduates there was no marked preference for the library or home in their choice of study venue. However, this differed for the Diploma students among whom only one fifth indicated a preference for using the institutional library as the venue for studying. Arguably, there was a need for examining what factors deterred or attracted individuals to take advantage of that

particular institutional provision. Among the recurrent factors implicated for not studying in the institutional libraries were:

- Noisy atmosphere.

...I usually do my studying at home mainly because quite honestly I find it hard to concentrate in the library... sometimes it gets quite noisy and it's no use studying there.... We've got the reading room and that, ...but quite often it gets noisy there just like the other areas and so I just take the books I need and just go home.

(2nd Year Diploma Student)

- Preference for the freedom of own home surroundings as opposed to the perceived constraint of the formal atmosphere of the institutional libraries.

Myself and couple of my mates share a flat and whenever...if there's going to be exam or something that's when we would study together. I quite like studying at the flat – it's quite fun 'cause there's no – like – we can joke and have a laugh and we're not disturbing anybody.

(2nd Year Undergraduate Student)

- Preference for the freedom of having background music and/or readily accessible refreshments, cups of tea and coffee.

Personally I don't like the library atmosphere, I tend to go home, have a wee rest then study. ...I like my freedom...if I want I can play music while I'm studying, and I can make myself cups of tea whenever I want.

(2nd Year Undergraduate Student)

In contrast, students who claimed to habitually use the institutional libraries as their study venue indicated the readily accessible range of literature and other learning resources available in that environment. Accessibility to study or discussion rooms also appeared to be an influencing factor for those individuals.

I use the library a lot in my free period not so much for studying as such but...for doing literature research for my coursework and essays. Because I can use the journals and computers, look up all the information take a few notes, photocopy things....

(3rd Year Diploma Student)

...a few of us study together and we find that the library is a great place to meet because we've got everything that we need there – great for looking up information, journals, discussing things.... This library's got rooms for that sort of thing...meeting and discussing things.

(3rd Year Undergraduate Student)

It was noted that the choice of study venue was not necessarily associated with engagement or non-engagement in study groups. Therefore, it became necessary to establish the nature of

interdependence which occurred during the learning process and whether or not individuals or peer study groups devised and used study schedules or timetables.

Peer Interdependence

Two dimensions of peer interdependence revealed that the extent to which individuals sought information, clarification and support from their peers depended on engagement or non-engagement in study groups. Therefore based on the principle of what was said and the manner in which it was communicated the uses of **I** and **we**, taken in context, influenced the categorisation of the responses. For example, where the context within which **I** was used clearly implied that the individual studied alone she/he was placed in the study alone category. Examples were as follows:

...I usually do my studying at home...I've never drawn up a plan or as you said, study timetable, just whatever I want to study.

(2nd Year Diploma Student)

...I never use a proper plan for my directed study. If we're given a topic to look at then I just look at that topic...do one thing at a time....

(2nd Year Diploma Student)

I don't normally have any study plan, I sort of...if I fancy studying a particular topic that interested me then I...look at that, but if...there's going to be a class test or something then I would study what we'd covered.

(2nd Year Undergraduate Student)

The nature and extent of interdependence described by the study alone group were noted to portray only occasional contacts, mainly to seek clarifications if they encountered difficulty with understanding a particular concept. For example:

If I didn't understand something I would maybe ask...other folks in the class the next day or something.

(3rd Year Diploma Student)

If I came across something that I didn't understand I would maybe look it up in the textbooks or ask one of my mates when I see them, sometimes, it depends but sometimes I would phone them, see if they can explain it to me.

(3rd Year Undergraduate Student)

These patterns of reported self-directed actions were designated sporadic and deliberate interdependence to describe the infrequent and irregular nature of the peer support as portrayed in the responses by the students quoted above. That is:

I would maybe ask...the next day or something.

...ask...when I see them,...it depends but sometimes I would phone them....

In contrast were those students who claimed habitually to participate in study groups. The uses of “we” in these responses were notable indicating sharing actions in the learning activities. For example:

...a few of us study together.... We don't make a serious, I mean formal timetable...everybody says what they want to study and we just agree on something to study. If we've been given something to look at from one of the lectures then that's what we do, look at all the different aspects, discuss, see how we'd link up all the bits....

(3rd Year Undergraduate Student)

Myself and couple of my mates share a flat and whenever...if there's going to be exam or something that's when we would study together....

(2nd Year Undergraduate Student)

It can be noted that the nature of interdependence portrayed by these peer study groups was characterised by spontaneity and frequent reliance on each other. These patterns were therefore categorised as spontaneous and frequent interdependence. Below are examples:

...if somebody suggested something then we all look at the different aspects. Then somebody else might come up with another idea – another topic...for the next time.

(3rd Year Undergraduate Student)

...everybody says what they want to study and we just agree on something to study. ...We all help each other when we're studying, we ask each other questions, if someone has a problem understanding something, they just say and we all – sort of – look it up, everybody chips in and we talk about it.

(4th Year Undergraduate Student)

Another finding was that the extent of commitment to the peer study groups differed among the Diploma and Undergraduate students. For example among the Diploma students, the ad hoc nature of the interdependence and the conditional terms conveyed indicated apparent lack of commitment and some degree of indifference to what participants might gain from the learning process. For example:

...if... you're looking at something and...one of your mates comes along...they're also looking at the same...thing...if you get on quite well, you might want to study together but it's not like you're always stuck with the same folks every time.

(3rd Year Diploma Student)

We don't normally do group studying as such,...just... occasionally... Sometimes you maybe have something to prepare for class – if the two of you have to present whatever it is to the class...then you'd maybe sit down and work on it together. ...we just sort of check when it...suits us to meet and maybe get a bit of the work done. Other than that, I just go home.

(3rd Year Diploma Student)

Analysis of the Responses Regarding Peer Interdependence

As indicated above, the two emerging categories described:

- i. Study alone with sporadic and deliberate interdependence,
versus
- ii. Peer study group with spontaneous and frequent interdependence

The aim of this qualitative analysis was to demonstrate whether or not a specific educational programme influenced the likelihood of habitually participating in peer study groups. The two variables examined were Programme of Education and Nature of peer interdependence. For the latter, individuals were placed in one of the two categories depending on whether or not they habitually participated in peer study groups. The previously mentioned descriptions of sporadic and deliberate were used where the nature and extent of interdependence reflected deliberate efforts to seek clarification or new information from peers at a later time.

Characteristically these actions were reported as planned. This differed from the spontaneity of interdependence described by those who habitually engaged in peer study group activities and therefore spent considerable amounts of time together in clarifying, challenging and sharing the knowledge gained.

Findings

The findings from this content analysis showed a balance among the Undergraduates between the 'study alone' and 'study with peers' categories, with approximately half of the students falling into each category. By contrast, 33 of the 45 Diploma students, fell into the category of 'study alone'. The frequency distribution did not reveal a distinctive difference between the two groups. However, the study alone category showed a slightly greater proportion of Diploma students than their Undergraduate counterparts.

It was also noted that the Diploma and Undergraduate students probably differed in their patterns of study. In particular the Undergraduate students were more inclined to engage in peer study groups than did their Diploma counterparts. Therefore, the conclusion was drawn that engagement in study group activities with liberal interdependence might be dependent on the programme of education being undertaken.

Synopsis

This qualitative content analysis dealt with the self-directed learning patterns described by the two groups of students. The main variables examined were:

- study venue, home versus institutional library and
- peer interdependence, study alone with sporadic interdependence versus participation in study groups with frequent interdependence.

The following differences emerged between the Diploma and Undergraduate students.

- More Diploma than Undergraduate students claimed habitually to study alone in their own homes and therefore only engaged in sporadic peer interdependence.
- More Undergraduates than Diploma students engaged in peer study groups that regularly convened in their institutional libraries.
- Among the Undergraduate peer study groups, topics were identified and studied according to expressed learning needs from within the groups.
- The Diploma students portrayed ad hoc patterns of study group participation with little or no commitment because the groups did not remain constant.

Characteristics common to both groups:

- Generally students habitually studied at home or the institutional libraries.
- Preferences emerged with regard to participation in study groups or studying alone.
- Those who participated in peer study groups at home were more likely to share a flat or lived in institutional residences.

- The pattern of seeking new information, clarification and support with the learning process indicated that individuals usually approached their peers as their first resource.
- Only a small proportion claimed to consult their educators as their first resource. Therefore the question arose as to whether individuals failed to recognise and exploit the specialist knowledge and expertise of their academic supervisors.
- Generally whether they studied on their own or with study groups, students did not devise and use study timetables.

The next section focuses on analysis of the perceptions regarding the impact of the activities involved in developing course projects on the students' self-direction in learning.

Analysis of the Students' Perceptions Concerning the Impact of Course Project Development on the level of Comprehension

The impact of the different learning techniques was qualitatively analysed in this section and began by examining student perceptions about the activities involved in developing course projects and essays. This is followed by content analysis of the perceptions about the group interactive learning technique and seminar presentations. The variables applied were Student groups and Perceived impact of the learning technique. In relation to the latter the emerging sub-categories were:

- i. Comprehension in terms of deep or superficial.
- ii. Recall in terms of long-term or short-term.

Within the context of this study the categories of deep and superficial comprehension represented the scope and depth of learning described. In particular, account was taken of the perceived quality of learning gained, the nature of retention and recall described and implied effort. The principle of what was said and how expressed continued to apply. It was noted, for example, from the contexts in which they occurred, that expressions such as:

...you gain more understanding...

...you learn a lot more – depth-wise...

...it sticks in your head...

you gain more learning... and

you remember more....

emerged in the responses where the students were describing deep comprehension. Portrayal of ability to make sense of the theoretical learning and to make practical application of the knowledge gained was also noted. For example as conveyed in the following statement,

...I found that doing my Health Studies essay while I was on community placement was okay because I was able to relate to some of the things I came across and so I'd like to think that I gained a wee bit more understanding about the topic.

(3rd Year Diploma Student)

respondents typically conveyed recognition of deep comprehension in terms of their ability to make direct links from the learnt theoretical principles to the actuality of client care situations. It was also notable in context that whilst the statement: "...you gain more understanding..." implied deeper level of learning "...you gain more learning..." appeared to be ways in which individuals implied greater scope of learning.

The quality of learning gained tended to be associated with the nature of effort involved. In the following statement, the amount of effort portrayed at the deep comprehension end of the spectrum reflected a dedicated personal commitment in the searching and reviewing of the different sources of the literature, that is:

...you have to decide the topic, decide how you are going to approach it, get yourself to the library everyday, whenever you can...plan everything, work on it. ... A lot of work goes into it and...it's all your own ideas and your own work, and you gain a lot of experience and...a lot of learning as well, from doing all the things yourself.

(3rd Year Undergraduate Student)

Other characteristics noted in relation to deep comprehension included the personal interest in topic selection for a given learning venture. Individuals' recognition of this as an opportunity to self-diagnose personal learning needs and as an incentive to explore the topic thoroughly was taken into account. Also noted was indication of the ability to organise the acquired information and utilise the knowledge gained effectively. Of equal relevance was portrayal of critical decision making with ability to act on personal judgements in fulfilling identified learning deficits. For example:

...choosing which topic interests you, ...able to organize yourself, ...look at it in depth, ...research into...all the different aspects...

(4th Year Undergraduate Student)

...it's good because you end up looking at other things that you wouldn't have done.... It probably makes you think about things a bit more...look at it in more depth than you would just sitting in class listening to it.

(4th Year Undergraduate Student)

...It's very much all your own work. You decide the topic, you decide how you want to develop it, you do all the research...spend hours in the library, write to different places get more information, put it together etc. ...you gain an awful lot of learning. If we have to tell the class about our projects...it's no big deal because you're at it all the time....

(4th Year Undergraduate Student)

By contrast, in relation to descriptions of superficial comprehension, account was taken of statements such as:

...you don't get real learning...

...you don't really learn that much...

...you don't really absorb the stuff...

...can't say that I'd be able to answer a question... very well if we got the topic in an exam...

The associated constrained effort portrayed at this end of the spectrum was notable in expressions such as:

...you've got all this work and you just do them....

...you don't really look at the topic...in depth....

Thus in assessing the categories of deep and superficial comprehension, the essential elements taken into account were portrayal of the following two sets of characteristics:

Characteristics Associated with Deep Comprehension:

- Consistent motivation and/or ability to self-diagnose personal learning deficits and identify the relevant topic areas.
- Consistent incentive to explore the identified topics thoroughly in terms of enhancing the scope and depth of knowledge.
- Dedicated personal effort in extensively reviewing the different sources of the literature.
- Adequate understanding and effective recall in terms of ability to organise and utilise the knowledge gained with practical application in different contexts.
- Critical mindedness in terms of ability to cope effectively with related challenges in various assignments.

Characteristics Associated with Superficial Comprehension:

- Limited personal interest with reliance on educators to determine learning deficits.
- Implied tendency to browse the literature.
- Limited exploration of the topic with implied limitation in scope and depth.
- Lack of adequate understanding with inability to organise and apply the knowledge gained in different contexts.
- Poor recall with limited ability to deal effectively with related challenges in assignments.

The above categories allowed for determining what proportion of respondents from each programme considered the activities involved in development of self-direction as beneficial or a hindrance to their learning. As in previous content analyses, the findings from the Diploma group were compared to the findings from the Undergraduates to establish whether or not specific perceptions were peculiar to students on a specific programme.

Perceptions of the Early-Phase Students in First and Second Year

The findings from each year of student groups were treated separately then compared to determine what changes might be attributable to progression and stage of education. This enabled within group polar differences to be established by comparing the first and the third-year Diploma students and the first and third then fourth-year Undergraduates.

The extreme polar differences of the entire student groups were also examined. In this case, to determine how the views of the first-year Diploma students compared to the views of the fourth-year Undergraduates. The following section presents the related content analysis.

- Sub-categories:**
- i. Deep Comprehension with long term recall
 - ii. Superficial Comprehension with short-term recall

The findings from this qualitative content analysis showed that the majority, 11 of the 15 first-year Diploma students conveyed the opinion that self-directedness in learning did not

necessarily promote deep comprehension and long term recall. Instead, they indicated that the learning gained from preparation and submission of course projects and other exploratory assignments, tended to be superficial. For example:

...We only have to do one coursework at a time so there's not a lot of pressure, but I think if you don't get structured guidelines then it's very difficult and you feel stressed and you don't really learn that much, because you don't really understand what you're supposed to be doing. We feel that self-directed is a bit of a let-down it's as if people don't want to teach us...like we're not wanted....

(1st Year Diploma Student)

Only about 4 of the 15 students in that group described the learning gained as deep with references to long term recall. Among the Undergraduates whilst 6, of the 10 first-year students described superficial learning, 4 were of the opinion that the related activities provided deeper comprehension. The views about the associated demands and the effects on the learning process were expressed as follows:

To me the problem is too much pressure. ...we get the coursework at the start of semester but then it's... you're expected to hand in everything the same week! You've got all this work and you just do them. You don't really absorb the stuff.

(1st Year Undergraduate Student)

The above responses implicated stress and anxiety associated with preparation of course assignments as the main hindrance to the quality of learning and development self-direction. The actual source of stress appeared to differ between the two groups of students. Whilst the Diploma group specified unclear guidelines, the undergraduates implicated 'bunching' of course assignments and heavy workload. The findings from the second year respondents revealed that 4 of the 15 second-year Diploma students perceived the activities involved in preparing course projects and essays as promoting more learning. However, 11 students in that group described various factors as causing a hindrance to their learning process. In particular the timing of preparation of course assignments during the period of practice placements was seen as adversely affecting the standard of performance. They also concurred with their junior colleagues regarding inaccessible material from the institutional libraries because of distant geographical locations of the different clinical areas.

I found that doing my Health Studies essay while I was on community placement was okay because I was able to relate to some of the things I came across and so I'd like to think that I gained a wee bit more understanding about the topic. But...I guess I might have done a wee bit better if I'd managed to get

myself to the library and done more research but the travelling was a big problem for me. ...I only had a couple of articles on the topic but...that's all I used and obviously that wasn't enough....

(2nd Year Diploma Student)

However, among the Undergraduates, the perceived stress of workload reported by the first-year students did not greatly preoccupy the second year respondents. Instead, 6 students from that group conveyed a more favourable perception about the activities involved in preparing course projects. The following response is an example.

...The coursework and essays, you're on your own if you want to get a good grade, you do the research, look at journals, books – use the library computers, get all the information you need. Then you put it all together and you...feel proud of yourself because at the end of the day you get to know the topic very well, gives you...confidence – you know.

(2nd Year Undergraduate Student)

In addition to gaining better understanding, the standard of performance in terms of grades emerged as a common motivating factor among both groups of second-year students.

Perceptions of the Late-Phase Students in Third Year

In this content analysis, it was deemed appropriate to treat the data from both groups of late phase students together because both groups of students tend to be considered as having essentially, reached the final phase of their professional education. Indeed the third-year Undergraduates indicated that they were in the process of completing the required curricular content toward the professional qualification. One student reported:

...I find third year...don't know. I think because basically we're doing the...major sort of stuff before people can qualify if they want, they expect quite a lot...in the essays, and seminars.

(3rd Year Undergraduate Student)

Undertaking the honours level studies was therefore, a personal choice with the aim of enhancing their professional competence and acquiring further managerial skills.

A recurrent view shared by these third-year students was that, the preparation of course projects involved considerable self-directed demands. Slightly less than half of the 15 third-year Diploma students claimed to achieve only superficial level of learning from those activities. The following are examples of the views expressed:

...I think the coursework's different because you get the topic and...you go and look for the information and set it all out, so it's your own work and you remember more.

(3rd Year Diploma Student)

The essays and coursework, when you can find time to work on them you...I suppose you can...gain more learning...because you have to...get the information yourself and write it up. Problem is if you're out there on placement and...you've got other things on your mind and you're expected to do coursework and you can't get the stuff because you're miles away from the library, it's hard going. All you can do is...get something down and hand it in when the due date comes up.

(3rd Year Diploma Student)

In contrast, among the Undergraduates the larger proportion, 8 of the 10 third-year students, described the learning gained in terms of deeper comprehension. Their opinion was that the activities involved exposed them to more challenging independent thought and actions. They described having to make personal decisions as they selected, planned and organised the assignment material. Individuals conveyed satisfaction with the control and ownership that they claimed they were allowed over their work. For example:

The essays and coursework are the really big self-directed stuff that we do and a lot of research goes into them. I personally find that being in control gives me confidence. I can...plan and do it at my own standard. Well, what I mean is I would normally go and check ...what they're looking for, things like that, but I think that you're definitely in control and you learn a lot more, I mean depth wise...much as you yourself want, really.

(3rd Year Undergraduate Student)

...but the coursework and essays...you're on your own. You sort of bounce off ideas with your pals but... everybody's doing their own work so you...keep at it then suddenly you understand it, same with the seminars, lot of work not like having group discussion, you're on your own when it comes to seminars, but....

(3rd Year Undergraduate Student)

Only 2 of the of the 10 third-year Undergraduates described the processes involved as resulting in superficial level of comprehension. The fourth-year students concurred with the majority views of their third-year colleagues as follows:

At the moment I can say that doing the project, the...research proposal is really self-directed. ...it's very much all your own work. You decide the topic, you decide how you want to develop it, you do all the research...spend hours in the library, write to different places get more information, put it together etc. it's quite hard,- bit stressful but you gain an awful lot of learning. If we have to tell the class about our projects...you don't find it, I mean it's no big deal because you're at it all the time.... In fourth year it's ...we're expected to...find out things ourselves, we're out in placement all the time because it's to develop...management skills and that but we come in now and then for...discussing and presenting stuff, bits of the research basically....

(4th Year Undergraduate Student)

As the content of the above response revealed, the fourth-year students described further self-directed challenges as exposure to research in clinical practice. The associated assignment

was described as involving self-determination of researchable clinical problems, and preparing the relevant research proposals. Despite the associated stress which they described, all the fourth-year students conveyed recognition of the scope of knowledge which they gained.

There was no equivalent fourth-year counterpart in the Diploma programme with which to compare the findings from the Undergraduate Honours level students. However, it was intended to demonstrate the polar differences with each of the first-year groups. The intention was to try to establish whether or not progression and stage of education influenced students' perceptions about the impact of the self-directed learning process.

Comparison of the Polar Groups of Students on Each Programme

In this section of the content analysis the term direct was used to describe the polar differences of students on the same educational programme. This was to depict the novice groups at one end of the spectrum and the finalist groups at the opposite end of the spectrum of the population of students on the specific educational programme. The findings suggested that among the Diploma group, progression and stage of education did not influence student perceptions about the effect of self-direction on their standard of performance. The common major factor that was implicated as causing a hindrance to self-directedness was the difficulty in accessing resources in their institutional libraries. The Undergraduates, however, did not report such difficulties.

The numbers in the study were insufficient to enable the application of statistical testing, though the qualitative findings do suggest a difference between the undergraduate polar groups, that is between the perceptions of the first – and fourth year students.

Comparison of the Extreme Polar Groups of First-year Diploma and Fourth-Year Undergraduates

In this qualitative content analysis the term extreme was used to describe the polar differences between the first- year Diploma and fourth-year Undergraduate students. This depicts the groups of students at the extreme ends of the spectrum across the two levels of nursing education. The findings revealed that the perceptions of the first-year Diploma students differed from the perceptions of the fourth-year Undergraduates. The findings suggested that progression and stage of education and student perceptions about the impact of self-directed course project were not independent.

- The main factor that may have contributed to the above result was the wide gap in academic knowledge and professional competence between the beginners and the post-finalist fourth-year students.
- Evidently, the nature of academic maturation and the different levels at which the two extreme groups of students functioned, potentially influenced individuals' perceptions and self-confidence as self-directed learners.
- Whilst the fourth-year students indicated recognition that the associated challenges were pertinent to their envisaged professional roles and responsibilities, the first-year students perceived those very activities as stressful and hindering their learning.

Synopsis

The first section of this chapter dealt with analysis of the students' portrayal of their self-directed learning patterns and behaviours. To begin with the study patterns were examined to find out how independently individuals planned and organised their learning. The qualitative findings revealed that generally students on the Undergraduate programme appeared to consistently show a tendency to engage in peer study groups. Therefore, peer interdependence emerged as a characteristic feature of the Undergraduate students' self-directedness in learning. Identified learning needs were seen as a shared concern within the groups and the

students described collaborative effort in exploring the different sources of the literature to fulfil those deficits.

The following section of the qualitative content analysis focuses on how the students perceived specific learning techniques in relation to developing independence in the theoretical and practical aspects of their learning and to what extent they used these. Thus the intention was to establish the students' perceptions about the impact of the techniques:

- in terms of the quality of learning which they felt they gained,
- in fostering personal autonomy and self-direction.

Similarly to the preceding content analyses, the categories of comprehension in terms of deep and superficial levels of knowledge gain and recall in terms of long-term and short-term retention of the acquired learning were applied. The technique of group interactive learning was analysed first followed by the seminar technique.

Perceptions about the Impact of the Group Interactive Learning Technique on the Quality of Learning

Responses from the Diploma Students

Although some first-year students described group interactive learning as encouraging social interactions and sharing of each other's points of view, the general opinion was that the actual learning gained was superficial and limited in scope. The factors identified were mainly group sizes which they saw as 'crowded' with potential conflicts arising during the interactions.

These concerns were particularly prevalent among the first-year Diploma students who consistently expressed dissatisfaction at having to function in relatively larger groups. For example:

...Sometimes you're put in a group and there's not much learning because if people are 'bossy' other people can't get a word in but it's a whole crowd of you...I think, that you probably gain something from the...discussions but I don't think you gain a lot of real learning as such.
(1st Year Diploma Student)

The implication in the above statement was that the dynamics within the groups deprived individuals' of the personal control and ownership of their learning process. This is because individuals found themselves having to conform to group decisions. For example,

...but in the group you're stuck...there's nothing you can do about it... If there's presenting to be done it's usually ... just the main points but that's done by the folks who take over and...dominate the discussion.

(1st Year Diploma Student)

The second and third-year students conveyed similar perceptions. They described the less articulate members as being at a disadvantage because of limited opportunity to fully participate in the interactive learning processes. For example:

Whenever we've done group work I find that it gets a bit disorganised and I find that there's no learning going on. Either that folks are confused about what we're doing or some folks, you don't really know them, and they're...a sort of clique...if you're not one of them then you don't get a chance to chip in... your ideas, because you don't really belong. If we're asked to...feedback to the class it's always that the people who didn't get a chance...leave all the talking to them... the clique so quite frankly I don't see the point of struggling to get involved...

(2nd Year Diploma Student)

I think the group work... if it works, it helps you to participate because you're working together as a team. You still have to put up with...a lot of people trying to look into something together. It's not easy I can't say that I'd be able to answer a question... very well if we got the topic in an exam... 'cause you don't really look at the topic...just yourself...in depth.

(3rd Year Diploma Student)

The Diploma students reported conflicts among peers and clique formation as particular problems which hindered individuals from 'fitting in' and functioning effectively within the social context of the group. As one student claimed in the above statement:

...if you're not one of them then you don't get a chance to chip in...your ideas, because you don't really belong.

(2nd Year Diploma Student)

This concern implied that some of the students felt they were denied the personal involvement to share the ownership of the learning process. Conversely, as previously indicated, individuals who were able to recognise their social identity within the group context described forming, what they called, smaller 'teams' or the cliques, with whom they shared their points of view. The larger group sizes and constant changes in memberships were portrayed as creating unfamiliarity and lack of cohesion within the groups. Students claimed that these

factors discouraged them from putting forward their personal opinions. Distracting activities and indifferent attitudes were also identified as hindering the learning process.

Confusion about the functions of the groups and the requirements of the learning task were highlighted as being attributable to the limited responsibility allowed them in their own learning process. As one student argued,

...it would probably be better if the groups were small and...probably if they left students to organise themselves but the way they are, you don't get much learning....

(3rd Year Diploma Student)

Thus the general view among the Diploma students was that the group context of learning was 'a waste of time'. Arguably, where individuals could not recognise the purpose and benefit of participating in group interactive learning the content of their responses conveyed lack of confidence in the technique.

Responses from the Undergraduate Students

While some early-phase Undergraduates conveyed more positive views about the benefits of the social interactions which evolved during the learning activities, a considerable proportion expressed dissatisfaction. The following were examples of their responses:

I don't particularly find group work...very useful because quite often you never get the work done for all the chatting that goes on. Sometimes there's not enough time...and so you haven't finished discussing and it's time's to stop and you haven't really learned anything.

(1st Year Undergraduate Student)

I think the group work's okay because you can gain from other folks' ideas. I think it helps you to listen to other people and you can see others' viewpoints

(2nd Year Undergraduate Student)

The third and fourth-year students portrayed a more balanced opinion. Only a minority described the technique as effecting superficial learning; the majority described deeper comprehension and recall. The difference in opinion between the early and late-phase students may be attributable to the amount of freedom and empowerment which these later-phase students claimed they were allowed in making personal decisions about their learning

process. This enabled them to devise their own strategies, such as task sharing to ensure that all members of the group actively participated in the related activities:

I think group work learning can be fragmented because when you divide up the work...it means that everybody's looking at something different. It's alright, in that you get the work done and everybody gets to do something but... you never get to look at the whole topic, and when you come to present you...just concentrate on the part you specifically did and that means you don't know the other aspects like your own bit. But some folks share the notes and...give out handouts and things so everybody goes away with all the information about the topic.

(3rd Year Undergraduate Student)

They also described a means of rectifying the potential fragmentation of learning by supplying each other handouts of the relevant material covering all aspects of the topic.

One explained:

It's alright, in that you get the work done and everybody gets to do something...some folks share the notes and...give out handouts and things so everybody goes away with all the information about the topic.

(3rd Year Undergraduate Student)

This practice was seen as an acceptable compromise for the perceived limitations and the reservations which individuals had about the technique. Relevant tables were devised to present the distribution of the respondents from each year group across the categories of levels of comprehension gained through group interactive learning. The frequencies were presented in this way to demonstrate, at a glance, how each year group of students compared between the two educational programmes. The findings showed that none of the first, second and third-year Diploma students felt that they gained deep comprehension recall from the group interactive technique. However, among the Undergraduates, although none of the first-year students described that level of learning, perceptions seemed to change with progression in academic and professional development. An example of the view expressed among the fourth year students was that:

...group work can be very beneficial for the simple fact that everybody gets a chance to put forward what they think and sometimes they'll come over and they'll say something that you hadn't thought about and then they'll make you think about other things and sometimes it's good because you end up looking at other things that you wouldn't have done.... It probably makes you think about things a bit more...look at it in more depth than you would just sitting in class listening to it.

(4th Year Undergraduate Student)

To begin with, the distribution of the first and fourth-year Undergraduates was examined to establish the direct, within-group differences. Responses from the first-year Diploma students and the fourth-year Undergraduates were then analysed to demonstrate the extreme polar

Based on the qualitative findings from both the direct and extreme polar groups, the conclusion drawn was that first-year students were less likely to perceive group interactive learning as encouraging deep comprehension. Conversely, finalist groups of students were more likely to portray the activities involved in the technique as promoting deep comprehension and better recall. There was no difference in the perceptions of the first and third- year Diploma students.

Influence of the Educational Programmes on the Students' Perceptions

The intention this time was to establish whether or not student perceptions about the impact of the group interactive learning technique was influenced by the programme of education which they were undertaking. This analysis was based on the total number of students from each group who described the learning as deep and the total number who described superficial level of learning.

Findings

The findings from this content analysis suggested that the perceptions of the students may have been influenced by the particular educational programme which they were undertaking. There was also the indication that factors within the educational climate in which they functioned may have influenced the students' perceptions. Two main perspectives emerged from the responses. At the positive end of the spectrum, the later-phase Undergraduates, described the following advantages. Apart from the social benefit of sharing each others' views they saw the technique as encouraging deeper comprehension and increased scope of knowledge gain. At the negative end of the spectrum, the Diploma students reported limited learning and attributed this to the constraints of the large groups. Apart from examining the

proportion of students from each programme across the range of factors reported as enhancing or hindering the learning process, the views regarding the impact of the technique in fostering personal autonomy and self-direction were examined later.

Perceived Impact of the Group Interactive Learning Technique in Fostering Personal Autonomy and Self-direction

This section dealt with the question as to what extent the technique encouraged personal autonomy and self-direction. The general opinion from the respondents was that these were not achievable in the group context of learning. This response was typical of the views expressed by a large proportion of the students:

...it's a whole crowd of you...you're in a group... (1st Year Diploma Student)

Others argued:

...I don't think because we do a lot of group work things that you'd automatically become...self-directed. It's not like you're working by yourself....

(2nd Year Diploma Student)

...It would probably work better if the groups were small and... probably if they left students to organise themselves but the way they are you don't get....

(3rd Year Diploma Student)

The first-year Undergraduates reported that when educators directly instructed students on how to organise and deal with the learning task, personal autonomy and self-direction through group interactions could not be achieved.

...I wouldn't say that it helps us to be self-directed because we're told what to do.

(1st Year Undergraduate Student)

They felt deprived of the ownership of their learning process and argued that:

It would probably work better if the groups were small and...probably if they left students to organise themselves but the way they are you don't get much....

(3rd Year Diploma Student)

These students apparently, failed to recognise what attributes individuals brought with them into the group context of learning. The final-phase Undergraduates on the other hand, seemed to capitalise on each other's potential in the ways in which they dealt with the learning tasks.

One student explained:

... We all take one aspect of the topic and do the literature research on it, you'd maybe take a couple of photocopies from the journals. You read the articles, put it all together, then when we meet up again everybody tells the group what they got from the literature we discuss, then organise ourselves and go and present. So, yeah, I think you can learn from that how to organise your own self-directed work....

(3rd Year Undergraduate Student)

Neither the later-phase Diploma students nor the early-Phase Undergraduates described the strategy of task sharing among the group members. They argued that, conforming to group decisions and actions inhibited development of self-direction in learning. For example:

... whenever we do that sort of thing it's still teamwork.... A lot of folks are involved in deciding how we go about it.... You still have to put up with... people trying to look into, something together. It's not easy....

(3rd Year Diploma Student)

This response conveyed the frustration expressed by some students concerning that learning situation. It also implied lack of knowledge and experience about what strategies they could employ to achieve the task or the potential satisfaction associated with that learning process. It is not entirely clear whether or not such responses also implied the lack of freedom and opportunity allowed them to make their own decisions and take control and responsibility for their own learning process.

This part of the content analysis examined the pattern of distribution of students across the categories of impact of the different learning techniques, used in encouraging personal autonomy and self-direction. The relevant findings are outlined below.

The Diploma Students' Views about the Factors Promoting or Hindering Self-direction in the Group Context of Learning

A. *Factors Perceived as Promoting Self-direction*

- Only 12 of the 45 Diploma students described the group interactive learning technique as promoting broader scope of learning.
- 14 of the 45 students described the social benefits of interacting and the sharing of views.

- 37 of the 45 students favoured the minimal demand and stress-free learning situation because they were not on their own in dealing with the task, neither did one individual carry direct responsibility for the learning process.

B. *Factors Perceived as Hindering Self-direction*

- All the Diploma students implicated the large group sizes as a hindrance to the learning process.
- 23 of the 45 students in this group identified indifferent attitudes, distracting conduct and inability of some group members to tolerate contradictions during the discussions.
- 25 of the 45 students described deprivation of personal control and ownership of the learning process within the group context.
- 32 students described disorganised group structures and confusion about individuals' roles within the groups, inconsistencies in the groups as a result of frequent changes in the group members.
- Lack of cohesion caused by clique formation and marginalisation of some group members also emerged. As a result, some individuals reported that they were unable to participate effectively in the group context of learning. Others reported that when they were able to recognise their sameness within the groups, they felt more at ease and confident to contribute their personal views.
- All the Diploma students shared the opinion that the organisation of their group learning activities potentially hindered development of self-direction.

The Undergraduate Students' Views About the Factors Promoting or Hindering Self-direction in the Group Context of Learning

A. *Factors Perceived as Promoting Self-direction*

The following represented the views of the 40 Undergraduate students.

- 31 students described the group interactive technique as promoting broader scope of learning through listening and learning from other peoples' perspectives.
- 34 students portrayed recognition of the social benefits of sharing each others' views.
- 28 students also favoured the minimal demand and stress-free learning climate because individuals were not on their own in dealing with the learning task.

B. *Factors Perceived as Hindering Self-direction*

- 11 of the 40 Undergraduates described lack of group cohesion as a hindrance.
- 16, mainly early phase students, expressed concerns about indifferent attitudes on the part of some members to attend to the learning task.
- 19 of the 40 students described lack of personal control over their own learning process in the group context.
- 14 students described feeling at a loss about the learning task and group function.
- The potential problem of fragmentation of the knowledge gained emerged as a recurrent concern because the strategy of dealing with different aspects of the topic was seen as preventing individuals within the group from exploring the whole topic.

There seemed to be a balance among Undergraduates in their views about the impact of the group interactive technique in promoting personal autonomy and self-direction. Strategies employed in dealing with identified problems included, as previously mentioned, delegation of tasks and note sharing, to compensate for the potential learning deficits created by individuals concentrating on specific aspects of the given topic.

Perceptions about the Impact of the Technique of Seminar Presentations

This section presents the systematic processes applied to analysis of the group interactive learning technique.

Responses from the Diploma Students

The Diploma students described only occasional presentations which normally occurred within the context of their group learning activities. This implied limited experience in individualised seminar presentations. The ways in which they expressed their perceptions were as follows:

Sometimes we have to present what we found to the class and usually one person from the group does the presenting but it's not just their own ideas it's from the group, supposed to be anyway. Sometimes... there's not much learning because if people are 'bossy' other people can't get a word in but it's a whole crowd of you....

(1st Year Diploma Student)

...Some tutors would get like every group to present their topic. I find that very difficult I don't really like standing up in front of the class and so I never do the presenting I let other folks do it....

(2nd Year Diploma Student)

These views portrayed not only a lack of personal responsibility and ownership of the learning experience but also an attitude of detachment. The responses were notably punctuated by 'if' and 'suppose'. It can also be noted that the pattern of sporadic group seminar presentations persisted to the third year. The attitudes and degree of motivation conveyed in their responses differed from that of their Undergraduate counterparts. As one explained:

We still don't get to do seminars as such it's more...in the group work that we may have to present. ...but whenever we do that sort of thing it's still teamwork and I suppose you might look into the topic a bit. I find that if you involve yourself and you participate then you sort of learn something. As I said we don't really do seminars.

(3rd Year Diploma Student)

These Diploma students did not portray the kind of student anxiety associated with preparation and presentation of seminar papers. Although some did indicate disinclination to present papers none of them seemed preoccupied by any related stress neither did they describe any practices which they used in ensuring equal participation in their group seminar situations. However, individuals did report having to make personal effort to actively

participate or opt out if they did not feel particularly inclined to involve themselves. Typical scenarios described were:

... in the group work...we may have to present. ...but whenever we do that sort of thing it's still teamwork and I suppose you might look into the topic a bit. I find that if you involve yourself and you participate then you sort of learn something

(3rd Year Diploma Student)

...the way they are you don't get much learning....

(3rd Year Diploma Student)

The lack of personal commitment was evident and reflected individuals' lack of confidence in the seminar technique based on uncertainty about its potential benefits. The question arises as to whether or not the prevalence of these reactions among the Diploma students was attributable to their limited exposure to the technique.

Responses from the Undergraduate Students

By contrast to the views of the Diploma students, the Undergraduates described two separate scenarios involving implementation of the seminar technique. In one situation involving the early-phase students, the nature of activity involved smaller groups of peers, for example three, sharing the task of preparing and presenting a seminar paper. As one explained:

...it's different with the seminars. I think they're different because you maybe get the list and if it's, say, three of you, you choose which topic interests you and look at it in depth knowing that you have to present. It can be nerve racking and you need assertion but you learn a lot more – I would say.

(2nd Year Undergraduate Student)

They were allowed to determine how they wished to organise and present their papers and they described the previously mentioned practices that enabled each person to deal with a specific aspect of the topic. Therefore, each individual was exposed to the experience of personally preparing and presenting a seminar paper. As one explained:

The seminars can be quite daunting, I think, at first we used to do it as a group and you only looked at one aspect not the whole topic because we split up the topic. Now you have to put the information together, get up there and present in front of everybody.

(2nd Year Undergraduate Student)

Only a small proportion of these early-phase Undergraduates described the knowledge gained through seminar presentations as deep. For example, one said:

... you can get real learning from the seminars because... you look into the topic, put the points together, main points, and you all decide that. Then, depends how they want us to present it, sometimes they give us big sheets of paper to...write down the points that we talked about and we use these when we're

presenting to the rest of the class. That part's quite stressful but the things that you looked at... stick in your head.

(1st Year Undergraduate Student)

The above response conveyed the view that the activities involved in exploring, preparing and presenting the seminar papers did promote long term and better quality of learning.

Another who shared in this view simply stated, "...you definitely learn a lot more from doing seminars." **(1st Year Undergraduate Student)**

Thus despite the associated stress and anxiety, some students in this group conveyed satisfaction and fulfilment in the personal responsibility involved. They also conveyed their capability and willingness to accept that responsibility.

...in first year we got...given a few pointers on it but then as we got to second year, it was mostly being asked how we wanted to approach it and stuff like that. ...I think it's ...good, because I think that once you get to second year you should be able to organise it and do it yourself.

(2nd Year Undergraduate Student)

Even at that early stage it seemed important to the second-year students that their educators should recognise and respond to their readiness to cope with the related demands and challenges. That self-concept and fulfilment probably compensated for some of the anxiety which individuals may have felt. A considerable proportion of the early-phase students described the knowledge gained through the seminar technique as superficial. Emerging reactions suggested that:

A lot of folks just read out everything. ...I would say that there's seminars and – there's seminars. I think you don't really gain as much learning when you're so worked up about the presenting....

(2nd Year Undergraduate Student)

The question therefore, arises as to what measures if any were taken to minimise such performance. The other scenario regarding implementation of the seminar technique appeared to be more prevalent among the third and fourth-year students. For example:

...everybody presenting their own topic which you choose from a list – well, sometimes you're expected to decide yourself, and you know they're going to fire questions at you so you prepare for that, well, you can only do your best.

(3rd Year Undergraduate student)

For the seminars you can choose your own topic...depends which module, ..you can choose something to do with ethical issues which you choose and research into it, all the different aspects.... If you decide to use the overhead projector you can do that.

(4th Year Undergraduate Student)

The exposure portrayed not only individualised preparation and presentation of the seminar papers but also dealing with challenges from their audience. Nevertheless, individuals indicated that those concerns did not necessarily hinder but served as motivational factors because of the fulfilment which they gained from their personal efforts. They stated:

...it's good because... you should be able to organise it and do it yourself.

(2nd Year Undergraduate Student)

...if you decide to use...you can do that....

(4th Year Undergraduate Student)

...and when you've done it and it goes well you feel good.

(3rd Year Undergraduate Student)

The satisfaction portrayed seemed to be related to the personal control and ownership such as being allowed to select topics of personal interest and making personal decisions about how to deal with it in the presentation. Similarly the claims that the activities involved in the preparations required "a lot of work" was not seen as a hindrance but that these promoted, "more learning" The preparation and use of visual aids in the presentations were also perceived as contributing to the learning and satisfaction. However, the main factor perceived to enhance the quality of learning, was the ability to personally target and control one's own learning process as in this example:

...choosing which topic interests you; ...able to organise yourself; ...look at it in depth; ...research into all the different aspects

(4th Year Undergraduate Student)

Other respondents described the associated stress and anxiety as adversely affecting their ability to perform effectively in front of their peers. Particular concerns related to the ordeal of dealing with questions and challenges from the audience.

...standing up in front of 'the class; ...getting questions fired at you; ...getting worked up by the presenting.

(3rd Year Undergraduate Student)

This section of the qualitative content analysis examined the proportion of each year group of respondents across the categories of perceived quality of learning gained through seminar presentations. Content Analyses of the polar groups were also conducted to establish if

possible association might emerge in relation to progression and the stage, at which the students were operating.

The qualitative findings from the direct and extreme polar groups that is, first and fourth-year Undergraduates and first-year Diploma versus fourth-year Undergraduate students indicated that first-year students were more likely to describe seminar presentations as stressful.

Consequently, they tended to see this technique not as encouraging self-direction and deep level of learning, but likely to associate it with a superficial level of learning. Nevertheless, as they progressed from first year to the final year, their perceptions of the seminar technique changed with recognition of its potential benefits. The next section presents an overall comparative qualitative analysis to determine the extent to which the students' perceptions of this technique were influenced by the programme of education being undertaken.

Findings about the Influence of the Educational Programmes on the Students' Perceptions about the Seminar Technique

The purpose of this analysis was to establish whether or not there was an association between the students' perceptions about the impact of the seminar technique and the programme of education which they were undertaking.

In this content analysis the aim was to determine the distribution of respondents across the categories of perceived impact of the technique of seminar presentations. Attempt was also made to determine the pattern of distribution of the respondents from both groups across the range of factors implicated as enhancing or hindering the learning process. The conclusion drawn from the qualitative findings was that the particular educational programme in which individuals were engaged apparently influenced their perceptions about the impact of the seminar technique.

Impact of the Seminar Technique in Fostering Personal Autonomy and Self-direction

The Undergraduate students saw the personal choices and decision making in the topic selection, planning and implementation of the learning task as vital elements of self-direction.

One student explained:

I think the seminars encourage you to be self-directed because you have to decide the topic, decide how you are going to approach it, get yourself to the library everyday, whenever you can...plan everything, work on it. You have to decide for yourself if you want to use the overhead or whatever. A lot of work goes into it and... it's all your own ideas and your own work, and you gain a lot of experience and... a lot of learning as well, from doing all the things yourself. You're...on your own in seminar presentations.

(4th Year Undergraduate Student)

Despite the perceived pressure of presenting the seminar papers, the collaborative effort involved in the small group presentations seemed acceptable to the first-year Undergraduate students. They portrayed a shared interest with peer support which presumably enabled individuals to cope with the related demands. One student explained:

...you maybe get the list and if it's, say, three of you, you choose which topic interests you and look at it in depth knowing that you have to present.

(1st Year Undergraduate Student)

The second-year students, on the other hand, portrayed a transitional phase of readiness to take increasing responsibility in dealing with the demands of seminar presentations that is:

...as we got to second year, it was mostly being asked how we wanted to approach it...I think it's...good, because I think that once you get to second year you should be able to organise it and do it yourself.

(2nd Year Undergraduate Student)

...we used to do it as a group and you only looked at one aspect not the whole topic because we split up the topic. Now you have to put the information together, get up there and present in front of everybody.

(2nd Year Undergraduate Student)

Third-year Undergraduate students described more complex demands and challenges in the seminar presentations. One student explained:

...everybody presenting their own topic, ...you're expected to decide yourself, ...you know they're going to fire questions at you so you prepare for that....

(3rd Year Undergraduate Student)

The more elaborate response from the honours level students conveyed how they dealt with the type of demands imposed on them. More importantly they also conveyed recognition of their personal autonomy and freedom as well as the potential benefits that they felt they gained from the exercise. For example:

I think the seminars encourage you to be self-directed because you have to decide the topic, decide how you are going to approach it, get yourself to the library everyday, whenever you can... plan everything, work on it. You have to decide for yourself if you want to use the overhead or whatever. A lot of work goes into it and...it's all your own ideas and your own work, and you gain a lot of experience and...a lot of learning as well, from doing all the things yourself. You're...on your own in seminar presentations.

(4th Year Undergraduate Student)

In contrast, the Diploma students who did not appear to portray similar readiness or to take personal responsibility disputed the notion that the activities involved in the seminar technique promoted self-direction. Unlike those Undergraduates who described task sharing in their group seminar situations, the Diploma students described presentation by rapporteurs.

One reported:

... whenever we present seminars it's still team work. A lot of folks are involved in deciding how we go about it. We're given guidelines so it is directed learning... not like using your own ideas and that. You have to depend on other folks... you don't really get the chance to be self-directed and develop the proper way to be self-directed.... The way it's done there's no way you can self-direct or learn to self-direct.

(3rd Year Diploma Student)

The factors that emerged as influencing the Diploma students' perceptions about the seminar technique were:

- the limited responsibility allowed
- presentations by large groups
- having to conform to decisions and actions in which individuals may not have directly participated.

To determine the distribution of students from each group who conveyed particular views about the impact of the seminar technique relevant tables were devised. The following section presents an outline of the findings.

The Diploma Students' Views about the Factors Promoting or Hindering Self-direction in the Seminar Context of Learning

A. *Factors Perceived as Promoting Self-direction*

Only a small proportion, 3 of the 45 Diploma students, described the seminar technique as promoting:

- ability to target and control the scope of learning gained,

- satisfaction at being able to make personal decisions about the learning process,
- recognition of the benefit of developing and using relevant audio-visual aids in the presentations and
- personal autonomy and self-direction.

B. *Factors Perceived as Hindering Self-direction*

- 21 of the 45 Diploma respondents expressed the opinion that the practice of group presentation was unfulfilling.
- 18 of the 45 students considered the anxiety and the threat of exposure to the peer audience as the main hindrance.
- The majority of this group of students felt that the way the technique is implemented, that is in the group context, hindered individuals' development of personal autonomy and self-direction.

