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CLINICAL TEACHING AND LEARNING

AN ACTION RESEARCH STUDY

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Bonnie Patricia Kay Schroyen

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Abstract

For student nurses, the clinical setting is considered to be the most valuable and also the most complex learning situation of their professional education. There are currently many issues in New Zealand that affect the quality of experience available in clinical areas for these future nurses. This research was initiated by a polytechnic nursing lecturer to explore one teaching and learning situation in clinical settings with a group of student nurses in order to improve it.

This study took place during an eleven week clinical block for the students in the last semester of a three year Bachelor of Health Science (Nursing) programme. The research question identified by the student participants was: "How can we improve the teaching and learning in clinical settings?" Using an educational action research model the students identified the essential elements in the situation in order to plan, implement and evaluate a practical change strategy.

The main finding in the analysis was that the staff nurses have a major influence on the students' learning in clinical settings. Five staff nurses working closely with these students in clinical areas were included as the study widened to involve those affected by the proposed change. These staff nurses added their perspectives and these informed the planning phases. The students chose to introduce contract learning into their interactions with the staff nurses as a method to improve the teaching and learning in clinical settings.

During the action phase it was discovered that because these students were working in diverse clinical areas and were developing unique learning relationships with the staff nurses, the method of implementing contract learning required innovation and perseverance. The individual experiences of these students, the staff nurses and a polytechnic lecturer are described as a case study of events. The action taken and the reflection on factors which hindered and which facilitated the success of contract learning are presented from the perspectives of all participants.

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Glossary

The following terms are defined for the purposes of this study:

Staff nurse: A registered nurse employed by the healthcare agency in which the student is gaining clinical experience.

Student: An undergraduate Bachelor of Health Science (Nursing) student from a polytechnic.

Clinical setting: Nursing practice areas in various healthcare organisations where students are placed by the polytechnic for planned clinical learning experiences.

Elective experience: An undergraduate nursing student's learning experience in a clinical setting in the final six months of their three year Bachelor of Health Science (Nursing) programme.

Polytechnic Nursing Lecturer: A teacher employed by a polytechnic. Teaching responsibilities may be in the classroom or in clinical settings.

Chapter One

Introduction

The participants in this study have identified current issues in clinical settings that influence the quality of teaching and learning. An action research process was applied to develop a shared understanding of the educational experience in local clinical settings for one group of students, a polytechnic lecturer and a sample of staff nurses. The thematic concern for the study, chosen by the student action group, was to improve their learning by changing their pattern of interaction with the staff nurses in a variety of clinical settings. The method chosen to improve the current situation was to increase student participation in their learning interactions with staff nurses through the introduction of contract learning. The teaching roles of the staff nurses and a polytechnic nursing lecturer were also examined and contract learning was explored as a useful teaching strategy.

Study aims

The primary aim of this study was to improve teaching and learning in nursing clinical settings. Secondary aims were to involve a group of student nurses in a collaborative research project and to develop self reflective teaching practice for me as the polytechnic lecturer. The original research question that guided the study was, "How can we improve the teaching and learning in clinical settings?" The group refined this question as the study progressed.

Background

Nursing education in New Zealand has undergone major changes in the last thirty years (Hercus *et al.*, 1998). Since 1981 there have been several reviews undertaken by governmental health and education departments that examine the influences of these changes on the current organisation of undergraduate nursing programmes (Nursing Council of New Zealand, 2001). The clinical component of this education is considered of vital importance in preparing nursing students for practice. These reviews, as well as research conducted both in New Zealand and internationally, suggest that historically and currently there are problems within the education and health systems that threaten the quality of teaching and learning in clinical settings for student nurses. The influence these problems have had on the calibre of new graduate nursing practice continues to be a concern for the profession (Adamson, Harris & Hunt, 1997; Booth, 1997; Boyle, 1994; Clare, 1991; Hercus *et al.*, 1998; Orchard, 1998; Pearson, 1998; Pearson *et al.*, 1996).

A quality clinical experience is defined as one that is well planned, relevant to the student's learning needs, provides experiential learning in a wide variety of patient care experiences and supports the student to develop staff-student relationships (Baillie, 1993). A quality learning environment in clinical settings also requires that there is a nominated resource person available to the student who is aware of curriculum requirements, has a degree of clinical credibility and has been prepared in teaching strategies that recognise the needs of adult learners (Dunn & Hansford, 1997).

There are several difficulties fulfilling the requirements for quality teaching and learning in clinical settings that have been highlighted in the literature. The first is that, although patient care settings represent the real world of nursing practice and provide valuable learning experiences for students, these settings are organised around providing quality patient care and needs of a

student nurse are secondary. This not only restrains learning opportunities for students, but influence relationships that students develop with staff (Fothergill-Bourbonnais & Higuchi, 1995; Napthine, 1996).

Another difficulty identified is that teaching responsibilities of the staff nurse in the setting are unclear and vary from one service provider to another and from one educational institution to another (Dyson, 1998; Orchard, 1998). Additionally, the role of the polytechnic lecturer in clinical teaching also varies and is the subject of debate within the nursing profession (Baillie, 1994; Clifford, 1996; Crotty, 1993; Dyson, 1998; Lee, 1996; Loannides, 1999). Finally, the theories of nursing knowledge taught in the classroom have been criticised as inadequate and irrelevant in preparing graduates for the realities of contemporary practice settings (Greenwood, 1984; McCaugherty