The Undergraduate Students' Views about the Factors Perceived as Promoting or Hindering Self-direction in the Seminar Context of Learning

A. *Factors Perceived as Promoting Self-direction*

- 27 of the 40 students described ability to control ones' own learning process.
- 30 of the 40 students conveyed satisfaction about their ability to make personal decisions.
- 29 students described the personal satisfaction gained from developing and using relevant audio-visual aids in their presentations.
- All the Undergraduates shared in the opinion that the seminar technique promotes development of personal autonomy and self-direction.

B. *Factors Perceived as Hindering Self-direction*

- 34 of the 40 students expressed concerns about their ability to perform effectively, whilst more than a third of the students in that group, 17 of the 40, described feeling vulnerable in front of the class.

- A small proportion, 8 of the 40 students, described group seminar presentation as unfulfilling. These were mainly early-phase students.

Synopsis

- Regarding the technique of group interactive learning, all the Diploma students disputed the impact of this in promoting self-direction.
- The first-year Undergraduates concurred in this view and argued that they were directly instructed on what to do in the organisation of the group learning situation and how to deal with the learning task.
- However, the third and fourth-year students described being allowed to make their own decisions about how they organised and conducted their group learning activities. They therefore employed their own practice of assigning aspects of the learning task to each other, allowing individuals to use their own initiative in exploring and organising the relevant material.
- They also described a practice of information sharing among the group members to rectify the potential learning deficits that might result from this practice. Thus these later-phase Undergraduates conveyed the opinion that the group interactive technique did promote self-direction in learning.
- Regarding the technique of seminar presentations, it was noted that the implementation practices differed in the Undergraduate and Diploma programmes.
- Whilst the Diploma group described educator directed group seminar presentations, the Undergraduates portrayed individualised seminar presentations involving self-selection of the topics and personal decisions about the planning and organisation of their presentations. This may have contributed to the Undergraduates' opinion that the activities involved in the seminar technique encouraged independence and the freedom to make personal choices in their learning process. Nevertheless, all the Undergraduates identified the demanding workload associated with the technique as a potential hindrance to effective learning.

The Students' Perceptions about the Impact of Self-direction on the Acquisition of their Practical Competencies

This section of the content analysis deals with the students' perceptions about self-directedness within the practical settings. The intention was to establish the extent to which students responded independently to the various learning opportunities which they encountered during their practice placements. It was also the aim to establish at what stage of education did the students perceive themselves as capable of such independent response to clinical learning opportunities. The question also arose as to what extent compliance to professional codes and regulations created constraint on student self-directedness in the acquisition of practical skills. The following sub-categories were formulated.

Sub-categories:

- i. Attentive and responsive reactions to learning opportunities
- ii. Non-committal responses to learning opportunities

Sub-category i. encompassed attributes suggestive of spontaneity in response. This was not designed to imply risk taking but to determine individuals' preparedness to take advantage of the learning opportunities which they encountered without the prompting or direction by preceptors.

Sub-category ii. encompassed attributes suggestive of considerable guardedness in responding to the learning opportunities encountered. Therefore, responses indicating constant dependence on the preceptor to initiate, direct and supervise the learning process were placed in this category.

Although individuals conveyed varying degrees of readiness to respond to the clinical learning opportunities, characteristically all the students portrayed varied degrees of guarded behaviours. Therefore, three descriptive sub-categories were devised from the above two categories. This allowed for placing individuals into more appropriate categories. At different dimensions of spectrum the three categories described the following:

- Readiness and Confident Response to Learning Opportunities at one end,
- Highly Guarded Response with constant dependence on supervisory support at the opposite end.

In between the two, a third category described characteristics that reflected readiness but with expressed need for supervisory support, that is:

- Constrained Response with Considerable Dependence on Supervisory Support.

In analysing this data the categories applied were Response to Clinical Learning Opportunities and Stages of Education. These allowed for demonstrating the effect of progression and stage of education on student responses to clinical learning opportunities.

In the related analysis both groups of students were treated together because comparison between the two groups was not considered relevant. Therefore, the responses quoted in the text are appropriately labeled as early or late-phase student to identify the source.

The qualitative content analysis revealed that overall only a small proportion of students, 10 of the total of 85, conveyed readiness to respond independently to the learning opportunities which they encountered. 6 of the 10 were fourth-year students while the remaining 4 were third-year students. The majority of the students, portrayed varying degrees of guarded and non-committal attitudes. This finding was prevalent among the first and second-year students although more Diploma students than Undergraduates indicated that they would be inclined to wait until prompted and supervised by the preceptor. An example of reaction described by one of the early phase students was as follows:

I don't think I'd be happy to go ahead, I'm not qualified – I think I'd let the preceptor decide, ...it might be safer to let the qualified staff come and do it, but I'd go and watch them doing it.
(Early-Phase student)

This self-concept as unqualified and therefore not adequately prepared to respond to clinical situations was characteristic. The common preoccupation among all the students was patient and client safety and anxiety about making mistakes. One student explained:

...I think you have to be very careful because you don't want to make mistakes. I think I'd be inclined to call one of the staff and say that the patient needs whatever...care procedure done....
(Early-Phase Student)

In addition to the caution stated above the late-phase students demonstrated more awareness of the need to comply with relevant professional codes and regulations than did their early-phase colleagues. Consequently the content of their responses were liberally interjected with, "if ..." All the students were preoccupied by the policy of communicating with designated authorised persons, their preceptors the charge nurse or other qualified staff. One respondent indicated:

If it's something that needs to be done, say every half hour or so and the patient's life was threatened, then if I'm skilled and confident enough, I'd maybe say to somebody, the charge nurse, that it's time to do the procedure and if they're happy for me to go ahead, then I'd carry out the procedure for the patient and tell the charge nurse what I'd done. Maybe get them to go and...see if it's okay.

(Late-Phase Student)

Nineteen of the combined group of 85 students portrayed a phase of transition between dependence on the preceptors and readiness to respond independently to the clinical situations. Although they conveyed personal motivation to take advantage of these, the main constraint apparently, was individuals' own lack of self-confidence to act without prompting and supervision. Thus patient safety and recognition of the roles of the preceptor were reaffirmed in the emphatic tone of their responses. For example:

... Depends what the situation was...if I'd been shown how to do it and...if I'm sure that I can do it, I'd probably get the necessary things ready and ask my mentor or...one of the staff, to come and watch me do it, I'd definitely not do anything without supervision.

(Late-Phase Student)

In this qualitative content analysis the first and second-year students on both programmes were categorised as early-phase students, a total of 50. Similarly, the third and fourth-year students on both programmes were categorised as late-phase students, a total of 35. The findings showed that only 29 of the 85 students fell into the category of Attentive and Responsive to clinical opportunities. The majority, 26 of the 29, were from the late-phase group. Only 3 of the 29 were from the early-phase group. By contrast, the majority of respondents, 56 out of the total of 85, who fell into the category of Non-committal Response with Dependent reactions, were from the early-phase group. They accounted for 47 of the 56.

It was noted that where participants of this study were concerned, students in the early phase of their education were more likely than the late-phase students to demonstrate highly guarded and non-committal reactions to clinical learning opportunities. By contrast, the late-phase students were more likely to spontaneously and independently respond to the challenges of the clinical learning opportunities which they encountered. A relatively small proportion of the students, 19 of the 85, conveyed in their responses the likelihood to demonstrate some degree of spontaneity while still showing considerable guardedness and dependence on supervisory support. 12 of that 19 were third- year students.

It could be argued that students who fell into this category portrayed some sense of responsibility for their own learning process. However, it also became apparent that characteristically, both groups of students perceived the professional regulations and policies as pre-eminent to their educational needs. They therefore felt constrained to respond to certain learning opportunities without authorisation, prompting and/or direct supervision.

Overall Summary of the Findings Relating to Theme III

This chapter analysed the students' perceptions about the impact of the different techniques employed in fostering self-direction in the theoretical and practical aspects of their learning. The intention in this final section was to demonstrate the nature of consistent differences in the students' self-directed reactions in relation to the different techniques employed in their programmes.

Perceptions of the impact of the demands and challenges associated with the different self-directed learning techniques showed distinctive differences among the two groups. The Diploma students consistently reported various factors relating to course project development as hindering rather than promoting self-direction and effective learning. The factors of particular concern to this group were the timing of course assignments, distant geographical locations of the different clinical areas and inaccessibility of their institutional library

facilities. As a result they tended to associate course project development with ineffective learning in terms of superficial comprehension and inadequate recall. By contrast, the Undergraduates consistently reported on the related heavy workload as a hindrance. Nevertheless, they also conveyed the general opinion that the activities involved and the demands of course project development and seminar presentations promoted self-direction with deeper comprehension. There was evidence from the comparison of the extreme polar groups to suggest that progression and academic maturation appeared to influence students' perceptions and patterns of self-directedness in learning.

Perceptions about other learning techniques showed that while student exposure to group interactive learning appeared to be a common practice in the Diploma programme, exposure to individualised seminar presentations was relatively infrequent. In the Undergraduate programme however, there seemed to be a balance in the students' exposure to the two techniques. A characteristic feature that distinctly differed in the student profile of the two programmes was the relatively large group sizes on the Diploma programme. Therefore in relation to perceptions about the impact of the group interactive learning technique, the Diploma students consistently conveyed misgivings and lack of confidence in this to promote self-direction and effective learning. A characteristic feature in the nature of implementation reported by the Undergraduates was that in the group interactive learning and seminar contexts it was possible for them to organise and deal with the set tasks in their own strategic ways. This element of perceived independence and control appeared to distinctly differ in the patterns of student self-directedness portrayed in the two programmes.

Emerging Trends Associated with Progression and Stage of Education

The qualitative findings indicated that irrespective of programme of education, generally early-phase students described the quality of learning gained through self-directedness as superficial. However, the factors which were implicated as contributing to this limitation, differed among the students on the two programmes. The first-year Diploma students

portrayed lack of knowledge and the skills involved in self-directedness in learning. The factors which they persistently identified as causing the hindrance to their self-direction and learning were inadequate guidelines along with stress and anxiety.

Although the first-year Undergraduates also associated self-directedness with superficial learning, the key factor which they identified was pressure from heavy workload. As they progressed through the second and third years a change in view evolved and tolerance of the perceived heavy workload became apparent. At this stage despite a perceived increase in the demands and challenges of, for example third-year work the students conveyed personal satisfaction with the control and ownership allowed in their own learning process. It was also noted that they associated deeper comprehension and better performance with individuals' ability to cope with the related demands of personal effort, independent thoughts and self-directed actions.

Although progression and stage of education did not appear to influence greatly perceptions about the quality of learning gained through self-directedness, a notable difference did nevertheless, emerge between the extreme polar groups. A comparison of the first-year Diploma students with the post-finalist honours level students revealed differing perceptions about self-direction in learning. Whilst the finalist students generally accepted the demands and challenges of self-directedness as pertinent to performance of their envisaged roles and responsibilities, the first-year students perceived a hindrance to their learning. The potential factor attributable to this difference in perception appeared to be the process of academic maturation and the different levels at which the two groups of students operated.

Within the clinical context of learning the main trend in the pattern of practical skills acquisition indicated non-committal behaviours and high dependence on preceptors among the early-phase students. These students consistently portrayed a need to rely on the qualified staff to initiate, direct and provide constant supervision. Therefore the rate and scope of learning in terms of development of varied range of practical competencies in different client

care situations reflected a difference in academic and professional maturation and self-confidence. The next chapter presents a qualitative content analysis of the theme of student supervision in relation to self-direction in learning.

CHAPTER NINE

THEME IV STUDENT SUPERVISION AND SUPPORT WITHIN THE THEORETICAL AND PRACTICAL CONTEXTS OF THEIR EDUCATION

Introduction

This chapter presents a comparative analysis of the students' responses as articulated in the interviews concerning the supervision they receive in the college and practical settings. The intention was to examine the nature of the supervision interactions and analyse the students' perspectives of:

- how the academic support was organised to encourage critical thinking and independent learning
- how the practical supervision was organised to guide and assist them in independently developing their practical competencies.

The Students' Perceptions about the Supervision provided in the Theoretical Context of Learning

This first part examines the supervision of the students in the theoretical context of learning.

Three main categories emerged from the responses and have been described as systems of contact, reasons for contact, perceived impact of the supervision on the students' self-directedness. The sub-categories that derived from each of these are also presented.

A. Systems of contact

The emerging sub-categories were described as:

- i. Open Door System,
- ii. Appointment system
- iii. Mixed Open Door and Appointment system

This analysis sought to determine:

- how prevalent specific systems of contact were among particular groups of students.
- how individuals' experiences with specific systems of contact influenced their attitudes and views about seeking academic support.

Sub-category i., The Open door system, encompassed all practices of an informal pattern of contact that allowed students to consult their supervisors without prior arrangement. The students therefore, initiated and mainly controlled this system of contact. For example,

I'm quite happy with the way it works. With my tutor, sometimes...if I wanted to see her about something and...if she wasn't too busy...if she wasn't seeing somebody...at that particular time then I would go in and talk to her, she doesn't mind that. If she's talking to somebody I would let her know that I'd come to see her then...I'd wait for her to finish with whoever....

(3rd Year Undergraduate Student)

Sub-category ii., The appointment system, was portrayed as a more formal pattern of contact characterised by arranged meetings, usually at mutually convenient times for the academic supervisor and the student. This system apparently formed part of prescribed institutional regulations to which students were expected to comply. The student's view as conveyed in the following response was:

I totally agree with the present system...we have this system...if you have any problem with your work ...if you get stuck with your project, you can always phone or go and make appointment to see them but if you don't have any problem then it's up to you...you just see them just once in the semester. But they sometimes come to the wards, so you see them anyway.

(4th Year Undergraduate Student)

Sub-category iii. was the third system of contact described by a considerable proportion of both respondent groups. This flexible practice of combined appointment and open door system enabled students to contact their academic supervisors with or without prior arrangement. For example:

We are really supposed to make appointment but...if it's something important, ...emergency sort of thing then they will see you. You don't make appointment you just go and talk to them about it.

(2nd Year Undergraduate Student)

The impression conveyed in the responses was that within the appointment system the opportunity was there for students to approach their academic supervisors to discuss self-diagnosed problems and needs on an open door basis. Similarly, some educator initiated

contacts also occurred without prior arrangements. The Diploma students described scheduled visits by their academic supervisors during the periods of practice placement. In those situations, students may be encouraged to call in at the college to see their academic supervisors for further consultations. The educators usually initiated and controlled those contacts and therefore they were organised through the appointment system. As this students explained:

...they normally see us when we're out on placements and...they check our projects...discuss it with you, then they'll maybe say, right see how you get on with this bit or that bit and I'll have a look at it. So they tell you when you can go and see them...but...you can go and see them yourself if you need to.

(3rd Year Diploma Respondent)

The above statement implied a system of imposed periodic tutor-tutee contacts. In contrast, the Undergraduates described a different institutional practice. One stated:

...we have this system...you are supposed to see them...once in the semester...at least....

(2nd Year Undergraduate Student)

It can be noted from the above that unlike the practice of arranged follow-up contacts initiated by educators, the Undergraduate student apparently initiated and sought appointment for the required academic support. Students who used the appointment and mixed systems concurred in their dissatisfaction about the problem of unavailable academic supervisors when attempts were made to contact them to arrange appointments. One student reported:

...doesn't always work...you can't even make the appointment if you need to see them yourself...really puts you off.

(2nd Year Undergraduate Student)

Rather than failure of educators to keep previously arranged appointments the prevailing concern was individuals' inability to arrange appointments. Similarly, unpredictability of the open door system of contact was clearly notable in the responses and all the students who described this system shared in the opinion that:

that doesn't always work because quite often...if they are not there, nobody can tell you where they are or when they're going to be around...

(2nd Year Diploma Student)

The apparent implication of these perceived disadvantages was that they probably contributed to individuals' reliance on their peers and/or other persons to seek required academic support. Using the sub-categories described above an appropriate table was devised for this analysis.

Findings

This qualitative content analysis examined the variations in the systems of supervisor-supervisee contacts described by the students. The findings revealed that both respondent groups reported being exposed to all the three systems of contact. The mixed open door and appointment system emerged as the more prevalent pattern of contact used by the Diploma students and their academic supervisors. This was reported by 20 of the 45 Diploma students whilst the appointment system was reported by 12 students from that group. Among the Undergraduates, the appointment system emerged as the more prevalent practice described by 19 of the 40 students. The overall pattern however, showed almost a balance between the appointment and the mixed systems of contact. Only 4 of the 40 Undergraduate students described use of the open door system with their academic supervisors.

B. Reasons for Contact

This category was designed to determine the main reasons and/or specific learning needs for which the students sought guidance and support from their academic supervisors. Bearing in mind that the operational definition of self-direction in this study encompasses students' ability to make independent decisions and act on personal judgements this category explores which specific needs students tend to seek help with.

The following are four emerging sub-categories of reasons for which students claimed to contact their academic supervisors:

- i. Specifically to seek Academic guidance
- ii. Academic guidance and practice placement issues
- iii. Support with placement issues only
- iv. Default on supervisory support

The most prevalent reason reported among both groups of students for contacting their educators was to seek Academic guidance Only. The responses showed that the students

related the concept of academic guidance to the theoretical aspect of their learning. Therefore the nature of self-directedness described by them involved self-diagnosing of personal learning deficits or selecting of topics for course projects, exploring the relevant literature, organising and preparing the related assignments. The ability to interpret and evaluate related information and independently work out solutions to given problems was also a crucial element. Consequently, they based the reasons for contacting their academic supervisors on difficulties encountered with specific aspects of course projects or other assignments. That discretionary pattern of contact was noted to be more prevalent among the late-phase students in third and fourth years. They explained that the preparation of their research projects, which they perceived, not only as 'major' course assignments but also 'real self-directed work', necessitated maintaining contacts with the designated Project Supervisors. A majority of the students admitted to their reliance on the subject, specialist knowledge and expertise of their educators to achieve their goals. For example:

...she's helping me with the methodology because she knows about that kinda stuff....

(4th Year Undergraduate Student)

This admission appeared to contradict the earlier claims which some students made concerning peer interdependence during their self-directed learning activities. However, it could also be argued that the students saw peer interdependence within the context of their own informally organised learning situations as a natural phenomenon. As one stated:

...we help each other out; ...if nobody in the group knows the answer...we all look it up....

(3rd Year Undergraduate Student)

As far as they were concerned the two situations differed. In contrast, the preparation of course projects under the guidance of designated supervisors was seen as formal, stititutional assessment requirements. Therefore, response to that regulation was perceived as acts of compliance rather than personal choice. In this qualitative content analysis, the responses which conveyed a need for supervision and/or guidance with essays, projects, or other coursework but did not indicate placement issues, were placed in this sub-category. For example:

...you have a project supervisor and...they sort of, guide you and stuff like that...so you go and see them if you're stuck...'cause you're supposed to...back it up with research findings. That's it really I don't normally go to them about placement and things like that.

(4th Year Undergraduate Student)

Although students from both groups described this pattern, the larger proportion of those who fell into this category was Undergraduate students. They described having college-based clinical supervisors, Clinical Teaching Fellows, who dealt specifically with matters relating to practice placements. For that reason they did not normally contact their academic supervisors on matters relating to placement issues. Individuals reported:

...If I have...coursework problems...I would probably go to the module tutor because you see them in class. ...but...I would probably go and talk to one of the clinical supervisors if I had a problem about placements, like not getting my learning outcomes....

(2nd Year Undergraduate Student)

Nevertheless, Academic guidance and Practice Placement Issues did emerge as another category of reason for contacting the educators. This sub-category encompassed all responses, which conveyed a combination of reasons. Individuals contacted educators not only to seek guidance with course projects and other aspects of the theoretical learning but also to discuss personal concerns relating to their practice placements. One respondent explained:

...I find that I can discuss things with any of them...one particular tutor has helped me a few times with my essays...checking for me that I'm on the right track...if I need to change anything...if it's not good she would let me know.... Also they would sort out placement problems for me if I run into difficulties.

(3rd Year Undergraduate Student)

The third sub-category was designated Placement Issues Only. Respondents who fell into this category indicated that they only consulted their academic supervisors if they encountered placement problems. They normally did not make discretionary contact with the educators for any other reasons. One student indicated:

...If something's bothering me or if I have a problem with my studies I normally go to...someone I can trust...but if it's to do with placement then that's different 'cause you really need to get your objectives, that's a UKCC thing....

(3rd Year Undergraduate Student)

The above response suggested that issues relating to practice placements were seen as imperative reasons for contacting the relevant educators. This reaction portrayed how students

perceived the authoritative source of the stipulated professional requirements and the value which they placed on that aspect of their education and professional development.

The fourth sub-category designated Default on Academic Guidance and Support, represented individuals who portrayed disinclination to maintain contact with their academic supervisors. It, therefore, encompassed all the responses suggesting that apart from class contacts or arranged meetings initiated by the educators these students avoided contacting their academic supervisors. For example:

To be honest I am not in the habit of going to see the...tutors. I've never really been to see any of them about my work.

(2nd Year Diploma Student)

...I think it would work better if they let students choose their own supervisors, I can understand them choosing for you in first year but I think after that they should let people choose for themselves. I don't normally go to my supervisor about my studying because normally you can...sort things out with your mates.

(2nd Year Undergraduate Student)

The question arises as to whether or not this reaction implied self-direction or over-reliance on peer support. Using the identified sub-categories a frequency table was developed to demonstrate the distribution of the respondents across the range of categories of reasons for contacting the academic supervisors.

Findings

The findings from this qualitative content analysis indicated that majority of the Diploma students, 20 of the 45 in that group, described guidance on course assignments and placement issues as the reasons for contacting their academic supervisors. One in four attributed their contacts specifically to Academic Guidance, whilst those who limited their contacts to Placement Issues Only accounted for only one in five of these students. It was also noted that the Diploma group did not describe college-based clinical supervisors whose primary responsibility involved dealing with matters relating to the practice placements. Instead, they portrayed the practice in which their tutors normally dealt with both academic and placement

issues. A small proportion of the Diploma students, 5 of the 45 in that group, admitted to Default on Academic Guidance and Support.

In contrast to the Diploma students, 24 of the 40 Undergraduates described Academic Guidance Only, as their reason for maintaining contacts with their supervisors. They accounted for two thirds of the combined total of 35 respondents who fell into that sub-category. However, when compared to sub-category ii, Academic Guidance and Practice Placement Issues, only 9 Undergraduates reported this as their reasons for maintaining the supervisory contact. Placement Issues was reported by only one in ten of this subject group whilst 3 of the 40 students admitted to Default on Academic Guidance and Support.

Thus the overall findings revealed the following:

- More than twice as many Undergraduates as Diploma students described Academic Guidance Only as the reason for contacting their Academic Supervisors. However, further examination of the overall pattern of contacts showed that twice as many Diploma students as Undergraduates contacted their academic supervisors on matters specifically relating to placement issues.
- The factor that potentially influenced the difference between the two groups was the college-based clinical supervisors described by the Undergraduates as the tutors who normally dealt with placement issues.
- Because of the perceived implications for future practice, Placement Issues emerged as predominant educational concern among both groups of students and their supervisors. Therefore, although they may not normally contact their academic supervisors for any other reasons, respondents did indicate that placement concerns invariably prompted them to do so.

- A small proportion of students from both groups admitted to not maintaining academic supervisory contacts. Therefore, by choice, those students neglected to capitalise on the subject specialism and expertise of their designated academic supervisors. Nevertheless, they also conceded that they sometimes sought assistance with their academic work from other people.

Trends of Contact during Course Project Preparation

In this content analysis the aim was to establish whether or not there was an association between preparation of course projects and the trends of contact with academic supervisors. The focus was on the pattern of student uptake of academic supervision among the Undergraduate group. The rationale was that whilst the Undergraduates described being assigned to project supervisors during their third and fourth years for developing specific course projects, that practice was not reported by the Diploma students. However, the intention was to establish whether or not the stage of education at which the students were operating influenced their patterns of contact with their academic supervisors. Therefore, the pattern of contact reported by the first and second-year Undergraduates was compared to that of their third and fourth-year colleagues. The categories applied in this content analysis were Phase of Education and Pattern of Contact for Academic Guidance.

The qualitative findings suggested that early and late-phase students apparently reacted differently in their motivation to capitalize on their academic supervisory contacts. It was also noted that preparation of course projects served as a potential incentive for maintaining systematic contacts. The third and fourth-year students who saw their project assignments as major academic requirements readily took advantage of the subject expertise of their supervisors. In a previous qualitative analysis respondents in the early phase conveyed a need for specific instructions and structured guidelines on their coursework. Nevertheless, only a minimal proportion, 6 out of 20, actually contacted their academic supervisors for the

required guidance and supervision. Students' opinions about the nature of the supervisory interactions, and how these affected their self-direction were later examined.

Other Emerging Reasons for Contacting Academic Supervisors.

Although a small proportion of both groups of respondents mentioned pastoral support and counselling as additional reasons for seeking consultations with their supervisors these issues were not treated within the context of this analysis. The reason was that institutional provision of pastoral and counselling services, student services, and advisors of studies were not found to be common to both groups of the study subjects. While the Undergraduate students described all three services as part of their institutional provision, this was evidently not the case with the Diploma students. Additionally, it was assumed that many of the matters which students presented to those services were usually not directly related to nor had any significant influence on self-direction in learning.

C. Nature of the Supervisory Interactions

This category focused on the respondents' perceptions about how the supervision interactions to which they were exposed influenced their self-directedness. The intention was to establish the extent to which students were empowered to develop increasing independence and self-direction in terms of choices, decisions and actions. It was also the intention to determine whether a particular pattern of interaction was more prevalent in a particular programme.

The essential elements, which derived from the above category were:

- i Inflexible Interaction with No empowerment
- ii Versatile Interaction with Liberal Empowerment
- iii Varied interaction with Guarded Empowerment

These described the dimensions of interactions and degree of empowerment. Thus where the response indicated that the educator retained control and directed the interactions it was recorded as Inflexible Interaction with No Empowerment. For example:

...I find that some of the tutors, ...I get frustrated because they don't listen to me...what I have to say. Some tutors, you don't want to go and see them because you never get a chance to say what it is that you need help with. You just get told...do this, do that and that, and you feel...well, I think a lot of spoon feeding goes on in this course. You're not given the chance...and you come away thinking, what a waste of time...I don't mean to be...but I just feel they could maybe let you work on our own a ideas...and then discuss your problems...

(3rd Year Diploma Student)

To be honest the supervision I get, I don't feel it helps me to be independent because it's not like I'm allowed to...explain what I'd done and why I done it that way. ...I think first year and maybe second year people think they should tell you everything – exactly what to do.... My supervisor, don't get me wrong, I think she's great and all that, but she does all the talking whenever I go and see her and I don't feel that helps me, self-directed wise.

(3rd Year Diploma Student)

However, where the student portrayed being empowered to direct the interaction, and act on personal decisions, that response was recorded as Versatile Interaction with Liberal Empowerment. This sub-category embraced the portrayal of freedom to make personal decisions about own learning process. For example:

I make the decisions about my project. ...fourth year, it's all self-directed...for example the research proposals it's up to you to...go and see your supervisor. ...with my supervisor the way it worked, she didn't tell me what topic or anything, that was up to me. But she's helping me with the methodology because she knows about that kinda stuff. ...she lets me decide how I want to develop it...it was me that decided I was going to use questionnaire. But she checks them over and I explain what I am looking for, ...it's hard work because it's really up to me. She sort of guides me to do it the correct way but I decide things myself.

(4th Year Undergraduate Student)

Where the response indicated that the interactions involved shared decision-making with variable control, this was recorded as Varied interaction with Guarded Empowerment. Only those respondents who reported that they were given opportunity to negotiate and act on personal judgements were placed in this sub-category. For example:

I know a lot of the girls prefer to be told...given structured guidelines and that. But... if you're talking self-directed, for myself, I feel it's better if they let me use my own thinking...I find that some tutors ask you, you to put forward ...tell them what you think and then, if necessary, they point you in the right direction and it's a sort of both your ideas....

(3rd Year Undergraduate Student)

...to me third year's when self-directed really hits you because when you start working on your project you have to decide the topic, what it is you want to base your project on. You discuss it with the supervisor and if they think it's a good idea you go and develop it much as you can. They give you a few pointers and stuff like that. I would say that most of it, it's my own ideas, but sometimes my tutor will tell me what's best. So it's like she guides me and checks that the project's coming on okay. If something's not right she would tell me...if it's rubbish she would say it's rubbish but if it's good she would tell me and that doesn't bother me 'cause she is honest with me.

(3rd Year Undergraduate Student)

It can be noted that a crucial element in these responses was sharing of the interaction process. The students' need and expectation to be allowed to actively contribute their own ideas were notable in the ways in which they expressed their views. To determine the distribution of respondents across the categories of facilitation and empowerment, an appropriate table was developed.

Findings

23 of the 45 Diploma students described interactions in which their academic supervisors retained major control and direction of the decisions made. 17 of the students also described the facilitation to which they were exposed as restricted with guarded empowerment. The general view about these interactive practices was that individuals felt deprived of the opportunity to make personal judgements and act on their own ideas. Only 5 of the 45 Diploma students described being exposed to relatively versatile facilitative styles with empowerment to make personal decisions and act on their own judgements.

The qualitative findings also revealed that although only a small proportion of Undergraduates described liberal empowerment, in comparison to their Diploma counterparts they, the Undergraduates, formed a majority, 9 of the 14 respondents who fell into this category. There was however, a balance in the proportion of Undergraduates who described guarded empowerment, 15, and no empowerment, 16 of the 40 students respectively.

Emerging Trends of the Supervisory Interactions

- The overall trend of the supervision practices revealed more educator control than student empowerment in both programmes. However, this appeared to be more prevalent among the Diploma group and the early phase Undergraduates. Students described practices in which educators may contact individuals to discuss specific aspects of their coursework or other issues.

- Although there was a notable difference in the proportions of students from the two programmes that described no empowerment, the proportions that described guarded empowerment were comparable.
- Varying degrees of guardedness were described but the general view among both groups of respondents was that most of the supervisors retained considerable control of the final decisions arrived at. The differences in practice were attributed to individual supervisor's preferred style of facilitation.
- The nature of liberal empowerment involved interactions in which the onus of responsibility was on the student to seek academic guidance at her/his own discretion based on self-diagnosed learning deficits.

The next step in the content analysis was to determine whether a relationship existed between the stage of education and the nature of facilitation and empowerment that occurred in the supervision interaction. Since the Undergraduate students reported perceptible self-directed demands during the later phase of their education, the qualitative analysis conducted in this section was based on the data obtained from that group.

Similarly to the pattern of contact, the content of the responses indicated that the nature of the supervisor-supervisee interactions probably differed among students in the early phase and those in the late phase of their education. Therefore, once again, the two variables examined were Phase of Education and Nature of Facilitation and Empowerment. Based on the presence or absence principle of content analysis the two sub-categories describing Liberal and Guarded facilitation and empowerment were combined for the following rationale. In both categories, respondents reported varying degrees of personal involvement in the discussions and the final decisions arrived at. Therefore, the combined variable was described simply, as Varied Facilitation and Empowerment. At the opposite end of the spectrum the alternative dimension was described as Inflexible Facilitation with No Empowerment.

7 of the 20 early-phase students described varied interactions with empowerment while the remaining 13 students described interactions that failed to empower them to function in the self-directed capacity. Among the late-phase students 17 of the 20 students described facilitation practices that empowered them to function independently. Only 3 of those 20 students fell into the category of no empowerment.

The qualitative findings indicated that the nature of facilitation and empowerment to which students were exposed differed for the early and the late-phase students. Students in late phase of their educational programmes were more likely to be encouraged to make decisions, choices and act on their own judgements than those in the early phase. Early-phase students, on the other hand, were more likely to be exposed to inflexible supervision practices that lacked empowerment. They therefore generally, acted on the decisions and judgements made by their supervisors.

Other Related Findings

- Whilst the Diploma group described a system of supervision by designated teams of tutors, the Undergraduates portrayed being assigned to individual project supervisors.
- Students perceived both practices as being associated with potential problems because variations in the supervisors' expectations created conflicts in the learning process.

For example, from the perspective of the Diploma students the feelings expressed included the following:

It's a shame that they...change your tutors when you finish the CFP (Common Foundation Programme).

(2nd Year Diploma Student)

...I've already had about half a dozen already and I don't see how that helps me.

(2nd Year Diploma Student)

It wouldn't be so bad if they agreed on what they want us to do...one tutor tells you one thing, ...you Do...what they told you to do, another tutor looks at it and tells you that's not enough or they expect something different and it gets...conflicting....

(3rd Year Diploma Student)

The Undergraduates also reported similar dissatisfactions. Although they described being assigned to individual supervisors they, nevertheless, reported that difficulties arose if the designated tutor was unavailable for a period of time when the student needed guidance and support. Respondents indicated that being re-assigned to a different supervisor disrupted established relationships between students and their supervisors. An example of their view on this was:

I think it's good to have your own supervisor because they get to know...how you want to develop your project and that. But then again if – like – mine...went off sick for weeks, it was quite a long time, then...you've got a real problem because...you're given another supervisor and...they don't really know you that well, they haven't seen your project and they don't know how you want to develop it. So you find that you're back to square one and it gets really difficult.

(4th Year Undergraduate Student)

These views suggested that individuals' attitudes to particular systems of supervision and their development of self-direction might be adversely affected. The main concern was:

...they don't really know you that well, they haven't seen your project and they don't know how you want to develop it. So you find that you're back to square one and it gets really difficult.

(4th Year Undergraduate Student)

These responses clearly conveyed students' concerns about change of academic supervisors.

The next section of the content analysis examined students' perceptions about the nature and impact of the supervisory practices to which they were exposed in the practical aspect of their learning.

The Students' Perceptions about the Supervision provided in the Practical Context of Learning

This section focused on the students' perspectives of the supervision of the practical aspects of their learning. In this qualitative analysis the responses from the Diploma and Undergraduate students were treated together for the following reasons. The practical learning took place within similar clinical environments. Both groups of students were exposed to practitioners with similar professional backgrounds, range of expertise and years of practice. The same statutory professional codes, policies and regulations guided all the practitioners. The statutory regulation required that all preceptors be appropriately qualified, and experienced practitioners who had received the approved preparation for facilitating students'

acquisition of their practical competencies. Therefore, essentially both groups of students should have been exposed to similar range of supervisory practices.

Taking account of the above, the responses from the combined year groups of students were treated together as follows. The data from the first-year students were analysed followed by the data from the second, third and Honours level students. This enabled comparisons to be made of the supervision provided at the different stages from the early, novice phase of first and second years to the final phase of third and fourth years. Based on the above argument, in this section of the content analysis the sources of the responses quoted in the text were appropriately identified by the phase of education.

The main category that emerged from the data was Nature of Student Self-direction in the Practical Settings. The sub-categories that derived from this main category described:

- i. Chaperoned observation.
- ii. Directly supervised practice
- iii. Discreetly supervised practice

Sub-category i. embraced all the responses which portrayed chaperoning of students to observe aspects of clinical practice, determined by the preceptor. Students who fell into this category described shadowing their preceptors or other qualified practitioners to watch how they functioned and dealt with the various aspects of nursing. For example:

...I think it's better to just follow them around and watch what they're doing. The preceptors usually decide everything.

(Early-Phase Student)

In first year you're new to the ward...you're really nervous and the last thing you need is to be left on your own, really not knowing what to do.

(Early-Phase Student)

On the whole usually, the preceptors organise things for you. You're given the same shifts, basically work with them....

(Early-Phase Student)

The extent of actual participation in care provision was notably limited and the interaction

in the supervisory process portrayed no empowerment. Preceptors determined the nature of learning to be achieved, when, where and how the related processes would take place. The scenario described by one student was as follows:

...they usually say to you just come along and watch, but if they don't, well I haven't said to them... Oh, I want to learn this and that. Some of them will ask you to do the odd basic things like BP. Well, I couldn't take BPs, every time they said...BP, I was like – don't make me do it and...they made me do it...three or four times a day. But I wouldn't go off and do things by myself...like practice it on the patients if there's nobody there to watch me. I don't think we're allowed.

(Early-Phase Student)

As they progressed the early-phase students described their day-to-day interactions with the preceptors as involving directly supervised practice. Thus sub-category ii. embraced all responses which described individuals being given opportunity to actively participate in various aspects of the care provision. Students indicated that generally preceptors tended not to give early-phase students much encouragement to indicate personal learning needs and/or independently utilise the practical learning opportunities which individuals encountered.

Instead, examples of scenarios described by two early-phase students suggested:

...they're always there to watch you, see that you don't make mistakes....

(Early-Phase Student)

I think that it is more beneficial to you if somebody said, Right I'm going to do such and such, do you want to come and watch? ...and you'll watch them doing it and as they've been going through the procedure they will tell you what they're doing and why they're doing it. Then maybe next time they'll say, I'm going to do this procedure do you want to come?...and I've went along and they've said, Right there you go, you do this bit or that bit, and it's good that they put you in that position because you have to learn and you can't learn just standing watching all the time. You have to do it as well. If the ward is very busy you don't really get to do much, and they sometimes forget you are there. Sometimes I just say, ...can I go and see this?

(Early-Phase Student)

The scope of competence acquisition reported during that early phase was restricted but in their lack of knowledge and competence individuals conveyed a preference for direct supervision. This group of respondents portrayed considerable anxiety about the idea of independent acquisition of practical skills. Nevertheless, they also conveyed a transition from the strictly observer status to participant learners.

Sub-category iii. embraced all the responses which portrayed encouragement to participate more diversely and independently, where appropriate, in the care provision. The nature of

interaction between student and preceptor apparently evolved from the instructional mode to negotiations. This became notable as the student began to personally seek clinical learning opportunities and took more initiative in acquiring and practising the professional skills.

Nevertheless, the need for discreet supervision was mutually acknowledged as indicated in their responses. For example:

...Really, by the time you get to third year you should be starting to do things on your own, anyway, but you're still a student and you can't just go off and do things. You have to check with the mentor or one of the staff. At this stage you don't feel so threatened. If I'm not sure about something and I want to learn how to do the procedure I would still say to my mentor. Just say what I want to do....

(Late-Phase Student)

Similarly, the post finalist stage at Honours level, allowed for consolidating and further expanding on the acquired competencies as well as observing new and unfamiliar procedures at a more advanced level. Thus all responses which described more liberal empowerment in the supervisory interactions to enable the student to function independently were placed in this category. For example:

...fourth year placement, ...is totally different because they treat you as part of the team. When I started in this...ward, the charge nurse...let me do things...as if I was one of the staff. I would organise my work, plan the care, discuss with him and if he thinks it's okay, I just go and do the things. You have to let them see that you are motivated and...work really hard to develop your skills. A lot of them are really great. They give you lots of opportunities....

(Late-Phase Student)

The above response conveyed perceptible empowerment towards independent thought and actions in the practical learning context. These characteristics differed from those described by the early-phase students who were at the stage of developing their practical competencies. To determine possible relationship between student empowerment and the stage at which they were functioning, a frequency distribution table was devised the year group and the categories of empowerment.

The Emerging Trends of Practical Supervision

The findings from the content analysis revealed that at one end of the spectrum 19 of the 25 first year students and 5 of the 25 second-year students described chaperoned observation. Students at that stage of education reported limited active participation in the care provision

and generally received no empowerment for self-direction. At the opposite end of the spectrum 17 of the 25 third-year students and majority of the Honours level students described discreetly supervised practice with liberal empowerment. In between the two were students who portrayed the kind of supervision that fostered only limited opportunities for independent decisions and actions in their competence acquisition. 17 of the 25 second-year students fell into this category although the overall distribution showed a mixed group of early and late-phase students. The late-phase students who fell into this category explained that direct supervision only occurred if they were exposed to new and unfamiliar situations.

In the related analysis, the two variables Phase of Education and Nature of Empowerment, once again, applied. Chaperoned observation was combined with the directly supervised practice. The rationale was that in both cases the respondents reported limited opportunities to use their own initiative in developing their practical skills. Thus the combined category was designated Chaperoned Participant Observation.

The combined distribution of respondents revealed that a majority, 47 of the 50 early-phase students experienced chaperoning with limited active participation and guarded empowerment. The proportion of late-phase students who fell into this category was only 10 of the 35. By contrast the majority of late-phase students 25 of the 35, described discreetly supervised practice with liberal empowerment.

The qualitative findings suggested that the nature of supervision and degree of empowerment probably differed for the early and late-phase students.

Other Related Findings

A notable phenomenon was observed during this part of the interviews. Respondents in both phases demonstrated apparent internal conflict when presented with items, which they

perceived as risk taking and/or non-compliance with professional codes and regulations. One particular item sought to establish:

- What independent measures individuals took in acquiring new skills or in further developing previously acquired skills without the direct supervision of their preceptors.

A considerable proportion of the students appeared to be dismayed by the implication of developing practical competencies through their own self-directed efforts without prompting by their supervisors. Consequently, their responses were constrained and individuals became defensive of the role and authority of their preceptors. However, they appeared to be more at ease in discussing the idea when the item was modified and the question reversed. The question as to:

- what measures preceptors took in encouraging them to function without direct supervision to help them develop increasing independence

appeared to be more acceptable to individuals. In response, those who claimed to have experienced supportive and empowering supervision readily explained their day-to-day interactions with their preceptors. In the same way, those who claimed to have experienced neglect also explained the perceived limitations in the supervision interactions to which they had been exposed.

Summary

This chapter examined the extent to which self-direction was encouraged in the acquisition of the theoretical knowledge and development of their practical competencies. In the theoretical context of learning, the assumption was that there might be an association between the phase of education at which individuals were functioning and their motivation to maintain contact with academic supervisors. Another assumption was that there was no association between the phase of education and the nature of facilitation and empowerment that occurred in the supervision interaction. The qualitative analysis revealed the following findings:

- A difference among the early and late-phase students in their incentive to maintain contact with academic supervisors. The late-phase students evidently took more advantage of the subject specialism and expertise of their educators than did the early-phase students.
- Whereas the Diploma programme with larger student population employed a system of team supervision, the Undergraduate programme with relatively smaller student population employed a system of assigning students to individual supervisors. Additionally, the Undergraduates reported having designated project supervisors during their third and fourth years of education.
- The essence of the academic supervisory interactions portrayed either inflexible facilitation with imperceptible empowerment, or versatile facilitation with liberal empowerment. Students who claimed that they were allowed freedom of choices and decision-making reported functioning in the late phase of their education and engaged in preparation of major course projects. The project topics apparently reflected clinical problem situations and professional issues presumably designed to encourage critical thinking and independent decision-making.
- Regarding placement issues, students in the Undergraduate programme, described supplemental supervision and support by college-based clinical supervisors, clinical teaching fellows.

In relation to the practical context of learning, students saw development of their practical skills not only as fulfilling curricular requirements but also as enabling them to participate safely in the provision of patient and client care. Three main supervisory practices emerged.

- i. During the early phase, the preceptors determined what practical situations the students were exposed to including the timing and the extent of opportunities allowed. Students were chaperoned at all times and apparently received no encouragement to independently develop their practical competencies.
- ii As the students progressed, a change in the interactions evolved whereby the students

were directly supervised to participate in aspects of the care provision. At that transitional phase, empowerment for self-direction in the practical context of learning was described as notably guarded.

- iii Students in the late phase of their education described more freedom and empowerment to independently develop their practical competencies. They were, therefore, able to negotiate opportunities to observe or actively perform various nursing procedures.

The qualitative analysis revealed that the nature of day-to-day interactions and extent of student empowerment reflected the phase of education at which individuals functioned. The next chapter presents analysis of the students' self-concept as self-directed learners.

CHAPTER TEN

STUDENTS' PERCEPTIONS OF THEIR AUTONOMY AND PERSONAL LEARNING ATTRIBUTES

Introduction

In the preceding analyses, the technique of content analysis was used to examine students' conceptualisations about self-direction as an educational concept. In addition, views about its implementation in the educational programmes and the students' reactions to the related demands were also examined. In this chapter, the technique of exploratory factor analysis was employed to investigate the perceptions of students undertaking nursing educational programmes concerning their self-directed characteristics.

Aim of the Factor Analysis

The purpose of this exploratory factor analysis was to establish the factorial structure of the students' responses to the questionnaire on how they perceived their autonomy and personal learning attributes.

Processes Involved in the Analysis

The technique of factorial analysis was employed essentially to determine the underlying factors that reflect specific dimensions of personal autonomy and learning attributes among these students. The following sections present the relevant details of the statistical processes involved in the analysis.

The Raw Data Matrix

The initial stage of the analysis involved development of a matrix of the raw data obtained from the study subjects. The matrix represented the study subjects in the vertical plane and the variables in the horizontal plane. Each row represented each individual subject whilst each

column represented a single variable. All together N=130 subjects were recorded. These were made up of 15 each of first, second and third year students and 10 fourth year students, a total of 55 from the undergraduate group. The Diploma group consisted of 25 each of first, second and third year students, a total of 75. Thus, the overall number of participants involved in this factor analysis fulfilled the proposed absolute minimum of not less than 100 subjects per analysis.

The variables consisted of 64 self-rating questionnaire items (Appendix 2.ii). The first part contained 8 items exploring the students' demographic profiles in terms of gender, age range, previous educational backgrounds, and previous self-directed learning experiences. The second part consisted of 56 items in a Likert-type scale, designed for respondents to indicate how they perceived their autonomy, as well as personal capabilities and preferences regarding self-direction in learning. Each item in the questionnaire was numerically coded including the five point scale where 1 represented strong disagreement, 2 = disagreement, 3 = uncertainty, 4 = agreement and 5 = strong agreement. Thus for each item the subject's response was recorded in the appropriate column according to the degree of agreement.

This principle of numerical coding was applied to each of the other items according to the label assigned to the particular variable and the value within the range of characteristics or variations identified. For example, column one represented the student groups and began with the Undergraduates in the first 55 rows followed by the Diploma group in the next 75 rows. The different year groups were coded separately beginning with fourth year undergraduates coded as - 4, third years as - 3, second years as - 2 and first years as -1. The year groups of the Diploma students were coded beginning with first years as - 5, second years as - 6 and third years as - 7. Additionally to distinguish between the two groups according to the programme of education, the Undergraduates were coded as Student Group - 1 whilst their Diploma counterparts were coded as Student Group - 2. Similarly, each of the demographic

items was coded according to the variations of characteristics identified. For example concerning gender, Male was coded as – 1 whilst Female was coded as – 2.

Suitability of the Instrument for Factor Analysis

In order to proceed with the factor analysis it was necessary to establish the suitability of the variables in the questionnaire for factor analysis. To that end, the statistical value of Kaiser – Meyer – Olkin’s (KMO) Measure of Sampling Adequacy was noted. The generally accepted normal range is 0 – 1 and high values above 0.7 would indicate that overall, the correlation of the variables was suitably high for factor analysis. Thus, the KMO result of 0.738 yielded from these variables indicated sufficiently high statistical value for this factor analysis. This is represented in Table 10.1 below.

Table 10.1 KMO Result Indicating the Measure of Sampling Adequacy

| | | |
|---|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | | .738 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square | 3089.033 |
| | df | 1540 |
| | Sig | .000 |

Correlation and Extraction of the Principal Components and the Eigenvalues

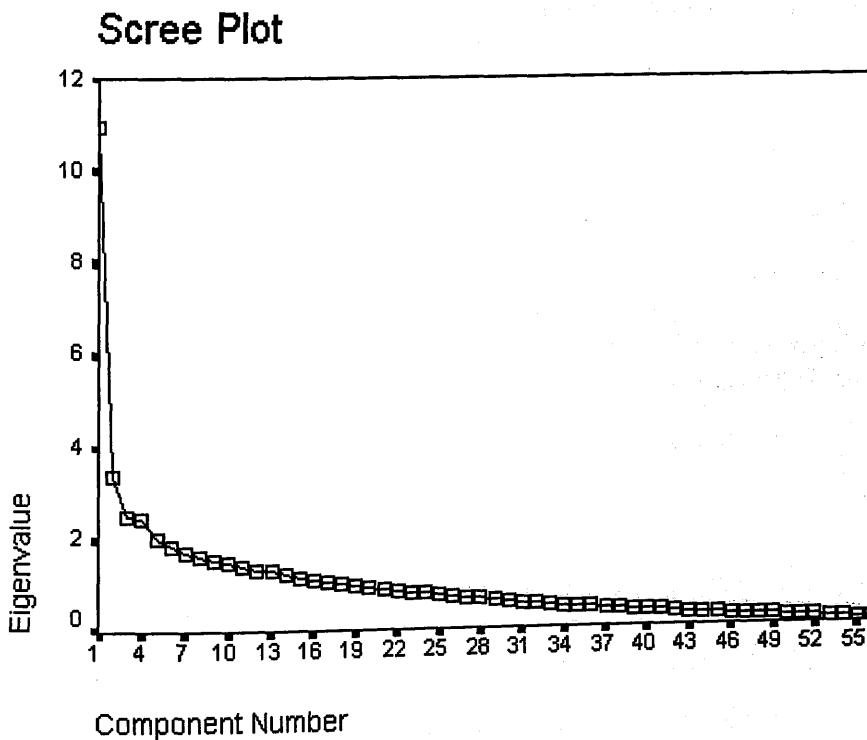
This part of the analysis involved reducing the overall set of variables to a smaller set. The intention was to establish which components related to identifiable constructs or factors. Thus, extraction of the principal components involved multiple correlations amongst the variables. The correlated matrix demonstrated not only the inter-relationships amongst the variables of the 56 Likert-scale questionnaire items but also their significance levels. The linear combinations of variables in the matrix indicated which variables were closely related in sharing similar characteristics. The pattern of emerging correlations represented the initial factors or components, the underlying dimensions that the variables had in common. 18 Principal Components were extracted from the original set of variables and indicated all the variance in the matrix. The extraction took account of the eigenvalues of each component, the amount of variance in the pool of variables in the questionnaire items that was explained by

each component. These represented the sum of the squared weights for each of the emerging components or factors as demonstrated in Appendix 8.i.

The Scree-Test

Additionally to the above, the statistical technique of scree-test based on the principle of discontinuity was employed to determine the stage at which no more factors should be extracted. The rationale was that little additional information could be gained from subsequent factors. The scree-test demonstrated, in graph format, the percentage of the variance explained by the eigenvalue of each of the factors. Therefore, the technique further enhanced the analysis by serving as a guide in the selection of the correct number of factors. Figure 10.1 below represents the scree-plot from the analysis of the principal components.

Figure 10.1 Scree-Plot Showing a Graphical Representation of the Eigenvalues of the Principal Components



Based on the above-mentioned principle of discontinuity, four factors were identifiable at locations preceding and to the point at which a change in slope occurred in the graph after which the eigenvalues began to level off. This feature indicated that information obtained from those subsequent factors would be unlikely to contribute significantly to the overall interpretation of the findings. This means that the factors located before and to the point following which a change in slope occurred, could be selected as providing adequate scope of authentic information. Factors located after the point of change in slope invariably yielded less authentic information. Thus in selecting the factors for the final analysis, emphasis was placed on the principle of discontinuity in the scree plot and on variables with eigenvalues greater than 1.00.

Orthogonal Rotation of the Factors

Examination of the unrotated principal components revealed a wide range of components with multiple loadings. The implication was that identification of authentic factors could not be achieved on the groupings of variables yielded in that matrix. It was necessary to clarify which variables belonged most clearly to each of the factors extracted in order to be able to produce appropriate interpretations. To simplify the structure and the interpretation of the factors, orthogonal rotation of the principal components was used. Based on the conventional criterion of co-efficient loadings exceeding 0.3, only those items which loaded appropriately high on a specific factor were selected. The rotated solution was achieved through the SPSS varimax technique.

The findings showed that whereas the unrotated matrix yielded 22 positively loaded items at co-efficient levels greater than 0.3, in the first factor this had reduced to 6 following rotation. Additionally, changes in item loadings and positions were noted to have occurred as a result of the rotation. Consequently, the original loading of item 11, for example, increased from 0.216 to 0.818, thus it became the most strongly loaded of the list of item variables that correlated with factor 3. Interpretation of the factors, therefore, took account of the rotated

factor loadings. Inferred meanings were derived from the content of the items with the highest loadings in each factor. The rotated items and loadings are later represented in tabular format.

Findings from Interpretation of the Factors

Within the context of this exploratory factor analysis, the emphasis was on determining the pattern of groupings of item variables that emerged from the students' self-rated responses. Therefore, in developing the tables both positively and negatively loaded items were represented to fully demonstrate the pattern of loadings in each factor. However, in interpreting the factors, particular emphasis was placed not only on the highest positively loaded items but also on the underlying construct derived from the overall set of items. The analysis yielded 4 major factors which were interpretable as dimensions of personal autonomy and learning attributes. Tables 10.2 – 10.5 below represent the set of items and their loadings relative to each factor. In each case, the description of the factor is provided together with the content and the explanation of the related construct.

Table 10.2 Factor Matrix from Orthogonal Rotation by Varimax Representing Factor 1 Items and their Loadings

| Factor 1 Lack of Self-confidence and Fear of Self-Direction in Learning | | | | | |
|--|---|-----------------|-----------------|-----------------|-----------------|
| Item | Variable | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
| 31 | I don't feel confident enough to take control of my own learning process on this course. | 0.657 | 0.150 | 0.049 | -0.106 |
| 9 | I don't like being left to go and do my own learning, I'm never sure if I'm on the right track or to what depth I have to learn something. | 0.609 | 0.190 | -0.343 | -0.137 |
| 24 | I think self-directed learning should be abolished because, like me, not everybody is organised and disciplined enough to cope with that way of learning. | 0.512 | 0.209 | 0.040 | 0.011 |
| 37 | I am not very organised and I am not really good at setting and achieving targets. | 0.512 | 0.192 | -0.198 | -0.171 |
| 13 | I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and the database system. | 0.377 | 0.317 | -0.175 | -0.407 |
| 55 | I don't really consider myself a keen self-directed learner because I find it too demanding and tend to put off studying or doing my assignments until the last minute. | 0.363 | 0.074 | 0.083 | -0.273 |
| 8 | I enjoy my independence and prefer to do things my own way | -0.688 | -0.059 | 0.098 | 0.138 |
| 14 | Discovery and problem-based learning don't really bother me, I think the challenge to plan how we are going to explore and work through the solution to a specific problem is quite good. | -0.399 | 0.038 | 0.343 | 0.152 |

Interpretation of Factor 1 – Lack of Self-confidence and Fear of Self-direction in Learning

8 items loaded on this factor, 6 of which loaded positively. Among those positively loaded items only one, item 13, was noted to have loaded on another factor. However, the loading of 0.317 on factor 2 was noted to be somewhat smaller than the co-efficient of 0.377 on factor 1 and -0.407 on Factor 4. The overall interpretation of the content of this cluster of items seemed quite clear. In the first instance, the items with highest loadings, item 31 – 0.657, item 9 – 0.609, item 24 – 0.512 and item 37 – 0.512, clearly indicated dependency. Also notable was the fact that this cluster of items (the 6 positively loaded items) appeared to convey a cognitive awareness of specific personal limitations. For example item 55 –

I don't really consider myself a keen self-directed learner because I find it too demanding and tend to put off studying or doing my assignments until the last minute

indicated perceived lack of commitment, motivation and initiative to the idea of functioning independently in self-directed learning situations.

The perceived demands and challenges associated with this approach seemed to be implicated for the disinclination and negative reactions conveyed. This factor also conveyed perceived lack of self-confidence, for example item 31 –

I don't feel confident enough to take control of my own learning process...

and item 37

I am not very organised and I am not really good at setting and achieving targets....

These items conveyed the tendency to neglect or perhaps temporise aspects of the academic work until prompted by external motivators such as pressure of submission date. Another manifestation of the dependency included the tendency to rely on others, the educators and preceptors, to prepare and supply the required learning materials seemed to be implied in item 13 –

I tend to rely on lecture notes and handouts....

These were elements, which evidently were critical for achieving the desired learning. Also implied in this factor was the expectation and preference to be provided direct instruction and guidance on what to learn, and to what depth. This emerged in Item 9

I don't like being left to go and do my own learning, I'm never sure if I'm on the right track or to what depth I have to learn something.

In contrast, at the other end of the spectrum the negatively loaded items on this factor, items 8 and 14, appeared to indicate independence and self-reliance. These are later discussed in a separate factor which appropriately addressed the elements of autonomy, self-discipline and personal control. The following section represents the description and interpretation of the content of factor 2.

Table 10.3 Factor Matrix from Orthogonal Rotation by Varimax Representing Factor 2 Items and their Loadings

| Factor 2 Reluctance to Assume Responsibility. | | | | | |
|--|--|----------|---------------|----------|----------|
| Item | Variable | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
| 48 | In the wards, I think it is safer to wait until you are asked to do things rather than acting on your own initiative. | 0.115 | 0.762 | -0.020 | 0.017 |
| 4 | I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice | 0.065 | 0.536 | -0.206 | 0.052 |
| 53 | I feel that teachers are ultimately responsible for whatever knowledge and skills students gain from their education. | 0.185 | 0.482 | 0.094 | -0.142 |
| 46 | Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I'm doing and where I am going wrong. | 0.059 | 0.431 | -0.198 | 0.097 |
| 56 | I am quite happy to let other people do all the necessary planning and organising for me. | 0.185 | 0.406 | 0.051 | 0.083 |
| 44 | I came on this course expecting to be taught what I need to know for my professional qualification so I resent having to do so much self-directed work. | 0.185 | 0.373 | -0.245 | -0.097 |
| 35 | I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications. | -0.063 | 0.318 | 0.020 | 0.131 |
| 13 | I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and the database system. | 0.377 | 0.317 | -0.175 | -0.407 |
| 54 | As adult students, I think we should be given more responsibility for our own learning. | -0.199 | -0.603 | 0.204 | 0.258 |

Interpretation of Factor 2 – Reluctance to Assume Responsibility.

9 items loaded on this factor, 8 of which loaded positively whilst the remaining one i.e. item 54 loaded negatively. Based on the cluster of items and the overall content a different

dimension of academic dependency could be derived. In this case, the dependency appeared to be externally influenced by two main concerns. From the perspective of learning within the practical settings the concern appeared to focus on safety in practice as conveyed in item 48 –

In the words I think it is safer to wait until you are asked to do things rather than acting on your own initiative.

From the theoretical perspective, however, there seemed to be anxiety about successfully achieving the educational goal i.e. the professional qualification. These could be further clarified in the following ways. In item 4 the need and preference to be directly supervised and guided was implied in the statement:

I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice.

In item 46 –

I always expect teachers to tell me how I'm doing and where I am going wrong...

the content seemed to imply students' expectation of the teacher as having the obligation to evaluate and assess their learning and progress. In item 44, the expectation

...to be taught what I need to know for my professional qualification

implied the teacher, not only as the major resource, but also as having the major role and responsibility in the educational process. This factor seemed to convey expectation that the teacher had an obligation to the students. It was therefore the teachers' responsibility to implement the curriculum, direct and control the learning process to ensure that students' achieved the relevant professional qualifications. These findings seemed to indicate individuals' lack of preparedness to take control and/or accept responsibility for their own learning process

Although item 13 also loaded positively on this factor, the content appeared to be more relevant to factor one as previously demonstrated. In contrast to the positively loaded items the negatively loaded item 54, which emerged on this factor clearly conveyed an awareness of

personal responsibility for the learning process. Further discussion of this concept is later provided under the relevant factor.

Table 10.4 Factor Matrix from Orthogonal Rotation by Varimax Representing Factor 3 Items and their Loadings

| Factor 3 Self-reliance and Resourcefulness | | | | | |
|---|--|----------|----------|---------------|----------|
| Item | Variable | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
| 11 | I enjoy learning through group work particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher | -0.119 | -0.097 | 0.818 | 0.050 |
| 7 | I learn a lot more when I have to find out things for myself, because I have the freedom to use various resources, which is not the same in taught sessions. | -0.099 | -0.106 | 0.419 | -0.143 |
| 14 | Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to specific problems is quite good. | -0.399 | 0.038 | 0.343 | 0.152 |
| 41 | I am always trying my hands on new things, I find it really exciting when I manage to teach myself something. | -0.033 | -0.154 | 0.306 | 0.299 |
| 10 | I don't like group work simply because when we're left on our own and there is no teacher there to control things, we tend to waste time floundering without learning anything concrete | 0.157 | 0.134 | -0.843 | -0.099 |
| 9 | I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something | 0.609 | 0.190 | -0.343 | -0.137 |

Interpretation of Factor 3 – Self-reliance and Resourcefulness

6 items loaded on this factor, of which 4 loaded positively showing the two items with highest loadings. The main attributes which this factor conveyed included self-reliance, and resourcefulness. These seemed to emerge from the readiness to function independently in fulfilling the learning objectives. Recognition of the freedom and benefit to use one's own initiative in making decisions seemed to be implied in item 7 –

I learn a lot more when I have to find out things for myself, because I have the freedom to use various resources....

In addition, this factor conveyed a willingness to embrace opportunities that allowed students to employ creative strategies in fulfilling the learning tasks to which they might be exposed. This suggested an element of academic maturation demonstrating individuals' readiness to deal with the demands and challenges of self-direction in learning. This latter interpretation was derived from item 14 indicating acceptance of problem-based learning with the view that:

...the challenge of having to plan how we are going to explore and work out the solution to specific problems is quite good.

Other attributes derived from this item and item 11 were the elements of compliancy and adaptability that might be gained from the various group interactive situations. In item 11 these seemed to be reflected in the preference for group learning situations in which students might be

...left to explore and debate a topic ~ without direct guidance from the teacher.

Additionally, item 41 –

I am always trying my hands on new things, I find it really exciting when I manage to teach myself something...

seemed to convey recognition of the benefits of using one’s initiative and being adaptable in various learning situations.

The 2 negatively loaded items, which were itemised provided the contrasting viewpoint in the interpretation as previously demonstrated. Thus from the negative end of the spectrum reactions and attitudes of insecurity and uncertainty emerge. These contrasting attributes emerged in the interpretations of factors 1 and 2 above conveying expectations and demands for direct supervision and assistance. The next section presents the content and interpretation of factor 4, from which the attributes of autonomy and personal control were derived.

Table 10.5 Factor Matrix from Orthogonal Rotation by Varimax Representing Factor 4 Items and their Loadings

| Factor 4 Autonomy and Self-discipline | | | | | |
|--|--|-----------------|-----------------|-----------------|-----------------|
| Item | Variable | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
| 29 | If I am going to do something, I like to make my own plans so that I know where I am going and what I am going to do. | -0.165 | -0.034 | -0.011 | 0.707 |
| 43 | It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off. | -0.078 | -0.027 | 0.091 | 0.689 |
| 25 | I usually write down things that are new to me so that I can ask somebody later or look them up myself. | -0.113 | 0.044 | 0.085 | 0.525 |
| 38 | In self-directed learning, I am in control and if there is something that I want to learn in greater depth then I can. | -0.296 | -0.145 | 0.222 | 0.343 |
| 45 | I usually assess my own learning and progress, that way I know what help to ask for. | -0.231 | -0.061 | 0.136 | 0.314 |
| 47 | I consider my work and my learning to be my own responsibility. | -0.096 | -0.083 | 0.211 | 0.306 |
| 13 | I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and database systems. | 0.377 | 0.317 | -0.175 | -0.407 |
| 17 | I'm not in the habit of reading up on things before we get taught in class unless the teacher specifically asks us to read up on the particular topic before coming. | 0.235 | 0.039 | 0.063 | -0.315 |

Interpretation of Factor 4 – Autonomy and Self-discipline

8 items loaded on this factor, 6 of which loaded positively. As previously demonstrated the interpretation focused on the overall content and highest loaded items. The main features derived from the items reflected attributes of autonomy, self-discipline and personal control. The strong elements of autonomy and personal control can be noted in items 29, 38 and 47 the content of which portray cognitive awareness of own capabilities and decisive actions. For example item 29 –

If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do –

seemed to reflect self-confidence.

Also notable was the perspective, which implied control over how to respond effectively to learning situations requiring self-direction. This is conveyed in item 38 –

In self-directed learning I am in control and if there is something that I want to learn in greater depth than I can.

The tone of self-assurance conveyed in this item could also be clearly noted. In a similar vein item 47 –

I consider my work and my learning to be my own responsibility

seemed to convey recognition of personal accountability in the learning process. An equally important perspective of this emerges in item 45 –

I usually assess my own learning and progress, that way I know what help to ask for.

This statement implied preparedness of the student to accept responsibility for own learning process. Attributes of self-discipline and academic commitment could also be derived from item 43 –

It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off.

The 2 items, which loaded negatively on this factor i.e. items 13 and 17, conveyed reliant tendencies. The statements clearly indicated lack of initiative to take independent measures in fulfilling learning objectives as previously discussed under the relevant factors.

Comparison of the Two Groups Based on the Factor Scores

In addition to the above analysis based on the factor loadings, each individual subject's score for each factor was calculated and used for further analysis. Two specific tests were carried out with a view to establishing relationships of the four factors with other concepts such as the educational programmes being undertaken and the variations in age of the students. Output of the computerised data showing the factor scores is enclosed as Appendix 8.ii. The following sections present the processes involved in each of the tests mentioned.

Independent Samples T-Test

The first test involved Unpaired Two Group T-Test design using computation techniques from the SPSS software package. The two subject groups as previously indicated were drawn from two separate populations of students undertaking Diploma studies and those undertaking Undergraduate studies in nursing education. The group sizes were unequal $n=75$ and $n=55$ respectively reflecting the unequal sizes of the two populations of students. The data used in this t-test were the factor scores calculated from the raw data of the subjects' self-rating on the five-point scale previously described.

The aim was to establish the extent to which the two sets of research subjects compared or differed in their scores. It was anticipated that the significance or otherwise, of any emerging differences in the findings from the t-test might help to explain the following question. Did self-image as an autonomous individual, accustomed to taking personal control and responsibility in other aspects of one's life reflect individuals' self-concept of their capability and willingness to function as self-directed learners? The following null and alternative hypotheses were formulated.

Null

H₀ That there was no difference between the Diploma and Undergraduate students in their self-rating of personal autonomy and self-concept as self-directed learners.

Alternative

H1 That students' self-image of personal autonomy and self-concept as self-directed learners are not dependent on the programme of education being undertaken.

The four factors described:

- Lack of Self-confidence and Fear of Self-direction in Learning
- Reluctance to Assume Responsibility.
- Self-reliance and Resourcefulness
- Autonomy and Self-discipline

Tables 10.6 to 10.9 inclusive, present the computerised outputs of the t-tests for Factors 1-4.

The student groups are represented in the horizontal plane (the rows) while the relevant values are represented in the vertical plane (the columns).

Table 10.6

Independent Samples T-Test for Factor 1

Group Statistics

| | STUDGRP | N | Mean | Std. Deviation | Std. Error Mean |
|----------|---------|----|-----------|----------------|-----------------|
| factor 1 | 1.00 | 55 | -9.47E-02 | .9665 | .1303 |
| | 2.00 | 75 | 6.947E-02 | 1.0247 | .1183 |

Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|----------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| factor 1 | Equal variances assumed | 1.386 | .241 | -.924 | 128 | .357 | -.1642 | .1776 | -.5157 | .1873 |
| | Equal variances not assumed | | | -.933 | 120.143 | .353 | -.1642 | .1760 | -.5127 | .1843 |

Table 10.7

Independent Samples T-Test for Factor 2

Group Statistics

| | STUDGRP | N | Mean | Std. Deviation | Std. Error Mean |
|---------|---------|----|--------|----------------|-----------------|
| factor2 | 1.00 | 55 | .1731 | .9884 | .1333 |
| | 2.00 | 75 | -.1269 | .9958 | .1150 |

305

Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| factor2 | .157 | .693 | 1.702 | 128 | .091 | .3000 | .1762 | Lower | Upper |
| | | | 1.704 | 117.004 | .091 | .3000 | .1760 | -4.87E-02 | .6487 |
| | | | | | | | | -4.86E-02 | .6486 |

Table 10.8

Independent Samples T-Test for Factor 3

Group Statistics

| | STUDGRP | N | Mean | Std. Deviation | Std. Error Mean |
|---------|---------|----|--------|----------------|-----------------|
| factor3 | 1.00 | 55 | -.1479 | .9893 | .1334 |
| | 2.00 | 75 | .1084 | 1.0004 | .1155 |

306

Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-----------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| factor3 | .039 | .844 | -1.450 | 128 | .150 | -.2563 | .1768 | -.6060 | 9.350E-02 |
| | | | -1.452 | 117.243 | .149 | -.2563 | .1765 | -.6058 | 9.320E-02 |

Table 10.9

Independent Samples T-Test for Factor 4

Group Statistics

| | STUDGRP | N | Mean | Std. Deviation | Std. Error Mean |
|---------|---------|----|-----------|----------------|-----------------|
| factor4 | 1.00 | 55 | -.1184 | .8924 | .1203 |
| | 2.00 | 75 | 8.681E-02 | 1.0696 | .1235 |

Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| factor4 | .410 | .523 | -1.157 | 128 | .249 | -.2052 | .1773 | -.5560 | .1456 |
| | | | -1.190 | 125.814 | .236 | -.2052 | .1724 | -.5464 | .1361 |

Findings

The output of the results for Factors 1, 2, 3, and 4, revealed that in each case there was not sufficient evidence to substantiate rejection of the null hypothesis. The t-value and its statistical significance, the probability value, as well as the means and standard deviation for the scores of the two sets of subjects were examined. In this analysis, the critical p-value of 0.05 representing the conventional significance level was employed. The finding in each output indicated that the results were not significant. For example, reading from Table 10.6 presenting the t-test output from Factor 1 the result showed:

$$t(128) = 0.924; p > 0.05$$

Based on this and similar outcomes from the other three factors the null hypothesis was accepted with rejection of the alternative hypothesis. The conclusion was drawn that the two groups of research subjects did not differ significantly in their factor scores of self-image of personal autonomy. Additionally, there were no distinct differences in individuals' perceptions of their capability and willingness to function as self-directed learners.

Analysis of Variance (ANOVA)

The other test that was carried out on the subjects' factor scores involved Analysis of Variance focusing on age as the independent variable. Again, the calculations were performed through computation formulae from the SPSS software package. The aim was to establish the potential association between age and individuals' self-concept as autonomous persons accustomed to taking control and responsibility for their lives. More importantly, within the context of this study, the aim was to establish whether maturity in terms of age did influence individual's perceptions of themselves in the self-directed learning situation. Thus the null and alternative hypotheses formulated were:

Null

- H₀** That the different age groups of subjects following the same programme did not differ in their self-concept as being autonomous and their perceived ability and willingness to function in the self-directed capacity.

Alternative

- H₁** That individuals' self-concept in terms of personal autonomy and their self-report of ability and willingness to function as self-directed learners were not independent of their maturity in chronological age.

What the above alternative hypothesis implied was that differences probably existed among subjects of the different age groups. Therefore, it was anticipated to be able to determine from the results how significant were the emerging differences, if any, among the different age categories. Tables 10.10 and 10.11 present the output summary of the ANOVA for factors 1 and 2 whilst Tables 10.16 and 10.17 present the output for Factors 3 and 4. In each case, the relevant sub-table of multiple comparisons is also produced showing the differences between the means, standard errors, critical p-values and the 95% confidence intervals. The complete sets of outputs for the four factors are enclosed as Appendix 8.iii.

Table 10.10 ANOVA for Factor 1

| ANOVA | | | | | |
|----------------|----------------|-----|-------------|-------|------|
| factor 1 | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 5.718 | 4 | 1.430 | 1.450 | .222 |
| Within Groups | 123.282 | 125 | .986 | | |
| Total | 129.000 | 129 | | | |

Findings

In relation to Factor 1 – Lack of Self-confidence and Fear of Self-direction in Learning, the findings revealed that although the ANOVA did not yield a p-value below the conventional 0.05, a significant difference emerged in the multiple comparison output. The evidence showed that subjects in the age category 21 – 25 probably differed significantly ($p < 0.05$)

from those in the age category 31 – 35. The critical p-value for this pair of age categories was 0.041 whereas the values for the other age categories did not indicate significant differences.

Table 10.11 ANOVA for Factor 2

ANOVA

factor2

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 12.463 | 4 | 3.116 | 3.342 | .012 |
| Within Groups | 116.537 | 125 | .932 | | |
| Total | 129.000 | 129 | | | |

In relation to Factor 2 – Reluctance to Assume Responsibility, the p-value from the ANOVA, which was 0.012, clearly fell below the critical value of 0.05. The overall result which clearly indicated significant differences yielded the value of $F(4, 125) = 3.34; p < 0.05$. Additionally, the multiple comparisons also revealed significant differences between the age category of 35 and the other age categories in the following ways:

- 17 – 20 (p=0.006)
- 21 – 25 (p=0.002)
- 31 – 35 (p=0.013)

all of which indicated critical significance values of < 0.05 . The exact characteristics that contributed to these differences in the critical p-values were not determinable in this analysis since the more elaborate statistical tests available for doing these were considered too extensive for the scope of this chapter. Nevertheless, further scrutiny and cross-tabulation of the raw data from the self-rated items in Factor 2 revealed notable differences in the self-report of the > 35 age category as compared to the other age categories. For example, examination of the following output on item 4:

I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice.

Revealed the following elements as having potentially contributed to the differences in the mean and critical p-values yielded in the ANOVA for Factor 2.

Table 10.12**Age Crosstabulation****Count**

| | | Age | | | | | Total |
|--|--------------------------|---------|---------|---------|---------|-----|-------|
| | | 17 - 20 | 21 - 25 | 26 - 30 | 31 - 35 | >35 | |
| I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice | Strongly disagree | | 1 | 1 | 2 | | 4 |
| | Disagree | 5 | 10 | 3 | 2 | 1 | 21 |
| | Not sure | 4 | 2 | | | 2 | 8 |
| | Agree | 21 | 24 | 9 | 5 | 12 | 71 |
| | Strongly agree | 8 | 6 | 7 | 4 | 1 | 26 |
| Total | | 38 | 43 | 20 | 13 | 16 | 130 |

It must be noted that the percentages cited in the discussion were calculated from the combined numbers in the two dimensions of agreement and the two dimensions of disagreement at opposite ends of the spectrum. The findings indicated that only 1 out of the 16, >35 age group conveyed disagreement while 13 indicated agreement to this statement. In point of argument, these proportions portrayed a unique feature of this group. It was noted that at either end of the spectrum they represented the smallest proportion and the highest proportion from any group to have rated their self-concept in this way. By comparison based on the respective totals, the proportion of other age categories that reported disagreement was two to five times as much. The largest proportion represented the 30 – 35 age category. Another item that may have contributed to the difference in the means and significance level of the ANOVA of Factor 2 was item 46:

Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I'm doing and where I am going wrong.

Table 10.13**Age Crosstabulation****Count**

| | | Age | | | | | Total |
|---|--------------------------|---------|---------|---------|---------|-----|-------|
| | | 17 - 20 | 21 - 25 | 26 - 30 | 31 - 35 | >35 | |
| Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I'm doing and where I am going wrong. | Strongly disagree | | 1 | 1 | 1 | | 3 |
| | Disagree | 13 | 13 | 5 | 1 | 2 | 34 |
| | Not sure | 1 | 2 | 1 | 2 | 3 | 9 |
| | Agree | 17 | 21 | 9 | 8 | 9 | 64 |
| | Strongly agree | 7 | 6 | 4 | 1 | 2 | 20 |
| Total | | 38 | 43 | 20 | 13 | 16 | 130 |

In this case whilst 2 of the >35 age category indicated disagreement the proportion of 17 – 20 age category that rated similarly was 13 out of the total of 38 in that age category.

Item 35:

I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications.

Table 10.14**Age Crosstabulation**

| Count | | Age | | | | | Total |
|--|--------------------------|---------|---------|---------|---------|-----|-------|
| | | 17 - 20 | 21 - 25 | 26 - 30 | 31 - 35 | >35 | |
| I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications. | Strongly disagree | 1 | 4 | 1 | 1 | | 7 |
| | Disagree | 4 | 10 | 6 | 2 | 2 | 24 |
| | Not sure | 1 | | | | 1 | 2 |
| | Agree | 28 | 27 | 6 | 10 | 10 | 81 |
| | Strongly agree | 4 | 2 | 7 | | 3 | 16 |
| Total | | 38 | 43 | 20 | 13 | 16 | 130 |

In relation to this item the findings showed that whilst only 2 of the > 35 age category indicated disagreement, by comparison, 7 of the 20 students in the 26 – 30 age group rated similarly.

The fourth item noted to have potentially contributed to the difference in the means, the critical p-values and significance level was number 54:

As adult students, I think we should be given more responsibility for our own learning.

Table 10.15**Age Crosstabulation**

| Count | | Age | | | | | Total |
|---|--------------------------|---------|---------|---------|---------|-----|-------|
| | | 17 - 20 | 21 - 25 | 26 - 30 | 31 - 35 | >35 | |
| As adult students, I think we should be given more responsibility for our own learning. | Strongly disagree | 2 | 1 | 1 | 1 | | 5 |
| | Disagree | 7 | 12 | 7 | 1 | 5 | 32 |
| | Not sure | 2 | 6 | | 1 | 3 | 12 |
| | Agree | 22 | 17 | 7 | 7 | 8 | 61 |
| | Strongly agree | 5 | 7 | 5 | 3 | | 20 |
| Total | | 38 | 43 | 20 | 13 | 16 | 130 |

In this case whilst 8 of the 16, > 35 age group conveyed agreement the proportions of 31 – 35 age group and 17 – 20 age group who rated similarly were 10 out of 13 and 27 out of 38 respectively.

Table 10.16 ANOVA for Factor 3

ANOVA

factor3

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 4.880 | 4 | 1.220 | 1.229 | .302 |
| Within Groups | 124.119 | 125 | .993 | | |
| Total | 129.000 | 129 | | | |

Table 10.17 ANOVA for Factor 4

ANOVA

factor4

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | 2.615 | 4 | .654 | .647 | .630 |
| Within Groups | 126.385 | 125 | 1.011 | | |
| Total | 129.000 | 129 | | | |

In relation to Factor 3 – Self-reliance and Resourcefulness and Factor 4 – Autonomy and Self-discipline neither the outputs from the ANOVA or the multiple comparisons yielded p-values that were indicative of critical significance. This indicated justification for rejecting the null hypothesis that there was no difference in the self-report on these factors among the identified age categories. For that reason, it was deemed unnecessary to discuss the content of the multiple outputs here. These are enclosed as Appendix 8.iv.

Crosstabulation Representation of Responses to the Items in Each Factor

This comparative analysis of Crosstabulation of the items in each factor allowed for explaining what proportion of respondents from each group conveyed personal, habitual preferences and behaviours. The focus was on independence and self-direction or dependence and reliant behaviours within the context of learning. As in the previous analysis responses that fell into the strongly agree and agree end of the spectrum on the five point scale were combined as a single count in calculating the percentages. Similarly those in the strongly

disagree and disagree end were combined. However, the responses indicating uncertainty, that is, Not Sure, were treated as Cases Missing. The following discussion of the findings took account of not only the emerging differences between the two subject groups but also the differences that occurred among the students in each group. In the condensed reproduction below the items are represented along the rows and the degrees of agreement from each student group represented in the columns. In relation to Factor 1 Table 10.18 and Factor 4 Table 10.21 each group is shaded separately to highlight the discrete differences within the groups. In Table 10.20, the continuous shadings linking one group to the other help to highlight the collective differences between one group and the other.

Table 10.18 Profile of the students' Responses to the Items in Factor 1
Lack of Self-confidence and Fear of Self-Direction in Learning

| Item | Undergraduate (n=55) | | | Diploma (n=75) | | |
|------|----------------------|-----------|---------------|----------------|-----------|---------------|
| | Disagreement | Agreement | Cases Missing | Disagreement | Agreement | Cases Missing |
| 31 | 40 | 12 | 3 | 53 | 18 | 4 |
| 9 | 24 | 30 | 1 | 36 | 35 | 4 |
| 24 | 32 | 12 | 11 | 43 | 18 | 14 |
| 37 | 34 | 18 | 3 | 49 | 21 | 3 |
| 13 | 47 | 8 | 0 | 64 | 10 | 1 |
| 55 | 34 | 17 | 4 | 39 | 34 | 2 |
| 8 | 8 | 42 | 5 | 18 | 46 | 11 |
| 14 | 17 | 35 | 3 | 36 | 36 | 3 |

Findings from the Profile of Students' Rating of Factor 1 Items

The frequency count of the respondents' rating of the items in Factor 1 showed that although differences did emerge between the two groups these were relatively small. However within-group differences revealed that regarding,

Item 13

I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and the database system.

while 47 of the 55 Undergraduates indicated disagreement only 8 did report agreement.

Among the Diploma group a similar pattern of within-group rating on this item emerged where 64 of the 75 conveyed disagreement whilst only 10 indicated agreement.

Table 10.19 Profile of the students' Responses to the Items in Factor 2

Reluctance to Assume Responsibility

| Item | Undergraduate (n=55) | | | Diploma (n=75) | | |
|------|----------------------|-----------|---------------|----------------|-----------|---------------|
| | Disagreement | Agreement | Cases Missing | Disagreement | Agreement | Cases Missing |
| 48 | 23 | 30 | 2 | 26 | 49 | 0 |
| 4 | 11 | 40 | 4 | 14 | 57 | 4 |
| 53 | 29 | 25 | 1 | 42 | 31 | 2 |
| 46 | 20 | 34 | 1 | 17 | 50 | 8 |
| 56 | 35 | 15 | 5 | 45 | 20 | 10 |
| 44 | 40 | 15 | 0 | 48 | 26 | 1 |
| 35 | 13 | 40 | 2 | 28 | 57 | 0 |
| 54 | 13 | 36 | 6 | 24 | 45 | 6 |

Findings from the Profile of Students' Rating of Factor 2 Items

The students' rating of the items in Factor 2 showed only small differences both within and between the groups. No distinctive polar differences emerged from either perspective.

Table 10.20 Profile of the students' Responses to the Items in Factor 3

Self-reliance and Resourcefulness

| Item | Undergraduate (n=55) | | | Diploma (n=75) | | |
|------|----------------------|-----------|---------------|----------------|-----------|---------------|
| | Disagreement | Agreement | Cases Missing | Disagreement | Agreement | Cases Missing |
| 11 | 19 | 34 | 2 | 45 | 29 | 1 |
| 7 | 21 | 29 | 4 | 31 | 43 | 1 |
| 14 | 17 | 35 | 3 | 36 | 36 | 3 |
| 41 | 12 | 39 | 4 | 12 | 60 | 3 |
| 10 | 29 | 26 | 0 | 27 | 45 | 3 |
| 9 | 24 | 30 | 1 | 36 | 35 | 4 |

Findings from the Profile of Students' Rating of Factor 3 Items

The distribution of respondents based on their ratings of the items in Factor 3 showed that although within group differences were relatively small notable differences did emerge between the two groups.

On Item 11

I enjoy learning through group work particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher.

whilst 19 of the 55 Undergraduates conveyed disagreement, 34 did indicate agreement. However, the reverse was noted among the Diploma group where a comparatively higher proportion of the respondents, 45 of the 75 reported disagreement whilst 29 conveyed agreement.

On Item 14

Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to specific problems is quiet good.

The findings showed that whilst 17 and 35 of the 55 Undergraduates conveyed disagreement and agreement respectively, balanced proportions were noted among the Diploma group with 36 Of the 75 indicating disagreement and agreement respectively.

On Item 10

I don't like group work simply because when we're left on our own and there is no teacher there to control things, we tend to waste time floundering without learning anything concrete.

In this case 26 of the 55 Undergraduates conveyed agreement. However, the proportion of Diploma students who rated similarly on this item was 45 out of the total of 75.

Table 10.21 Profile of the students' Responses to the Items in Factor 4

Autonomy and Self-discipline

| Item | Undergraduate (n=55) | | | Diploma (n=75) | | |
|------|----------------------|-----------|---------------|----------------|-----------|---------------|
| | Disagreement | Agreement | Cases Missing | Disagreement | Agreement | Cases Missing |
| 29 | 5 | 50 | 0 | 4 | 71 | 0 |
| 43 | 11 | 44 | 0 | 8 | 67 | 0 |
| 25 | 2 | 53 | 0 | 4 | 70 | 1 |
| 38 | 7 | 47 | 1 | 15 | 58 | 2 |
| 45 | 24 | 31 | 0 | 29 | 46 | 0 |
| 47 | 14 | 41 | 0 | 17 | 55 | 3 |
| 13 | 47 | 8 | 0 | 64 | 10 | 1 |
| 17 | 16 | 38 | 1 | 29 | 44 | 2 |

Findings from the Profile of Students' Rating of Factor 4 Items

Similarly to Factor 1, although small differences did emerge between the two groups the more overt differences appeared to be attributable to within group variations. The following represent the substantive findings.

On Item 29

If I am going to do something, I like to make my own plans so that I know where I am going and what I am going to do.

Considerable differences were noticeable among the students in each group. For example whilst 50 of the 55 Undergraduates conveyed agreement to this item only 5 indicated disagreement. A similar pattern was noted among the Diploma students where 71 of the 75 respondents indicated agreement and only 4 indicating disagreement.

In relation to Item 43

It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off.

The substantive within-group variations were noted among the 75 Diploma respondents with 67 having rated agreement and only 8 reporting disagreement.

Item 25

I usually write down things that are new to me so that I can ask somebody later or look them up myself.

Showed similar patterns where the largest proportion of the Undergraduate respondents, 53 of the 55 students reported agreement and only 2 indicating disagreement. This reflected the within- group differences which emerged from their Diploma counterparts with 70 of the 75 students indicating agreement and only 4 reporting disagreement.

In relation to Item 38

In self-directed learning, I am in control and if there is something that I want to learn in greater depth then I can.

the substantive difference was noted among the Undergraduates where 47 respondents conveyed agreement and 7, disagreement.

Synopsis

Exploratory factor analysis was used to determine the factorial structure of the self-rating questionnaire on how the students perceived themselves in the self-directed learning situation.

130 students undertaking nursing educational programmes completed the questionnaire consisting of 56 item Likert-type scale. Aspects of the demographic profile such as age category and educational background were also taken into account. Various statistical techniques were employed in analysing the data. These included:

1. Factor analysis of the questionnaire items
2. Two group Independent T-Test on the individuals' factor scores
3. ANOVA based on the age categories and individuals' factor scores
4. Crosstabulation of the raw data based on individuals' rating of the items in each factor.

Four major bi-polar factors emerged from the initial factor analysis. These were described in dimensions of how individuals perceived themselves in the self-directed learning situation and how they perceived their autonomy in other aspects of their personal lives. The descriptive labels were derived from interpretation of the statements of the highest loading items in each factor. A summation of these is outlined below.

Factor 1

Lack of Self-confidence and Fear of Self-direction in Learning

The highest loading item on this factor was:

Item 31

I don't feel confident enough to take control of my own learning process on this course.

The self-concept conveyed in this factor implicated lack of self-confidence in terms of intrinsic dependency. The characteristic behaviour suggested a tendency to reject that mode of learning. The emerging evidence was that such individuals presumably felt threatened by the thought of not being able to function effectively in the self-directed capacity.

Factor 2

Reluctance to Assume Responsibility

The highest loading item stated:

Item 48

In the wards, I think it is safer to wait until you are asked to do things rather than acting on your own initiative.

Unlike Factor 1, which implicated an intrinsic dependency, the self-image conveyed in Factor 2, suggested situational dependency. The individuals conveyed the perception that when faced with extrinsic phenomena such as new and unfamiliar theoretical or practical learning challenges they were likely to demonstrate behaviours of helplessness. That in such situations they felt a strong need for constant supervision and support and therefore expected direct instructions.

Factor 3

Self-reliance and Resourcefulness

The highest loading item on this factor stated:

Item 11

I enjoy learning through group work particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher

This factor conveyed individuals' perceptions of their ability and preparedness to function in self-directed learning situations through their own independent thoughts and actions.

Factor 4

Autonomy and Self-discipline

Item 29

If I am going to do something, I like to make my own plans so that I know where I am going and what I am going to do.

The self-concept conveyed in Factor 4 was that such individuals were accustomed to taking control over situations in other aspects of their personal lives. The question arose as to whether claims of personal autonomy and self-discipline necessarily indicated preparedness in terms of capability and willingness to function in the self-directed capacity.

The findings from the Independent Samples T-Test revealed no significant difference between the two groups in terms of how individuals perceived their personal autonomy and their capability to function as self-directed learners.

The Analysis of Variance was based on the null hypothesis that individuals in different age categories did not differ in their perceptions of personal autonomy and readiness to function as self-directed learners.

The findings revealed that the ANOVA for Factor 2 and its related multiple comparisons yielded p-values below the conventional critical level of significance whereas Factors 1, 3 and 4 did not. In fact the evidence from Factor 2 suggested potential differences between the >35 age group as compared to the other age categories.

Crosstabulation of the raw data revealed various factors that probably contributed to the emerging differences. For example, as compared to the other age categories a relatively larger proportion of the >35 age group indicated a preference for clear guidelines in their learning and practical application.

Only a small proportion of this group conveyed disagreement with the view that teachers should retain control over the learning process. Thus despite the claims of personal autonomy the >35 age group were apparently more inclined than the other age groups to demonstrate regard for and dependence on their teachers. In particular they were inclined to portray discretionary exploitation of the knowledge, expertise and authority, of their teachers.

Crosstabulation of the raw data based on programme of education revealed that whilst within group differences emerged in Factors 1 and 4 the differences that emerged in Factor 3 were noted to occur between the two groups.

In relation to Factor 1 similar patterns of within group variations indicated that relatively larger proportions of students in each group reported reliance on lecture notes and handouts. In relation to Factor 4 larger proportions within each group portrayed the self-image of being accustomed to personal autonomy and self-discipline.

The emerging evidence from Factor 3 suggested that misgivings about group interactive learning, discovery and problem-based learning were more prevalent among the Diploma than the Undergraduate group.

Narrative Explanation of the Emerging Trends in the Factor Scores

The analysis in this chapter incorporated different functions of the statistical techniques involved in factor analysis. The process yielded 4 factors, that is, concise labels that consolidated the characteristic features portrayed by the cluster of items or variables in each factor. As previously mentioned these factors described dimensions of the students' self-concept of their personal autonomy and self-direction in learning.

To gain more information about each subject in relation to her/his rating of the items in each factor the analysis was taken further by calculating individuals' factor scores. This final section presents a narrative overview of the trends in the subjects' factor scores. Calculation of these took account of the subject's raw (unweighted) score and the factor loading on each of the variable items included in the factor.

Thus:

$$\text{Factor Score} = \text{Sum of } \underbrace{(\text{Subject's Raw Score})}_{\text{(on each Variable)}} \times \underbrace{(\text{The Factor Loading of})}_{\text{(that Variable on that)}}_{\text{(Factor)}}$$

This exercise was considered to be particularly important in this study for the following reasons.

- Each individual's raw scores of the items on a specific factor represented her/his self-assessment of a particular attribute or characteristic.

- The descriptive label of each factor was determined by the magnitude of the factor loadings of the given cluster of variable items.

Therefore, it could be argued that although some of the tests on the factor scores did not produce significant differences, certain assumptions could still be made based on notable trends in the factor scores as follows.

The different dimensions of personal autonomy and self-direction described by the four factors were:

- Lack of Self-confidence and Fear of Self-direction in Learning
- Reluctance to Assume Responsibility.
- Self-reliance and Resourcefulness
- Autonomy and Self-discipline

Essentially individuals who scored high on Factor 1 Lack of Self-confidence and Fear of Self-direction in Learning conveyed disinclination to self-directedness in learning. This was evidently because of their lack of confidence in themselves to perform effectively enough in the related assessments designed for successful completion of their professional education. They were inclined therefore, to demonstrate negative attitudes to self-directedness in learning because of perceived lack of the relevant knowledge and skills for functioning in this capacity. Typical reactions showed apparent academic helplessness with fear of failure when exposed to this educational approach. As a result individuals expected constant supervision and persistently sought direct instructions from their educators on what to do and how to go about it.

Those students who scored high on Factor 2 Reluctance to Assume Responsibility also portrayed an aversion to self-directedness in learning. Nevertheless, it was not entirely clear as to whether or not the type of academic dependency characterized by this factor was the same as that associated with the academic helplessness and fear of failure portrayed in Factor

1 – Lack of Self-confidence and Fear of Self-direction in Learning. The factor scores indicated a possibility that the type of dependency underlying the sets of items in the two factors probably differed. Arguably both types of dependency are associated with reliant behaviours that could result in learned academic helplessness. Nevertheless, the dependency associated with Factor 1 apparently reflected not only a need for knowing what self-directedness involved, but also active nurturing with staged, purposely designed activities to promote self-direction. By contrast the characteristic dependency portrayed in Factor 2 appeared to be associated with uncertainty about the given challenge and the perceived implications. Therefore the associated reliant characteristics seemed to be typically situational requiring encouragement and support to respond independently in specific contexts of learning. Thus, it could be argued that students with specific characteristics might present different types of needs for academic support and preparation for functioning in the self-directed capacity.

Also notable was the finding that the aversion to self-directedness and the dependency portrayed by the clusters of items in Factors 1 and 2 respectively appeared to persist among the early and late phase Diploma students. This however, did not appear to be so among the Undergraduates. It was therefore unclear as to whether there was an inherent element that contributed to one or both of these or whether progression did influence development of the related attributes of self-direction.

The variables in Factor 3 – Self-reliance and Resourcefulness were interpreted as reflecting learning behaviours characterised by academic coping skills. Unlike the cases demonstrated in Factors 1 and 2 above, students with high factor scores on this characterisation conveyed apparent willingness and readiness to function independently in various aspects of their educational process. However, similarly to Factors 1 and 2, the factor scores seemed to indicate that the characteristics associated with Factor 4 – Autonomy and Self-discipline might not necessarily be transferable from the personal non-academic aspect of an

individual's life to the context of formal education and learning. This suggested that the nature of independence conveyed by the particular clusters of variables in Factors 3 and 4 probably differed.

It was noted that comparatively, relatively more Diploma students than Undergraduates assessed themselves higher on the cluster of items in Factor 4 conveying a self-concept of being autonomous and a preference to make personal decisions and judgements. Nevertheless, this did not necessarily reflect consistently high self-assessment on the cluster of items in Factor 3 to convey a preference for academic independence, self-discipline and preparedness to function as self-directed learners. The underlying elements that directly contributed to this difference were not entirely clear although maturity in terms of chronological age was more prevalent among the Diploma group.

It could be argued that multiple elements might have contributed to individuals' self-concept of personal autonomy and the way in which students from the different educational programmes scored themselves on the sets of items on each factor. Therefore, unique differences among the two groups that could have potentially influenced individual's self-rating of the items ought to be investigated and critically examined in future studies. These should include the nature of academic programmes, the structuring and organisation of the curricular content, perceptions of the related assessment regulations, and supervision, the student's personal characteristics and their educational backgrounds.

The above arguments indicate a need for caution in future research studies. In particular it must be noted that use of the subject scores on given factors to investigate or determine student requirement for academic support ought to be considered with caution. Potential variations in the subjects' interpretation of certain items could not be totally overruled in this study. It is anticipated therefore, that with further refinement of the items of this instrument the obtained factor scores could reveal more distinctly the differing dimensions of academic

dependency and autonomy. It might then be possible to determine the kind of student preparation and support required for functioning effectively in the self-directed capacity based on the identified characteristics and needs.

Summary

The emerging perceptions showed variations in the portrayal of self-concept in the self-directed learning situation. In relation to chronological age a notable difference emerged between the mature students in the over 35 age category and those in the other age categories. In relation to programme of education similar findings emerged within the two groups where preference for handouts and lecture notes were concerned. Additionally, portrayal of self-concept of personal autonomy and self-discipline showed similar trends within each of the two groups. However, a difference in attitude emerged between the two groups with regard to discovery and problem-based learning.

The next two chapters examine the teachers' perspectives of interpretation of the concept of self-direction in learning and their views about student supervision in this educational context.

CHAPTER ELEVEN

THE TEACHERS' CONCEPTUALISATIONS OF STUDENT SELF-DIRECTION IN LEARNING

Introduction

A comparative analysis of the views of the academic teachers and preceptors as articulated in the interviews is presented in this chapter. This analysis is based on the assumption that the educators' practices and attitudes to specific educational concepts were influenced by their professional backgrounds and experiences and their interpretations of the particular contexts in which they functioned. Therefore the main intentions in this chapter were:

- to explore and compare the academic and practical teachers' conceptualisations of self-directed learning,
- to determine how these in turn, compared to the students' conceptualisations,
- to establish in what ways the teachers' perceptions influenced their practices in fostering student self-direction in learning.

Variations in the Teachers' Interpretations of the Concept

30 teachers participated in this study, 15 of whom functioned within the academic sector and 15 in the practical sector. Five of the 15 academic teachers, that is, one-third were undergraduate lecturers while the remaining two-thirds, 10, were involved with Diploma programmes. In this analysis, the variations in the interpretations within each group were examined followed by examination of between group variations. The responses were examined to determine the proportion of teachers who interpreted self-direction in terms of student autonomy and independence in learning and the proportion that maintained the view of educator control and direction. The interview item simply posed the question:

- What is your interpretation of self-directed learning?

The categorisation of the responses was based on the presence or absence of key elements in the interpretations. Thus where the response described self-direction in terms of students' ability to identify their own learning deficits, determine appropriate topics and personally seek ways of rectifying those needs, it was placed in category A indicating:

Independence with Personal Control and Direction of the Learning Process.

For example:

The interpretation of self-directed learning...in its pure essence...is that the topic to be learned is determined by the student. The range of the topic, the depth of the topic and the assessment of the topic is determined by the student who then determines whether it is learned or not....

(Academic Teacher)

...leaving the students alone, giving them freedom to go in various directions of interest to them, what they really want to get out of the course, what they really want to know, the special interest they have, ... leaving them to decide what is best and to go on and explore, and doing the seeking and searching and researching themselves....

(Academic Teacher)

Conversely all responses which portrayed an approach characterised by student dependence on educators to determine learning needs, provide instructions and supervision were placed in category B indicating:

Dependence on Educator Control and Direction of the Learning Process.

One teacher explained:

... in a more practical sense I see self-directed learning within the curriculum as being where the students are given guidance or indeed instruction, on their topic, enlightened as to the different ways they can achieve this and they are given a good idea of what is expected of them, at the end of which they may or may not be assessed by a facilitated teacher.

(Academic Teacher)

This qualitative content analysis involved examination of the range of responses from both groups of teachers across the categories of conceptualisation of student self-direction. The intention was to determine if the interpretations reflected the backgrounds of expertise or context within which the educators functioned. Therefore, the variables applied were Specialist backgrounds and Conceptualisations.

Findings

The qualitative findings revealed that 7 of the 15 academic teachers interpreted self-direction in terms of student independence, initiative, and freedom to make decisions about their own learning process. 8 of the 15 portrayed student dependence on educator control and direction.

A comparison between the two groups of teachers showed that 3 of the 5 Undergraduate teachers interpreted self-direction as involving student autonomy and initiative in the following way:

Self-directed means that the student has chosen to explore a topic in depth because they have a personal motivation and interest in it.

(Undergraduate Teacher)

The remaining 2 advocated educator control of the learning process as in the following example:

one way in which students are helped to do this now is by being given, ...learning outcomes. So they can ...literally fill in the gaps themselves. I think probably the lecturer would design the content of the module around the learning outcomes.... I think they need clear guidelines. I don't think it's...enough to face a student at this stage, you know, new pre reg, these are the learning outcomes, here's a lecture, think about the content of a lecture, compare that with the learning outcomes, look at the reference list... they need secure guidelines as to how they're actually going to do it....

(Undergraduate Teacher)

Among the Diploma teachers, 6 of the 10 respondents portrayed direction and control of the learning process by the educator as follows:

What I consider learning to be self-directed is when the students are given a topic, they're given guidelines, given reasonably specific aims with learning outcomes, and how they achieve them would be up to themselves whether they read or whether they do what they have to do.

(Diploma Teacher)

The remaining 4 advocated student control and direction of their own learning process as in the following way:

I think basically that it's learning where the student has a large degree of control, that she can give the direction of her learning and pace her learning and make the decisions as to her own learning needs and set her own learning goals, basically.

(Diploma Teacher)

There was no notable difference in the language and expressions used by the academic teachers in their interpretations of the concept. Among the preceptors however, only one in

four interpreted self-direction as involving student independence and personal control of the learning process. However, those who did explained the concept as in the following examples:

Self-directed learning is... that if the students come across a subject or a problem in the college they would go and research this subject and if they still had a problem then they would come to their tutor for guidance and maybe – direction.

(Preceptor)

My interpretation would be – rather than the student being told everything, that she needs to know, which is what we were told, the student has actually got to go and learn things for herself basically.

(Preceptor)

The larger proportion, approximately three out of four, advocated control and direction by the educator in their interpretations. An example of the explanation given was:

I've always taken self-directed learning as that you are given or students are given...learning outcomes that they would need to obtain...guidelines of what you are going to be able to achieve, and they do the research. ...they find out the information, the up-to-date information and in that way they are guiding their own learning....

(Preceptor)

A notable difference between the conceptualisations of the academic teachers and the practical teachers was that the latter group invariably contextualised self-directed learning in the theoretical setting of the college. It therefore seemed appropriate to later explore the teachers' perspectives about the feasibility of this learning approach in the different educational settings.

Another recurrent finding was that the clinical mentors and preceptors attributed the source of their interpretations to personal experiences as learners rather than based on specific theories.

For example:

Well I'm thinking more when I did paediatric course two years ago...that's really why I'm saying that. I must admit it's not my favourite way of learning personally. I don't know how other students felt. ...but having worked with a couple of students and having faced too many difficulties I felt, perhaps, more guidance from the teachers might have been nice....

(Preceptor)

...I've done both, I've done a couple of modules...my anaesthetic modules, some things, it was self-directed learning, some, it wasn't because I think it just couldn't be....

(Preceptor)

It was not entirely clear as to whether or not the differences in the responses related to the backgrounds of the teachers and/or the context of learning.

The findings from this qualitative analysis suggested that individuals' professional backgrounds or the contexts in which they functioned did not influence the teachers' interpretations of self-direction in learning. The next section analyses the teachers' perspectives about the implementation of the self-directed approach to learning.

The Teachers' Perspectives about Implementation of the Self-directed Approach in the Theoretical and Practical Contexts of Learning

The techniques of fostering student self-direction and the sources of control of the learning process were examined. The content analysis began by separately examining the responses from the academic teachers followed by the preceptors. This allowed for establishing each groups' perceptions. This section focuses on the theoretical aspect of learning.

Perceptions about Implementation of the Different Learning Techniques in the Theoretical Context of Learning

This section examined teachers' perceptions of the practicability of the learning techniques employed in fostering self-direction in learning. Thus their views about implementation of:

- the group interactive learning technique,
- seminar presentations,
- reflective learning technique and
- negotiated learning contract

were examined in turn.

Similarly to previous analyses, the responses from the academic teachers were treated separately from the preceptors' responses. Additionally the views of the Diploma teachers were compared to the views expressed by the Undergraduate teachers. In this way not only were variations between the groups determined, but the variations within each group could also be determined. A frequency distribution table was developed to show what proportions of teachers considered each technique as realistically practicable in fostering student self-

direction in each of the settings. The number of Teachers in each group as previously indicated were:

- Undergraduate – 5,
- Diploma – 10,
- Preceptors – 15

Findings

The Diploma Teachers' Perceptions about Implementation of the Different Techniques

The findings showed that all the Diploma teachers considered the group interactive and reflective learning techniques essentially, as appropriate means of fostering student independence in the theoretical context of learning. However, 4 of the 10 contended the practicability of the seminar technique for fostering independent acquisition of theoretical knowledge. One in five rejected the negotiated learning contract as an appropriate technique for encouraging student self-direction.

Four of the 10 Diploma teachers described educator control of the learning process by justifying their decisions and practices with arguments based on specific factors. The difficulty of organising appropriate learning situations to challenge students to make personal decisions about their own learning process was explained. The lack of supportive resources apparently influenced the practice of supplying students with the required learning materials rather than challenging them to go and explore and select such things for themselves. This was conveyed in the following response:

...very often we do, there's large numbers of them and in fact it's quite difficult to do group work, because getting resources for the classes, 63 in a group then breaking it down into smaller groups and getting feedback, that can be very difficult with those type of numbers.... It's very often me providing them with some sort of resources. ...other times we would have group work on things related perhaps to ethical issues, getting them to do some reading on their own or having discussions in groups and then coming back and look at issues that have come out within their practice.

(Diploma Teacher)

The educators also normally controlled topic selection and the decision to reconvene for discussions following the interactive exercises. These practices varied and may simply involve a process of responding to questions posed by the educator or presenting a summary of the outcome of the discussions through rapporteurs. For example:

...sometimes you actually ask that they nominate somebody, but the nomination is then up to them out of the group, but yes, because it is group work you usually have to get feedback...if I give them group work I am in control of the questions that I will ask them and I think I am quite focused in that respect.

(Diploma Teacher)

Six of the 10 Diploma teachers described the implementation of the seminar technique as time consuming. Again, they argued that the large numbers of students in the class created negative reactions to the presentations. One explained that:

...students hate it because they're quite time consuming in the big classes and...there's always the problem of what we've had in the past, of folks not turning up on the day of their presentation....

(Diploma Teacher)

Where the seminar presentations formed a unit of course assessment a typical pattern emerged where students only attended to present their own papers. Another notable pattern was that members of cliques selectively attended each other's presentations to support friends but failed to attend other presentations. The teachers therefore, used these reasons to justify why they only rarely employed or failed to use the seminar technique.

Concerning the reflective technique, differences in opinion emerged among the Diploma teachers. The majority, 8 of the 10, agreed about the complexity of the concept and questioned their capability to accurately interpret the underpinning theory to promote effective student learning. Among the views expressed was the following:

I don't know how practical it is. That's really how I feel about it because I haven't actually had to write reflective learning before on the course I am involved with and I find it a very, very difficult thing to do and I am a very experienced nurse teacher and I just didn't realise how difficult it was. I think, yes, get people to look at their practice and think about it, but not to the depth the reflection is asking or is talked about in nursing literature. I don't think that's an easy thing to do. Experienced nurses have a difficulty with that so I don't know that we can actually demand that of students. I have a problem with it.

(Diploma Teacher)

The fact that the concept was generally loosely interpreted in this programme was obvious. In point of argument, this probably influenced the inconsistent implementation practices adopted by the educators as portrayed in the following response:

Well I think reflection is a crucial aspect of the whole learning process and they must reflect, even if it's not done in a sort of formal way, it's done. Hence it's an individual thing. You reflect back on what happened in the clinical area that morning, and the student and the mentor can discuss the decisions that were made, why the decisions were made and why certain managerial things were done.... Well in that sort of formal way, where they are reflecting on their clinical placement, they don't particularly like it. I don't know if it has something to do with the method that we use. The students themselves often reflect informally and by the time they come to group session called reflection, they say – not the same thing again- so I probably think it's the way that we do it....

(Diploma Teacher)

A small proportion, one in five, of the teachers conveyed recognition of its dual purpose. They therefore advocated implementation of this technique because of the potential benefits that students might gain from two perspectives. A recurrent argument conveyed by the teachers is reflected in the following statement:

You tend to find with the students that they want to use it as a time to sound off about problems they are having in the clinical area. ...we try to get away from that griping session, ...but often what we do now is half focus for reflection so they've actually got something they are looking at in the clinical area and are then coming back to the reflection sessions and trying to link up the theory with the practice, which is what it should be, but I think they need sessions where they can sound off. I think the students actually need it. I don't think it's a bad thing because they've got nowhere else to really come back and discuss problems really, and it helps other students to talk through the problems with them. It's not just the teacher saying, well, it might be an idea to approach it this way.

(Diploma Teacher)

In relation to the technique of negotiated learning contract, all the Diploma teachers expressed strong reservations about it and admitted to not considering it as a mode of learning.

...I don't know – the idea of a written, a binding contract – I would have a problem with that...I certainly can't see myself using it and I know for sure that none of the other teachers would. It's not a method that we even talk about.... I am sure that certainly the students we have nobody will commit to a contract. I think they'll see it as too much pressure and won't take to the idea very well.

(Diploma Teacher)

Individuals assumed that the contractual element might be a major deterrent for the students. Apart from their expressed views about the students' lack of readiness to cope with this technique there was also an obvious lack of preparedness on the part of the educators to implement it in fostering student self-direction in learning.

The Undergraduate Teachers' Perceptions about Implementation of the Different Techniques

The Undergraduate teachers felt that the techniques of group interactive learning, seminar presentation and the technique of reflective learning were practicable means of fostering self-direction in the theoretical context of learning. Only 2 of the 5 considered the negotiated learning contract as a practicable technique in this context. They explained that rather than determining and allocating specific topics to the groups they provided students with lists of suggested topics for them to choose from. Both the students and the teachers considered this as self-selection of topics. Generally the teachers claimed to encourage student decision making by giving them opportunities to organise their own group memberships, to plan and implement the required activities. The following is an example of the techniques employed:

...they are encouraged, if possible, to have a varied background for members of the group, so that they can glean as much as possible from each other. ...It's left to them to determine which group they go into, ...explore the advantages of being a member of such a group.

(Undergraduate Teacher)

In relation to the seminar technique all the 5 Undergraduate teachers considered this as a feasible means of fostering student self-direction in the theoretical context of learning. These views reflected the students' perceptions about the practice of individual seminar presentations. Examples of implementation practices described are presented here:

In the first semesters the general impression is gained with the likes of seminars and every single student has to present work and that gives an indication of how far they explored the topic.

(Undergraduate Teacher)

...it's very individualised, and the students cope very well with it and present it well.

(Undergraduate Teacher)

I think you have to be quite careful about...using seminars because you have to make sure that the class don't see it as a way the lecturer not presenting the material to them...I think you have to strike a balance between the amount of seminars and the amount of input from the lecturer. And I think you have to be quite specific about what you want to achieve by this seminar in relation to the learning outcomes of the module.

(Undergraduate Teacher)

Regarding the actual implementation, this group of teachers described practices which, arguably, suggested educator control. However, similarly to the group interactive learning scenario, they maintained that their practices encouraged student decision making in the topic selection, the planning and implementation of the activities involved in the seminar

presentations. They did, however, concur with their Diploma counterparts on students' reactions to the technique, that is, that generally students disliked seminar presentations. The teachers further noted that despite those apparent negative reactions the Undergraduate students expressed recognition of the potential benefits of the processes involved in implementing the seminar technique. The views expressed were that:

...students as a whole do not like seminar presentations. When you ask them afterwards if they have benefited from doing it, it's usually very positive but they then go on and say – But I still don't like it.

(Undergraduate Teacher)

...There also is the feeling that they are being assessed in some way by their peers not just the lecturer, so...we would hope that the quality of their preparation is good for that reason.

(Undergraduate Teacher)

On reflective learning, all the Undergraduate teachers considered the technique as a practicable means of fostering self-direction in the theoretical context of learning. However, their reflective sessions placed emphasis on the emotive element of individuals' experiences. They implied paying only limited attention to reflection on individuals' concrete experiences of clinical practice to make sense of the principles of client care. An explanation provided was:

...Reflecting on their learning experience in the college as well as the clinical setting...it's usually very positive. Initially when they are first asked to do it there is a bit of hesitancy because they don't know that it is going to be beneficial but if the teacher manages to encourage at least one person to start it off, then it snowballs and everyone has something to say. Mainly personal experiences...so they can share what made it easy for one person and what made it difficult for another and maybe they can learn in the process from each other.

(Undergraduate Teacher)

Regarding the technique of negotiated learning contract, a majority of the Undergraduate teachers conveyed reservations about the contractual element of the concept. Only 2 of the 5 considered it as an appropriate technique for fostering self-directed learning in the theoretical aspect of the educational programme although commitment to its application was uncertain. An example of the explanation given was as follows:

...I think probably at the root of it the student has to be motivated given that it's a true contract and it means something to both sides. So if the student's motivated the student is able to contribute to their part of the bargain in conforming to the contract and then in actually fulfilling their requirements through self-direction.

(Undergraduate Teacher)

The Preceptors' Perceptions about Implementation of the Different Techniques

The general view among the preceptors was that the theoretical context was the appropriate learning situation for employing the group interactive, seminar and the reflective techniques in fostering student self-direction. Only one in five advocated negotiated learning contract as appropriate for fostering self-direction in this educational context.

Perceptions about Practicability of the Different Learning Techniques within the Practical Context of Learning

The next section examined the teachers' views about the appropriateness of implementing the learning techniques in the practical context of learning. The relevant table presented the distribution of the respondents across the categories of self-directed learning techniques.

Findings

The Diploma Teachers' Views

The majority, 7 out of the 10 Diploma teachers did consider the reflective learning technique as an appropriate means of encouraging student independence in learning in the practical settings. Only 4 considered the group interactive technique and negotiated learning contract as appropriate modes of self-directed learning in the practical settings. None of this group of teachers considered the technique of seminar presentations as practicable in the clinical settings.

The Undergraduate Teachers' Views

The findings showed that while all the Undergraduate teachers considered the reflective learning technique as practicable for student self-direction in the clinical settings, opinions differed about the other techniques. Although 3 of the 5 saw group interactive learning as practicable, potential constraints were identified as hindering the implementation of this technique. For example:

We try to see our own students as much as we can when they go out on placements but it can be difficult. You arrange before you go but if their shifts are changed, nobody bothers to let you know, which is a waste of time trying to organise group discussions.

(Undergraduate Teacher)

Only 2 felt that the technique of negotiated learning contract was an appropriate means of encouraging student self-direction in the practical settings.

The Views of the Preceptors

The majority, 11 out of the 15 preceptors considered the reflective technique as realistically practicable in the practical aspect of learning. However, the actual practices reflected individuals' interpretations of the concept. Variations in the timing and nature of the interactions depended on the clinical circumstances at the time. A majority of the preceptors reported focusing on the emotive aspect of the student's experience in the placement areas.

For example:

The reflection I do, usually I try to find out if they were happy, how they'd found the placement, we go through their objectives, talk about their learning outcomes that sort of thing and I do this at the end, sometimes midway as well but normally at the end.

(Preceptor)

Only a small proportion of preceptors claimed to use this technique in guiding students to reflect on specific clinical events in order to make sense of the nursing care provided. The following response depicts the practices employed by the preceptors:

We try to help them to relate things, what they see here in the placement areas to the theory, but I think sometimes they are taught the ideal and they find that things are not quite the way they were taught in college and some of them find that difficult.

(Preceptor)

Typical views on the organisation of group interactive learning indicated that the nature of activities in the wards, the level of client demands and the shift system created constraints on the practicability of the technique. For example:

It's really quite difficult to get students together what with the shifts and all that. If the ward is busy and there are things going on then you can't organise the group work. There is also the problem of where – which room you can get to take your students and how long you can have them.

(Preceptor)

Other notable constraints were as follow:

- The system of personal preceptors meant that students may be engaged in different clinical activities and might not be able to join in group learning activities. For example:

We all have our own students and that's probably one of the reasons that doing things with groups isn't all that easy....

(Preceptor)

- The possibility that the group of students in the particular placement area might be functioning at different stages of their education and therefore have differing learning needs to fulfil. One preceptor explained:

The problem I find is that even if you get a few students together they might not be of the same class and if their preceptors have arranged to do things with them then you can't have them either. So you really have to pre- arrange, phone up find out what shifts each student is on, talk to their preceptors....

(Preceptor)

- Lack of tutorial and discussion rooms in many ward areas where students could meet for group discussions was also described as a hindrance to group interactive learning in the clinical areas.

Only 2 out of the 15 preceptors considered the negotiated learning contract as practicable for encouraging self-direction in the clinical settings. The majority, 13 of the 15 preceptors, conveyed unfamiliarity or a perception that the contractual element might create a hindrance to the learning process.

...I don't know about a contract, I wouldn't say that it is something I am familiar with and I don't really like the sound of a contract. You maybe ask a student to go and look up something and come back and tell you what they found but that's all...that's as far as I would go.

(Preceptor)

Those who claimed to implement the technique appeared to interpret the concept loosely without any contractual element. For example, senior students might be encouraged to identify personal learning needs and negotiate with the preceptors how that need might be fulfilled.

We do something, I wouldn't call it that, but some of the more senior students sometimes approach you and ask if you could show them or let them have a go at something, or else you check their objective books see what sort of things they haven't done. Then you sort of plan with them, ...set a time and a day and you've talked about it so you keep your word and you make sure you do whatever it is you planned and usually it works out well. But sometimes things change, something happens and you're not able to do what you planned but there's nothing you can do about that. But I don't think you can put a contract on somebody to force them to learn. I think I would find that a real problem.

(Preceptor)

Concerning seminar presentations, the preceptors concurred with the academic teachers that the technique was not practicable in the clinical settings because of the following constraints:

- time required for students to go and explore, prepare and present the papers
- unpredictability of the clinical situations, for example, occurrence of unexpected emergencies requiring impromptu cancellation of presentations
- students were unlikely to attend the presentations in their own time.

One preceptor argued:

Really I don't think the wards are appropriate for having seminars, there's all sorts of complications, it just won't work...I doubt how many would want to do it. Also if something crops up, say the ward gets busy all of a sudden and everybody has to rush off, I think the presentation would fall flat which I don't think would be very good for the student who's done all the work.

(Preceptor)

The teachers' perceptions of the students' capability to function as self-directed learners are examined in the next section.

The Teachers' Perceptions of the Students' Readiness to Function in the Self-directed Capacity

The majority of the Diploma teachers, 8 of the 10, maintained that maturity in terms of chronological age was probably a significant determining factor in individuals' ability to function as self-directed learners. As conveyed in the following responses, they noted that:

The students that are young, 17 or 18. ...who've come straight from school don't, I would say, have that ability. You can't foster it in them, that's something that you can't foster in them at all.

(Diploma Teacher)

I think a large number of them aren't, and I think it's largely, although not always, related to the chronological age. I found the 17 year olds etc. are still quite immature. ...but there are quite a number of them who although they might be 20, 21 etc. are actually still very young in terms of...I suppose, interpersonal skills, that sort of thing, but even those students need a lot of direction still.

(Diploma Lecturers)

Academic maturation and previous experience of learning through the self-directed approach at higher academic level were also noted to be significant factors. As the following respondents explained:

...it also depends on the individual students as well, because it's quite noticeable for students who have, for example, done degree courses before, or any type of higher education learning before, they are more able to do self-directed learning.

(Diploma Teacher)

I think that there are great differences amongst the students. I find that there are a number of students who have previous experience of learning at a higher education level and they are very self-directed, about a third of the student intake....

(Diploma Teacher)

...the more mature students who maybe have previous experience... are more confident...I think maturity is important.

(Diploma Teacher)

The Undergraduate teachers, on the other hand, placed more emphasis on academic maturation and little attention to chronological age. They noted, for example, that the more significant factors were lack of familiarity with the concept and lack of ability to determine personal learning needs:

...there is less self-directed capability in the first year experience, it's difficult because...in that first experience they don't know what they need to learn, the perception of what they need to learn isn't there yet.

(Undergraduate Teacher)

The students in that early phase of education were described as in the following response:

...they are like sponges, wanting to be fed information. ...but if they get somebody who can instruct them, then that's fine they can develop a lot quicker with more understanding of what's expected of them, what being self-directed is all about.

(Undergraduate Teacher)

Three of the 5 Undergraduate teachers conveyed the opinion that there was a need for students to develop the required attributes for self-directed learning. It was felt that a majority of the new entrants lacked the ability to independently utilise the different resources available to them. Their argument as conveyed in the following response was that students:

...need to be able to identify what the resources are. So they need good library skills, they need IT skills ...I think to be a good self-directed learner you need to be well versed in what's available and what would be useful for you and I think probably new students don't have those, they don't have that knowledge and they don't have those skills.

(Undergraduate Teacher)

This view was shared by 4 of the 10 Diploma academic teachers and 2 of the 15 Preceptors.

The following responses conveyed their respective views:

They've got to learn to be quite organised, because if you're self-directed then you tend to organise your time very well. You go to the library, but then you need to know what you're looking for...certainly, I don't know if that's a skill we teach them, but certainly in the library they're taught skills, CD ROM, that sort of thing. You need attributes.

(Diploma Teacher)

...to me it is that the students are aware of what facilities there are for finding out for themselves about certain things. ...I would think you need to give them guidelines, obviously, on how to use the library, library skills, and how to examine what they need to know....

(Preceptor)

The suggestion that students might be given the freedom to make decisions and act on their own judgements seemed to create unease among the clinical mentors and preceptors.

Individuals viewed the idea of student empowerment in the acquisition of practical skills with scepticism and argued that there was a need for direct or indirect supervision of the students at all times. The following are examples of the views expressed:

There has to be a bit more supervision because things happen so rapidly...they may need a wee bit more pointing in the right direction...I feel guidance plus... teaching supervision is important.

(Preceptor)

...you don't want them to feel that you're breathing down their necks all the time....

(Preceptor)

...but you expect to keep an eye on them and you make sure that mistakes don't happen....

(Preceptor)

These views evidently reflected individuals' perceptions of their professional obligations. In their opinion, the concept of self-direction in learning was more appropriate within the theoretical context of learning than the clinical context. The preceptors described the constraints associated with student self-direction in the practical settings and for that reason, their reservations about this learning approach. The ethical implications emerged as a particular concern because they saw human life as central to the practical context of the learning. The following typical response portrayed how they expressed their perspective:

Self-directed in the practical areas, I would say has got problems, ethical problems, looking at the practical aspects over here. Whereas in college it's obviously books and you know they can self-direct but then over here they don't know how people feel so obviously you can't expect that... kind of learning.

(Preceptor)

Arguably, these concerns might have influenced the preceptors' opinions that self-directed learning was more practicable in the college environment than in the areas of practice. In justifying their views, individuals argued that the college setting was safer because there was

no intrusion on the clients. They also argued that the provisions within the college settings catered for a more varied range of relevant resources that were more readily accessible to the students. Therefore even where the desired learning could be more effectively achieved through the realities of clinical care situations, the idea of student self-directedness was seen as better placed within the college setting. The following represent the views expressed.

I think maybe it's more appropriate at the college. Because you have got a college, you know you're there to learn and you go to the library and look up articles and I think possibly in the practical situation maybe the student feels a bit conscious sitting down with a book.

(Preceptor)

I suppose it's easier when they're at college because they've got time and they can go and learn what they need to learn whereas in...working in most areas, like for instance in the hospitals, in the wards, things arise and it's very difficult for the student to pick up her textbook to go and read or, to self-direct and learn on her own.

(Preceptor)

The academic teachers also expressed similar reservations. The dilemma for most was the ethical implication of patient and client exposure to students to spontaneously practice on in developing their practical competencies. While this might be an educational advantage for students to exploit the concrete clinical situations, the welfare and safety of the patients was seen as superseding students' educational activities. The following response represents the ways in which the teachers expressed their reservations.

...We had a debate a couple of weeks ago and that's an issue that came up. I think it would be a real danger if you fostered students in the clinical area to go out and do their own thing because they don't always see what they need to know they will often want to go and do the technical things...the complicated things. ...I think it's a danger in clinical practice....

(Diploma Teacher)

Both groups of academic teachers concurred in pointing out the difficulty for particularly the early phase students, to identify what learning deficits they required to make good or what clinical competencies they needed to develop. Among the arguments presented were that:

...early on they couldn't identify the learning needs, they couldn't do it themselves because they were just into this world that they knew nothing about and they wanted somebody to really tell them what to do, to tell them they were actually safe in what they were doing.

(Diploma Teacher)

...I suppose in the clinical settings it may be more difficult for students to identify opportunities because they don't have as much control, particularly inexperienced students.

(Undergraduate Teacher)

Despite these views the preceptors did report their observation that progression, experience and confidence enabled the late-phase students to achieve some prescribed learning outcomes without being prompted. Nevertheless, they maintained that some form of supervision was always required in accordance with professional regulations. Individuals explained:

...I think their self-direction in terms of clinical practice improves as their confidence in the programme and their knowledge base improves but you expect to keep an eye on them and you make sure that mistakes don't happen....

(Preceptor)

In the clinical area I think self-directed learning has got it's place but maybe not to the same degree as the college. There has to be a bit more supervision because things happen so rapidly...they may need a wee bit more pointing in the right direction...I feel guidance plus...teaching supervision is important.

(Preceptor)

These responses convey the consistent view that the welfare of the patients and clients and the related ethical implications clearly superceded perceived learning needs of the students.

Summary

As demonstrated in previous chapters the students' conceptualisations of self-direction in learning varied and seemed to mainly reflect their experiences in the programmes being undertaken and their self-concept as self-directed learners. This chapter set out to qualitatively analyse the teachers' perspectives. The findings revealed the following:

- Variations in the educators' conceptualisations of self-directed learning with just over one third interpreting it as independence with self-initiated decisions and actions. Less than two thirds interpreted the concept as involving some degree of student freedom in the learning process but based on the educators' control and direction.

- Of the four techniques, group interactive learning and the reflective techniques were considered by all the teachers as practicable for fostering self-direction in the theoretical context of learning.

- Varied practices of organisation of group memberships were reported. Although students were at times allowed the freedom to form their own groups, the majority of the teachers reported intervening to regroup students if disorganisation or clique groupings occurred.
- The implementation of the reflective learning technique involved conversational sessions with emotional undertones. The teachers' familiarity and interpretations of the related concepts, and their motivations apparently influenced implementation of the technique.
- Although the technique of seminar presentations was considered by all the teachers as practicable in fostering student self-direction in the theoretical context of learning, none of the teachers considered it practicable in the clinical settings.
- Only a small proportion of the teachers considered the technique of negotiated learning contract as practicable in fostering self-direction in both the theoretical and practical aspects of learning. Application however, varied and tended to be based on loose interpretations.
- Maturity in terms of chronological age and previous higher academic experience of self-directedness, were seen as significant factors that influenced students' readiness to function in the independent capacity.

The next chapter presents a similar qualitative content analysis of the teachers' perspectives of student supervision in their self-directed learning activities.

CHAPTER TWELVE

THE TEACHERS' PERSPECTIVES OF THE SUPERVISION OF THE STUDENTS

Introduction

A comparative analysis of the views of the academic teachers and preceptors as articulated in the interviews is presented in this chapter. This section focused on the teachers' perspectives of student supervision in the theoretical and practical aspects of the educational programmes.

The intentions were:

- to establish the teachers' conceptualisations of their supervisory roles and the extent to which these influenced their practices,
- to examine and compare the supervisory practices employed by the academic teachers to the practices employed by the preceptors,
- to examine the influence of professional and institutional constraints on the practices employed by the academic and practical supervisors.

The Teachers' Conceptualisations of their Supervisory Roles

Since the theme of this section concerns supervision the two groups of supervisors will be identified according to their backgrounds of specialism. Thus the labels Academic Supervisors and Preceptors are used to distinguish between supervisors in the theoretical and practical contexts of education respectively. Where a distinction requires to be made between the two groups of Academic Supervisors the programme of education is appropriately applied. Thus Diploma Academic Supervisor and Undergraduate Academic Supervisor are used to identify the sources of responses quoted in the text.

The responses from the entire group of supervisors were examined to determine the variations in individuals' conceptualisations of their supervisory roles. The perceived roles of the

academic supervisors were compared to the ways in which the preceptors portrayed their roles. The perceptions of the Diploma academic supervisors were then compared to those of the Undergraduate academic supervisors to distinguish any distinctive differences or similarities.

The aim of this qualitative content analysis was to determine what proportion of supervisors from each group described their roles in specific terms. All responses which defined the supervisory role in terms of teaching and instructional function with the supervisor as the vital source of the specialist knowledge and as guide to the learning resources were placed in the category of supervisor as:

A. Academic Expert, Major Learning Resource with Ultimate Control

For example:

The way I see my role is to make sure that the students achieve the learning that is required for their qualification. As the teacher I know what they have to learn so I feel it's my responsibility to make sure they achieve that knowledge. I spend hours with students going over their work, I think they go through stages, I think it's difficult for some of them not knowing what to expect. I don't think they're sure when they come to see us, what they want. So you sit with them...get them to identify choices. With coursework you work with them, guide them on the choice of topic, tell them, give them ideas about what books, what articles, what learning packages and things, to use.

(Academic Supervisor)

Conversely, all responses which described the supervisory role in terms of facilitation and collaboration, suggesting that students were empowered to retain control over their own learning process, were placed in the category of supervisor as:

B. Academic Expert, Collaborator and Facilitator.

For example:

I suppose in a way that these roles just sort of happen. ...when it comes down to their learning, coursework and things like that, there is a lot of discussion and negotiation there, and they do have some say, in fact, quite a lot of say... Well they probably often thought there was something behind it because I am the teacher and asking them for their opinion. It was a very strange concept to be doing, to ask them, what do you think? ...and we can pull things forward...knowing there's work to be done and you can decide how or when to do it. At first it was really strange...and then in discussions...they then think, Oh well, this is not such a bad idea after all, because they are allowing us some choice and then empowering us.

(Academic Supervisor)

This part of the content analysis focused on determining what proportion of respondents from the two groups, academic teachers and preceptors fell into the categories of supervisor as academic expert with ultimate control and supervisor as collaborator and facilitator. The qualitative findings revealed that teachers' conceptualisations of their supervisory roles fell into two main dimensions. At one end of the spectrum was the view, which described the role in terms of instructional function in which the supervisor organised and controlled the learning process. At the opposite end was the portrayal of the supervisor in a collaborative and facilitative role. The frequency distribution showed that 9 of the 15 academic supervisors described their roles as experts with overall control while 6 described supportive and collaborative role.

Although a similar pattern of distribution emerged from the practical supervisors, a distinctive difference in the proportions emerged. Eleven of this group described their supervisory role in terms of expert instructor with ultimate control of the learning process. Only 4 of the 15 described their roles in terms of collaboration and facilitation.

The Views of the Academic Teachers

The content of the responses showed that those supervisors who retained ultimate control were inclined to portray themselves as the source of professional knowledge and expertise and therefore the primary learning resource. They perceived their status in terms of legitimised authority with the right and expertise to determine and manipulate the educational goals, content, learning resources and techniques. The following are examples of responses conveying the above perceptions:

I think as a teacher I know the curriculum and what the students are supposed to achieve. I think it's difficult for most of them so we tend to give them directed learning. I think I am a bit more directed to them and not so self-directed. Certainly for quite a lot of things it's directed learning. I think directed learning is easier and it is safe because you don't have to worry that they are not looking at the right things. This way you know they are looking at things in the curriculum that relate to content of the programme.

(Academic Supervisor)

The way I see my role is that I would have more experience of nursing than they have, a bit more knowledge of the things that are involved... I give them guidance about the content and what depth I would expect them to achieve because a lot of them need that.

(Academic Supervisor)

Despite the above, individuals still considered the practice of supplying students with topics, handouts, reference lists and other learning materials with direct instructions and supervision as constituting student self-directedness. That practice was considered simply, as a means of facilitating the process of self-direction in learning. An emerging feature from the responses was that supervisors' perceptions were influenced by what they speculated as students' expectations. For example:

Generally they expect you to support them, they expect you to listen to them, they expect you to give them direction if they are floundering with assignments in some way, ~ you are meant to be the fountain of all knowledge as well, at times for them. ... and you have to guide them, tell them where they can find the information, and give them references. I think as they progress through the course you really are encouraging the students to be self-directed but you have to be there for them and do these things because they expect you to.

(Academic Supervisor)

... They expect me to have things prepared so that it is unambiguous what they have to do and the different ways they can go about it. They also expect that if they come up with a query about the process or even the content, that I will be able to address it. ... I feel it's important to let them know what you expect of them. I tell my group the sort of things I expect them to achieve... the things to concentrate on and what depth. They get handouts of the guidelines, they also get handouts of the content and articles on the specific topics and they get references from me.

(Academic Supervisor)

In contrast to the above, the supervisors who conceptualised their roles in terms of collaboration and facilitation described practices of empowering students to make personal decisions and act on their own judgements. Those teachers felt that this practice allowed students to take responsibility for their own learning process through self-diagnosing of personal learning deficits. The students were apparently encouraged to determine for themselves relevant content, the goals and the strategies for achieving the learning task. For example:

Normally for their coursework and projects they get a list of topics to choose from. You discuss these with them and you ask them to think about the topic that interests them and why they feel they want to look at that topic. Then if they say I would like to try this, your reaction is being very encouraging, ... Why don't you try and then... you can come back and have a chat. ... I find that if I leave people to make that choice then they actually do come back.

(Academic Supervisor)

Before comparing these findings to those that emerged from the preceptors it was considered necessary to devise another table to determine what differences might show within the subject group of academic supervisors, Diploma and Undergraduate teachers.

Thus the frequency distribution table represented the 15 Diploma and Undergraduate Academic supervisors. In the following discussion reference will be made to the relevant proportions of the specific group. The findings from this qualitative content analysis indicated that a majority, 7 of the 10 Diploma academic supervisors portrayed greater inclination to retain control while 3 portrayed an inclination to collaborate with students and empower them in their learning process.

The pattern of distribution of the Undergraduate academic supervisors differed. It indicated that 3 of the 5 were more likely than their Diploma academic counterparts to allow students the opportunity to independently determine aspects of the curricular content plan and implement the learning task. It was not entirely clear whether or not these findings reflected institutional culture and ethos or the type of students and their self-directed capabilities. However, the intention was to later examine the extent to which the teachers' perceptions of the students' self-directed capability may have influenced their supervisory practices.

The Views of the Preceptors

The preceptors conveyed similar views. However their main preoccupation in terms of professional responsibility regarding safety in clinical practice, apparently influenced their perceptions of the supervisory role. Compliance with institutional regulations such as meeting prescribed learning outcomes also emerged as another factor which may have influenced the supervisors' conceptualisations. For example:

I see it as my duty to help students develop their skills and so I make sure that they get their objectives for that ward area. You're responsible for their learning so you go by their objective books. You decide what you're going to teach them and how you're going to organise that over the time that they're with you in that ward. You show them, ...specific procedures and skills, you let them watch you do it, you get them to try it out then you let them do it, but you have a responsibility to watch they don't make mistakes, you have to supervise them.

(Preceptor)

Focusing on the learning outcomes for the different stages of the students' education, the preceptors determined what competencies must be achieved in specific placement areas. For example:

...it's very difficult as well because you have a very busy day where they don't get experience because it's too busy, and a quiet day where they still don't get the experience. You have to try and find a day where there's a happy medium for them to get to do what they need to do, so it's probably quite hard for them but you have to make sure that they get to learn the things that are appropriate for the stage they are at.

(Preceptor)

I'd say I'm more facilitator or mentor than anything. My own particular role as a practitioner means that I spend my time actually working directly with the patients, depends on the busyness of the ward. So it's not as often that I am directly looking after patients needing a lot of care while I have a student that I have to supervise directly. ...the more senior students I can allow them to work on their own, make some decisions, build their confidence, but I have a responsibility so I keep an eye on everything they do.

(Preceptor)

The above observations conveyed some degree of tension in the system which inevitably created conflict for the practitioners where their obligation to client and patient welfare and students' learning needs were concerned. The next section examined in what ways the conceptualisations may have influenced the practices employed by the supervisors.

Nature of the Supervisory Interactions in the Theoretical Context of Learning

Systems of contact

Similarly to the students, the systems of contact described by the academic supervisors were:

- Open-door
- Appointment and
- Combined systems.

As the following responses indicated, the combined open door and appointment system of contact emerged as the most prevalent practice reported by the Diploma academic supervisors. The variations in these arrangements suggested that the systems of contact were generally informal. The following were practices described by the academic supervisors.

It's open-door system in a way, but we do have a regulated appointment system, but I still do say that although we do have set times, if anybody is in dire straits or really wants to see me, of course they can....

(Diploma Academic Supervisor)

...on the whole they make appointments, they can drop in and see me whenever they want. I've a very open door, I'm not, well, I don't say we will meet regularly. If they need to see me they phone up and make an appointment, we don't have regular sessions.

(Diploma Academic Supervisor)

Although the Undergraduate teachers also described the combined system, in contrast to their Diploma counterparts, contact by appointments appeared to be the more prevalent practice.

For example:

We normally encourage them to make appointment if they want to come and talk about something, or you tell them what days and times you have set aside to see students. Some students don't bother and think they can just walk in any time to see you, ...but you have to tell them, make them realise that you have lots of other commitments and can't possibly see folks immediately every time they wish to be seen. I think it's quite a good system, works well, I think.

(Undergraduate Academic supervisor)

Both of the situations described above indicated institutionally set regulations. However, apart from the student initiated, discretionary contacts both groups of academic supervisors described periodic visits to the areas of practice placements to maintain contact with their supervisees. In those instances, the usual practice was that the supervisor initiated the meeting by contacting the clinical staff to negotiate an appropriate time to meet with the students. For example:

The arranged meeting – basically boils down to the fact that I expect to see them twice per semester. I also see them on a planned basis. Usually I would telephone and talk to the staff to arrange a time before I go out to see my students.

(Undergraduate Academic supervisor)

Reasons for Contact

The reasons for contact described by the academic supervisors also varied and included the following:

- Academic guidance mainly in relation to supervision of course projects,
- Compliance with institutional requirement,
- Matters concerning practice placements,
- Pastoral support and counselling.

In analysing this data the presence or absence principle continued to be applied in determining the prevalence of each characteristic in the supervision practices. A tabulated representation was devised to demonstrate the distribution of respondents across the categories of reasons for contact.

Findings

The Diploma Teachers' Perceptions

The qualitative findings revealed that while there were no distinctive differences in the reasons for supervisor-supervisee contacts among the Diploma group, the most common reason that emerged related to placement issues. Pastoral support and counselling was noted to be relatively prevalent but there was a balance in the need for academic guidance and compliance with institutional requirement.

Although 4 of the 10 Diploma teachers described contact for academic guidance, the pattern of student initiated discretionary contacts did not appear to occur either regularly or on a formal basis. Another emerging feature of the Diploma students was that whenever they sought such guidance they often did so in groups. This differed from that observed among the Undergraduate students who apparently sought guidance on an individual basis to discuss personal learning deficits or personal progress on academic projects. The typical feature as observed by the Diploma teachers is conveyed in the following response:

...One or two of them would come to me quite often to ask for information or advice. Usually they want you to proof-mark or just read over their work and tell them if they are on the right track or not.... Sometimes they want you to explain something to them and it's often a small group who tend to come asking for clarification on things.

(Diploma Academic Supervisor)

Student visits during placements were portrayed by both groups of academic supervisors as institutional requirements with which they complied to maintain contacts with their supervisees. The characteristic patterns described by the Diploma teachers indicated inconsistencies in both reason and frequency of visits. As explained in the following responses:

...I see them twice for each placement, normally. If they are having difficulties in particular areas, if they are having absences in clinical areas, I will go out and see them, ...I go out to see the mentor sometimes and hear from her or see how they are doing....

(Diploma Academic Supervisor)

I haven't done many recently but I have always visited them in their practice placements, depending on how long it is. If it was only four weeks I tried to make sure I visited everyone once and I'm sure I achieved that, but when it was nine weeks I would want to have visited every student at least twice, but

some would require more visits because always when they are in placements, they are also working on some project and it seems more appropriate to go to the area that if they are doing care study or management study they are doing it in that area. So it seems more appropriate to visit them there...if they identify problems I would go more often and I would certainly go on request.

(Diploma Academic Supervisor)

Despite their attempts to comply with the institutional regulation of maintaining student contacts, various constraints were noted to create a hindrance to this. For example:

Yes, well, this is a problem. It states that we should visit them twice on a placement. That's not happening. It's just not possible and this placement, I have only visited two...of the students, but because they have problems...I went and spent ages with them and another student...because there was problems with mentor. I am afraid that my personal students have not been visited on this placement.

(Diploma Academic Supervisor)

It's very difficult to achieve, with students in different placements across the city you spend a lot of time travelling around, and it is very time consuming. I usually do it...as an ad hoc type thing, and I organise with them...I'll come and I'll do such and such. Sometimes I can meet with them but sometimes I can't because there are things going on in the ward or they're involved in something.

(Diploma Academic Supervisor)

Placement issues as indicated in the responses varied and included student need for support with personal matters or exposure to traumatic clinical events. Other relatively common reasons requiring visits by academic supervisors included problems with achieving the prescribed learning outcomes. Poor performance or conflicts in their professional socialisation and interpersonal relationships with patients or members of staff were also indicated. For example:

They come to me when they've got problems, either theoretically or something else, ...but when they're in the clinical areas...it's very rare that it would be...informal basis. ...if I'm asked to go into the area, then that means they've either done something wrong, ...made a mistake, or they've not been getting on with the ward staff, ...or the situation in the ward has been very traumatic or the student is very distressed themselves because of personal difficulties....

(Diploma Academic Supervisor)

Quite a number of them, I would say only come to see me when they are directed to come and see me,

(Diploma Academic Supervisor)

Unlike their undergraduate counterparts, a considerable proportion, 5 of the 10 Diploma teachers described having to directly deal with student needs for pastoral support and counselling. Nevertheless, they also noted that some students by choice defaulted from

contacting their academic supervisors even when they encountered difficulties with their academic work. As one teacher explained:

...others won't and sometimes I wonder if some of them don't like to ask about things because they don't want you to think they don't know these things. Whereas there are one or two, mature students in fact who are happy to come and say I haven't a clue about this, tell me.

(Diploma Academic Supervisor)

The Undergraduate Teachers' Perceptions

The findings from the Undergraduate teachers showed that they all reported academic guidance in terms of project supervision as the most prevalent reason for contact by their supervisees. Compliance with institutional requirement was a relatively common reason, while pastoral support and placement issues were noted to be rare reasons for student-initiated contacts. For example:

...it's mainly supervising third and fourth year projects, but you also get students who want their draft essays or coursework to be checked over etc.

(Undergraduate Academic Supervisor)

As portrayed in the above response, the typical picture was that the nature of academic support for which the students contacted their supervisors reflected the stage at which individuals were functioning. It also reflected the type of challenge, nature of demands from workload and the type of work in which they were engaged. For example:

I think probably project supervision, and coursework, particularly...getting near to the submission date, ...there's a lot of demand on you, because students are so stressed with their work.

(Undergraduate Academic Supervisor)

Placement issues as a reason for contact was less common among the Undergraduate teachers and students than noted among their Diploma counterparts. The apparent difference as previously established, reflected the role of the college based clinical teaching fellows who dealt with placement matters. As one teacher explained:

...We try to visit them once or twice during placements and we discuss conditions or professional issues to do with patients in that ward area....

(Undergraduate Academic Supervisor)

Additionally, the availability of student services meant that the Undergraduate students who presented such needs were referred to the relevant experts for pastoral and/or counselling support. Obviously the reasons for contact varied and included the following:

...if another lecturer approached with concern about a student I would obviously contact the student.

(Undergraduate Academic Supervisor)

...If in fact they feel they can't discuss it with me then I'll suggest or arrange for them to go to student services.... It's a case, You're having a problem, do you want to talk about it? So although it's coming as a formal thing the approach is very informal.

(Undergraduate Academic Supervisor)

Other reasons a student's wanted to contact me was...to change to another course in another University ...she wasn't happy, she wanted to discuss the options.

(Undergraduate Academic Supervisor)

Default on taking up Supervisory Support was noted to be often attributable to sensitive personal concerns. When such attitudes emerged, the teachers claimed to deal with them through use of the referral system. As one teacher explained:

There are always those who just won't come to see you or approach any lecturers for support. ...they just never respond or take up the support available to them, ...but there are the odd students who I really do want to see, I really do, and they'll not come and see me. That does happen on the odd occasion and I tackle that point by searching them out and say – Look you need to have a chat with somebody. If you can't talk to me or you don't want to talk to me, please go and see somebody else, and if there's anyone you want to raise it with then what I'll guarantee is the confidentiality that if they go and speak to somebody else the person will not then come and tell me. I think that's quite important.

(Undergraduate Academic Supervisor)

The above responses portray situations in which the nature of the problem or a student's perception of the specific matter determined whether contact was made or not. The responses also imply that the nature of the interaction that evolved between the supervisor and the supervisee might also depend on these. The next section examines the nature of interactions that occurred in the supervision.

Control of the Supervisor-Supervisee Interactions

Three emerging categories were analysed in this section. These reflected the nature of control that occurred in the interactions between the students and the supervisors and were categorised as follows:

- Supervisor control
- Shared control

- Student control

The responses conveyed the nature of student involvement in the control of the interactions and in the decisions about their own learning process. The characteristic feature in this process was conditional sharing of the control of the interactions. Student participation in decisions concerning their learning process and whether or not the supervisor took total control depended on various circumstances. These included the supervisor's perception of her/his role, the nature of identified learning needs and stage of education at which specific students were functioning. Both groups of academic supervisors concurred in their expectation that students in the late phase of their education ought to be able to make considerable decisions about certain aspects of their learning process. The general opinion was that such students should have the freedom to seek academic support at their own discretion. Therefore, the qualitative content analysis was based on the question as to:

- Who initiated and controlled the day-to-day interactions and the decisions that evolved from that process?

An attempt was made to determine whether or not there were any differences in the ways in which students in the early phase of their education and those in the late phase were supervised. In the relevant table the categories of control were represented in the columns whilst the frequency distribution of the supervisors were represented in the rows. These reflected the categories which emerged from the students' perspectives of this theme.

Findings

The qualitative findings showed that 3 of the 5 Undergraduate academic supervisors described shared control of the interactions whilst 2 described student control. None of them claimed to take total control of the interactions. For example:

It depends if a student comes to see me off their own back, frequently they will start themselves. However ...if I've asked them in I'm quite open with them...So although it's coming as a formal thing the approach is very informal.

(Undergraduate Academic Supervisor)

Those who placed the onus of control on the students justified their practices by emphasising the stage of education and the nature of work in which the students were engaged. Another point of argument presented by the teachers was that the students ought to be capable of contacting their supervisors to seek guidance at their own discretion in order to retain ownership of their own learning process. Individuals explained:

... Third and fourth year students tend to be quite capable of deciding what sort of things, ...they want to explore and develop in their projects. They may want to discuss their objectives with the lecturer or project supervisor but most of the decisions are made by the individual.

(Undergraduate Academic Supervisors)

As a supervisor say supervising a student's project...I think the main thing, where the student's concerned, is that you should be able to control and make your own decisions...I would say to students this is their project and I would like to support them doing well, but it is their project and I would tend not to have a sort of authoritative role in the supervision. I would tend to be much more facilitator.

(Undergraduate Academic Supervisor)

These Undergraduate teachers conveyed an expectation that students in the final phase of their education and engaged in preparation of specific course projects should demonstrate preparedness to make their own decisions and accept responsibility for their own judgements in their learning process. By contrast, 6 of the 10 Diploma teachers indicated that they retained greater control over the interactions. For example:

I'm very directive in my support. I'm inclined to, when they come to me regarding pieces of work, ...I am really directive, I tell them. ...there are the ones who need more support, and who want me to explain what it means to them, and I am much more supportive than other teachers. I am perhaps very directive.

(Diploma Academic Supervisor)

...I have to deliberately move from the maternalistic, I have a tendency towards that, which I am aware of, and I have to sort of step back from telling them what to do but I find that difficult. I am not very good at that. Probably because I feel it is my duty to give them the knowledge... make sure they....

(Diploma Academic Supervisor)

Four of the 10 Diploma teachers described shared control in specific circumstances if the student had requested the meeting to discuss a personal concern. On the other hand, a final year student might be allowed to contribute considerably to the decisions that evolved from the interactions. None of the Diploma teachers described ceding greater control of the interactions to the student. The following were among the views expressed:

It could be either. It depends sometimes the student has had to take the lead because they are asking very specific things and I have to address issues they identify, so it would be inappropriate to step in and take

over but sometimes...especially with students who have more difficulty academically, or the ones in first year, I have had to take more of the lead...

(Diploma Academic Supervisor)

The more mature ones, the third year students, you expect them to make some decisions. They should be able to select their own topics for their essays, go to the library gather the information and write the essay, and if they feel they need clarification then they can come and ask me.

(Diploma Academic Supervisor)

The preceptors appeared to be rather guarded about the notion of student empowerment and control. The majority of this group of respondents, 12 of the 15 preceptors, portrayed greater control by the supervisor. Only 3 preceptors described shared control in which students in the late phase were increasingly encouraged to take more responsibility in developing their competencies. Patient safety clearly superseded the notion of allowing student freedom and independence in the practical aspect of their learning. These conflicts and reservations became notable in the way in which the preceptors defensively justified their control of the day-to-day interactions with the students. Individuals argued as follows:

I see it as my duty to help students develop their skills and so I make sure that they get their objectives for that ward area. You're responsible for their learning so you go by their objective books. You decide what you're going to teach them and how you're going to organise that over the time that they're with you in that ward. ...you have a responsibility to watch they don't make mistakes, you have to supervise them.

(Preceptor)

...the students we have on the wards – they are quite senior and I think it's important for them to find out for themselves sometimes, especially when it's specific to their patient or different conditions on the ward. I think it's important for them to pick up on the different things that are going on in the clinical environment and then going and looking for them and expanding on their knowledge...with direction as well. I think it's important to support the student at all times in the wards....

(Preceptor)

It was quite obvious that the preceptors considered major to total control justifiable with all students who were newly allocated the specific clinical areas irrespective of the stage of education.

Summary

This chapter set out to examine and compare the perspectives of the academic supervisors and the preceptors concerning the supervision of the students in the theoretical and practical aspects of their learning. Comparison was also made between the two groups of academic supervisors, the Diploma and undergraduate teachers.

- Two thirds of the academic and practical supervisors described themselves as experts and major learning resource and were therefore, inclined to retain control and direction of the learning process. The remaining one third described their supervisory roles in terms of a collaborative and facilitative function and were therefore, inclined to empower their students and share control over the learning process.
- In relation to the systems of contact, the combined open door and appointment option emerged as the practice commonly employed by both groups of academic supervisors.
- The emerging pattern of contact showed that while Diploma academic supervisors normally initiated the arranged supervisory meetings, Undergraduate students were more likely to initiate this using the appointment system of contact.
- The reasons for supervisor-supervisee contacts indicated that project preparation created greater incentives for students to seek academic guidance and support. This phenomenon appeared to be more prevalent among the Undergraduates than the Diploma group.
- The nature of the day-to-day interactions revealed greater control by the supervisor in the practical context of learning. Conversely, the academic supervisors portrayed varying practices of shared control in the context of theoretical learning.
- The practical supervisors considered their professional obligations concerning patient and client safety as justification for retaining greater control in the supervisory interactions.
- However, increasing responsibility and control by students appeared to be guardedly fostered during the late phase of their education. At that stage, both the academic and practical supervisors considered the final year students ready for and capable of contributing to relatively major decisions and acting on their own judgements.

CHAPTER THIRTEEN

DISCUSSION OF THE IMPLICATIONS OF THE FINDINGS

Introduction

This study set out to explore student self-direction within the theoretical and practical contexts of nursing education. The aim of this chapter is to present a comprehensive overview about the implications of the findings, primarily for this educational context. However, certain elements might also be deemed applicable to other professional educational contexts. Relevant theorisations in the current literature will be drawn upon in the final arguments.

The discussion will also demonstrate in what ways differences in the findings may have been influenced by the unique characteristics of each programme of education. The influence of specific characteristics of each student group and differences relating to the stage of education where applicable will be demonstrated.

Implications of the Emerging Conceptualisations

Chapters two and three explored the background to adoption of the self-directed approach and the factors influencing its interpretation and implementation in this professional education. Examination of the range of interpretations in other contexts of adult education revealed underpinning professional and institutional philosophies, and theorisations from various studies. These include descriptions of self-directed learning as:

- an educational process (Knowles et al., 1984; Boud, 1988; Hammond and Collins 1991),
- a goal of educational outcome (Boud, 1988)
- encompassing both process and related personal characteristics of the learner (Merriam and Caffarella, 1991; Hamond and Collins, 1991; Brockett and Hiemstra, 1993;)

Brockett and Hiemstra's (1991) distinction between self-directed learning and learner self-direction in terms of personal characteristics and responsibility was also examined. An

operational definition was devised for this study that contextualised self-direction in terms of learner characteristics and response to the related demands. The eclectic definition formulated by this researcher described student self-direction as follows:

A learner-controlled educational concept characterised by specific personal attributes and behaviours. The learners demonstrate a need or intrinsic motivation to learn and continually increase their knowledge and/or skills. They show a preference for independence and freedom in determining personal learning needs. Once the learning deficit is identified the learners proceed to devise and implement appropriate learning activities. The relevant learning resources are personally selected and guidance and support from experts in the academic and practical sectors are sought at the learners' own discretion. Having attained the desired knowledge and/or skill, the learners demonstrate appropriate change in behaviour in their self-confidence and desire to apply the acquired learning in various situations. Additionally they demonstrate spontaneity in objectively evaluating their personal performance based on that learning.

Based on this definition, exploration of the students' and educators' conceptualisations was explored through the following research question.

- What perceptions do students, educators and clinical mentors/preceptors have about the concept of self-directedness in learning?

The interview questions were designed to seek personal understanding of the concept and opinions about the different methods employed. Among the key elements analysed in the responses were indications of:

- personal initiative, self-reliance, independent thought and actions,
- student controlled group interactive learning activities,
- presenter-led discussions in seminar presentations,
- personal control in negotiated learning contracts and
- student controlled reflective learning activities.

These portray learner control over the learning process as postulated by authors such as Knowles and Associates. (1984); Boud (1988), Hammond and Collins (1991). This study sought to establish the extent to which this portrayal of self-directedness applied to the subject groups and the potential implications for this professional education.

As demonstrated in chapters 6 and 11, a range of interpretations of the concept emerged from the responses of the students and teachers which substantiates Tennant's (1988) observation about the wide variations in conceptualisation of what student self-direction involves and how it should be applied. In this case, however, there appeared to be a general lack of understanding of the concept, its related principles and the nature of associated demands which undoubtedly resulted in many students' inability to respond appropriately. Candy (1989) implicated the lack of consistent theoretical base for the confusion in interpretation of this educational concept. The content of the responses showed that the Diploma students and educators considered the provision of instructions about content, resources and methods of fulfilling the learning task as an essential component of the process of self-directed learning. This practice which was perceived as facilitation by the educator clearly conflicted with the conventional idea of learner's self-initiated decisions and actions and personal control over the learning process.

The characteristic feature in the Undergraduate students' interpretations was recognition of personal responsibility for the learning process. Nonetheless, many early-phase Undergraduates also portrayed similar conceptualisations and dependent characteristics as their Diploma counterparts. Other students from both groups portrayed mixed dependent and independent learning attributes which were characterised by initial lack of spontaneity and therefore dependence on their educators' decisions. Once they had received the required instructions, however, unprompted decisions and actions became manifest during the actual process of the learning. The initial dependence appeared to be individuals' way of ensuring that the topics they studied were directly relevant to the curricular content.

These findings indicated a possible association between the students' self-directed learning attributes and their academic backgrounds, contexts in which they functioned and envisaged goals. Indeed Candy (1989) described self-direction in learning as involving three phenomena: learning independently without institutional support, that is, autodidaxy;

learners' freedom and control to organise the knowledge acquisition; and self-direction as a personal attribute. Long's (1989) portrayal of self-directedness in learning is that the concept encompasses different dimensions. Similarly to Candy's idea of autodidaxy, the sociological dimension in Long's portrayal of the concept refers to the situation in which the learners function independently of institutional or educator control. The pedagogical dimension on the other hand refers to the learners' actions in identifying personal learning deficits and determining the relevant resources for fulfilling the desired learning. Long describes a third dimension, the psychological aspect, as relating to learners' ability to maintain control over their own learning process. It could be argued, therefore, that where the different subject groups of this study were concerned, individuals' understanding of the related concepts, personal experiences and the values which they placed on student self-direction may well have influenced the conceptualisations and practices conveyed in their responses. There is no doubt that other factors, such as the professional and institutional philosophies, policies, regulations and provisions, also influenced the way they interpreted and implemented the concept.

Although there was little evidence of appropriate preparation for self-direction itself, students' ability to function as self-directed learners was a major concern within the educational system to both the administrators and the educators. This finding substantiates Boud's (1988) urging for institutions to provide the required preparatory programmes that enable students to cope with the demands of self-directedness in learning. He pointed out that this requirement ought to be seen by the institutional administrators as their obligation if they considered student self-direction as crucial to their educational development and function.

An Emerging Compromise and its Implications

In the earlier chapters a critical debate was presented to demonstrate the tension created by implementation of student self-direction in an educational system fraught with professional codes and regulations. This appeared to be further complicated by the ethical dilemmas

associated with patient and client care. It was noted, that a considerable proportion of the Diploma students and teachers were uncomfortable with the notions of student self-directedness, independence and autonomy in learning. This was also notable among some of the Undergraduates particularly the early phase students. The Diploma students' reservations could be noted in their preference for the term 'directed learning'. Slevin (1992) highlighted the situation of academic dilemma in which the terms 'directed self-learning' and 'teacher-induced self-direction' had evolved within nursing education.

The students exposed to the practice of 'directed' learning, the Diploma group, perceived the educator as the initiator and supervisor whilst the processes involved in fulfilling the learning tasks were seen as their own independent actions. It could be argued, therefore, that the proponents of the concept, 'teacher-induced self-direction' were probably justified in their view that the term more accurately described their practices.

By contrast, the Undergraduates generally described self-reliance with discretionary consultations as the key elements of self-directedness. They conveyed the belief that it was expected of degree level students to be able to fulfil much of the required learning through the personal effort of independent work. The source of that supposition was uncertain but possible association with an institutional culture of peer interdependence and participation in peer study groups was notable. Other factors that may have influenced this view included the institutional regulations, level of academic challenge, systems of student supervision and the kind of material resources available to them. While accepting the challenge of the learner's initiative in the learning process the Undergraduates also described seeking help at their own discretion. These actions portrayed ability to function '...with or without the help of others...' (Knowles and Associates, 1984).

Critical Review of the Implications of the Key Findings

Implications of the Perceptions about Self-direction within the Practical Context of Learning

The findings indicated that a considerable proportion of the early phase students in both groups were reluctant to relate the connotations of self-reliance and independence to the practical context of learning. The fourth year students, on the other hand, portrayed a readiness for self-direction similar to that found in a study by Dare (1984) among qualified registered nurses undertaking mandatory or self-selected post registration studies. That study showed that qualified nurses who engaged in post registration continuing education demonstrated a readiness to function as autonomous, self-directed learners. It could be argued therefore, that specific characteristics, such as their previous educational experiences and professional development, may have enhanced their motivation and self-confidence for engaging in an independent learning capacity.

The preceptors reported that the fourth year students demonstrated more confidence, self-reliance and independent learning attributes in the clinical settings than did other students. It was obvious from their responses that the critical motivational factor and major preoccupation was their impending roles as registered staff who would be expected to function in an increasingly autonomous capacity. Therefore, in point of argument, perhaps The Central Council's ulterior motive, that the acquired attributes of self-directedness would be transferable, is somehow, being realised. The extent to which this phenomenon does realistically manifest remains debatable.

Paradoxically, the preceptors were reported as being more inclined to retain major control over the learning process. Potential association was demonstrable between that supervisory style and the context in which they functioned. Apart from compliance with professional codes and regulations, the additional dilemma was the ethical implications associated with the key learning resource as previously explained. This substantiates Adler and Goodman's

(1985) observation that the practices of educators reflected their interpretations of the specific contexts of teaching.

Student Reactions to the Threat of learning Deficits

The evidence from this study showed that threatened by the demands and challenges of self-direction some students, particularly the Diploma group and early phase Undergraduates, resorted to dependent conducts which they anticipated would produce nurturing responses from their educators. As previously noted, Brockett and Hiemstra (1991) caution that imposition of this educational approach on students in disregard of their cognitive capabilities or preferred learning styles could compromise their reactions to the learning process. It was also apparent, however, that others, particularly late phase Undergraduates, resorted to strategic, self-reliant learning actions, on occasions, to fulfil learning deficits if these threatened to hinder personal performance and achievement of specific goals.

This phenomenon of goal motivated independence and creativity in acquiring a specific knowledge or skill, reflects the theorisation that, faced with an identified learning need adult learners are inclined to employ various self-directed learning strategies to fulfil the desired learning (Jarvis, 1988). Additionally, fulfilment of the identified learning need becomes a particularly strong motivator for self-direction or independent learning if the desired knowledge and/or skill is perceived as critical to the performance of a specific career role (Knowles and Associates, 1984).

The Undergraduates described the strategy of splitting up the learning tasks and delegating relevant components to each other to go and explore. Discussions and note sharing formed an integral part of this learning interaction to ensure that every group member benefited equally from the topics which they studied. Others explained the strategy of seeking help and support from their study group members if they encountered difficulties when studying. In those situations, the collaborative effort described involved all members of the study group looking

up the relevant information to fulfil the expressed learning need. The fourth year students also described occasional presentation of seminar papers in the absence of teachers. This interdependence and support appear to be consistent with the characteristic phenomenon of collaboration that frequently evolves in the group context of self-directedness in learning (Heron, 1974; Boud, 1988).

Implications of the Practice of Peer Interdependence

The evidence indicated that students who habitually engaged in peer study group interactions were more likely to experience and develop the control and autonomy which evolve through the interdependent processes. The late phase undergraduates reported more frequent engagement in this practice than the early phase students. Typically in the peer study group situations:

- students spontaneously identified their own learning deficits, and
- there was evidence of group initiatives and shared decisions about what strategies to employ, for example, determining the component parts of the selected topic, delegating separate elements to each other to go and explore, and discussing their findings. The creative measures previously explained probably enhanced the interdependent relationships. As Heron (1974) observed, the key elements of the group context of self-directed learning involved equal recognition of, not only each member's identified learning needs, but also personal interests, skills and unique resources.

The interactive situations described, apparently encouraged active learning. Rather than relying on educators to determine learning deficits and devise structured learning activities for them the students took responsibility and control over their own learning process. There are distinctions to be made, however, between individual and group student learning. The underlying motivational factor for commitment to study groups was not entirely clear. What became evident was that extrinsic motivators in terms of performance in course assignments towards successful attainment of the professional qualification were the major impetus.

There is no doubt that the active discussions encouraged reflection on how the knowledge gained might be integrated in the practical context. It could also be argued that the study group situations enhanced students' ability to tolerate contradictions and criticisms as they challenged each other and debated on various issues. The Undergraduates concurred in Brookfield's (1986) observation that the related activities, for example, use of various database systems and Information Technology promoted familiarity and skills in the use of different learning resources. These portray an enhancement of the skills of self-directedness in learning as postulated by Knowles (1975) in his assumptions about adult learners. The strategies and nature of interdependence described by some of the subjects including the peer evaluation that evolved apparently enhanced the students' self-confidence in their self-direction. This phenomenon of student autonomy in the group context substantiates Heron's (1974) and Boud's (1988) observations. It was noted, however, that although they did not show reluctance to encourage peer study groups, neither the Diploma teachers nor the Undergraduate teachers described deliberate measures for fostering involvement in peer study groups.

Perceived Impact of the Institutional Provisions.

A critical factor that the Undergraduates indicated as an incentive for engaging in peer study group activities was provision of discussion and syndicate rooms. Of crucial importance to the students was the assurance of being able to gain easy access to these.

Evidence from related studies identify specific learning resources as particularly beneficial for supporting students in their self-directedness in learning. These include the library resources of the varied range of literature, computer laboratories and IT facilities (Hiemstra, 1985). The subjects of this study also identified similar resources. However, the notable difference was that whilst discussion and syndicate rooms, that is purposely designated venues, emerged as a particular motivational factor for the Undergraduate subjects in this study, other self-directed

learners, for example the participants in the findings reported by Hiemstra (1985) did not prioritise these facilities. Yet this factor was noted to be a specific resource item that differed in the institutional provisions described by the two subject groups of this study, the Diploma and Undergraduate students.

Location of these facilities within the library environment was reported as affording a convenient venue for the peer study groups to meet. The added advantage was easy access to the varied range of learning resources. Boredom, constant distractions from radio and frequent interruptions for refreshment which characterised study at home, were effectively eliminated in the relatively intense study atmosphere of the library. The students indicated that they tended to meet at that venue for pre-determined purpose and the atmosphere enabled them to persevere with their set targets.

Implications of the Impact of Stage of Education and Progression

The findings revealed that as they progressed from first through to fourth year, the Undergraduates demonstrated greater awareness of their personal responsibility and spontaneity in their learning. Final year students from both groups described unprompted actions which portrayed increasing self-reliance and independent thought. Possible association with academic maturation, professional development and increase in self-confidence could not be ruled out.

The influence of stage of education and progression on students' conceptualisations was more overtly notable among the extreme polar groups of first year Diploma students and the fourth year Undergraduates. The fourth year students reported a preoccupation for taking active measures to independently enhance development of their professional competencies. This was, apparently, in anticipation of the level at which they would be expected to function in their immediate future roles of registered practitioners. By contrast, the first year Diploma students conveyed varying degrees of a need and preference for

educator direction and therefore described highly guarded and non-committal reactions in the practical settings.

The difference in these reactions suggests that as students gained more insight into the concept of self-direction, the acquired knowledge, experience and self-confidence enabled them to employ various independent learning strategies. Therefore, apparent student dependency might be associated with lack of familiarity with self-direction rather than lack of intellectual capability for independent learning. This finding substantiates the theorisation that adequate understanding of the concept and familiarity with the techniques of self-directedness in learning are critical for the development of learners' self-confidence and competence in functioning as self-directed, autonomous learners (Merriam and Caffarella, 1991). Also reaffirmed is the view that there is a need for establishing learners' readiness for functioning in the self-directed capacity before being exposed to that approach. Indeed, the institutional administrators face the challenge of exploring their roles in providing appropriate provisions and the required support for fostering student self-direction (Merriam and Caffarella, 1991; Brockett and Hiemstra, 1991).

Findings relating to the Influence of Chronological Age

Many of the Diploma teachers expressed the opinion that mature students of older chronological age were more likely to demonstrate preparedness for functioning in the self-directed capacity. However, in this study the contention is that a relationship between personal autonomy in other life situations and self-direction in the academic context is arguable. The findings showed that, as compared to the other age categories and despite their claims of personal autonomy, the students of over 35 years of age did portray dependent reactions. This finding seems to contradict claims based on the Self-directed Learning Readiness Scale that there is a relationship between age and self-direction in learning (Brockett and Hiemstra (1991). As Merriam and Caffarella (1991) also argued not all adults necessarily wish to function in that capacity.

Implications of Personal Characteristics and Self-directed Learning Attributes

The current theorisation is that self-direction is an internal process involving the self-concept Brockett and Hiemstra (1991). The technique of factor analysis was employed to establish the different dimensions of personal autonomy and learning attributes through the personal accounts of the students. The emerging bi-polar factors indicated the following:

- Lack of self-confidence and fear of self-direction in learning reflected by the positively loaded items whilst the negatively loaded items at the opposite end of the pole indicated independence and self-reliance.
- Reluctance to assume responsibility reflected by the positively loaded items whilst the negatively loaded items at the opposite end conveyed personal responsibility for the learning process.
- Self-reliance and resourcefulness indicated by the positively loaded items whilst the negatively loaded items at the opposite end conveyed attitudes of insecurity and non-committal reactions.
- Autonomy and self-discipline portrayed by the positively loaded items whilst the negatively loaded items at the opposite end of the pole portrayed lack of initiative to take independent measures in fulfilling learning objectives.

The issues taken into account were the respondents' self-concept of their initiative, spontaneity, attitudes to functioning independently and expressed need for freedom in making personal choices. The extent of transferability of these attributes was examined.

The dimension of Lack of self-confidence and fear of self-direction was interpreted as disinclination to function in the independent learning capacity. The misgivings appeared to be related to the threat or potential risk of failure to achieve the educational goals and professional qualifications. Therefore, those individuals portrayed patterns of dependency which supports the observation by Stanton (1988) regarding the importance of individuals' self-confidence in their ability to work independently.

The type of dependency conveyed in reluctance to assume responsibility evidently differed from that previously described. This factor reflected a situational need for support and guidance when individuals were confronted with new and unfamiliar challenges and academic demands. Relating these to the findings from the interview data, it was noted that some students, both Diploma and Undergraduates, differed from others in the extent to which they were prepared to take control and responsibility for their own learning process. This finding also reflects some of the issues raised at the seminar on ethics on adult education cited by Brockett and Hiemstra (1991) that indicated variations in the degree of self-direction in different individuals

Witkin et al's (1977) study showed that learners who portray academic dependency tend to prefer structured material, direct instructions and close guidance and supervision. While some associate these with field-dependence and argue that such characteristics are not compatible with self-directedness (Pratt, 1984), others such as Brookfield, (1986) contend those assumptions. In his opinion, both cognitive dimensions of field-dependence and field independence have potential for coping successfully with self-directedness in learning.

Cognitive growth and readiness for self-directed learning was another issue debated at the Ethics seminar and Higgs (1988) also discussed self-direction as a developmental process. Looking back at the findings from this study regarding academic maturation and progression in professional development, the late phase Undergraduates portrayed more confidence in self-diagnosing and implementing their personal learning needs. This transition reflects some of the phases that manifest in the cycle of growth of self-direction postulated by Taylor (1987).

The trends in the subjects' scores for Factor 1 – Lack of self-confidence and fear of self-direction and Factor 2 – Reluctance to assume responsibility indicated that the students on both programmes were similar in their portrayal of these dependencies. More importantly,

what this finding suggests is that appropriate preparatory and supervisory support ought to be provided to, at least, the new entrants and those who express a specific need for these. Boud (1988) noted that generally there seems to be an apparent limitation in this provision by Higher Academic Institutions.

The nature of independence conveyed in Factor 3 – self-reliance and resourcefulness reflected individuals' coping mechanisms in their learning process. Thus the factor encompassed the ability to structure, organise and fulfil own learning requirements whilst utilising the relevant sources of expertise at their own discretion. These, clearly, reflect the field-independent cognitive dimension, described by Witkin et al. (1977) and differed from the type of independence conveyed in Factor 4 – autonomy and self-discipline. The trends in the factor scores indicated possible association between these factors and the programmes of education, in that more Diploma students than Undergraduates saw themselves as autonomous in the non-academic aspects of their lives, whereas more Undergraduates portrayed preparedness for functioning in the capacity of self-directed learners.

There was no evidence that indicated a link between the two variables to suggest that individuals who portrayed personal autonomy in the non-academic aspects of their lives also portrayed self-reliance and resourcefulness in the academic context of learning. This finding seems to substantiate the views of Brockett and Hiemstra (1991) and Merriam and Caffarella (1991). The implication is that individuals who embark on their educational venture, self-confident in their personal control and autonomy are likely to be disillusioned when faced by the realisation that this differs from the nature of independence and demands associated with the academic requirements.

Implications of Student Misgivings about Self-direction in the Group Context of Learning

Despite an overall familiarity with the technique of group interactive learning, student misgivings about the effectiveness and value of this technique emerged. The Diploma students' lack of confidence in this technique evidently stemmed from the relatively large group sizes and their academic teachers' tendency to retain control over the learning activities. It could be argued, therefore, that the constraint of having to comply with educators' instructions about the structuring and organisation of the groups deprived them of the opportunity to develop their autonomy. The general view was that these and the problems of frequent changes of group memberships hindered cohesion and the opportunity to share and benefit from each other's contributions. Additionally, the inability of some students to cope with the natural conflicts arising from differences in points of view meant that they came out of those group contexts not having gained or made useful contributions. They therefore felt that group interaction was unproductive in achieving effective learning or fostering self-direction. It was obvious from these reactions that as Brundage and MacKeracher (1980) cautioned, the stages of development of student autonomy in the group context of learning, that is entry, reactive, proactive and integrative failed to manifest.

Relating to the Undergraduates' satisfaction with working in smaller tutorial groups, the above problems could be resolved if the interactive learning was implemented at the level of smaller discussion sub-groups. Thus rather than the entire tutorial group engaging in the learning activities, students could be allowed to organise themselves into still smaller learning units of discussion sub-groups. This strategy might prove less threatening, eliminate problems of unfamiliarity, and encourage all members to participate in the interactions without feeling intimidated. The relatively smaller group context described by the Undergraduates undoubtedly ensured the kind of situations where group members shared equal opportunity in their learning process. The phenomenon depicted by Heron (1974) apparently manifested in the peer study groups whereby group members were able to express their learning needs and

participate equally in the judgements and decisions about organisation and implementation of set learning tasks.

The Undergraduates' view that the discussions in group interactive learning helped them to see other peoples' perspectives and learn more about the topic, reflected Quinn's (1995) observation that this method encourages critical thinking. However, this depends on how the learning activities are organised and the source of control. The Undergraduates described the benefit of active contributions to achieve the learning task when each person dealt with a specific aspect of the topic. Undoubtedly this strategy eliminated the clique formations and the threat of certain members taking control of the interactions. The potential hindrance to learning in the group context created by dominant cliques (Merriam and Caffarella, 1991) emerged as a persistent issue of contention among the students on the Diploma programme.

Implications of Group versus Individualised Seminar Presentations in Fostering Student Self-direction.

This section presents a comparative review of differences in the seminar context of learning and the impact of stage of education and professional progress. While the strategy of group seminar presentations was reported as prevalent practice in the Diploma programme, the Undergraduates described individualised presentations as the prevalent technique employed. In terms of progression, educator-controlled group seminar presentations emerged as a common practice in the early phase, particularly first year, of the Undergraduate programme. This was also notable in both the early and late phases of the Diploma programme, whereas individualised presentations with increasing student control was reported as the common practice in the late phase of the Undergraduate programme.

The emerging differences and potential implications will be examined. The late phase Undergraduates, but not the early phase students, described the seminar technique as promoting self-direction and deeper comprehension. They also expressed satisfaction with the

very challenges perceived as stressful, that is, leading discussions and dealing with questions from the audience. Their view was that these promote personal and professional development, not only in enhancing thorough understanding of the topic, but also in dealing with questions relating to clinical application. This is crucial because according to Tompkins and McGraw (1988), the higher level cognitive activities such as those described in the context of seminar presentations enhance individuals' self-confidence in their self-directed learning situations whilst at the same time promoting their decision-making skills.

The following distinctive features emerged as the motivational factors in this group of students' commitment to the seminar technique:

- i. Working to achieve the required standards in the related academic assessments as noted amongst the late phase students. This reflects academic maturation and readiness to make realistic practical application of the acquired knowledge and skills in professional practice.
- ii. Broadening the scope and depth of professional knowledge and competencies, that is, combined intrinsic and extrinsic motivation.
- iii. Recognition of common goals and mutual support.
- iv. Familiarity and peer cohesion in the Small groups.
- v. Freedom to function independently of the control and direction of the teacher, that is, student autonomy in the topic selection and in making decisions about the preparation and presentation strategies.

In relation to self-selection of seminar topics, they indicated that in most cases the key motivational factor was the need to fulfil self-diagnosed learning deficits. This finding was particularly significant in this study, as the practice was applicable not only in the seminar context but also in relation to course projects and essays, and the academic research projects. Bligh's (1971) view suggested that seminar presentations encourage critical mindedness which apparently was the perception of the late-phase Undergraduates.

Implications of the Peer Assessments within the Seminar Sub-groups

Tompkin and McGraw (1988) noted that the processes involved in self and peer evaluation promote development of self-confidence in student self-direction. Quinn (1995) also noted that informal norms establish within the group context when members have had the opportunity to get to know each other through interactions over an extended period of time. Apart from enhancing the quality of learning, the group seminar context, discussed above, could be considered as a means of promoting interdependence and participation in peer study groups outwith the formal settings of the classrooms. This might, in turn, encourage more expanded socialisation among peers thus minimising the stress and anxiety associated with peer evaluation.

As demonstrated by the late phase Undergraduates, once the group members became familiar with each other and informal norms of relationships had developed, self and peer assessment of the seminar presentations became acceptable. Effective peer evaluation, of course, requires that educators and students collaborate in determining what they perceive as the main elements of the process. This means that extensive discussions among the students and their teachers must take place to examine the related rationales and benefits of peer assessment. This is likely to influence the value which students might place on the technique. Recognition of their joint ownership of that purposefully devised strategy might, in itself, stimulate student motivation and confidence in independently assessing each other's performance. Heron (1988) advocates such re-distribution of power whereby students and their teachers collaborate in decision-making about the learning process. The findings from this study suggest that the potential benefits of this ideal strategy be carefully examined.

The staffing implications of organising peer assessment within seminar sub-groups could be argued as follows. Unless the students have been appropriately prepared and are confident enough to evaluate the quality of work and assess each others' performance, presentations in the smaller discussion sub-groups would place additional demands on an individual teacher.

The alternative might be involvement of other academic staff to provide the required facilitative support for the sub-groups. Other strategies that could be considered as acceptable compromise are:

- peer evaluation within each small group independently of the teacher
- more teachers to facilitate small groups
- same teacher facilitating the activities of each small group in turn.

The potential problem with this third alternative might be the strain of extra demands on the teacher if functioning alone. From the students' perspective, the problem might be that the associated delays could disrupt the learning process and cause potential loss of student interest and motivation if some groups have to present their papers at a much later date.

Implications of Student Perceptions about Autonomy and Control in the Learning Process

The value which individuals placed on group seminar presentations depended on whether or not they were allowed freedom to control and use their own strategies. Respondents from both the Undergraduate and Diploma programmes indicated a preference for such freedom. The early and late phase Undergraduates expressed satisfaction where the group presentations involved the active learning interactions previously described, with participation of all the members in the decisions on how to go about achieving the learning task. In those situations the nature and degree of commitment portrayed was particularly notable, that is, not to disadvantage themselves or their colleagues in the presenting group. Undoubtedly, familiarity and the confidence which members showed in each other contributed to the effectiveness of the interactions that occurred.

By contrast the Diploma group and their academic teachers described student aversion to seminar presentations and there were misgivings about its impact in promoting effective learning and self-direction. The general opinion among this group of students was that implementation of this technique was disorganised with lack of freedom and control. Their

lack of confidence in the method was, once again, attributed to the large size of the groups. In the seminar context students described as daunting, the threat of facing a relatively large crowd to present papers, lead discussions, and deal with challenges from the audience as well as emerging unpredictable conflicts. These concerns and anxieties could be minimised if:

- educator control was progressively reduced to promote student freedom and control of their group learning interactions.
- the sub-group members remained together over a considerable period to eliminate or reduce the stress and anxiety of being exposed to a large group of unfamiliar members. However, to avoid deprivation of flexible academic socialisation, re-grouping with other members of the class could be encouraged in other learning situations. Although the Diploma students described frequent changes of group membership, this did not resolve the problem of large numbers of students in the newly established groups.
- the relatively large seminar groups were split into smaller sub-groups. The evidence from this study suggests that such a measure is likely to encourage active participation by each member of the group. This would also ensure that each person's contribution is equally valued within the group thus enhancing confidence building, increased motivation and personal satisfaction in the learning process.

Implications of Misconceptions about Negotiated Learning Contracts

Implementation of this technique was notably lacking despite extensive documentation of its effectiveness in encouraging student autonomy and self-direction (Brockett and Hiemstra 1991). This technique appeared not to have been adequately explored by the teachers in this professional education. As a result there were varied interpretations and misconceptions about this as a means of fostering student self-direction. Additionally, educators and students both concurred in their misgivings about the related demands. Thus rather than a contractual agreement, the sporadic practices involved students seeking guidance from their academic supervisors when they encountered difficulties with their work. The essence of the interactions depicted allocation of structured task(s) determined by the educator who then set

an appointed time for the student to return for review of the learning. This practice, invariably, disrupted the personal autonomy and other principles of the negotiated learning contract. These processes bore no resemblance to the exemplar proposed by experts such as Loacker and Doherty (1984) in relation to preparation of students for self-directed Undergraduate study. There was no purposive and systematic orientation process to enable the students to use the technique effectively.

It could, therefore, be argued that a model such as Knowles and Associates' (1984) eight stage guidelines as outlined below:

- self-diagnosing of learning needs
- formulating the relevant learning objectives
- self-identification of the relevant learning resources
- defining the means of evaluating achievement of the objectives
- determining how the evaluation process would be validated
- Reviewing the contract with individuals who have relevant expertise
- implementation of the contractual exercise
- evaluation of the learning achieved

could be usefully employed or modified as necessary to serve as a basis for guiding students to employ this approach to learning. The active involvement of the students is vital to eliminate misgivings, ensure ownership and enhance individuals' motivation and confidence in its use.

Quite contrary to the findings from this study, Tompkins and McGraw (1988) reported from their findings of different stages of nursing students that many learners achieve considerable scope of their educational objectives through negotiated learning contracts. Their observation was that the higher level cognitive processes involved encouraged development of, not only role-related competence, but also self-confidence and the required attributes for autonomous, self-directed learning.

Implications of the Views about Reflective Learning

The teachers' responses from the interviews revealed imprecise definitions with practices which afforded opportunities for students to discuss their placement experiences. Generally, the focus was on the traumatic experiences for which individuals sought peer support and/or solutions from their educators. Whilst some students perceived this practice as beneficial in that way, others described it as not beneficial.

The teachers argued that various sources of the literature present a very sophisticated view of reflective learning and that the required attributes for reflective practice, such as ability to:

- function in the autonomous capacity
- assess own performance
- critically evaluate existing clinical situations and
- demonstrate initiative, innovation and adaptability to change,

can only result from extensive knowledge and professional experience. Therefore, the expectation for pre-registration students to demonstrate these attributes was unrealistic.

Nevertheless, the principles of critical reflection and critical thinking (Brockett and Hiemstra, 1991; Brookfield, 1987; Mezirow, 1985) equally apply to this context of learning and could serve as a potentially useful way of guiding and supporting the students in their self-direction in learning.

Implications of the Supervisory Practices

The Undergraduate students described being exposed to two systems of individualised supervision:

- i. A personal tutor – tutee system which involved assignation of an identified academic teacher right from the initial stages of the educational programme.
- ii. A project supervisor – supervisee system which involved assignation of another academic supervisor during the third year to facilitate development of students' research proposals and projects.

Although it could be argued that assigning students to individual supervisors might be ideal, it must be noted that practices characterised by inflexible facilitation with limited empowerment could result in student dependency. On the other hand, in the situation described by the Undergraduates, the designated project supervisors may have compensated for this by providing additional supervisory relationships with other teachers.

By contrast the practice of team supervision in the Diploma programmes afforded the advantage that evaluation and assessment of students' progress and personal needs could be achieved more objectively by the team of teachers. However, the students' experiences of conflicting guidance and instructions cannot be disregarded.

Where control of the supervisory interactions is concerned, proposed theories suggest that success in fostering self-directedness lies in the educators helping the students to achieve their full potential (Brockett and Hiemstra, 1991). In this context full potential refers to individuals' independence to take increasing control and responsibility for their own learning. Theorists in adult education advocate systematically and progressively decreasing learners' dependency (Mezirow 1981). Additionally, the need for learners to feel at ease with the learning environment and thoroughly familiar with the different learning resources available to them is, without doubt, critical to student autonomy and effective learning.

The educators are, therefore, faced with the challenge of ensuring that they themselves are fully conversant with the range of self-directed learning techniques and resources that can be creatively used to encourage effective self-direction in learning (Merriam and Caffarella, 1991). The principles of student self-direction suggest creative use of the technique of negotiated learning contracts to promote more learner independence. The theorisation is that the processes involved encourage development of an internal locus of control that fosters ownership of the learning process and promotes increasing independence in the learners (Merriam and Caffarella, 1991).

The evidence from this study suggests that many students did not necessarily expect their educators to provide them answers but to help them understand the nature of their difficulties so that they could work out the solutions for themselves. A typical reaction among the fourth year Undergraduates reflected the characteristic of many adult learners who preferred to be challenged in such a way as to force them to examine and deal with their own limitations. Drawing on the views of other educational experts such as Knowles and Associates (1984), the fourth year students appeared to demonstrate a deep psychological need to be recognised and treated as adult learners capable, at this stage, of taking control and responsibility for their learning. They portrayed an apparent need to be allowed to make and act on personal decisions and judgements and appeared to demonstrate preparedness for being accountable for their own decisions and actions.

Respondents in both groups described the tendency for teachers to take control and tell students what to do and how to go about things when consulted about identified learning needs. In those situations, because little or no comprehensive dialogue took place, the actual problem or learning need for which the student sought consultation might not to be addressed adequately. The implication, particularly for the Diploma group, was that students often felt disillusioned by unfulfilled needs and expectations. They reported not being treated as adults, not being allowed to articulate their specific personal concerns and not getting the opportunity to present and discuss their own ideas about ways of solving personal learning deficits.

The fear of losing control was evidently a common factor as Brockett and Hiemstra (1991) noted. Yet among the key principles that emerged from Gibbon's (1980) research on self-direction was learner's retention of control of the learning process. Based on the findings from this study it could be argued that the degree of trust which the educator conveys to the learner is critical in the nurturing process of student autonomy and self-direction.

The fact that educator controlled interactions were more prevalent than that of collaborative interaction indicated:

- i. lack of familiarity with the principles of supervising students' self-direction
- ii. uncertainty about the roles of teacher, facilitator, supervisor
- iii. assumption that students expect to be directly instructed and supplied the required material to fulfil their knowledge deficits.
- iv. fear that students might doubt or question the teachers' knowledge and expertise.
- v. lack of confidence in the students' ability to make effective contribution to decisions about their own learning.

Looking back at the motives for the recommendation to adopt this educational concept, self-direction and autonomous decision-making were the kind of attribute that the Professional Bodies envisaged in the qualified practitioners.

Implications of the Patterns of Contact with Supervisors

Differences emerged between the early and late phase students in their incentive to maintain contact with their academic supervisors. The late phase students took more advantage of the subject specialisms and expertise of their educators than did the early phase students. Possible association was noted relating to the acquired self-confidence which enabled the late phase Undergraduates to engage in rational discussions with their educators about various aspects of their work.

In the practical context of learning, the interview questions focused on the nature of day-to-day interactions and extent of student empowerment. Generally the preceptors determined the type and level of supervision, whether constant or selective chaperoning, direct or indirect supervision. Both educators and students implicated the constraints of statutory regulations and the ethical dilemmas associated with patient and client exposure to students at varying levels of professional development. This finding also concurs with the argument that the environment and the nature of learning resources influence the degree of

empowerment that the students receive from their supervisors. The issue of applicability of self-direction within the settings of clinical practice appeared to be constantly questioned. Nevertheless, findings from other related studies, suggest that student self-direction in various settings of professional practice does prove to be a practicable and effective mode of knowledge and skills acquisition (Knowles and Associates, 1984; Brockett and Hiemstra, 1991).

On the basis of the findings of these studies above, this researcher proposes that students in this professional education ought to be guided to reflect on which aspects of the programme content they have difficulty understanding. They should be given guidance to think critically about what strategies they might employ in fulfilling their particular learning deficits either individually or with other peers experiencing similar difficulties. It was obvious from the late-phase Undergraduates' experience of the supervision which they described regarding preparation of major course projects, that they preferred the collaborative approach to supervisor – supervisee interactions. Brockett (1983) emphasised the importance of facilitators establishing a helping relationship with the students engaged in self-directed learning. A useful exemplar based on the findings from this study is discussed in the following section.

Implications of Student Controlled Critical Reflection on Self-diagnosed Learning Deficits

This strategy provides a basis for helping students to recognise their ownership and control over their learning process. The literature about different modes and techniques of fostering self-direction in learning advocates student retention and ownership and control through the learner's critical reflection on all aspects of the learning process (Tompkins and McGraw, 1988). It is vital, therefore, that discussions take place between the educator and students to ensure clear understanding and acceptance of the related conditions. Many of the late phase Undergraduate and Diploma students expressed a need to be allowed to find solutions to

identified learning deficits through their own personal efforts or with discretionary consultations. The Diploma group and the early phase Undergraduates also noted that being constantly given direct instructions and denied opportunities to take control and make their own decisions in their group interactive learning situations did not encourage self-direction.

Critics of student self-direction emphasise the risk compromising the quality of the educational experience. Their argument is that to avoid compromising the standard and quality of learning, the institutional administrators and the educators with the specialist knowledge and expertise must retain control over the educational programmes, curricular content and subject delivery (Brockett and Hiemstra, 1991). This researcher suggests that the challenge for educators in nursing and other professional educational sectors is to ensure that high standards and quality are maintained in the implementation of the self-directed approach to learning. Arguably this depends on clear understanding, by the educators, of the underpinning principles of self-direction in learning. There seem not to have been any specific attempts to contend the potential compromise to the standard and quality of learning when this approach was adopted in nursing education. The prime motive and preoccupation, it would appear, was fostering development of the attributes of autonomy, critical mindedness and independent decision-making in the future practitioners.

Based on the findings from this study and the related literature, this author recommends that educators and indeed institutional administrators take account of the fact that many students are apparently aware of the necessity to accept personal responsibility for their own learning. Many of the subjects conveyed awareness of the fact that the educator would not or should not necessarily provide all the answers and direct instructions but rather, guidance to promote realisation of their potentials in fulfilling desired learning tasks. Taking account of these findings, key elements of the interactions ought to be that:

- i. Student negotiates consultation at his/her own discretion based on what specific days and times are set for facilitative and supervisory contacts.

- ii. Prior to the meeting student must reflect on and document the specific problem or learning need to be discussed.
- iii. At the meeting student must be allowed the opportunity to articulate, in his/her own way, the nature of the identified learning deficit and what help is being sought.
- iv. Where applicable, reference should be made to related previous work and the student's performance with a view to encouraging him/her to evaluate, critically, the areas of strengths and weaknesses relating to that work or topic.
- v. Student should be encouraged to reflect on and articulate what personal decisions, actions or judgements enabled her/him to achieve the areas of good performance.
- vi. Student should be encouraged to reflect on and examine, critically, the areas of weakness and how those problems might have been avoided. She/he should then be allowed to put forward own ideas, about what specific actions might rectify the poor performance. The learning could be made easier and more meaningful to the student if she/he could be guided to reflect on and relate the theoretical learning to the realities of clinical practice. By personally doing this students might be helped to make sense of the experiences which they have encountered in their professional development.
- vii. The conclusion of the meeting should be a collaborated decision by the student and educator. The final decisions should include a self-devised timeframe in which the student anticipates fulfilling the relevant aspects of the learning task.
- viii. A subsequent meeting might then be arranged at the individual's own discretion and aimed at encouraging him/her to reflect on and discuss:
 - Whether or not the strategy proved effective.
 - What modifications, if any, were made and the rationale for each
 - To what extent the learning deficit has been rectified.

Thus overall, the above discussion has attempted to demonstrate the implications of the findings from this study in relation to existing theories about student self-direction.

Strengths and Limitations of the Study

Representative subject groups from the existing cohorts of Diploma and Undergraduate students and educators from the theoretical and practical settings ensured collection of extensive data from different perspectives. The cross-sectional design proved appropriately versatile for obtaining the required data. This strategy avoided the potential effects of major changes in the educational system that might have affected the research findings had a longitudinal study been undertaken. The data obtained allowed for identifying and comparing realistically, emerging differences attributable to programme of education, progression and professional development. The intention was to capture how the students and the teachers perceived the events and practices in place.

The 'one off' approach to data collection proved advantageous in the recruitment of subjects because it eliminated individuals' reservations about committing to participate in the study. Additionally, allowing the interviewees to determine the dates and times at their own convenience appealed to the majority of the students. Although this proved to be more demanding on the researcher's time and travelling, the flexibility encouraged subjects to fulfil the arranged appointments.

Recognition of the relevance of the research topic to their current educational situation aroused students' interest in participating in the study to express personal views about their self-directed learning experiences. The decision to conduct individualised interviews involving all the subjects was intended to enhance the richness of information gathered and the degree of confidence in the findings. However, this strategy resulted in prolongation of the period of data collection.

To complement the interviews, a 56 item Likert-type self-rating questionnaire was administered to the students. This strategy of combined qualitative and quantitative methodologies, which drew on Holsti's (1969) idea, ensured greater scope and insight into the

information obtained and helped in generating substantive findings. The objective was to capture the multi-dimensional perspectives of student self-direction as conveyed in the research questions. The following were particularly cogent reasons for employing the combined approach. From the qualitative perspective, the idea was to establish:

- i. The meaning individuals ascribed to self-direction in learning.
- ii. The impact that specific perceptions had on the patterns of self-directedness described by the subjects.
- iii. The factors perceived to influence the implementation of the approach.
- iv. How the students perceived and responded to the material and supervisory provisions provided by their institutions.

The process of content analysis was employed with the intention of using the information obtained from the interview data in making credible deductions about the respondents' self-directed experiences. The categorisation strategy based on the presence or absence principle took account of what was said, how it was communicated and within what context. The aim was to maintain consistency, accuracy and robustness in the content analytic process.

An equally important reason for employing the combined methodologies was to complement the qualitative analysis by introducing some quantification. In particular, the intention was:

- v. To present in quantifiable terms the frequency of occurrence of specific expressions and the prevalence of identified practices and attributes among the different subject groups.

Attempts were made to demonstrate comparisons between the Diploma students and their Undergraduate counterparts. This allowed for establishing which emerging differences were attributable to the programmes of education and those attributable to specific stages and/or academic and professional progression. It was also hoped that such differences could form a basis for hypothesis testing in future studies with larger numbers.

A pilot analysis was conducted on the students' questionnaire in which an attempt was made, initially, to apply the technique of direct oblimin to see if the emerging factors might be correlated. However, this method was abandoned for the reasons that rotation failed to occur even when the maximum number of steps was doubled to achieve the solution. This suggested that the inherent factors were probably uncorrelated. What was particularly important in this study was that the emerging factors would be clearly interpretable. This might have proved difficult with the correlated factors that direct oblimin might have yielded. Therefore, the procedure of orthogonal rotation was employed.

Looking at the number of subjects, it could be argued that proportionately the Undergraduate and Diploma subjects reasonably reflected the situation at the time of data collection. However, perhaps subjects from a second Undergraduate programme, could have been included to avoid the impression of the specific being compared with the general.

Summary

This chapter presented a critical review of the implications of the findings to the professional educational system. The intention was to relate the findings to theorisations and findings from other studies. Thus implications of the emerging conceptualisations, perceptions about the learning environment, institutional provisions, the techniques employed in fostering self-direction, the supervision practices and the influence of specific student characteristics have been examined.

CHAPTER FOURTEEN

CONCLUSIONS AND CONSIDERATIONS FOR FUTURE RESEARCH

Introduction

This final chapter presents the overall conclusions based on the findings from this study. Considerations for future research are also addressed.

Four main themes were explored from the perspectives of the students, their academic teachers and their preceptors regarding student self-direction in learning. These include:

- conceptualisations
- operationalisation
- perceptions about the impact of the approach and related self-directed learning techniques
- student supervision and support.

The literature revealed that no studies to this extent had been conducted within this professional educational context that explored different dimensions of student self-direction. Nevertheless, similarly to the English National Board (ENB), the National Board for Scotland and the Scottish educational institutions concurred in advocating implementation of this educational concept. Based on the findings from this study, this researcher poses the following questions to the professional bodies and the institutional administrators as issues requiring careful consideration in the implementation of student self-direction.

- Is student self-direction in the theoretical context indicative of self-direction and personal autonomy within the practical context?
- Does an individual's self-concept of personal autonomy in the non-academic aspect of her/his life indicate preparedness to function in the capacity of an independent learner?

The arguments in the following section draw on the components of two schema illustrating the original assumptions on which the study is based and the key elements of the findings to present the conclusions and recommendations.

Review of the Multi-dimensional Influences on Nursing Education

In Chapter 3 a multi-dimensional schema was devised to illustrate how student self-direction might have been influenced by different factors. These represent the key elements of the original assumptions as outlined below:

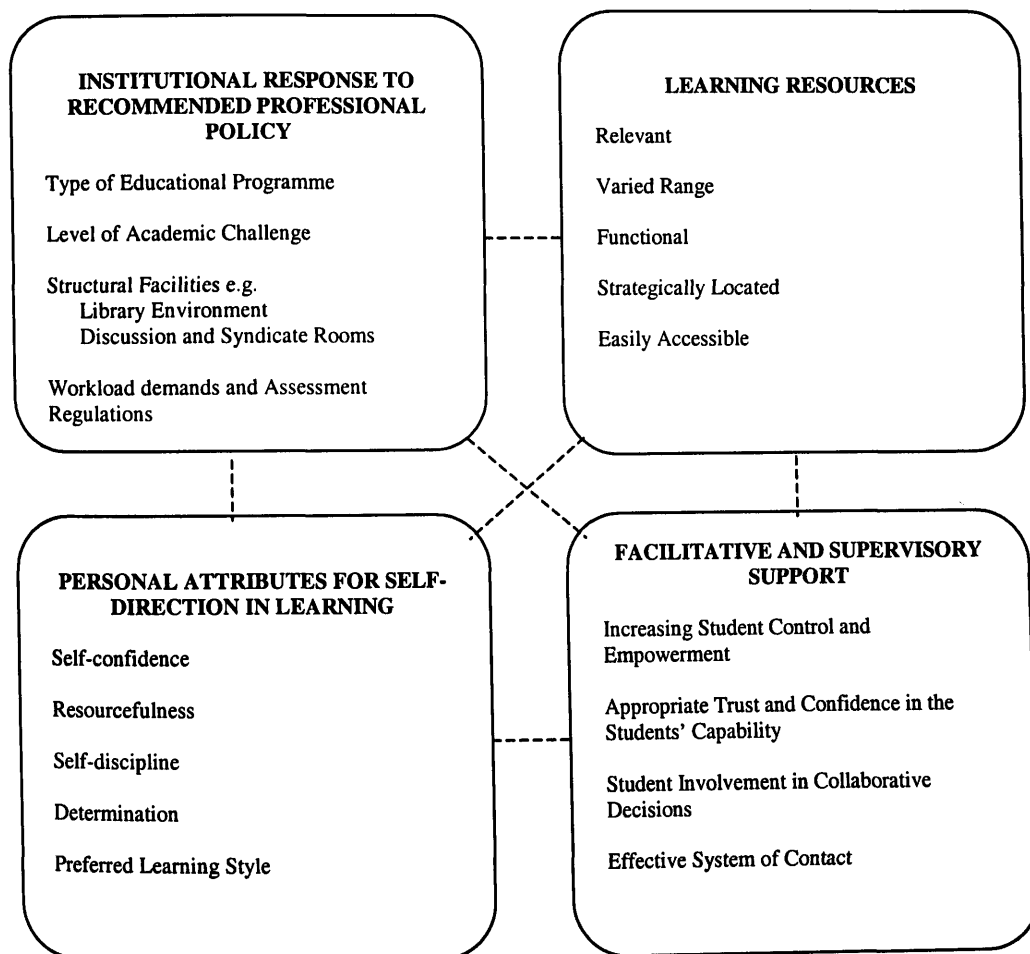
- **The Policy decision-makers**, the Professional Bodies, with legislative control and authority who recommended the adoption of the educational concept based on the philosophy of this profession.
- **The Policy Agents**, the institutional administrators responsible for ensuring that:
 - i. The educational climate was conducive to fostering student self-direction with appropriate structural facilities.
 - ii. The structure of the specific programme was relevant for the implementation of student self-direction at an appropriate level.
 - iii. Appropriate orientation programmes are in place for preparing the educators and students for functioning effectively in their respective capacities of facilitators and self-directed learners.
- **The implementors of the policy recommendations**, the educators, in the theoretical and practical settings, responsible for:
 - i. ensuring effective implementation of the concept and the relevant techniques.
 - ii. providing the required academic and practical support.
- **The consumers of the policy recommendations**, the students, who are central to the implementation of the adopted educational concept.

This researcher urges that the interrelated factors that emerged as potential influences on the students' self-direction ought to be a primary concern of the Professional Bodies and the academic institutions. The schema in Figure 14.1 illustrates those factors as:

- institutional response to recommended professional policy
- learning resources
- facilitative and supervisory support
- personal attributes for self-direction in learning

The related explanation takes account of the components of the multi-dimensional schema presented in Chapter 4. The intention is to demonstrate in what ways the empirical findings from this study may have changed or substantiated those original assumptions.

Figure 14.1



SCHEMA OF KEY ELEMENTS THAT POTENTIALLY INFLUENCE STUDENT SELF-DIRECTION

Inter-linkages in the Schema of Key Elements that Potentially Influence Student Self-direction

Inter-linkages between the four components of the schema in Fig 14.1 could be explained through logical arguments. For example, looking at the diagonal links it could be argued that:

- institutional decisions concerning the specific educational programme, level of academic challenge, related regulations and the structural facilities provided, invariably enhanced or constrained the educators' practices of facilitation and student supervision,
- the standard, range and accessibility of learning resources available to the students, undoubtedly encouraged or hindered development of the attributes of resourcefulness, motivation, self-confidence, and self-discipline with which individuals embraced the demands of self-directed work.

Critical Review of the Original Assumptions and the Emerging Key Factors in the Recommendations Proposed

This section proposes sets of recommendations to the Professional Bodies, Institutional Administrators and the educators based on the main findings from this study. In the following section the intention is to attempt to demonstrate the significance of the components of the schema.

Recommendation to the Professional Bodies

From the perspective of the professional Bodies, the impetus for recommending student self-direction was to prepare the future practitioners for functioning in the autonomous capacity within the different settings of care provision. It was envisaged, therefore, that the acquired attributes of self-direction would be transferable between the theoretical and the practical contexts of learning, as well as being applicable to future post registration educational ventures and professional practice.

The original assumption in this study was that the philosophy of the profession, its policy and regulations imposed significant external influence on implementation of the recommended

educational concept. The argument based on the findings from this study is that the nature of nursing knowledge, professional codes and regulations and the ethical implications of the major learning resource, the patients and clients, create constraints on the implementation process.

The recommendations from this study to the Professional Bodies are that there is a need to establish and maintain extensive dialogue with the institutional administrators.

- The prime objective of that dialogue ought to be to determine a realistically achievable conceptualisation of student self-direction within the context of nursing education.
- Apart from reflecting the principles of self-direction in adult education, careful consideration ought to be given to the nature of nursing knowledge, its multiple dimensions and complexity.
- Consideration should also be given to the different aspects of the professional educational programme, that is, theoretical and practical and the major learning resources within each setting that could be effectively used to support learner self-direction.
- Direct involvement of the educators, both academic and practical, is crucial to evaluate and take account of their knowledge and expertise and their values about the self-directed learning approach. They are the implementors of educational policy recommendations. They would have clearer insight into the potential constraints that might influence implementation of the learning approach. Therefore, it is only logical that account be taken of their perceptions about how specific professional codes and regulations as well as institutional policies might affect the operationalisation of the concept and related methods.
- Of equal importance, the educators have clearer insight into the varied student characteristics, preferred teaching-learning methods, the nature of learning environments and the specific resources required for effective implementation of self-directed learning.
- This study argues that it is the educators who would be better able to realistically advise the professional and institutional authorities and conduct appropriate research to explore

how practicable the concept, how best to re-conceptualise and what techniques of application might be effective for its implementation in this professional education. It is only by such direct participation that recognition of shared values and ownership can be achieved to ensure appropriate interpretation and implementation.

- The re-conceptualisation should be addressed from the multiple dimensions of:
 - Educational outcomes,
 - Process
 - Learner characteristics.
- It is important to ensure that the philosophy of the profession and the key elements of the philosophies of the academic institutions, are reflected in the implementation of the concept.
- The means of promoting development of the desired attributes within the different aspects of the educational programme could also be examined through tentative application to assess practicability and the nature of student response.

Recommendations to Administrators of Academic Institutions

The argument here is that students' acceptance of or aversion to self-directedness in learning might be associated with:

- the institution's philosophy that underpins the specific educational programme,
- the institution's expectations of the students in terms of academic effort,
- the level of academic challenge to which the students are exposed and
- the shared values emerging reactions of the students and the study patterns adopted.

The perspective of the higher academic institutions was not only to foster the attributes of critical mindedness, but also to encourage knowledge acquisition through the personal efforts of independent learning. Nevertheless, the findings revealed a lack of student exposure to a purposefully structured and systematic preparatory programme that focuses on these expectations during the introductory period of the students' academic experiences.

It was not entirely clear from this study how the induction and orientation programmes for new recruits compared in the two programmes and in particular, what institutional aims and values were actually conveyed to the students. Neither was it clear what processes were involved in the preparatory programmes to enable the students to respond appropriately to the academic expectations of critical mindedness and self-direction. The content of the responses revealed that the practices in place were inconsistent and ineffective. This study proposes that prioritisation of preparatory programmes that provide clear explanations, practical examples and basic exercises at the initial stages of their education might help new students to adapt and respond appropriately to the demands and challenges of self-directed learning. For many students, guidance on planning and organisation of their work to take account of the submission dates for course assignments could be considered a developmental imperative in fostering the desired academic discipline and self-directedness.

In relation to personal attributes, as argued in the original assumptions, students' perceptions about the required attributes for self-directedness include self-confidence, resourcefulness, self-discipline and determination. These were supported in the expressed views and attributes portrayed by mainly the Undergraduate students and the ways in which they dealt with the challenges to which they were exposed in the group interactive context, individualised seminar presentations and project preparations. Individuals among mainly the late phase Diploma group, although not many, also portrayed these characteristics in the personal efforts which they employed in fulfilling learning deficits or exploring topics of personal interest to them. Invariably, lack of insight and understanding of the principles and processes involved in self-direction and lack of self-confidence in functioning as autonomous self-directed learners create frustrations for new recruits.

Findings relating to learning resources revealed that structural facilities within the library environment and accessibility to a range of Information Technology (IT) equipment, mainly computers and photocopying facilities, apparently influenced the students' self-directed

activities. As proposed in the original assumption, the general opinion among the students was that to be able to function effectively in the independent learning capacity, relevant, functional and strategically located learning resources were vital motivational factors. These were also perceived as particularly important to the activities of the peer study groups.

Based on these arguments the recommendations to institutional administrators are outlined below:

- A collaborative strategy ought to be established with professional policy decision-makers regarding the kind of programme content and learning approach considered suitable for preparing the future practitioners to fulfil the desired roles. The students, apparently, derived their conceptualisations from their experiences. Therefore, appropriate staff development programmes are imperative to increase staff understanding and insight into the concept. This should enable them to re-conceptualise, implement more effectively, and provide the kind of facilitation and supervision likely to promote the desired attributes of autonomy and independent decision-making.
- The preparation of educators ought to emphasise role definition and clarification of facilitation of learner self-direction and the related demands of supervision.
- It is crucial that teachers are adequately motivated and committed to this approach to learning. Therefore, they should be given the opportunity to articulate their specific knowledge of and experiential deficits in this educational approach. They should also be allowed to determine the kind of preparatory programme that might best benefit them in functioning effectively and creatively in their facilitative and supervisory roles. IT training ought to form a major element of the preparatory programme. It could be argued that student motivation and interest in using the various resources might be realised if educators were sufficiently conversant with these to provide the required guidance on how to apply various techniques in their learning process.
- Research-based evidence is vital to the success of implementation of the learning approach. Therefore teachers should be encouraged to continually explore and test the

principles and related theories underpinning student autonomy and independent learning.

- Clearly outlined protocols and frequent academic seminars could be established to guide and continually improve the facilitative and supervisory practices employed by the teachers. This might help to avoid the potential risk of indifference to the adopted learning approach and inappropriate implementation practices.
- Additionally, compliance with institutionally determined principles of application of given self-directed learning techniques might help to avoid student frustrations about conflicting variations between different departments in the institution. This might also ensure maintenance of high academic standards and quality assurance.
- Institutional administrators ought to listen to teachers and give consideration to the kind of student-teacher ratio required for effective implementation of the different self-directed learning techniques. This should be seen as an academic imperative if an appropriate level of facilitation with student empowerment is expected. The aim, invariably, is to achieve the institutional expectations of fulfilling increasing proportions of their learning through their own autonomous, self-directed efforts.
- Another obligation of administrators is to provide teachers the required support to enable them to devise structured supervised programmes of preparation for both new recruits and existing students at different stages of progression. This means that rather than a one-off introductory session, a more comprehensive preparatory programme could be devised that clearly features a staged or progressive decrease in direct supervision with increasing student empowerment to promote autonomy and independence in learning.
- It is the responsibility of administrators to ensure that adequate provision of a varied range of material resources such as library and IT facilities, discussion and syndicate rooms as well as study carrels are in place to encourage independent learning activities. The location of these and the appropriate technical support must be readily accessible to all students.

Recommendations to Educators

The original assumption was that the nature of facilitation and supervision provided to students at different stages and the degree of confidence which the educators showed in the students, influenced the kind of relationship that was established and the nature of supervisory interactions that occurred. It could be argued that the extent of control and empowerment which students receive could enhance or hinder individuals' self-confidence and their preparedness to function in a self-directed capacity. In support of the original assumption, those students who had been exposed to the style of supervision that encourages personal control, expressed satisfaction about being given increasing responsibility for their own learning and allowed freedom to make their own decisions and act on their own judgements. Based on these arguments the recommendations proposed are these:

- Educators must make personal efforts in responding to the preparatory programmes provided by their institutions to gain clear understanding of student self-direction, its related theories and principles.
- More in-depth exploration of emerging research evidence by teachers is vital to ensure that appropriate techniques are used in promoting the attributes of self-direction. There is no doubt that the understanding and insight gained would enhance not only the teachers' creativity in applying the different techniques but also individuals' self-confidence, commitment and the value which they place on student self-direction.
- Educators have a responsibility to establish an appropriate climate of trust with the students and maintain regular dialogues with them in decisions about the learning approach and selection and application of specific methods. That degree of involvement is likely to enhance students' self-confidence, motivation and interest in spontaneously applying various self-directed learning techniques independently.
- There is a need for conscientious efforts to be made by educators to adopt the style of facilitation and supervision characterised by progressive decrease of direct instruction with progressive student empowerment to take increasing control over their learning

process. This would afford the kind of helping relationship that achieves independent thought and personal accountability for own judgements and actions.

- Peer study groups should be encouraged as the discourse and learning interactions have the advantage of increasing learners' dialectical skills and building individuals' self-confidence in making personal decisions about their own learning process.

Considerations for Future Research

A comparison between the Undergraduate and Diploma programmes in the four Scottish institutions revealed varied conceptualisations of student self-direction. These ranged from personal initiative, control and responsibility at one end of the spectrum, to educator control and student dependency at the opposite end. There is no doubt that student self-direction within this professional education needs to be further explored to ensure that the relevant principles are implemented through appropriately standardised practices.

Future studies could, therefore, aim at:

- analysing and evaluating the related concepts of self-direction in learning
- devising and/or testing creative ways of applying specific self-directed learning techniques such as negotiated learning contracts and critical reflection. Such studies should aim at:
 - ensuring relevance to this context of professional education
 - empowering students to achieve autonomy in their learning process and
 - ensuring effective facilitation and supervision
- developing and testing specific preparatory and orientation programmes for educators and students that incorporate staged practical exercises
- determining, among new recruits, individuals' self-concept, capabilities and/or preference for functioning as self-directed learners
- making creative use of the subjects' factor scores as the basis for hypothesis testing to establish possible associations between self-direction and the factors influencing

individuals' preparedness to function in the capacity of autonomous independent learners.

These include, for example:

- gender
- chronological age
- previous educational background
- academic attainments
- preferred learning styles

Thorough understanding of the potential impact of these on student self-direction might help in fostering effective development of transferable attributes for coping with the demands of autonomy and independence in learning. The strategy of combined quantitative and qualitative methodologies could prove invaluable in generating extensive information about effective ways of achieving the desired attributes.

Summary

As previously indicated, this study differs from other investigations on student self-direction in nursing education. Rather than focusing on a specific aspect of the concept, the intention was to capture a broader and more realistic picture of its implementation from the perspectives of the educators and students. In particular what this thesis has achieved is to demonstrate the multi-dimensional nature of this educational concept and the complexity of actual operationalisation. Therefore, an attempt was made to demonstrate the varied range of external and internal factors that influence student self-direction in the theoretical and practical contexts of learning.

Appendix 1.i Permission for Access

Appendix 1.ii Consent form

Appendix 2.i COVERING LETTER for Initial validation of instruments

APPENDIX 3.i

INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF STUDENTS
INITIAL PILOT VERSION

PART - A
ITEMS RELATING TO STUDENT CONCEPTUALISATIONS OF
SELF-DIRECTEDNESS IN LEARNING, THEIR EXPERIENCES OF ITS APPLICATION AND THEIR EXPRESSED
VIEWS OF THE EFFECTIVENESS

- A.1. **One of the key principles of adult education is learning through the self-directed approach.**
What is your conceptualisation of self-directedness in learning?
- A. 2. **Let's talk about some of the ways in which the self-directed learning approach is applied in the college part of your programme.**
2. 1 To what extent do you engage in self-directed learning activities without being asked to do so by a tutor or clinical supervisor and how do you decide what topic to learn and what learning resources to use?
2. 2 **Now let's turn to specific self-directed learning methods used in your programme. I'd like to know your personal views about each of them as a way of learning. Shall we begin with group work?**
In your opinion how do you think group work ought to be organised in order to encourage every member to contribute?
What do you expect of your group members?
What are your views about the tutor being present during group work?
Describe to me how group work affects the way you learn.
2. 3 **Let's, talk about seminar presentations?**
Personally how do you feel about the way your seminars are organised?
Tell me how you find seminar presentations as a way of learning?
2. 4 **Another self-directed learning approach is reflective Learning.**
Describe to me what your reflective learning sessions involve when you are on practice placements and when you return to college.
Tell me what your views are about reflection as a way of learning?
- A.3 **Let's now think about the amount of self-directed work that you actually do and how you feel about that.**
Can you tell me how you feel about the amount of self-directed work that you have to do in college?
Describe to me how much opportunity you get to be self-directing when you are on practice placements?
In a future professional education if you had the choice would you go for a programme with as much self-directed work or one with more or one with less - give me your reason?

PART - B

ITEMS RELATING TO THE LEARNING PATTERNS WHICH STUDENTS ADOPT IN THEIR
SELF-DIRECTED ACTIVITIES

- B.1 **Tell me about development of your self-directedness.**
Describe to me how you organise your study pattern.
To what extent do you normally depend on other people for guidance and help with your studying or when preparing your assignments?
- B.2 **There is another method, which is used to encourage self-directed learning. Often called learning contract, it involves an agreement between the student and the tutor or preceptor.**
In what ways do you use negotiated learning contract in your self-directed work in the college setting and during your practice placements?
How would you describe negotiated learning contract as a way of learning?

B.3 Usually before starting placement in a new clinical area you do have some idea of what patient care you would be helping to provide. You also have some idea of what clinical procedures and practical skills you would need to develop in that particular area.

Can you tell me what measures you normally take to prepare for going to new placement areas?

Once there what actions do you usually take to help you in developing your practical skills?

what kind of practical procedures do you feel confident in carrying out without being asked or directly supervised?

Can you explain to me how those actions might involve self-directedness?

B.4 I'd like to know how you feel about organising your own learning and finding out about particular topics and clinical conditions through textbooks and other means. I'd also like to know how you feel about developing specific clinical skills by yourself without any supervision from your preceptor or clinical mentor.

In your opinion how does being self-directed in theoretical learning compare with or differ from being self-directed in developing practical skills within the context of patient care in the practice settings?

B.5 Let's continue by talking about your course assessments. How these affect the way you learn and in what ways they involve self-directedness.

Tell me about your course assessments, how these affect the way you learn and in what ways they involve self-directedness in the theory and practical aspects of your education.

B.6 Now let us talk about assessment of your progress during practice placements.

Tell me what your assessment in practice placements involve?

B.7 Another important aspect of self-directedness in learning is the ability of the student to assess his/her own progress.

How do you feel about having to assess your own learning and practical performance?

Usually learning a new skill or clinical procedure involves certain stages.

First you are shown how to perform the particular procedure. Then you are supervised in practising it until you are considered to be capable of doing it on your own. Eventually you are allowed to carry out that procedure without direct supervision.

When you carry out procedures on your own with or without direct supervision how do you judge your performance?

B.8 Let's talk about peer assessment which is also regarded as a useful way of personal development for students engaged in self-directed learning activities.

How would you feel about having to assess other members of your class in, for example, their seminar presentations or performing a particular patient care procedure?

How would you react to being asked to work with a junior student, show him/her the basic skills, supervise him/her, assess and document this student's performance and how he/she copes with the patient care situation.

Now tell me what your views are about students having to assess each other's work either in class or in clinical practice.

PART - C

ITEMS RELATING TO STUDENT'S EXPERIENCES OF THE FACILITATION AND SUPERVISION PROVIDED THEM IN THEIR SELF-DIRECTED ACTIVITIES

C.1 Let us now focus on the supervision, which you receive with regard to your self-directed work within the college setting.

Describe to me how student supervision is organised in this college.

How would you describe the kind of support, which you receive from personal or programme tutors, in what ways do you feel that you are encouraged to be resourceful, and self-directing?

C.2 If you required help with an essay or course project and you approached your personal tutor/supervisor about it - describe to me what that interaction might involve.

Who, would you say takes the lead or controls the discussion?

C.3 **Still talking about the supervision that you receive,**

What personal attributes, do you think, are essential for supporting and supervising students in their self-directed work?

C.4 **We shall now move on and talk about the supervision and support provided by your preceptors/mentors:**

How do they go about helping you to gain the required practical skills and build your self-confidence?

If you required help in developing a particular skill and you approached your preceptor/mentor
How would that situation usually be handled?

Do you have arranged meetings with your preceptors/mentors to discuss how you are getting on?

When you meet who controls the discussion?

What qualities and personal attributes do you think are essential for supervising and supporting students as they develop their practical skills?

PART – D

ITEMS RELATING TO STUDENT PERCEPTIONS OF THE INFLUENCE OF EXTERNAL CONTROL AND INSTITUTIONAL FACTORS ON THEIR SELF-DIRECTEDNESS IN LEARNING

The final part of this interview concerns the authorities that control this professional education and how you see the way they influence the theory and practical components of the programmes.

D.1 **Who do you think determines what theoretical knowledge and practical skills must be acquired in order to qualify as a nurse or midwife?**

Does the idea that a specific professional Body has ultimate control over your education influence the way you attitude to the amount self-directed work that you have to do?

D.2 **In relation to selection of the teaching/learning methods applied in this programme:**

As far as you are aware who determines what teaching and learning methods are used for particular topics in the theoretical setting and what techniques are used in helping students learn the practical procedures?

Are students involved in decisions about which methods are used in the learning process?

On reflection who, would you say has ultimate control over your learning process?

D.3 **Let's talk about the learning resources available to you in this college.
We shall begin with the library.**

Describe to me what facilities in the library you consider to encourage self-directedness in learning and what facilities you consider as a hindrance to self-directedness in learning?

D.4 **What other learning resources are provided in this college to encourage student self-directedness in learning.**

Do you have study rooms and discussion rooms which students can use for their self-directed learning activities?

How accessible are these when you have to do self-directed work?

** Thank you -- you have been very helpful indeed.*

** Is there any other relevant issues that you feel could have been included in this study but has not been addressed?*

APPENDIX 3.ii

**INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF TEACHERS
INITIAL PILOT VERSION**

PART A

**ITEMS RELATING TO THE TEACHERS' CONCEPTUALISATIONS OF
SELF-DIRECTEDNESS IN LEARNING, THEIR EXPERIENCES AND VIEWS OF ITS APPLICATION AND
EFFECTIVENESS WITHIN NURSING/MIDWIFERY EDUCATION**

A. 1 Self-directedness in learning has been interpreted in various ways within adult education.

- 1. 1 Could you tell me what your conceptualisation of self-directedness in learning is?
- 1. 2 Did you ever receive any formal preparation, to enable you to facilitate and supervise student self-directedness?
- 1. 3 What was your personal view about that preparatory programme?

A. 2 Now I would like us to focus briefly on the specific programme in which you are currently involved.

- 2. 1 In your experience with the students on this programme, would you say that the new recruits are generally ready and able to cope with the demands of self-directedness in learning?
- 2. 2 What attributes, would you say that a student requires in order to be able to function effectively as a self-directed learner?
- 2. 3 How do you usually convey to new students that they are expected to achieve some of their learning through self-directedness?
- 2. 4 On reflection how do students' usually react to this expectation?
- 2. 5 What measures are in place within this institution for identifying new students who have not developed the capability for self-directedness in learning, and what measures are taken to prepare them for functioning in this way?
- 2. 6 **I would now like to know how the students behave in their self-directed learning activities. I'd also like to know your personal view and what you have observed in the student's learning behaviours in the theoretical and practical settings.**

In your opinion how does self-directedness in the theoretical context compare with self-directedness in the practical context of patient care?
- 2. 7 From your experience how would you describe the students' attitudes and self-directed behaviours when they are in the college setting and when they go on practice placements?
- 2. 8 What student actions and behaviours would you consider as demonstrating self-directedness in the theoretical aspect of their learning, and how do these compare with the actions and behaviours which they tend to demonstrate in the clinical settings?
- 2. 9 I notice that there are periods in the time-table when no specific sessions have been programmed. Could you tell me what the students are told with regard to the purpose of those periods and from personal observation how do they actually use those periods?

PART B

**ITEMS RELATING TO THE TEACHERS' EXPERIENCES AND VIEWS ABOUT THE IMPLEMENTATION OF
DIFFERENT SELF-DIRECTED LEARNING METHODS AND THE THEIR OBSERVATIONS OF STUDENTS'
REACTIONS TO THEM**

B.1 In this section I would like us to focus on the different self-directed learning methods, your views about each and how the students react to each of them.

- 1. 1 Shall we begin with group activities? -Tell me about the different learning situations in which you implement group learning activities and how do the students respond to this method?
- 1. 2 In what ways do you perceive group interactions to encourage self-directedness in learning?
- 1. 3 What about seminar presentations – to what extent do you employ this method and how do the students usually react to the idea of presenting seminars?

What are your views about seminar presentations as a way of self-directedness and as a way of learning?

1.4 Whenever you employ the technique of negotiated learning contract what does it usually involve and how do students react to that way of learning.

What are your personal views about learning contracts as a way of fostering student self-direction?

1.5 **With regard to student involvement in decisions about their own learning process –**

To what extent do you normally involve students in decisions about the methods used?

Let's reflect for a moment on the curricular content and your role, perhaps, as programme tutor or module tutor

Explain to me what other ways you normally involve the students in decisions about their own learning process?

How do the students usually respond to opportunities to make decisions about their own learning process?

B.2 Now let's talk about the assessment strategies used in this programme and the extent to which they involve self-directedness.

2.1 What proportion of the overall assessment of this programme, would you say, involves students' self-directed efforts?

2.2 What impact do you think the amount of self-directed assignments have on the students' workload and how do they respond in relation to the workload?

2.3 Are there any assessments in this programme, which you do not consider to involve students' self-directed efforts? Please explain your views to me.

2.4 How would you describe student performance in those assessments as compared to performance in the assignments which involve self-directed work?

2.5 **I would now like to find out your views about the practical assessments.**

In what ways does the practical skills acquisition practical involve self-directedness?

2.6 On the structure and content of the practical assessment documents – How would you describe the way that levels of competence are interpreted by different assessors?

2.7 What are your views about students assessing their own performance in the theoretical and practical learning situations?

2.8 In what specific situations do you normally encourage them to assess their own performance, and how do they usually react to this?

PART C

ITEMS RELATING TO THE TEACHERS' EXPERIENCES AND VIEWS ABOUT SUPERVISING STUDENTS IN THEIR SELF-DIRECTED LEARNING ACTIVITIES

C.1 We shall now talk about student supervision and support.

1.1 Could you describe to me your supervisory practice?

1.2 What, do you think the students expect of you?

C.2 I am interested to know the nature of the relationship, which tends to develop in your interactions with your personal tutees or supervisees.

2.1 Please explain to me the system of allocation of students to the teachers and what your views are about that.

2.2 Generally how regularly do you meet with each tutee when they are in college?

2.3 When they go on practice placements, how regularly do you visit each student?

2.4 Please tell about your pattern of interactions with them in arranged meetings.

2.5 In your experience how do the students generally respond to having a personal tutor/supervisor?

To what extent do they take advantage of your role and expertise to seek guidance about self-directed learning activities and course assignments?

Do students normally approach you about personal matters that are not directly related to their education and training? Tell me how you personally feel about that?

- C. 3** There are various opinions about how demanding the practice of combined approach is, in comparison with the didactic approach.

How do you cope with your role as facilitator and supervisor of students' self-directedness and the demands of lesson preparations, teaching commitments, administrative commitments and your personal academic activities?

PART D

TEACHERS' PERCEPTIONS OF THE INFLUENCE OF STATUTORY/LEGISLATIVE CONTROL, THE IMPACT OF INSTITUTIONAL REGULATIONS AND THE RESOURCE PROVISIONS ON THE IMPLEMENTATION OF SELF-DIRECTEDNESS IN LEARNING

- D. 1** To finish off I would like to find out your opinion about the institutional facilities and the resources provided.

1. 1 What are your views about the resources provided in terms of encouraging or hindering student self-direction ?

1. 2 Please explain to me the kind of orientation programme provided for new students regarding the library facilities and database systems.

In your opinion how beneficial is that orientation programme in helping new students to use the different facilities available to them?

1. 3 What are your views about the other resource provisions? For example, the computer lab facilities, study/discussion rooms?

To what extent do the students use these in their self-directed learning activities?

- D. 2** The recent re-emergence of practical skills laboratories has aroused considerable interest.

What are your views about the re-establishment of practical skills laboratories aside from the actualities of patient/client care settings?

- D. 3** My last set of questions concerns an ethical conflict for both teachers and preceptors

In what ways do the statutory control and the institutional policies and regulations affect the ways in which you facilitate student self-directedness and in what ways do these influence your style of student supervision?

Thank you for your participation.

Are there any other issues relating to student self-directedness in learning, which you feel, is missing from this study?

APPENDIX 3.iii

INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF PRECEPTORS
INITIAL PILOT VERSION

PART A

ITEMS RELATING TO THE PRECEPTORS' CONCEPTUALISATIONS OF SELF-DIRECTEDNESS IN LEARNING. THEIR VIEWS AND PERSONAL EXPERIENCES OF STUDENTS' SELF-DIRECTED BEHAVIOURS WITHIN THE PRACTICAL CONTEXT OF PATIENT/CLIENT CARE

- A. 1 Self-directedness in learning has been interpreted in various ways within adult education.**
1. 1 Could you explain to me what your conceptualisation of self-directedness in learning is?
- A. 2 I'd like to know your personal view and experience regarding the capabilities of students for self-directedness within the practice settings.**
2. 1 What attributes would you say that students require in order to be able to function effectively in the self-directed capacity?
2. 2 What student actions and behaviours would you consider to demonstrate self-directedness in their practical skills development?
2. 3 At what stage do you usually consider a student as being able to function in this area of practice without direct supervision?
2. 4 In your opinion how does student self-directedness within the clinical areas compare with or differ from self-directedness within the in the college setting?

PART B

ITEMS RELATING TO THE PRECEPTORS' VIEWS ABOUT THE APPLICATION OF DIFFERENT SELF-DIRECTED LEARNING METHODS. THEIR EXPERIENCES OF HOW THE STUDENTS' RESPOND TO THESE

- B. 1 Let's talk about your experience of how the students respond to some of the self-directed learning methods which you may have used in your supervisory role.**
1. 1 In terms of advantages and disadvantages what are your views about group activities as a way of learning?
1. 2 In what situations are you likely to encourage group reflection while the students are here on practice placements?
1. 3 How do students generally respond to the various opportunities available to them to engage in group discussions?
1. 4 **Let's turn to another method employed in self-directed learning.**
- Tell me your views about the use of negotiated learning contracts as a way of encouraging students to be self-directed in their learning?
- In your opinion what quality of learning might students gain from using this method?
1. 5 To what extent and in what situations might students choose this method as a means of developing some of their practical skills?
- B. 2 Now let's consider the assessment of student performance during their practice placements.**
2. 1 In what ways, do you think, that the method of assessing the students' practical competencies realistically encourages them to become increasingly self-directed in their learning?
- To what extent do students to rely on their object books as a guide to attaining their skills and monitoring personal progress?
2. 2 To what extent is the structure and content of the assessment document or the object books easy to interpret in the same way by different members of the qualified staff?
2. 3 What is your opinion about a student having to assess his/her own performance?
In what ways might students benefit from assessing their own performance?
2. 4 In your experience how do students generally respond to the idea of having to assess their own

PART C

ITEMS RELATING TO THE PRECEPTORS' EXPERIENCES AND VIEWS ABOUT STUDENT SUPERVISION IN THE PRACTICAL SETTINGS.

- C. 1** Lets continue by focusing on your different roles of preceptor, practitioner and role model for the students in their practical skills development.
1. 1 Could you explain to me how you use those roles in your day-day interactions with the students?
1. 2 In your experience how do the students generally respond to you as preceptor or mentor?
- C. 2** I am interested to know about your style of supervision of the students, the kind of preceptor - student relationships which tend to develop, and the ways in which they affect the students' self-directed behaviours.
2. 1 In your day-to-day interactions with the students what measures do you normally take to help them increasingly, to take the initiative and become self-directed in their practical skills development?
2. 2 As the students progress what kinds of decisions do you tend to encourage them to make about their own learning process?
2. 3 Generally how do they respond when offered the opportunity to make decisions about their own learning process?
2. 4 Apart from your day-to-day interactions with the students tell me about other arranged meetings that you have with each individual and what is usually involved in those meetings.
2. 5 In terms of workload how would you describe your role of supervising the students?

PART D

ITEMS RELATING TO THE PRECEPTORS' PERCEPTIONS OF THE STATUTORY AND INSTITUTIONAL INFLUENCES, THE IMPACT ON THEIR FACILITATIVE AND SUPERVISION PRACTICES AND THE DEGREE OF FREEDOM WHICH THEY ALLOW THE STUDENTS TO BE SELF-DIRECTED IN THE PRACTICAL SETTINGS

- D. 1** In this final part of the interview we shall briefly consider the ways in which Statutory and Institutional regulations affect your supervision styles.
1. 1 In what ways do the statutory and institutional policies regulations affect the amount of freedom, which you allow students to be self-directed in this clinical area?
1. 2 In your opinion to what extent are the practical settings appropriate for student self-directedness?
1. 3 In relation to time, team allocations, client care procedures and staffing systems, what opportunities do you feel exist for students to enable them to take the initiative in developing the appropriate skills?
1. 4 Tell me what is involved in the orientation programme, which you normally provide for new students to this clinical area.
1. 5 Generally how do students respond to their orientation programmes?
- In what ways do students take advantage of the facilities and learning opportunities available to them in developing their practical skills?
- D. 2** I am also interested to know what factors, you think, create constraints for the students in their self-directedness within the practice settings.
2. 1 What factors do you consider to create a hindrance to students' in being resourceful in their skills acquisition?
- D. 3** In recent years the use of practical skills laboratories for demonstrations and development of nursing skills has evolved again.
3. 1 What are your views about practical skills laboratories?

Thank you for your participation. Are there any other issues relating to student self-directedness in learning which you feel has been missed from this study?

APPENDIX 4.i

ORIGINAL PRE-PILOT QUESTIONNAIRE ADMINISTERED FOR VALIDATION BY EDUCATORS

This study sets out to explore the educational concept, Self-directed learning which 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 learning strategies, and evaluating learning outcomes”

(Knowles & Associates 1984, p.301)

This questionnaire consists of 10 sections. In validating the content please follow the guidelines in the covering letter.

DEMOGRAPHIC DETAILS

THIS SECTION IS DESIGNED TO OBTAIN INFORMATION ABOUT PERSONAL CHARACTERISTICS THAT MIGHT INFLUENCE A STUDENT’S SELF-DIRECTION IN LEARNING

Please indicate your response by placing a [✓] in the appropriate box.

SECTION 1

GENDER

Male

Female

AGE CATEGORY

17-20 21-25 26-30 31-35 Over 35

SECTION - 2

PRIOR EDUCATIONAL BACKGROUND

LEVEL OF EDUCATION PRIOR TO COMMENCEMENT OF CURRENT PROGRAMME

University - Qualifications attained:

Other Higher / Further education

PLEASE SPECIFY

Qualifications attained:

Secondary education:

Please write in the appropriate box the number of Grades attained. For example if you attained 3 A Grades place 3 in the box provided.

SIXTH YEAR

Grades Attained

FIFTH YEAR

Grades Attained

SECTION – 3

NUMBER OF YEARS SINCE FORMAL STUDYING

Less than one year One to Two years More than Two years

SECTION – 4

In your opinion what is the main distinction between self-directed learning and the traditional teaching/learning approach?

Have you ever had experience with self-directed learning?

YES NO

If YES Please Explain

SECTION – 5

FAMILIARITY WITH THE RELEVANT TECHNIQUES

The next set of items assesses how familiar you are with the various self-directed learning techniques. Please answer as concisely as you can. For each item, please explain briefly your understanding of what the technique involves and how much experience you have had with that as a way of self-directed learning.

Contract Learning

Seminar Presentations

Peer group learning

SECTION – 6

The following are other techniques that can be used in self-directed learning. Please indicate the one(s) with which you are familiar by placing a tick [✓] in the relevant box.

- Computer Assisted Learning
- Learning Packages
- Televised Educational Programmes
- Course Projects
- Reflective Journals

SECTION - 7

THE FOLLOWING STATEMENTS ARE DESIGNED TO ASSESS STUDENTS' PERCEIVED CAPABILITIES AND PERSONAL ATTITUDES TO SELF-DIRECTED LEARNING

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 learning strategies, and evaluating learning outcomes"

(Knowles & Associates 1984, p.301)

Please examine each statement and indicate in what way you consider the attitude stated to relate to the concept of self-directedness. For example if you consider it to be a positive attitude to an attribute of self-directed learning as indicated in the above definition, then place a tick [✓] in the relevant box where 1 indicates strongly positive, 2 = positive, 3 = neither positive nor negative, 4 = negative and 5 = strongly negative

Then Using the CVI assessment system as explained in the covering letter please indicate Degree of Relevance to the identified attribute.

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| I find that I usually learn a lot more on my own than when I am being constantly instructed and supervised. | | | | | |
| I expect teachers to make the decisions about the topics for all course projects and essays. | | | | | |
| I find taking notes at lectures really difficult one thing I'm not good at is listening to what's being said and writing at the same. | | | | | |
| I like being allowed to choose a topic that hasn't been taught in class and explore it in depth at my own pace. | | | | | |
| I prefer to be given clear guidelines about what to learn how to go about it and how to relate it to practice. | | | | | |
| I learn better when someone takes me aside and goes through things with me on a one-to-one basis. | | | | | |
| I prefer independent learning to taught sessions where both the pace and content are controlled by someone else. | | | | | |
| I learn a lot more from group discussions when we have to find out things for ourselves than from the formal taught sessions. | | | | | |
| I enjoy my independence and prefer to do things my own way. | | | | | |
| I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. | | | | | |
| I can't wait to finish this course, I find that all this studying takes over your life. | | | | | |
| I think change and innovation are exciting. There's always something new to learn | | | | | |
| I think teachers should always give out handouts, that way you can concentrate on what they are teaching you. | | | | | |
| I don't like group work with no teacher there to tell us what we are supposed to learn because we tend to waste time floundering without learning anything concrete. | | | | | |
| I find learning through group work good, particularly when we are left to explore and discuss a topic by ourselves without any direct guidance from the teacher. | | | | | |
| I like working independently on self-selected topics because exploring it in depth helps me to further develop my skills in use of computers and the library database systems. | | | | | |
| I will never stop studying, I think I cope quite well and don't find the demands too stressful. | | | | | |
| When doing my course work or an essay I tend to rely on just my lecture notes and handouts because I find searching through the database systems too tedious. | | | | | |
| I think if teachers are going to give us work on a particular journal article they should give everybody a copy together with the guidelines. | | | | | |
| I prefer the discovery learning technique where I have to find out all the relevant information about a specific problem and put forward an argument in a discussion. | | | | | |

SECTION - 8

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| After I've been shown something I consider that it's up to me to go away and practice it by myself. | | | | | |
| In new learning environments I am inclined to wait for somebody to show me around. | | | | | |
| I'm not in the habit of reading up on things before the next session in class unless the teacher specifically asks us to read something before coming. | | | | | |
| I find peer group assessment overwhelming | | | | | |
| If something needs to be done in the ward and I've been shown how to do it but haven't done it before I wouldn't offer to do it unless I'm asked by a trained staff and someone stays to give me support. | | | | | |
| I can never make up my mind about things if somebody makes the decisions and choices then I don't have to worry about mistakes. | | | | | |
| Throughout my first allocation to a ward I usually tag on to a senior student for a bit of security because I feel vulnerable and threatened by all the experienced staff and the unfamiliar routines. | | | | | |
| I tend to vary the way I learn, if I find an alternative approach that seems appropriate I like to try it out. | | | | | |
| When a patient asks me something I usually call somebody and stay at the background rather than getting too involved in case I make mistakes. | | | | | |
| If I had to choose between lectures and directed work I'd go for lectures at least you know you're getting the syllabus. | | | | | |
| I like trying things out by myself which means I tend to take risks but I feel I've got to push myself in order to make progress. | | | | | |
| During my first allocation to a ward I consider that it's up to me to read the ward procedure manual. | | | | | |
| Self-directed course projects are too time consuming and stressful I don't really like that approach to learning. | | | | | |
| I am very good at getting teachers to tell me the stuff that I need to learn. | | | | | |
| I usually write down things that are new to me so that I can ask somebody later or look them up myself. | | | | | |
| I find reading from notice boards very boring I prefer someone to explain things to me. | | | | | |
| I don't think you can learn when you're asked to teach new students I don't have the confidence and I find it too stressful. | | | | | |
| In new areas of practice placements I usually rely on my preceptors or the trained staff to make the decisions about demonstrating things to me whenever necessary. If they don't I feel lost and rejected. | | | | | |
| I think they expect far too much from students on this course. | | | | | |
| I have an established daily pattern for studying which starts with making my own notes from what I've jotted down in class and reading whatever handout we've been given. | | | | | |

SECTION - 9

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do. | | | | | |
| I prefer to see a tutor only when I need to because I resent being told how to plan and when carry out my own learning. | | | | | |
| I don't feel confident enough to take control of my own learning process on this course. | | | | | |
| I think a couple of hours of studying is enough for one day, being stuck in the library for hours is not my idea of student life. | | | | | |
| All I need is to be given the gist of what is expected of me. Once I get that I am quite happy to set my own objectives, get on with my learning and see how it goes. | | | | | |
| I find conferences and study-day conferences too formal and patronising | | | | | |
| I feel that I can learn just as effectively by myself as through taught sessions I don't really need any specific guidelines. | | | | | |
| I need pressure from someone in authority to make me settle down and work on my assignments. | | | | | |
| As far as I am concerned education should always be an organised situation where you go to class to be taught by a teacher. | | | | | |
| I think teachers should always retain control of the learning process because they know what knowledge and skills are required for getting the necessary qualifications. | | | | | |
| I hate to feel inadequate so I tend to get on with things somehow rather than depending on other people. | | | | | |
| The idea of having to make my own decisions about what I need to learn and having to assess my own progress is too much for me. | | | | | |
| In self-directed learning I am in control and if there is something that I want to learn in greater depth then I can. | | | | | |
| I would hate to have a personal tutor who is always checking up on me about my work. | | | | | |
| I don't think being given control of my own learning is a good idea because I am not sure that I can determine what I am supposed to learn to get my qualification. | | | | | |
| In most practice situations the trained staff expect me to tell them what I need to learn. I don't think that's right I think they should be the ones to determine my learning needs. | | | | | |
| I think teachers should socialise a bit more with students that way it's easy when you have to go and see them about your work. | | | | | |
| I feel good whenever I teach myself to do something so I am always trying my hands on new things. | | | | | |
| I am not very good at working collaboratively with my peers or helping others with self-directed work. | | | | | |
| I always look forward to doing a seminar presentation simply because I am in control. | | | | | |

SECTION - 10

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| It is unusual for me to ask for more time for my self-directed course work I know it is up to me to do the work so I don't usually put it off. | | | | | |
| I'm quite a laid back person and like to take my time with things. | | | | | |
| I came on this course expecting to be taught what I need to know in order to gain my professional qualification so I resent having to do all that self-directed work. | | | | | |
| I like to assess my own progress that way I know what help to ask for to meet my own needs. | | | | | |
| I think the greater responsibility should rest with the teachers to make sure that all my learning objectives are achieved. | | | | | |
| I consider my work and my learning to be my own responsibility. | | | | | |
| I think if the trained staff expect me to get things right then it is up to them to plan and show me exactly what to do in specific situations. | | | | | |
| I would resent being asked to write my own learning plans/objectives for any sessions since I don't consider it my responsibility. | | | | | |
| I don't see the benefit of self-assessment. | | | | | |
| I consider it the responsibility of my preceptors/mentors to look for opportunities for me to practice the new skills they teach me. | | | | | |
| I feel that once you have gained your qualification that should be enough for your career, there's no need for further courses. | | | | | |
| The fact that continuing education might involve similar or more self-directed work doesn't bother me because I enjoy that way of learning and intend to do a further degree or other post registration courses after I qualify. | | | | | |
| I really don't think it's fair to take on studying if you are a parent | | | | | |
| I have drawn out my own time table to help me keep up a regular studying routine which covers revising my lecture notes and looking up new topics that interest me. | | | | | |
| I think it if they gave you study timetables that says exactly what you should be working on it would help you to discipline yourself with studying. | | | | | |
| I feel that ultimately the teachers are responsible for making sure that when I qualify I'm going to be a safe practitioner so whatever knowledge and experience I get are up to them. | | | | | |
| As adult students I think we should be given more and more responsibility for our own learning as the course progresses. | | | | | |
| I think continuing education is very important | | | | | |
| I don't really consider myself as a keen self-directed learner because I feel its too demanding and tend to put off doing my course work until the last minute. | | | | | |
| I consider it the teachers' responsibility to plan and organise everything to do with our learning process. | | | | | |

SECTION – 11

PLEASE RANK THE FOLLOWING IN THE ORDER OF IMPORTANCE TO YOU BY PLACING – 1 AGAINST THE ITEM WHICH YOU CONSIDER TO BE **MOST IMPORTANT** AND 4 AGAINST THE ITEM WHICH YOU CONSIDER TO BE **LEAST IMPORTANT**.

While engaged in self-directed learning assignments, the people I most rely on for assistance are:

- Personal Tutor
- Mentor/Preceptor
- Peers
- Other, Please state -----

In relation to self-directed learning I consider my peers as:

- Source of information
- Means of sharing knowledge
- Means of sounding/testing ideas
- Means of expressing my worries

I consider my Tutor/supervisor as:

- My guide
- Somebody to facilitate my learning
- Resource person
- Someone to teach me all the knowledge and skills I need to pass my exams.

In self-directed learning assignments I prefer the situation where my Tutor Or supervisor gives me clear guidance on:

- Choice of topic
- Sources of reference
- Amount and depth to aim at
- How to relate my theory to practice

Please list in order of importance to you, four resource materials which you consider to be most helpful when preparing your course projects or when engaged in other self-directed work.

APPENDIX 5.i COVERING LETTER 2

APPENDIX 5.ii

INSTRUMENT TRIAL

INSTRUCTIONS TO PILOT GROUP OF SUBJECTS

Thank you for taking part in testing this questionnaire which is designed to explore how independent individuals see themselves in other aspects of their lives and how individuals see themselves in the self-directed learning situation.

In responding to these statements please:

- Note how long it takes to complete the questionnaire. Write this at the top right-hand corner. For example – 10, 12 or 15.
- Comment on how clear you found the statements. Only write Not clear against the item at the right of the table if that is the case.
- Identify any statements that you found to be ambiguous and therefore difficult to rate. If a statement is complex and you are unable to rate either way, write Complex against the item at the right side of the table.
- Identify any items, which you objected to answering. That is, if you have reservation about any item write Reservation against the item at the right side of the table.

*If you wish to make any other comment please do so at the bottom of the last page.
Thank you for your time.*

APPENDIX 6.i

**AMENDED VERSION OF STUDENT QUESTIONNAIRE USED IN FIRST PILOT TESTING
CONTENT VALIDATION BY EDUCATORS**

THE FOLLOWING STATEMENTS ARE DESIGNED TO ASSESS STUDENTS' PERCEIVED CAPABILITIES AND
PERSONAL ATTITUDES TO SELF-DIRECTED LEARNING

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 learning strategies, and evaluating learning outcomes”

(Knowles & Associates 1984, p.301)

Please examine each statement and indicate in what way you consider the attitude stated to relate to the concept of self-directedness. For example if you consider it to be a positive attitude to an attribute of self-directed learning then place a tick [✓] in the relevant box where 1 indicates strongly positive, 2 = positive, 3 = neither positive nor negative, 4 = negative and 5 = strongly negative

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| I find that I usually learn a lot more on my own than when I am being constantly instructed and supervised. | | | | | |
| I expect teachers to make the decisions about the topics for all course projects and essays. | | | | | |
| I like being allowed to choose a topic that hasn't been taught in class and explore it in depth at my own pace. | | | | | |
| I prefer to be given clear guidelines about what to learn how to go about it and how to relate it to practice. | | | | | |
| I learn better when someone takes me aside and goes through things with me on a one-to-one basis. | | | | | |
| I prefer independent learning to taught sessions where both the pace and content are controlled by someone else. | | | | | |
| I learn a lot more from group discussions when we have to find out things for ourselves than from the formal taught sessions. | | | | | |
| I enjoy my independence and prefer to do things my own way. | | | | | |
| I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. | | | | | |
| I don't like group work with no teacher there to tell us what we are supposed to learn because we tend to waste time floundering without learning anything concrete. | | | | | |
| I find learning through group work good, particularly when we are left to explore and discuss a topic by ourselves without any direct guidance from the teacher. | | | | | |
| I like working independently on self-selected topics because exploring it in depth helps me to further develop my skills in use of computers and the library database systems. | | | | | |
| When doing my course work or an essay I tend to rely on just my lecture notes and handouts because I find searching through the database systems too tedious. | | | | | |
| I prefer the discovery learning technique where I have to find out all the relevant information about a specific problem and put forward an argument in a discussion. | | | | | |

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| After I've been shown something I consider that it's up to me to go away and practice it by myself. | | | | | |
| In new learning environments I am inclined to wait for somebody to show me around. | | | | | |
| I'm not in the habit of reading up on things before the next session in class unless the teacher specifically asks us to read something before coming. | | | | | |
| If something needs to be done in the ward and I've been shown how to do it but haven't done it before I wouldn't offer to do it unless I'm asked by a trained staff and someone stays to give me support. | | | | | |
| Throughout my first allocation to a ward I usually tag on to a senior student for a bit of security because I feel vulnerable and threatened by all the experienced staff and the unfamiliar routines. | | | | | |
| I tend to vary the way I learn, if I find an alternative approach that seems appropriate I like to try it out. | | | | | |
| When a patient asks me something I usually call somebody and stay at the background rather than getting too involved in case I make mistakes. | | | | | |
| I like trying things out by myself which means I tend to take risks but I feel I've got to push myself in order to make progress. | | | | | |
| During my first allocation to a ward I consider that it's up to me to read the ward procedure manual. | | | | | |
| Self-directed course projects are too time consuming and stressful I don't really like that approach to learning. | | | | | |
| I usually write down things that are new to me so that I can ask somebody later or look them up myself. | | | | | |
| I find reading from notice boards very boring I prefer someone to explain things to me. | | | | | |
| In new areas of practice placements I usually rely on my preceptors or the trained staff to make the decisions about demonstrating things to me whenever necessary. If they don't I feel lost and rejected. | | | | | |
| I have an established daily pattern for studying which starts with making my own notes from what I've jotted down in class and reading whatever handout we've been given. | | | | | |

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do. | | | | | |
| I prefer to see a tutor only when I need to because I resent being told how to plan and when carry out my own learning. | | | | | |
| I don't feel confident enough to take control of my own learning process on this course. | | | | | |
| All I need is to be given the gist of what is expected of me. Once I get that I am quite happy to set my own objectives, get on with my learning and see how it goes. | | | | | |
| I feel that I can learn just as effectively by myself as through taught sessions I don't really need any specific guidelines. | | | | | |
| I need pressure from someone in authority to make me settle down and work on my assignments. | | | | | |
| I think teachers should always retain control of the learning process because they know what knowledge and skills are required for getting the necessary qualifications. | | | | | |
| I hate to feel inadequate so I tend to get on with things somehow rather than depending on other people. | | | | | |
| The idea of having to make my own decisions about what I need to learn and having to assess my own progress is too much for me. | | | | | |
| In self-directed learning I am in control and if there is something that I want to learn in greater depth then I can. | | | | | |
| I don't think being given control of my own learning is a good idea because I am not sure that I can determine what I am supposed to learn to get my qualification. | | | | | |
| In most practice situations the trained staff expect me to tell them what I need to learn. I don't think that's right I think they should be the ones to determine my learning needs. | | | | | |
| I feel good whenever I teach myself to do something so I am always trying my hands on new things. | | | | | |
| I always look forward to doing a seminar presentation simply because I am in control. | | | | | |

| | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| It is unusual for me to ask for more time for my self-directed course work I know it is up to me to do the work so I don't usually put it off. | | | | | |
| I came on this course expecting to be taught what I need to know in order to gain my professional qualification so I resent having to do all that self-directed work. | | | | | |
| I like to assess my own progress that way I know what help to ask for to meet my own needs. | | | | | |
| I think the greater responsibility should rest with the teachers to make sure that all my learning objectives are achieved. | | | | | |
| I consider my work and my learning to be my own responsibility. | | | | | |
| I think if the trained staff expect me to get things right then it is up to them to plan and show me exactly what to do in specific situations. | | | | | |
| I would resent being asked to write my own learning plans/objectives for any sessions since I don't consider it my responsibility. | | | | | |
| I consider it the responsibility of my preceptors/mentors to look for opportunities for me to practice the new skills they teach me. | | | | | |
| The fact that continuing education might involve similar or more self-directed work doesn't bother me because I enjoy that way of learning and intend to do a further degree or other post registration courses after I qualify. | | | | | |
| I have drawn out my own time table to help me keep up a regular studying routine which covers revising my lecture notes and looking up new topics that interest me. | | | | | |
| I feel that ultimately the teachers are responsible for making sure that when I qualify I'm going to be a safe practitioner so whatever knowledge and experience I get are up to them. | | | | | |
| As adult students I think we should be given more and more responsibility for our own learning as the course progresses. | | | | | |
| I don't really consider myself as a keen self-directed learner because I feel its too demanding and tend to put off doing my course work until the last minute. | | | | | |
| I consider it the teachers' responsibility to plan and organise everything to do with our learning process. | | | | | |

DEMOGRAPHIC DETAILS

THIS SECTION IS DESIGNED TO OBTAIN INFORMATION ABOUT PERSONAL CHARACTERISTICS THAT MIGHT INFLUENCE A STUDENT'S SELF-DIRECTION IN LEARNING

Please indicate your response by placing a [✓] in the appropriate box.

ENDER

Male

Female

AGE CATEGORY

17-20 21-25 26-30 31-35 Over 35

LEVEL OF EDUCATION PRIOR TO COMMENCEMENT OF THE CURRENT PROGRAMME

University - Qualifications attained:

Masters Degree Post graduate Diploma

Degree with Honours Diploma in Higher Education

Degree without Honours

Other Higher / Further education - Qualifications attained:

HND HNC B.TEC SCOTVEC SVQ

Secondary education:

Please write in the appropriate box the number of Grades attained. For example if you attained 3 0 Grades place 3 in the box provided.

Standard Grades 0 Levels / 0 Grades Higher Grades

A Levels SCOTVEC Modules

NUMBER OF YEARS SINCE YOU WERE IN SCHOOL OR WERE INVOLVED IN OTHER FORMAL STUDYING BEFORE COMMENCING THIS EDUCATIONAL PROGRAMME

Less than one year One to Two years More than Two years

Have you ever had experience with self-directed learning?

YES NO

If YES Please Explain

.....
.....

PREVIOUS JOB/PROFESSIONAL EXPERIENCE

Please state what post you held in your most recent job.

.....

Briefly explain the degree of control and/or responsibility which you had in that job. For example:

i. How much freedom did you have in making decisions based on your own judgements?

.....

ii. In what way would you say that you were answerable/accountable in that post?

.....

APPENDIX 6.ii

FINAL VERSION PILOT TESTED AND USED IN MAIN STUDY

STUDENTS' QUESTIONNAIRE ON PERCEIVED AUTONOMY AND PERSONAL LEARNING ATTRIBUTES

This study is being conducted to gain insight into how individuals describe their personal autonomy and how they perceive themselves in terms of personal attributes for self-direction in learning. That is:

Being able to determine your personal learning needs, select the appropriate learning resources, plan and implement the learning and evaluate your personal progress.

The aim is to highlight the implications to practice, to teachers who might be engaged in supervising and supporting students in their educational programmes.

Your anonymity will be fully protected and the information you provide will be treated in strict confidence. Thank you for taking part.

DEMOGRAPHIC DETAILS

THIS SECTION IS DESIGNED TO OBTAIN INFORMATION ABOUT THE PERSONAL CHARACTERISTICS THAT MIGHT INFLUENCE AN INDIVIDUAL'S SELF-DIRECTION IN LEARNING

Please indicate your response by placing a ✓ in the appropriate box.

GENDER

Male

Female

AGE CATEGORY

17-20 21-25 26-30 31-35 Over 35

LEVEL OF EDUCATION PRIOR TO COMMENCEMENT OF THE CURRENT PROGRAMME

University - Qualifications attained:

Masters Degree Post graduate Diploma

Degree with Honours Diploma in Higher Education

Degree without Honours

Other Higher / Further education - Qualifications attained:

HND HNC B.TEC SCOTVEC SVQ

Secondary education:

Please write in the appropriate box the number of Grades attained. For example if you attained 3 0 Grades place 3 in the box provided.

Standard Grades 0 Levels / 0 Grades Higher Grades

A Levels SCOTVEC Modules

NUMBER OF YEARS SINCE YOU WERE IN SCHOOL OR WERE INVOLVED IN OTHER FORMAL STUDYING BEFORE COMMENCING THIS EDUCATIONAL PROGRAMME

Less than one year One to Two years More than Two years

Have you ever had experience with self-directed learning?

YES NO

If YES Please Explain

.....
.....

PREVIOUS JOB/PROFESSIONAL EXPERIENCE

Please state what post you held in your most recent job.

.....

Briefly explain the degree of control and/or responsibility which you had in that job.
For example:

i. How much freedom did you have in making decisions based on your own judgements?

.....

ii. In what way would you say that you were answerable/accountable in that post?

.....

THE FOLLOWING STATEMENTS ARE DESIGNED TO INVESTIGATE INDIVIDUALS' OPINION OF THEMSELVES REGARDING PERSONAL AUTONOMY AND SELF-DIRECTION IN LEARNING

Please respond as spontaneously as you can by placing a tick [✓] in the column which most accurately reflects your personal characteristic.

| | Strongly Agree | Agree | Not Sure | Dis- Agree | Strongly Disagree |
|---|----------------|-------|----------|------------|-------------------|
| I find that I usually learn a lot more on my own than when I am constantly instructed and supervised. | | | | | |
| I expect teachers to make the decisions about the topics for all course projects and essays. | | | | | |
| I find satisfaction in being allowed to choose a topic that hasn't been taught in class and explore it to the depth that I can, at my own pace. | | | | | |
| I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice. | | | | | |
| I learn better when someone takes the time to through things with me on a one-to-one basis. | | | | | |
| Self-directed learning is more convenient and beneficial to me than taught sessions where teachers control both the pace and content. | | | | | |
| I learn a lot more when I have to find out things for myself, because I can explore and use various resources which is not the same in taught sessions. | | | | | |
| I enjoy my independence and prefer to do things my own way. | | | | | |
| I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. | | | | | |
| I don't like group work simply because when we'er left on our own and there is no teacher there to control things, we tend to waste time floundering without learning anything concrete. | | | | | |
| I enjoy learning through group work, particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher. | | | | | |
| I normally set aside time to go and read journals and search through the Database systems and I do this whenever I come across something that interests me, not just for the purpose of coursework. | | | | | |
| I tend to rely on lecture notes and handouts because I find it boring and tedious searching through the literature and Database systems. | | | | | |
| Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to the specific problems is quite good. | | | | | |

| | Strongly Agree | Agree | Not Sure | Dis-Agree | Strongly Disagree |
|--|----------------|-------|----------|-----------|-------------------|
| After I've been shown something I consider that it's up to me to practice it by myself until I am good at it. | | | | | |
| In new learning environments I am inclined to wait for somebody to show me the routine, I don't feel that I need to ask. | | | | | |
| I'm not in the habit of reading up on things before we get taught in class unless the teacher specifically asks us to read up on the particular topic before coming. | | | | | |
| If something needs to be done and I've been shown how to do it but haven't done it before, I wouldn't offer to do it unless somebody experienced asks me to and stays there to supervise me. | | | | | |
| Whenever I go to a new place or if I am put into a new situation, I automatically ask about the routine in that place or look for written guidelines. | | | | | |
| I find it difficult setting my own goals and determining what topics I have to study, I prefer for such things to be decided by the tutors. | | | | | |
| I tend to stick to the way I am taught to do something and don't readily change the technique because it is too much hassle. | | | | | |
| I like trying things out by myself which means I tend to take risks but I feel I've got to push myself in order to make progress. | | | | | |
| I am not very good at evaluating my own learning or clinical skills, I think as a student it is difficult to judge how well you are doing. | | | | | |
| I think Self-directed learning should be abolished because, like me, not everybody is organised and disciplined enough to cope with that way of learning. | | | | | |
| I usually write down things that are new to me so that I can ask somebody to later or look them up myself | | | | | |
| I tend to vary the way I learn, if I find an alternative approach that seems easy then I would try it. | | | | | |
| In new areas of practice placements I usually rely on my preceptors and the trained staff to decide about what skills I have to learn in that area. If they don't, I feel really rejected. | | | | | |
| I have an established routine for studying which starts with making my own notes from what I've jotted down in class and reading whatever handout we've been given. | | | | | |

| | Strongly Agree | Agree | Not Sure | Dis-Agree | Strongly Disagree |
|--|----------------|-------|----------|-----------|-------------------|
| If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do. | | | | | |
| I prefer to see a tutor only when I need to because I don't need to be told how to plan and when carry out my own studying. | | | | | |
| I don't feel confident enough to take control of my own learning process on this course. | | | | | |
| All I need is to be given the gist of what is expected of me. Once I get that I am quite happy to set my own objectives, get on with my studying and see how I get on. | | | | | |
| I feel that I can learn just as effectively by myself as through teaching or instructions. | | | | | |
| I need pressure from someone in authority to make me settle down and work on my assignments. | | | | | |
| I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications. | | | | | |
| I hate to feel inadequate so I tend to get on with things somehow rather than depending on other people. | | | | | |
| I am not very organised and I am not really good at setting and achieving targets. | | | | | |
| In self-directed learning I am in control and if there is something that I want to learn in greater depth then I can. | | | | | |
| I don't think being given control of my own learning is a good idea because I am not sure that I can determine what I am supposed to learn to get my qualification. | | | | | |
| In practice placements I consider it my responsibility to determine my own learning needs and look for opportunities to develop my skills. | | | | | |
| I am always trying my hands on new things, I find it really exciting when I manage to teach myself to do something. | | | | | |
| I enjoy seminar presentations because I can explore a topic in depth, present it to the class and lead the discussion. | | | | | |

| | Strongly Agree | Agree | Not Sure | Dis-Agree | Strongly Disagree |
|--|----------------|-------|----------|-----------|-------------------|
| It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off. | | | | | |
| I came on this course expecting to be taught what I need to know for my professional qualification so I resent having to do so much self-directed work. | | | | | |
| I usually assess my own learning and progress that way I know what help to ask for. | | | | | |
| Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I am doing and where I am going wrong. | | | | | |
| I consider my work and my learning to be my own responsibility. | | | | | |
| In the wards I think it is safer to wait until you are asked to do things rather than acting on your own initiative. | | | | | |
| I would resent being asked to write my own learning objectives for any sessions since I don't consider it my responsibility. | | | | | |
| I consider it the responsibility of my clinical mentors/preceptors to look for opportunities for me to practice the new skills they teach me. | | | | | |
| The fact that continuing education might involve similar or more self-directed work doesn't bother me because normally I prefer to find out things for myself rather than being told everything. | | | | | |
| I usually draw out my own timetable for studying to help me keep up a regular routine. | | | | | |
| I feel that teachers are ultimately responsible for whatever knowledge and skills students gain from their education. | | | | | |
| As adult students I think we should be given more responsibility for our own learning. | | | | | |
| I don't really consider myself as a keen self-directed learner because I find it too demanding and tend to put off doing my assignments until the last minute. | | | | | |
| I am quite happy to let other people do all the necessary planning and organising for me. | | | | | |

APPENDIX 7.i

INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF STUDENTS
FINAL VERSION

PART - A

ITEMS RELATING TO STUDENT CONCEPTUALISATIONS OF
SELF-DIRECTEDNESS IN LEARNING, THEIR EXPERIENCES OF ITS APPLICATION AND THEIR EXPRESSED
VIEWS OF THE EFFECTIVENESS

- A. 1. **One of the key principles of adult education is learning through the self-directed approach.**
Could you tell me what self-directedness in learning means to you?
- A. 2. **Let's talk about some of the ways in which the self-directed learning approach is applied in the college part of your programme.**
2. 1 Have you ever learned a topic from your programme totally by yourself, where you had to set your own objectives, plan and learn about the topic without any input in the classroom setting?
Tell me more about that personal decision and action.
- ? Pr For example - what prompted you to learn about that topic?
How did you determine which specific topic to study?
Once you had identified what you needed to learn what exactly did you do, did you seek further guidance from anybody - say - a tutor or preceptor? Tell me what exactly you needed help with.
2. 2 **Now let's turn to specific self-directed learning methods used in your programme. I'd like to know your personal views about each of them as a way of learning. Shall we begin with group work?**
Just reflect for a moment on the most recent group work that you did.
Tell me how that was organised and how that session went.
In your opinion how do you think group work ought to be organised in order to encourage every member to contribute in dealing with the task that has been set?
What qualities or attitudes and behaviours would you say, help group members to work well together in achieving their objectives and satisfaction from the session?
What are your views about the tutor being present during group work?
Describe to me how group work affects the way you learn in terms of advantages and disadvantages.
2. 3 **Now let's, for a moment, consider seminar presentations?**
Tell me, what exactly you are expected to do for presenting a seminar .
Who makes the decisions about the topic selection, the preparation of the paper and the way in which you present the topic?
During or at the end of each presentation who leads and controls the discussions?
Personally how do you feel about the way your seminars are organised?
Tell me how you find seminar presentations as a way of learning?
2. 4 **There is another self-directed learning approach that you probably use which also involves group interaction. I would like to find out what you think of that method.**
Following a period of practice placement do you have arranged times in your programme when you get together to talk about your experiences - if so what do you call those sessions?
Explain to me how those sessions are organised and what is involved in them?
Tell me about the discussion sessions, which you have in the placement areas.
Do you meet with other students while on placement to discuss case studies, various procedures and your personal experiences?
Are there areas in the practice settings (clinical tutorial/seminar rooms) for holding such discussions?

Who organises those sessions?

If you do not have that kind of arranged sessions can you tell me about any informal situations in which you meet with your peers to talk about your work and personal experiences during placements?

Tell me what your views are about such discussions as a way of learning?

A.3 **So far we have talked about various ways in which the self-directed learning approach is applied in your programme. Let's now think about the amount of self-directed work that you actually do and how you feel about that.**

On the whole how much of your learning in college would you say involves self-directed work?

Did you expect there to be as much self-directed work in the theory part of this programme?

Can you tell me how you personally feel about the amount of self-directed work that you have to do in college?

Describe to me how much opportunity you get to be self-directing when you are on practice placements, and how you feel about that.

What attributes/qualities, would you say, that a student needs in order to be able to cope with the demands of self-directed work?

Bearing in mind those qualities/attributes how would you describe yourself?

In a future professional education if you had the choice would you go for a programme with as much self-directed work or one with more or one with less - give me your reason?

We are now going to move on to talk about your patterns of learning but before that can you think of any other self-directed learning activities, which you do - in college but which we have not talked about, if so describe to me what that involves. What about other self-directed activities in practice placements, is there any specific one that we have not talked about?

PART - B

ITEMS RELATING TO THE LEARNING PATTERNS WHICH STUDENTS ADOPT IN THEIR SELF-DIRECTED ACTIVITIES

Once again we shall begin with your self-directed work in the college part (theoretical aspect) of your learning.

B.1 **Tell me a little about your study pattern.**

? Pr For example: Where do you normally prefer to study?

What resources and back-up materials do you tend to use?

Describe to me what exactly you do when you set about to study?

Tell me a bit more - how do you structure your studying?

While studying if you came across something which has not been taught in class, for example, the physiology of breathing which would help you to understand what is wrong with a particular patient, what action are you likely to take?

B.2 **There is another method, which many students use in their self-directed work. It involves an agreement between the student and the tutor/preceptor.**

Are you familiar with negotiated learning contracts? If so tell me what you think of that method.

In what ways do you use that method in your self-directed work in the college setting and during your practice placements?

How would you describe negotiated learning contract as a way of learning?

B.3 **Let's consider other learning experiences, which might involve self-directedness when you are on practice placements and the pattern of your learning in those situations.**

In terms of clinical conditions and procedures explain to me what was involved in your last practice placement. Was it your first experience to that area?

What type of experience will your next placement involve?

Would that be your first experience in that area?

What objectives and practical skills would you have to achieve in that particular area?

Usually before starting placement in a new clinical area you do have some idea of what patient care you would be helping to provide. You also have some idea of what clinical procedures/practical skills you would need to develop in that particular area.

Can you tell me what measures you normally take in a way of preparation before going to new placement areas?

Once there what actions do you usually take to help you in developing your practical skills?

At this stage of your education and training - taking account of the knowledge and experience that you have so far gained - what kind of practical procedures do you feel confident in carrying out without being asked or directly supervised?

Can you explain to me how those actions might involve self-directedness?

B.4 I am going to pose you a little dilemma which students often find themselves faced with. Please listen carefully then describe to me how you would react or behave in those situations.

Scenario

You find yourself in a situation where a particular procedure needs to be performed on a patient, perhaps relieve some discomfort or pain. You've been shown how to do that procedure but have never actually done it under supervision. If all the staff appear to be very busy and you strongly feel that the patient urgently needs to be attended to.

What actions are you likely to take?

How would you describe your decisions and actions?

I'd like to know how you feel about the following two situations. The first concerns organising your own learning and finding out about particular topics and clinical conditions on your own perhaps through the textbooks and other means. The second concerns developing specific clinical skills by yourself without any instructions or direct supervision from a tutor, preceptor or clinical mentor.

In your opinion how does being self-directed in theoretical learning compare with or differ from being self-directed in developing practical skills within the context of patient care in the practice settings?

B.5 Let's continue by talking about your course assessments. How these affect the way you learn and in what ways they involve self-directedness.

Describe to me the different means by which the theory part of your course is assessed?

Are there any assessments in this programme, which you do not regard as involving self-directed effort?

Can you tell me why you don't regard those assessments as involving self-directed effort?

In terms of the amount of work involved how would you describe the demand for submission of assignments on set dates during and at the end of semester?

Can you explain to me in what ways that affects the way you learn and how you feel about that?

**? Pr Tell me about the most recent self-directed assignment or essay that you submitted.
For example, what did that assignment involve?**

**? Pr To what extent are you usually involved in decisions about your course assignments?
For example, in determining what topic areas might be more beneficial for practical purposes, deciding what learning resources to use, and how much detail to cover.**

Taking account of those issues how would you sum up the amount of self-directedness involved in your course assessments?

B.6 Would you mind if I asked you about your performance in your assessments?

Which assessment(s) would you describe as your best piece of work?

What grade or mark did you get for that?

What was it about that assessment that helped you to excel yourself.

Which assessment(s) would you describe as your weakest and what was it about that assessment that caused you problems?

* What actions did you take to resolve the particular problem(s)?

Tell me how the activities involved in each of the following assessments affect the way you learn: essays, projects, written exams?

B.7 **Now let us talk about assessment of your progress during practice placements.**

? Pr Tell me, what is involved in assessment of your practical skills and levels of competence
For example, how are the assessments organised?

Who usually suggests that you meet at the appointed times?

Who controls the discussions and determines what levels of performance you have attained?
Using a typical example can you describe to me how the conclusions about your practical progress are arrived at?

Who has control in deciding what comments are written in your assessment document?

Tell me how you feel about the way your practical assessments are conducted?

B.8 **Another important aspect of self-directedness in learning is the ability of the student to assess his/her own progress.**

In what ways have you been assessing your own progress?

How confident are you in assessing your own work?

What are your views about having to assess your own learning and practical performance, and judging your own progress?

Usually learning a new skill or clinical procedure involves certain stages. First you are shown how to perform the particular procedure while somebody demonstrates it to you. You are then supervised in practising it until you are considered to be capable of doing it on your own with less and less direct supervision as you gain confidence. Eventually you are allowed to carry out that procedure without direct supervision.

When you carry out procedures on your own with or without direct supervision how do you judge your performance?

? Pr For example, do you judge by referring to any set criteria?
do you compare your performance to that of other people - if so who?
or do you rely on feedback from other people if so whose comments mean more to you and why?

B.9 **Let's turn to another dimension of assessment. It involves being assessed by other members of your own class - Peer assessment. This is also regarded as an important aspect of personal development which is useful when a group of students engage in self-directed learning activities.**

Suppose you were given the opportunity to assess other members of your class in, for example, their seminar presentations or specific aspects of patient care, what would be your reaction?

Tell me your reasons.

How would you feel about being asked to work with a junior student, show him/her the basic skills, supervise him/her, assess the level of performance and determine how he/she copes with the patient care situation. Tell me how you would react to that.

Now tell me what your views are about students having to assess each other's work either in class or in clinical practice.

PART - C

ITEMS RELATING TO STUDENT'S EXPERIENCES OF THE FACILITATION AND SUPERVISION PROVIDED THEM IN THEIR SELF-DIRECTED ACTIVITIES

C.1 **Let us now focus on the supervision, which you receive with regard to your self-directedness in your theoretical learning within the college setting.**

? Pr Describe to me how student supervision is organised in this college.
For example, apart from your class tutor do you have an identified personal tutor or supervisor?

Tell me what you expect from him/her?
Now tell me - exactly what role your personal tutor/ supervisor, plays in helping you become more resourceful and self-directing?

? Pr For example, when preparing an assignment, an essay or course project what kind of help do you tend to seek from your personal tutor?

How would you describe the kind of support, which you receive from him/her, in other words in what ways do you feel that you are encouraged to be resourceful, self-reliant and self-directing?

C.2 **If you required help with an essay or course project and you approached your personal tutor/supervisor about it - describe to me what that interaction might involve.**

? Pr For example – do you have specific days and times when you meet or do you have a flexible open door system where you call in whenever you need to discuss something?

Who, would you say, takes the lead/control when you meet?

C.3 **Usually when two people work together on a regular basis a relationship develops between them as they get to know each other.**

Do you think your personal tutor/supervisor knows you well enough to be able to give you the help and support you require in your self-directed work?

During practice placements how regularly does your personal tutor visit you?

Tell me about those visits – for example how does he/she go about helping you to relate the theory to the realities of practice situations?

What personal attributes, do you think, are essential for supporting and supervising students in their self-directed work?

Which of those personal qualities, would you say, best describes your personal tutor?

Tell me about any problems, which you have ever had with the supervision relationship.

On hindsight is there any way that you think things could have been different?

On a more personal basis – if you had a specific personal problem, which you felt might be affecting your studies and performance, tell me whom you would discuss it with and what your reasons are?

If you were to approach your personal tutor about specific personal problems, what kind of support, do you think he/she might provide in such situations?

C.4 **We shall now move on and talk about the supervision and support provided by your preceptors/mentors:**

Describe to me your day -to -day interactions with your preceptors/mentors.

? Pr For example, what measures do they take in encouraging you to take the initiative and become resourceful and independent in developing your practical skills?

How do they go about helping you to gain professional self-confidence?

If you required help in developing a particular skill and you approached your preceptor/mentor How would that situation usually be handled?

Apart from the day-to-day interactions do you also have arranged meetings with your preceptors/mentors to discuss specific issues, if so could you describe to me what a typical meeting like that might involve?

In those day-to-day situations and arranged meetings - tell me about the times when your preceptors/mentors allowed you to take control over decisions about your own learning process.

? Pr For example, in determining what you wanted to learn,
setting your own goals,
planning and carrying out the learning,
evaluating the quality of your work and learning,
reviewing your overall progress.

How well, would you say, that your preceptors/mentors get to know you in order to be able to give you the support and assistance, which you require in developing your skills?

Tell me about any problems that you may have had before with the supervision and support which are provided by your preceptors/mentors.

On reflection how do you think things could have been different?

What qualities and personal attributes do you think are essential for supervising and supporting students as they develop their practical skills and professional competence?

Which of those qualities, would you say, best describes your most effective preceptor(s)/mentor(s)?

PART - D

ITEMS RELATING TO STUDENT PERCEPTIONS OF THE INFLUENCE OF EXTERNAL CONTROL AND INSTITUTIONAL FACTORS ON THEIR SELF-DIRECTEDNESS IN LEARNING

The final part of this interview concerns the decision-makers of your education and training and how you think they influence the way in which the programme is organised, the amount of theoretical and practical Components involved, and the resources provided to facilitate the learning process.

D.1 **We shall begin with how you see the overall control and authority in nursing/midwifery education and how they influence your attitude to the self-directed work that you have to do.**

With regard to the content of your programme who do you think determines what theoretical knowledge and practical skills must be acquired in order to qualify as a nurse or midwife?

Does the idea that a specific professional Body has ultimate control over your education influence the way you feel and respond to the amount self-directed work that you have to do?

D.2 **In relation to selection of the teaching/learning methods applied in this programme:**

As far as you are aware who determines what teaching and learning methods are used for particular topics in the theoretical setting and what techniques are used in helping students learn the practical procedures?

In your opinion how varied and motivating are the methods used in the teaching learning activities?

Are students involved in decisions about which methods are used for particular topics?

How do you feel about the way in which decisions are made regarding the choice of teaching/learning methods?

Does that influence your attitude to the amount of self-directed work involved?

On reflection who, would you say has ultimate control over your learning process?

D.3 **Let's talk about the learning resources available to you in this college. We shall begin with the library.**

Describe to me what facilities in the library you consider to encourage self-directedness in learning and what facilities you consider as a hindrance to self-directedness in learning?

? Pr Is there anything else? For example, how do you find the atmosphere in the library?

What are your views about the opening hours?

D.4 **Just to finish off, tell me about other additional learning resources provided in this college and how you think they affect student self-directedness in learning.**

? Pr For example, how would you describe the computer lab facilities?

Are there study/discussion rooms available which students can independently use in their self-directed activities?

How accessible are these and how conducive, would you say, they are for self-directed work?

* *Thank you - - you have been very helpful indeed.*

* *Is there any other relevant issues that you feel could have been included in this study but has not been addressed?*

APPENDIX 7ii

**INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF TEACHERS
FINAL VERSION**

PART A

ITEMS RELATING TO THE TEACHERS' CONCEPTUALISATIONS OF
SELF-DIRECTEDNESS IN LEARNING, THEIR EXPERIENCES AND VIEWS OF ITS APPLICATION AND
EFFECTIVENESS WITHIN NURSING/MIDWIFERY EDUCATION

- A. 1 Self-directedness in learning has been interpreted in various ways within adult education. In nursing/midwifery education the interpretations might be based on previous personal experiences as self-directed learners or as supervisors of students engaged in self-directed learning.**
1. 1 Could you tell me what your interpretation of self-directedness in learning is?
- Is this based on your personal experience as a self-directed learner or on your experience of supervising students in their self-directed activities?
1. 2 Did you ever receive any formal preparation, specifically relating to the principles and techniques of this educational concept to enable you to facilitate and supervise student self-directedness?
- ? Pr To what extent would you say that you were adequately prepared to cope with the demands of organising, facilitating and supervising student self-directedness in learning?
1. 3 Could you express to me your experience and personal view about that preparatory programme or lack of it?
- A. 2 Now I would like us to focus briefly on the specific programme in which you are currently involved.**
2. 1 In your experience with the students on this programme, would you say that the new recruits are generally ready and able to cope with the demands of self-directedness in learning?
2. 2 What attributes, would you say that a student requires in order to be able to function effectively as a self-directed learner?
2. 3 How do you usually convey to new students that they are expected to achieve some amount of their learning through their own self-directed efforts?
2. 4 On reflection how would you describe students' reactions and response to this expectation?
2. 5 What measures are in place within this institution for identifying new students who have not developed the capability for self-directedness in learning, or who simply resent functioning in that capacity?
2. 6 Once identified what measures are taken to prepare them before they embark on self-directed work?
2. 7 **I would now like to know how the students behave once they actually begin to engage in self-directed work. I'd also like to know your personal view and what you have observed in the student's behaviours in each learning context.**
- In your opinion how does self-directedness in the theoretical context within the college setting compare with self-directedness in the practical context of client care within the clinical settings?
2. 8 From your experience how would you describe the students' attitudes and self-directed behaviours when they are in the college setting and when they go on practice placements?
2. 9 What student actions and behaviours would you consider as demonstrating self-directedness in the theoretical aspect of their learning, and how do these compare with the actions and behaviours which they tend to demonstrate in the clinical settings?
2. 10 I notice that there are periods in the time-table when no specific sessions have been programmed. Could you tell me what you usually suggest to new students with regard to the purpose of those periods and what response and behaviours you have actually observed?

PART B

ITEMS RELATING TO THE TEACHERS' EXPERIENCES AND VIEWS ABOUT THE IMPLEMENTATION OF DIFFERENT SELF-DIRECTED LEARNING METHODS AND THEIR OBSERVATIONS OF STUDENTS' REACTIONS TO THEM

- B.1** In this section of the interview I would like us to focus on the different self-directed learning methods, your views about each and your observation of how the students react to each of them.
- 1.1 Shall we begin with group activities? -Tell me about the different learning situations in which you encourage use of group interactions, how it is organised and how the students respond to this method of learning.
- 1.2 In what ways do you perceive group interactions to encourage self-directedness in learning?
? Pr For example, what are your views about group work as a way of self-directedness and as a way of learning?
- 1.3 What about seminar presentations – to what extent do you facilitate student self-directedness through use of this method and how do they usually react to the idea of having to prepare and present seminars?

What are your views about seminar presentations as a way of self-directedness and as a way of learning?
- 1.4 Now please tell me the extent to which you encourage use of negotiated learning contracts, what is involved and the students' reactions to that way of learning.

What are your personal views about learning contracts as a way of self-directedness and as a way of learning?
- 1.5 **Thinking about the notion of student involvement in decisions about their own learning process –**

Do you normally involve students in determining which learning methods are used in particular sessions?

Let's reflect for a moment on the curricular content and your role, perhaps, as programme tutor or module tutor

Explain to me what other ways you normally involve the students in decisions about their own learning process?

How do the students generally respond when they are offered the opportunity to make decisions about their own learning process?
- B.2** **Having discussed the different modes of application let's now move on and talk about the assessment strategies used in this programme and the amount of self-directedness involved.**
- 2.1 What proportion of the overall assessment of this programme, would you say, involves students' self-directed efforts?
- 2.2 What impact do you think the amount of self-directed assignments have on the students' workload and how do they respond in relation to the workload?
? Pr In other words what impact does the assessment workload have on the students' self-directed learning behaviours?
- 2.3 Are there any assessments in this programme, which you do not consider to involve students' self-directed efforts?
Please explain your views to me.
- 2.4 How would you describe the trend of student performance in those assessments which do not involve self-directed efforts as compared with the trend of performance in the assignments which require them to make personal decisions, use their own resourcefulness and self-reliance in preparing and submitting the work?
- 2.5 **I would now like to find out your views about the practical assessments.**

In what ways does the system used in assessing the students' practical competencies encourage resourcefulness and independence in their skills acquisition?

? Pr For example, do you think that the structure and content of the practical objective books encourage self-directedness with students taking initiative in their practical skills development? What is your personal opinion on this?
- 2.6 Still on the structure and content of the practical assessment documents – How would you describe the degree of accuracy in the way in which the levels of competence are interpreted by different assessors?
- 2.7 **On the issue of self and peer assessments –**

What are your views about students assessing their own performance in the theoretical and practical learning situations?
- 2.8 In what specific situations do you normally encourage them to assess their own performance, and how do they usually respond to the idea of self-assessment?

PART C

ITEMS RELATING TO THE TEACHERS' EXPERIENCES AND VIEWS ABOUT SUPERVISING STUDENTS IN THEIR SELF-DIRECTED LEARNING ACTIVITIES

- C. 1** We shall now talk about your facilitative and supervisory roles within the context of student self-directedness in learning.
1. 1 Could you explain to me what you actually do in facilitating students' self-directedness in learning?
- ? Pr What I am interested in is your interpretation of the facilitative role and what practices you tend to employ.
1. 2 What, do you think the students expect of you in your supervisory capacity?
- C. 2** I am interested to know the nature of the relationship, which tends to develop in your interactions with your personal tutees or supervisees.
2. 1 Please explain to me the system of allocation of students as supervisees to the teachers and what your views are about that.
2. 2 Generally how regularly do you meet with each tutee or supervisee when they are in college?
2. 3 What about when they go on practice placements, how regularly do you visit each student?
2. 4 Please tell more about your pattern of interactions with them.
- ? Pr For example, what sort of consultation system do you have with your supervisees?
- Do you encourage an open door system or do you particularly maintain an appointment system?
- What circumstances tend to lead to an arranged meeting?
- Who normally initiates such meetings?
- Please describe the pattern of interaction to me. For example, when you do meet who normally takes the lead and controls the discussions and how are decisions reached at conclusion of those meetings?
2. 4 How well, would you, say that you normally get to know each of your supervisees on individual basis?
- Tell me how that influences your ability to provide them with the kind of support and assistance, which each individual requires.
2. 5 In your experience how do the students generally respond to having a personal tutor/supervisor?
- To what extent do they take advantage of your role and expertise by consulting you to seek guidance when they are engaged in self-directed learning activities?
- Do students normally approach you about personal matters that are not directly related to their education and training? Tell me how you personally feel about that?
- C. 3** There are various opinions about how demanding the practice of combined approach is, in comparison with the previous unilateral, didactic approach. By combined approach I mean implementation of the traditional pedagogic approach alongside the liberal humanistic approach of student self-directedness in a single educational system.
3. 1 In terms of workload and demand, how would you describe the effect that the combined approach has on your performance of the roles of facilitator and supervisor of students' self-directedness?
- Tell me your experience and personal feelings with regard to the impact of these demands on you. How do you cope with these, taking account of your teaching remits, administrative commitments and your personal academic activities?

PART D

TEACHERS' PERCEPTIONS OF THE INFLUENCE OF STATUTORY/LEGISLATIVE CONTROL, THE IMPACT OF INSTITUTIONAL REGULATIONS AND THE RESOURCE PROVISIONS ON THE IMPLEMENTATION OF SELF-DIRECTEDNESS IN LEARNING

- D. 1** To finish off I would like to find out your opinion about how conducive to student self-directedness are the institutional facilities and the resources provided.
1. 1 What are your views about the resources provided in this college as encouraging or hindering student self-directedness in learning?
- ? Pr For example how would you describe the library provisions, the atmosphere and the opening hours?
- How effective are these in stimulating and promoting self-reliance and resourcefulness in self-directed learning?
1. 2 Please explain to me the kind of orientation programme provided for new students regarding the library facilities and database systems.
- In your opinion how beneficial is that orientation programme in helping new students to use the different facilities available to them?
1. 3 What are your views about the other resource provisions? For example, the computer lab facilities, study/discussion rooms?
- To what extent do the students use these in their self-directed learning activities?
- D. 2** The recent re-emergence of practical skills laboratories has aroused considerable interest.
2. 1 What are your views about the re-establishment of practical skills laboratories aside from the actualities of patient/client care settings?
- ? Pr What would you say are the advantages and disadvantages of having those facilities in nursing/midwifery education?
- D. 3** My last set of questions concerns an ethical conflict for both teachers and preceptors and it relates to the influence of statutory/legislative regulations as well as institutional policies on student self-directedness in learning.
3. 1 In what ways do the statutory and organisational control and the institutional policies affect the ways in which you facilitate student self-directedness?
- ? Pr What impact do these have on the amount of freedom, which you feel you, can allow students in their self-directedness?
- In what ways do the statutory control and institutional regulations influence your style of student supervision?

** Thank you for your participation.*

** Are there any other issues relating to student self-directedness in learning, which you feel, is missing from this study?*

APPENDIX 7.iii

INTERVIEW SCHEDULE FOR THE SUBJECT GROUP OF PRECEPTORS
FINAL VERSION

PART A

ITEMS RELATING TO THE PRECEPTORS CONCEPTUALISATIONS OF SELF-DIRECTEDNESS IN LEARNING. THEIR VIEWS AND PERSONAL EXPERIENCES OF STUDENTS' SELF-DIRECTED BEHAVIOURS WITHIN THE PRACTICAL CONTEXT OF PATIENT/CLIENT CARE

- A. 1 Interpretations of self-directedness in learning are varied. Interestingly they may be based on individuals' personal experiences as self-directed learners or as supervisors of students engaged in self-directed learning.**
1. 1 Could you explain to me what your interpretation of self-directedness in learning is?
- Have you ever studied as a self-directed learner or is your interpretation based on your involvement with the students?
1. 2 Did you receive any formal preparation for facilitating and supervising students' self-directedness in learning?
- ? Pr For example, to what extent did the preceptorship or mentorship course prepare you for supervising students in self-directed learning activities when they are on practice placements?
- A. 2 I'd like to know your personal view and experience regarding the capabilities of students for self-directedness within the practice settings.**
2. 1 What attributes would you say that students require in order to be able to function effectively in the self-directed capacity?
2. 2 What student actions and behaviours would you consider to demonstrate self-directedness in their practical skills development?
2. 3 At what stage do you usually consider a student as being ready and able to function in this area of practice without direct supervision and guidance?
2. 4 In your opinion how does student self-directedness within the practical context of patient care compare with or differ from self-directedness within the theoretical context in the college setting?

PART B

ITEMS RELATING TO THE PRECEPTORS' VIEWS ABOUT THE APPLICATION OF DIFFERENT SELF-DIRECTED LEARNING METHODS. THEIR EXPERIENCES OF HOW THE STUDENTS' RESPOND TO THESE

- B. 1 Let's talk about your experience of how the students respond to some of the self-directed learning methods which you may have encouraged them to use in your facilitative role.**
1. 1 In terms of advantages and disadvantages what are your views about group activities as a way of learning?
- ? Pr In what ways might this method encourage the students to take the initiative and independently learn aspects of patient and client care provision?
1. 2 In what situations are you likely to encourage group reflection while the students are here on practice placements?
1. 3 How do students generally respond to the various opportunities available to them to engage in group reflective learning?
1. 4 **Let's turn to another method employed in self-directed learning.**
- Tell me your views about the use of negotiated learning contracts as a way of encouraging students to be self-directed in their learning?
- In your opinion what quality of learning might students gain from using this method?
1. 5 To what extent and in what situations might students choose this method as a means of acquiring some of their practical competencies?

- B. 2** Now let's consider the assessment strategy designed for monitoring students' performance during their practice placements.
2. 1 In what ways, do you think, that the method of assessing the students' practical competencies realistically encourages them to become increasingly self-directed in their learning?
- ? Pr For example, do you find that having those practical objective books encourages them to take the initiative and independently develop some of their practical skills?
- How feasible is it for students to rely on their object books as a guide to independently attaining their levels of competence?
2. 2 To what extent is the structure and content of the assessment document easy to interpret in the same way by different members of the qualified staff?
- ? Pr What further modification do you think might enhance the reliability of that tool in assessing students' practical performance?
2. 3 What is your opinion about a student having to assess his/her own performance?
- ? Pr How objectively and accurately do you find the students to judge their own performance and personal progress?
- In what ways might students benefit from assessing their own performance?
2. 4 In your experience how do students generally respond to assessing and documenting their own performance and progress?

PART C

ITEMS RELATING TO THE PRECEPTORS' EXPERIENCES AND VIEWS ABOUT STUDENT SUPERVISION IN THE PRACTICAL SETTINGS.

- C. 1** Lets continue by focusing on your different roles of preceptor, practitioner and role model for the students in their practical skills development.
1. 1 Could you explain to me how you use those roles in your day-day interactions with the students?
- ? Pr For example, what exactly does your preceptor's role involve?
- In what ways are you a role model for the students?
1. 2 In your experience how do the students generally respond to you as preceptor/mentor?
- ? Pr To what extent do they take advantage of your expertise in seeking your guidance to develop their skills, or your help in relating theory to practice?
- What exactly do the students expect from you as preceptor?
- C. 2** I am interested to know about your style of supervision of the students, the kind of preceptor - student relationships which tend to develop, and the ways in which they affect the students' self-directed behaviours.
2. 1 In your day-to-day interactions with the students what measures do you normally take to help them increasingly, to take the initiative and become self-directed in their practical skills development?
2. 2 As the students progress what kinds of decisions do you tend to encourage them to make about their own learning process?
- ? Pr For example, explain to me exactly what decisions they have to make for themselves in relation to achieving their practical objectives?
2. 3 Generally how do they respond when offered the opportunity to make decisions about their own learning process?
- ? Pr For example, identifying what practical procedures they need to develop, Planning and implementing the learning and judging their own performance.
2. 4 Apart from your day-to-day interactions with the students tell me about other arranged meetings that you have with each individual and what is usually involved in those meetings.
- ? Pr For example, who usually initiates the meeting?
 what particular issues do you normally reserve for arranged meetings?
 who takes the lead and controls the discussions and how are decisions reached at conclusion of those meetings?

2. 5 Tell me a little about the relationships that tend to develop between you and your supervisees.
- ? Pr For example, how well would you say that you normally get to know each of supervisees in order to be able to provide them the kind of support and guidance which they might require?
2. 6 In terms of workload how would you describe your role of supervising the students?
- ? Pr In what ways do the demands of student supervision affect the way in which you perform your other commitments such as charge nurse, midwife or ward manager?

PART D

ITEMS RELATING TO THE PRECEPTORS' PERCEPTIONS OF THE STATUTORY AND INSTITUTIONAL INFLUENCES, THE IMPACT ON THEIR FACILITATIVE AND SUPERVISION PRACTICES AND THE DEGREE OF FREEDOM WHICH THEY ALLOW THE STUDENTS TO BE SELF-DIRECTED IN THE PRACTICAL SETTINGS

- D. 1 In this final part of the interview we shall briefly consider the ways in which Statutory and Institutional regulations affect your supervision styles.**
1. 1 In what ways do the statutory/professional organisational policies and institutional regulations affect the amount of freedom, which you allow students to be self-directed within the context of care provision?
1. 2 In your opinion to what extent are the practical settings appropriate for student self-directedness?
- ? Pr What resources and facilities within the practice settings encourage the students to be self-reliant and resourceful in their skills development?
1. 3 In relation to time, team allocations, client care procedures and staffing systems, what opportunities do you feel exist for students to enable them to take the initiative in developing the appropriate skills?
1. 4 Tell me what is involved in the orientation programme, which you normally provide for new students to this area of practice.
1. 5 Generally how do the students respond to that introductory programme?
- ? Pr In other words, having been shown the geographical layout and the available resources for patient care and for learning, how have you observed them to behave?
- In what ways do students take advantage of the facilities and learning opportunities available to them in developing their professional skills and levels of competence.
- D. 2 I am also interested to know what factors, you think, create constraints for the students in their self-directedness within the practice settings.**
2. 1 What factors do you consider to create a hindrance to students' in being self-reliant and resourceful in acquiring their skills?
- D. 3 In recent years the use of practical skills laboratories for demonstrations and development of nursing skills has evolved again.**
3. 1 In terms of advantages and disadvantages, and taking account of self-directedness in learning, what are your views about the skills laboratories as an environment for demonstrating and learning new and unfamiliar skills prior to being exposed to the realities of patient/client care provision?

** Thank you for your participation.*

** Are there any other issues relating to student self-directedness in learning which you feel has been missed from this study?*

APPENDICES 8.i - 8.iv

TABLES OF STATISTICAL RESULTS

APPENDIX 8.i

The Eigenvalues of the Principal Components

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 10.949 | 19.552 | 19.552 | 10.949 | 19.552 | 19.552 | 3.169 | 5.659 | 5.659 |
| 2 | 3.383 | 6.041 | 25.592 | 3.383 | 6.041 | 25.592 | 2.930 | 5.233 | 10.892 |
| 3 | 2.519 | 4.499 | 30.091 | 2.519 | 4.499 | 30.091 | 2.873 | 5.130 | 16.022 |
| 4 | 2.480 | 4.428 | 34.519 | 2.480 | 4.428 | 34.519 | 2.864 | 5.114 | 21.136 |
| 5 | 2.024 | 3.615 | 38.133 | 2.024 | 3.615 | 38.133 | 2.823 | 5.041 | 26.177 |
| 6 | 1.847 | 3.298 | 41.432 | 1.847 | 3.298 | 41.432 | 2.755 | 4.919 | 31.096 |
| 7 | 1.733 | 3.094 | 44.526 | 1.733 | 3.094 | 44.526 | 2.597 | 4.637 | 35.733 |
| 8 | 1.645 | 2.938 | 47.464 | 1.645 | 2.938 | 47.464 | 2.325 | 4.152 | 39.885 |
| 9 | 1.548 | 2.765 | 50.229 | 1.548 | 2.765 | 50.229 | 2.000 | 3.571 | 43.456 |
| 10 | 1.500 | 2.678 | 52.907 | 1.500 | 2.678 | 52.907 | 1.947 | 3.477 | 46.933 |
| 11 | 1.421 | 2.538 | 55.446 | 1.421 | 2.538 | 55.446 | 1.851 | 3.305 | 50.238 |
| 12 | 1.328 | 2.372 | 57.817 | 1.328 | 2.372 | 57.817 | 1.782 | 3.183 | 53.420 |
| 13 | 1.312 | 2.343 | 60.160 | 1.312 | 2.343 | 60.160 | 1.700 | 3.036 | 56.456 |
| 14 | 1.244 | 2.222 | 62.383 | 1.244 | 2.222 | 62.383 | 1.618 | 2.889 | 59.345 |
| 15 | 1.137 | 2.031 | 64.413 | 1.137 | 2.031 | 64.413 | 1.593 | 2.845 | 62.190 |
| 16 | 1.094 | 1.954 | 66.367 | 1.094 | 1.954 | 66.367 | 1.489 | 2.659 | 64.849 |
| 17 | 1.036 | 1.851 | 68.218 | 1.036 | 1.851 | 68.218 | 1.450 | 2.590 | 67.439 |
| 18 | 1.005 | 1.794 | 70.012 | 1.005 | 1.794 | 70.012 | 1.441 | 2.573 | 70.012 |
| 19 | .964 | 1.722 | 71.734 | | | | | | |
| 20 | .928 | 1.658 | 73.392 | | | | | | |
| 21 | .888 | 1.586 | 74.978 | | | | | | |
| 22 | .821 | 1.466 | 76.445 | | | | | | |
| 23 | .781 | 1.394 | 77.839 | | | | | | |
| 24 | .773 | 1.381 | 79.220 | | | | | | |
| 25 | .737 | 1.316 | 80.536 | | | | | | |
| 26 | .695 | 1.241 | 81.776 | | | | | | |
| 27 | .680 | 1.214 | 82.990 | | | | | | |
| 28 | .650 | 1.160 | 84.150 | | | | | | |
| 29 | .622 | 1.110 | 85.260 | | | | | | |
| 30 | .586 | 1.046 | 86.306 | | | | | | |
| 31 | .549 | .981 | 87.287 | | | | | | |
| 32 | .534 | .954 | 88.241 | | | | | | |
| 33 | .474 | .847 | 89.088 | | | | | | |
| 34 | .447 | .798 | 89.886 | | | | | | |
| 35 | .441 | .788 | 90.674 | | | | | | |
| 36 | .433 | .773 | 91.448 | | | | | | |
| 37 | .391 | .698 | 92.146 | | | | | | |
| 38 | .378 | .675 | 92.821 | | | | | | |
| 39 | .373 | .666 | 93.487 | | | | | | |
| 40 | .367 | .655 | 94.142 | | | | | | |
| 41 | .331 | .591 | 94.733 | | | | | | |
| 42 | .299 | .534 | 95.267 | | | | | | |
| 43 | .283 | .505 | 95.772 | | | | | | |
| 44 | .282 | .504 | 96.276 | | | | | | |
| 45 | .254 | .454 | 96.730 | | | | | | |
| 46 | .241 | .430 | 97.160 | | | | | | |
| 47 | .226 | .404 | 97.564 | | | | | | |
| 48 | .209 | .374 | 97.937 | | | | | | |
| 49 | .201 | .359 | 98.296 | | | | | | |
| 50 | .182 | .325 | 98.621 | | | | | | |
| 51 | .167 | .298 | 98.919 | | | | | | |
| 52 | .161 | .288 | 99.207 | | | | | | |
| 53 | .136 | .242 | 99.450 | | | | | | |
| 54 | .127 | .226 | 99.676 | | | | | | |
| 55 | .102 | .183 | 99.859 | | | | | | |
| 56 | 7.905E-02 | .141 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

APPENDIX 8.ii

Students' Factor Scores

The Undergraduate Group

| Student Group | Age | Factor 1 Scores | Factor 2 Scores | Factor 3 Scores | Factor 4 Scores |
|---------------|---------|-----------------|-----------------|-----------------|-----------------|
| 1.00 | 21-25 | -.78 | .13 | -1.45 | .44 |
| 1.00 | 26-30 | -2.16 | .62 | -2.07 | .28 |
| 1.00 | 21-25 | .00 | -.72 | -.48 | -.46 |
| 1.00 | 17-20 | -.21 | .41 | -.80 | -.08 |
| 1.00 | 21-25 | -.15 | .31 | -1.16 | -.91 |
| 1.00 | 21-25 | .73 | -.45 | -1.31 | .46 |
| 1.00 | 21-25 | -.07 | 1.36 | -.88 | 1.24 |
| 1.00 | 21-25 | -1.06 | -1.12 | .17 | .47 |
| 1.00 | 21-25 | -2.05 | -.20 | .61 | 1.00 |
| 1.00 | 21-25 | -.38 | -.78 | -.16 | -.38 |
| 1.00 | 17-20 | .69 | 1.60 | -1.14 | -.67 |
| 1.00 | 17-20 | -2.15 | .97 | -1.28 | -.96 |
| 1.00 | 21-25 | -.55 | .55 | -.76 | -.63 |
| 1.00 | 21-25 | -.41 | -1.30 | .44 | .15 |
| 1.00 | 17-20 | .14 | 1.23 | -.82 | -1.37 |
| 1.00 | 26-30 | .72 | 2.06 | -.15 | -2.60 |
| 1.00 | 21-25 | -.19 | .34 | -1.35 | 1.38 |
| 1.00 | 21-25 | .58 | .01 | -2.00 | -.81 |
| 1.00 | Over 35 | 1.55 | -.58 | -1.57 | -2.54 |
| 1.00 | 21-25 | 1.14 | -2.49 | -.52 | -1.82 |
| 1.00 | 17-20 | -.60 | 1.32 | -1.18 | .25 |
| 1.00 | 17-20 | .38 | .22 | .12 | .35 |
| 1.00 | 21-25 | -.92 | .31 | -.64 | -.18 |
| 1.00 | 17-20 | .73 | -.37 | -.33 | .32 |
| 1.00 | 17-20 | .07 | 1.28 | -1.46 | -.07 |
| 1.00 | 21-25 | .77 | .13 | .04 | .77 |
| 1.00 | 21-25 | 1.16 | .84 | .00 | .14 |
| 1.00 | 21-25 | -.16 | .07 | -.17 | 1.14 |
| 1.00 | 21-25 | -.31 | 1.07 | -.68 | 1.60 |
| 1.00 | 21-25 | .36 | .27 | -.58 | -.27 |
| 1.00 | 21-25 | .35 | .45 | .25 | -.20 |
| 1.00 | 17-20 | .18 | .20 | -1.02 | -.09 |
| 1.00 | 21-25 | 1.81 | 1.59 | -.02 | .97 |
| 1.00 | 21-25 | -.24 | 1.30 | 1.00 | .25 |
| 1.00 | Over 35 | -.23 | -.20 | -.49 | -.74 |
| 1.00 | 17-20 | -.04 | -.88 | 1.01 | -.57 |
| 1.00 | Over 35 | -.50 | -2.89 | .85 | .00 |
| 1.00 | 17-20 | 1.14 | .02 | 2.17 | .49 |
| 1.00 | 21-25 | -2.14 | 1.68 | -.25 | -.22 |
| 1.00 | 17-20 | -.50 | -1.28 | .49 | -.73 |
| 1.00 | 17-20 | -.21 | .45 | -.16 | -.98 |
| 1.00 | 17-20 | .40 | -.51 | -.64 | .31 |
| 1.00 | 21-25 | -.22 | -.36 | .78 | -1.64 |
| 1.00 | 26-30 | 2.12 | .45 | -.11 | 1.38 |
| 1.00 | 17-20 | -.11 | .02 | -.25 | -.20 |
| 1.00 | 17-20 | -1.48 | -.01 | .69 | .34 |
| 1.00 | 17-20 | .37 | .68 | .55 | -.97 |
| 1.00 | 17-20 | -1.80 | .83 | 1.58 | -.40 |
| 1.00 | 17-20 | -.78 | .74 | .16 | .86 |
| 1.00 | 17-20 | -.58 | -.76 | 1.76 | -.05 |
| 1.00 | 17-20 | -.89 | -.38 | 1.88 | .35 |
| 1.00 | 17-20 | .92 | -1.13 | 1.37 | -.21 |
| 1.00 | 17-20 | 1.39 | 1.19 | .90 | -1.01 |
| 1.00 | 17-20 | -.38 | -.08 | -.38 | .36 |
| 1.00 | 17-20 | -.66 | 1.32 | 1.32 | -.06 |

The Diploma Group

| Student Group | Age | Factor 1 Scores | Factor 2 Scores | Factor 3 Scores | Factor 4 Scores |
|---------------|---------|-----------------|-----------------|-----------------|-----------------|
| 2.00 | Over 35 | -.51 | -.18 | -.13 | -.90 |
| 2.00 | 17-20 | .13 | -2.29 | -.37 | .36 |
| 2.00 | 21-25 | -1.15 | 2.17 | 1.31 | 1.25 |
| 2.00 | Over 35 | .04 | -.26 | .20 | -.33 |
| 2.00 | 26-30 | -1.34 | .18 | -.17 | 1.62 |
| 2.00 | 26-30 | -.90 | -.75 | 1.95 | -.50 |
| 2.00 | 26-30 | -.28 | .26 | 1.54 | -1.97 |
| 2.00 | 17-20 | -.86 | .43 | -1.29 | -1.08 |
| 2.00 | 17-20 | .92 | .10 | -1.65 | .45 |
| 2.00 | 17-20 | -.86 | .02 | .73 | .01 |
| 2.00 | 21-25 | .24 | .19 | 1.18 | .43 |
| 2.00 | 31-35 | -.31 | -.55 | 1.67 | -1.18 |
| 2.00 | 21-25 | -.54 | .67 | -.15 | .23 |
| 2.00 | Over 35 | .41 | -1.14 | .84 | -.29 |
| 2.00 | 31-35 | .37 | .81 | 1.18 | -.31 |
| 2.00 | Over 35 | -.07 | -1.52 | .86 | .02 |
| 2.00 | 21-25 | -1.08 | 1.63 | -.41 | -.63 |
| 2.00 | 26-30 | 1.10 | 1.26 | 1.96 | -.19 |
| 2.00 | Over 35 | .79 | .38 | .96 | .52 |
| 2.00 | 21-25 | -2.35 | -.37 | .60 | -.03 |
| 2.00 | 17-20 | -.19 | .27 | .08 | 1.61 |
| 2.00 | 31-35 | .01 | 1.60 | .96 | -.48 |
| 2.00 | 17-20 | 2.18 | .20 | 1.13 | .01 |
| 2.00 | 17-20 | -.70 | -.39 | .21 | -.45 |
| 2.00 | 17-20 | -.73 | -1.17 | 2.55 | 5.39 |
| 2.00 | 31-35 | .64 | .90 | 1.38 | -.59 |
| 2.00 | 31-35 | .72 | .06 | .19 | .24 |
| 2.00 | 31-35 | .56 | .59 | .70 | -.11 |
| 2.00 | 31-35 | 1.10 | .18 | -.04 | .07 |
| 2.00 | 17-20 | -.63 | 1.21 | -.69 | .73 |
| 2.00 | Over 35 | -.71 | .66 | -.39 | -1.22 |
| 2.00 | 21-25 | 2.00 | .37 | 1.36 | -1.29 |
| 2.00 | 31-35 | 1.56 | 1.63 | -.37 | .47 |
| 2.00 | 17-20 | 1.03 | -.03 | 2.45 | -1.13 |
| 2.00 | 31-35 | -1.32 | -.82 | -.99 | -.32 |
| 2.00 | 31-35 | -1.53 | -.63 | .74 | .59 |
| 2.00 | Over 35 | .99 | -1.86 | .22 | -.90 |
| 2.00 | 26-30 | .89 | -2.14 | -1.35 | -.74 |
| 2.00 | 21-25 | -1.04 | -.54 | -1.01 | -.89 |
| 2.00 | 17-20 | -.77 | .10 | .65 | 1.47 |
| 2.00 | 21-25 | .07 | .92 | 1.42 | -.64 |
| 2.00 | 21-25 | -.17 | .98 | .10 | .59 |
| 2.00 | Over 35 | .47 | .95 | -.74 | .94 |
| 2.00 | 21-25 | -.95 | .39 | -.42 | -.07 |
| 2.00 | 17-20 | .95 | -.51 | -.41 | -.07 |
| 2.00 | 21-25 | 1.93 | 1.04 | -.61 | .73 |
| 2.00 | 26-30 | 1.55 | .68 | -.22 | -.01 |
| 2.00 | 21-25 | -.94 | -.99 | .50 | -.19 |
| 2.00 | 26-30 | 1.27 | -1.20 | -1.00 | 1.03 |
| 2.00 | 21-25 | .07 | -.69 | -.56 | -1.02 |
| 2.00 | Over 35 | .30 | -.09 | -.31 | .69 |
| 2.00 | 26-30 | -.55 | .10 | -1.51 | .19 |
| 2.00 | 26-30 | -.83 | -1.21 | .41 | -.46 |
| 2.00 | 17-20 | -.48 | -.44 | .19 | -.76 |
| 2.00 | 21-25 | -.46 | 1.99 | .67 | -1.51 |
| 2.00 | Over 35 | .77 | -.50 | -.68 | -.48 |
| 2.00 | 26-30 | 1.28 | -1.20 | -.61 | .26 |
| 2.00 | 31-35 | .63 | -.02 | -.50 | .86 |
| 2.00 | 21-25 | -.82 | -1.11 | -1.42 | 1.43 |
| 2.00 | Over 35 | -1.08 | -1.76 | -.01 | .09 |
| 2.00 | 26-30 | -.93 | -.27 | -2.25 | 1.58 |
| 2.00 | 21-25 | .72 | -1.17 | -.58 | 1.89 |

The Diploma Group (cont.)

| | | | | | |
|------|---------|-------|-------|-------|------|
| 2.00 | 26-30 | -1.44 | -1.41 | -.01 | -.84 |
| 2.00 | 21-25 | -.66 | .75 | .61 | -.51 |
| 2.00 | 21-25 | -1.11 | .11 | -.58 | -.36 |
| 2.00 | 26-30 | .37 | .20 | -1.61 | -.08 |
| 2.00 | 31-35 | 1.65 | -1.58 | -1.09 | .03 |
| 2.00 | Over 35 | -.57 | -1.53 | .25 | -.80 |
| 2.00 | 26-30 | -.44 | -2.05 | -1.19 | -.75 |
| 2.00 | Over 35 | .31 | -.42 | .80 | .05 |
| 2.00 | 31-35 | 1.98 | .75 | -.67 | 2.59 |
| 2.00 | 26-30 | .42 | -.14 | 1.10 | -.21 |
| 2.00 | 26-30 | 2.74 | -1.22 | -.05 | .78 |
| 2.00 | 21-25 | 1.00 | .05 | .07 | -.08 |
| 2.00 | 26-30 | .31 | -.19 | .47 | 1.67 |

APPENDIX 8.iii

SPSS Output of the Crosstabulation of the Items in each Factor

The crosstabulations show student groups represented in the vertical plane (the columns) whilst the variables of agreement are represented in the horizontal plane (the rows).

Crosstabulation output of the Items in Factor 1

I enjoy my independence and prefer to do things my own way. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|--------------------|-----------|------------|
| | | undergra duates | diploma | |
| I enjoy my independence and prefer to do things my own way. | Strongly disagree | 1 | 1 | 2 |
| | Disagree | 7 | 17 | 24 |
| | Not sure | 5 | 11 | 16 |
| | Agree | 33 | 36 | 69 |
| | Strongly agree | 9 | 10 | 19 |
| Total | | 55 | 75 | 130 |

I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|--------------------|-----------|------------|
| | | undergra duates | diploma | |
| I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. | Strongly disagree | 3 | 6 | 9 |
| | Disagree | 21 | 30 | 51 |
| | Not sure | 1 | 4 | 5 |
| | Agree | 25 | 25 | 50 |
| | Strongly agree | 5 | 10 | 15 |
| Total | | 55 | 75 | 130 |

I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and the database systems. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| I tend to rely on lecture notes and handouts because I find it boring and too tedious searching through the literature and the database systems. | Strongly disagree | 25 | 26 | 51 |
| | Disagree | 22 | 38 | 60 |
| | Not sure | | 1 | 1 |
| | Agree | 7 | 9 | 16 |
| | Strongly agree | 1 | 1 | 2 |
| Total | | 55 | 75 | 130 |

I think self-directed learning should be abolished because, like me, not everybody is organised and disciplined enough to cope with that way of learning. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| I think self-directed learning should be abolished because, like me, not everybody is organised and disciplined enough to cope with that way of learning. | Strongly disagree | 4 | 8 | 12 |
| | Disagree | 23 | 20 | 43 |
| | Not sure | 16 | 24 | 40 |
| | Agree | 12 | 21 | 33 |
| | Strongly agree | | 2 | 2 |
| Total | | 55 | 75 | 130 |

I don't feel confident enough to take control of my own learning process on this course. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| I don't feel confident enough to take control of my own learning process on this course. | Strongly disagree | 7 | 10 | 17 |
| | Disagree | 33 | 43 | 76 |
| | Not sure | 3 | 4 | 7 |
| | Agree | 11 | 16 | 27 |
| | Strongly agree | 1 | 2 | 3 |
| Total | | 55 | 75 | 130 |

am not very organised and I am not really good at setting and achieving targets. *
Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I am not very organised and I am not really good at setting and achieving targets. | Strongly disagree | 8 | 9 | 17 |
| | Disagree | 26 | 40 | 66 |
| | Not sure | 3 | 3 | 6 |
| | Agree | 14 | 22 | 36 |
| | Strongly agree | 4 | 1 | 5 |
| Total | | 55 | 75 | 130 |

**I don't really consider myself as a keen self-directed learner because I find it too
demanding and tend to put off studying or doing my assignments until the last
minute. * Student group Crosstabulation**

Count

| | | Student group | | Total |
|---|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I don't really consider myself as a keen self-directed learner because I find it too demanding and tend to put off studying or doing my assignments until the last minute. | Strongly disagree | 5 | 3 | 8 |
| | Disagree | 22 | 33 | 55 |
| | Not sure | 4 | 2 | 6 |
| | Agree | 16 | 30 | 46 |
| | Strongly agree | 8 | 7 | 15 |
| Total | | 55 | 75 | 130 |

Crosstabulation output of the Items in Factor 2

I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I prefer to be given clear guidelines about what to learn, how to go about it and how to relate it to practice. | Strongly disagree | 1 | 3 | 4 |
| | Disagree | 10 | 11 | 21 |
| | Not sure | 4 | 4 | 8 |
| | Agree | 32 | 39 | 71 |
| | Strongly agree | 8 | 18 | 26 |
| Total | | 55 | 75 | 130 |

I tend to rely on lecture notes and handouts because I find it boring and too tedious searching though the literature and the database systems. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I tend to rely on lecture notes and handouts because I find it boring and too tedious searching though the literature and the database systems. | Strongly disagree | 25 | 26 | 51 |
| | Disagree | 22 | 38 | 60 |
| | Not sure | | 1 | 1 |
| | Agree | 7 | 9 | 16 |
| | Strongly agree | 1 | 1 | 2 |
| Total | | 55 | 75 | 130 |

I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I think teachers should always retain control over the learning process, after all they know what knowledge and skills we have to gain for our qualifications. | Strongly disagree | 3 | 4 | 7 |
| | Disagree | 10 | 14 | 24 |
| | Not sure | 2 | | 2 |
| | Agree | 34 | 47 | 81 |
| | Strongly agree | 6 | 10 | 16 |
| Total | | 55 | 75 | 130 |

Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I'm doing and where I am going wrong. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| Guidelines and feedback are really important to me in my studies and so I always expect teachers to tell me how I'm doing and where I am going wrong. | Strongly disagree | 1 | 2 | 3 |
| | Disagree | 19 | 15 | 34 |
| | Not sure | 1 | 8 | 9 |
| | Agree | 24 | 40 | 64 |
| | Strongly agree | 10 | 10 | 20 |
| Total | | 55 | 75 | 130 |

In the wards I think it is safer to wait until you are asked to do things rather than acting on your own initiative. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| In the wards I think it is safer to wait until you are asked to do things rather than acting on your own initiative. | Strongly disagree | 1 | 3 | 4 |
| | Disagree | 22 | 23 | 45 |
| | Not sure | 2 | | 2 |
| | Agree | 27 | 41 | 68 |
| | Strongly agree | 3 | 8 | 11 |
| Total | | 55 | 75 | 130 |

I feel that teachers are ultimately responsible for whatever knowledge and skills students gain from their education. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I feel that teachers are ultimately responsible for whatever knowledge and skills students gain from their education. | Strongly disagree | 4 | 11 | 15 |
| | Disagree | 25 | 31 | 56 |
| | Not sure | 1 | 2 | 3 |
| | Agree | 23 | 23 | 46 |
| | Strongly agree | 2 | 8 | 10 |
| Total | | 55 | 75 | 130 |

As adult students I think we should be given more responsibility for our own learning. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| As adult students I think we should be given more responsibility for our own learning. | Strongly disagree | 1 | 4 | 5 |
| | Disagree | 12 | 20 | 32 |
| | Not sure | 6 | 6 | 12 |
| | Agree | 25 | 36 | 61 |
| | Strongly agree | 11 | 9 | 20 |
| Total | | 55 | 75 | 130 |

I am quite happy to let other people to do all the necessary planning and organising for me. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I am quite happy to let other people to do all the necessary planning and organising for me. | Strongly disagree | 5 | 12 | 17 |
| | Disagree | 30 | 33 | 63 |
| | Not sure | 5 | 10 | 15 |
| | Agree | 15 | 19 | 34 |
| | Strongly agree | | 1 | 1 |
| Total | | 55 | 75 | 130 |

Crosstabulation output of the Items in Factor 3

I learn a lot more when I have to find out things for myself, because I have the freedom to use various resources which is not the same in taught sessions. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I learn a lot more when I have to find out things for myself, because I have the freedom to use various resources which is not the same in taught sessions. | Strongly disagree | 3 | 2 | 5 |
| | Disagree | 19 | 29 | 48 |
| | Not sure | 4 | 1 | 5 |
| | Agree | 19 | 32 | 51 |
| | Strongly agree | 10 | 11 | 21 |
| Total | | 55 | 75 | 130 |

I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I don't like being left to go and do my own learning, I am never sure if I am on the right track or to what depth I have to learn something. | Strongly disagree | 3 | 6 | 9 |
| | Disagree | 21 | 30 | 51 |
| | Not sure | 1 | 4 | 5 |
| | Agree | 25 | 25 | 50 |
| | Strongly agree | 5 | 10 | 15 |
| Total | | 55 | 75 | 130 |

I don't like group work simply because when we're left on our own and there is no teacher there to control things, we tend to waste time floundering without learning anything concret * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I don't like group work simply because when we're left on our own and there is no teacher there to control things, we tend to waste time floundering without learning anything concret | Strongly disagree | 4 | 6 | 10 |
| | Disagree | 25 | 21 | 46 |
| | Not sure | | 3 | 3 |
| | Agree | 23 | 32 | 55 |
| | Strongly agree | 3 | 13 | 16 |
| Total | | 55 | 75 | 130 |

I enjoy learning through group work particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| I enjoy learning through group work particularly when we are left to explore and debate a topic by ourselves without direct guidance from the teacher. | Strongly disagree | 2 | 6 | 8 |
| | Disagree | 17 | 39 | 56 |
| | Not sure | 2 | 1 | 3 |
| | Agree | 30 | 24 | 54 |
| | Strongly agree | 4 | 5 | 9 |
| Total | | 55 | 75 | 130 |

Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to specific problems is quite good. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| Discovery and problem-based learning don't really bother me, I think the challenge of having to plan how we are going to explore and work out the solution to specific problems is quite good. | Strongly disagree | 1 | 5 | 6 |
| | Disagree | 16 | 31 | 47 |
| | Not sure | 3 | 3 | 6 |
| | Agree | 28 | 32 | 60 |
| | Strongly agree | 7 | 4 | 11 |
| Total | | 55 | 75 | 130 |

I am always trying my hands on new things, I find it really exciting when I manage to teach myself to do something. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|----------------|---------|-------|
| | | undergraduates | diploma | |
| I am always trying my hands on new things, I find it really exciting when I manage to teach myself to do something. | Strongly disagree | | 1 | 1 |
| | Disagree | 12 | 11 | 23 |
| | Not sure | 4 | 3 | 7 |
| | Agree | 29 | 46 | 75 |
| | Strongly agree | 10 | 14 | 24 |
| Total | | 55 | 75 | 130 |

Crosstabulation output of the Items in Factor 4

I tend to rely on lecture notes and handouts because I find it boring and too tedious searching though the literature and the database systems. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I tend to rely on lecture notes and handouts because I find it boring and too tedious searching though the literature and the database systems. | Strongly disagree | 25 | 26 | 51 |
| | Disagree | 22 | 38 | 60 |
| | Not sure | | 1 | 1 |
| | Agree | 7 | 9 | 16 |
| | Strongly agree | 1 | 1 | 2 |
| Total | | 55 | 75 | 130 |

I'm not in the habit of reading up on things before we get taught in class unless the teacher specifically asks us to read up on the particular topic before coming. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I'm not in the habit of reading up on things before we get taught in class unless the teacher specifically asks us to read up on the particular topic before coming. | Strongly disagree | 6 | 4 | 10 |
| | Disagree | 10 | 25 | 35 |
| | Not sure | 1 | 2 | 3 |
| | Agree | 33 | 38 | 71 |
| | Strongly agree | 5 | 6 | 11 |
| Total | | 55 | 75 | 130 |

I usually write down things that are new to me so that I can ask somebody later or look them up myself. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| I usually write down things that are new to me so that I can ask somebody later or look them up myself. | Strongly disagree | | 2 | 2 |
| | Disagree | 2 | 2 | 4 |
| | Not sure | | 1 | 1 |
| | Agree | 38 | 52 | 90 |
| | Strongly agree | 15 | 18 | 33 |
| Total | | 55 | 75 | 130 |

If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|----------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| If I am going to do something I like to make my own plans so that I know where I am going and what I am going to do. | Disagree | 5 | 4 | 9 |
| | Agree | 37 | 45 | 82 |
| | Strongly agree | 13 | 26 | 39 |
| | Total | 55 | 75 | 130 |

In self-directed learning I am in control and if there is something that I want to learn in greater depth then I can. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| In self-directed learning I am in control and if there is something that I want to learn in greater depth then I can. | Strongly disagree | 1 | | 1 |
| | Disagree | 6 | 15 | 21 |
| | Not sure | 1 | 2 | 3 |
| | Agree | 35 | 49 | 84 |
| | Strongly agree | 12 | 9 | 21 |
| Total | | 55 | 75 | 130 |

It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|---------|-------|
| | | undergr duates | diploma | |
| It is unusual for me to ask for more time for my coursework and essays, I know it is up to me to do the work, so I don't usually put things off. | Strongly disagree | 1 | 2 | 3 |
| | Disagree | 10 | 6 | 16 |
| | Agree | 28 | 50 | 78 |
| | Strongly agree | 16 | 17 | 33 |
| Total | | 55 | 75 | 130 |

I usually assess my own learning and progress, that way I know what help to ask for. * Student group Crosstabulation

Count

| | | Student group | | Total |
|--|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I usually assess my own learning and progress, that way I know what help to ask for. | Strongly disagree | 6 | 3 | 9 |
| | Disagree | 18 | 26 | 44 |
| | Agree | 28 | 39 | 67 |
| | Strongly agree | 3 | 7 | 10 |
| Total | | 55 | 75 | 130 |

I consider my work and my learning to be my own responsibility. * Student group Crosstabulation

Count

| | | Student group | | Total |
|---|-------------------|-------------------|-----------|------------|
| | | undergr duates | diploma | |
| I consider my work and my learning to be my own responsibility. | Strongly disagree | 2 | 2 | 4 |
| | Disagree | 12 | 15 | 27 |
| | Not sure | | 3 | 3 |
| | Agree | 29 | 44 | 73 |
| | Strongly agree | 12 | 11 | 23 |
| Total | | 55 | 75 | 130 |

ANOVA

factor 1

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 5.718 | 4 | 1.430 | 1.450 | .222 |
| Within Groups | 123.282 | 125 | .986 | | |
| Total | 129.000 | 129 | | | |

Multiple Comparisons

Dependent Variable: factor 1

LSD

| (I) age | (J) age | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---------|---------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 17-20 | 21-25 | 7.998E-02 | .2211 | .718 | -.3576 | .5176 |
| | 26-30 | -.3007 | .2743 | .275 | -.8436 | .2423 |
| | 31-35 | -.5707 | .3191 | .076 | -1.2022 | 6.083E-02 |
| | Over 35 | -.2282 | .2960 | .442 | -.8140 | .3575 |
| 21-25 | 17-20 | -7.998E-02 | .2211 | .718 | -.5176 | .3576 |
| | 26-30 | -.3807 | .2688 | .159 | -.9126 | .1513 |
| | 31-35 | -.6507* | .3143 | .041 | -1.2728 | -2.86E-02 |
| | Over 35 | -.3082 | .2908 | .291 | -.8838 | .2674 |
| 26-30 | 17-20 | .3007 | .2743 | .275 | -.2423 | .8436 |
| | 21-25 | .3807 | .2688 | .159 | -.1513 | .9126 |
| | 31-35 | -.2700 | .3538 | .447 | -.9702 | .4302 |
| | Over 35 | 7.245E-02 | .3331 | .828 | -.5868 | .7317 |
| 31-35 | 17-20 | .5707 | .3191 | .076 | -6.08E-02 | 1.2022 |
| | 21-25 | .6507* | .3143 | .041 | 2.858E-02 | 1.2728 |
| | 26-30 | .2700 | .3538 | .447 | -.4302 | .9702 |
| | Over 35 | .3425 | .3708 | .358 | -.3914 | 1.0764 |
| Over 35 | 17-20 | .2282 | .2960 | .442 | -.3575 | .8140 |
| | 21-25 | .3082 | .2908 | .291 | -.2674 | .8838 |
| | 26-30 | -7.245E-02 | .3331 | .828 | -.7317 | .5868 |
| | 31-35 | -.3425 | .3708 | .358 | -1.0764 | .3914 |

*. The mean difference is significant at the .05 level.

ANOVA

factor2

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 12.463 | 4 | 3.116 | 3.342 | .012 |
| Within Groups | 116.537 | 125 | .932 | | |
| Total | 129.000 | 129 | | | |

Multiple Comparisons

Dependent Variable: factor2

LSD

| (I) age | (J) age | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---------|---------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 17-20 | 21-25 | -9.814E-02 | .2150 | .649 | -.5236 | .3273 |
| | 26-30 | .4163 | .2667 | .121 | -.1116 | .9442 |
| | 31-35 | -.1057 | .3102 | .734 | -.7197 | .5083 |
| | Over 35 | .8025* | .2878 | .006 | .2330 | 1.3720 |
| 21-25 | 17-20 | 9.814E-02 | .2150 | .649 | -.3273 | .5236 |
| | 26-30 | .5144 | .2613 | .051 | -2.79E-03 | 1.0316 |
| | 31-35 | -7.561E-03 | .3056 | .980 | -.6124 | .5973 |
| | Over 35 | .9006* | .2828 | .002 | .3410 | 1.4602 |
| 26-30 | 17-20 | -.4163 | .2667 | .121 | -.9442 | .1116 |
| | 21-25 | -.5144 | .2613 | .051 | -1.0316 | 2.793E-03 |
| | 31-35 | -.5220 | .3440 | .132 | -1.2028 | .1588 |
| | Over 35 | .3862 | .3239 | .235 | -.2548 | 1.0271 |
| 31-35 | 17-20 | .1057 | .3102 | .734 | -.5083 | .7197 |
| | 21-25 | 7.561E-03 | .3056 | .980 | -.5973 | .6124 |
| | 26-30 | .5220 | .3440 | .132 | -.1588 | 1.2028 |
| | Over 35 | .9082* | .3605 | .013 | .1946 | 1.6217 |
| Over 35 | 17-20 | -.8025* | .2878 | .006 | -1.3720 | -.2330 |
| | 21-25 | -.9006* | .2828 | .002 | -1.4602 | -.3410 |
| | 26-30 | -.3862 | .3239 | .235 | -1.0271 | .2548 |
| | 31-35 | -.9082* | .3605 | .013 | -1.6217 | -.1946 |

*. The mean difference is significant at the .05 level.

ANOVA

factor3

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 4.880 | 4 | 1.220 | 1.229 | .302 |
| Within Groups | 124.119 | 125 | .993 | | |
| Total | 129.000 | 129 | | | |

Multiple Comparisons

Dependent Variable: factor3

LSD

| (I) age | (J) age | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---------|---------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 17-20 | 21-25 | .3775 | .2219 | .091 | -6.15E-02 | .8166 |
| | 26-30 | .4575 | .2753 | .099 | -8.73E-02 | 1.0023 |
| | 31-35 | -3.035E-02 | .3202 | .925 | -.6640 | .6033 |
| | Over 35 | .1720 | .2970 | .563 | -.4157 | .7597 |
| 21-25 | 17-20 | -.3775 | .2219 | .091 | -.8166 | 6.154E-02 |
| | 26-30 | 7.994E-02 | .2697 | .767 | -.4538 | .6137 |
| | 31-35 | -.4079 | .3154 | .198 | -1.0321 | .2163 |
| | Over 35 | -.2055 | .2918 | .483 | -.7831 | .3720 |
| 26-30 | 17-20 | -.4575 | .2753 | .099 | -1.0023 | 8.732E-02 |
| | 21-25 | -7.994E-02 | .2697 | .767 | -.6137 | .4538 |
| | 31-35 | -.4878 | .3550 | .172 | -1.1904 | .2148 |
| | Over 35 | -.2855 | .3342 | .395 | -.9470 | .3760 |
| 31-35 | 17-20 | 3.035E-02 | .3202 | .925 | -.6033 | .6640 |
| | 21-25 | .4079 | .3154 | .198 | -.2163 | 1.0321 |
| | 26-30 | .4878 | .3550 | .172 | -.2148 | 1.1904 |
| | Over 35 | .2024 | .3721 | .588 | -.5340 | .9387 |
| Over 35 | 17-20 | -.1720 | .2970 | .563 | -.7597 | .4157 |
| | 21-25 | .2055 | .2918 | .483 | -.3720 | .7831 |
| | 26-30 | .2855 | .3342 | .395 | -.3760 | .9470 |
| | 31-35 | -.2024 | .3721 | .588 | -.9387 | .5340 |

ANOVA

factor4

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | 2.615 | 4 | .654 | .647 | .630 |
| Within Groups | 126.385 | 125 | 1.011 | | |
| Total | 129.000 | 129 | | | |

Multiple Comparisons

Dependent Variable: factor4

LSD

| (I) age | (J) age | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---------|---------|-----------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 17-20 | 21-25 | 2.920E-03 | .2239 | .990 | -.4402 | .4460 |
| | 26-30 | 2.325E-02 | .2778 | .933 | -.5265 | .5730 |
| | 31-35 | -9.782E-02 | .3231 | .763 | -.7372 | .5416 |
| | Over 35 | .4147 | .2997 | .169 | -.1783 | 1.0078 |
| 21-25 | 17-20 | -2.920E-03 | .2239 | .990 | -.4460 | .4402 |
| | 26-30 | 2.033E-02 | .2722 | .941 | -.5183 | .5590 |
| | 31-35 | -.1007 | .3183 | .752 | -.7306 | .5291 |
| | Over 35 | .4118 | .2945 | .164 | -.1710 | .9946 |
| 26-30 | 17-20 | -2.325E-02 | .2778 | .933 | -.5730 | .5265 |
| | 21-25 | -2.033E-02 | .2722 | .941 | -.5590 | .5183 |
| | 31-35 | -.1211 | .3582 | .736 | -.8301 | .5879 |
| | Over 35 | .3915 | .3373 | .248 | -.2760 | 1.0590 |
| 31-35 | 17-20 | 9.782E-02 | .3231 | .763 | -.5416 | .7372 |
| | 21-25 | .1007 | .3183 | .752 | -.5291 | .7306 |
| | 26-30 | .1211 | .3582 | .736 | -.5879 | .8301 |
| | Over 35 | .5126 | .3755 | .175 | -.2305 | 1.2556 |
| Over 35 | 17-20 | -.4147 | .2997 | .169 | -1.0078 | .1783 |
| | 21-25 | -.4118 | .2945 | .164 | -.9946 | .1710 |
| | 26-30 | -.3915 | .3373 | .248 | -1.0590 | .2760 |
| | 31-35 | -.5126 | .3755 | .175 | -1.2556 | .2305 |

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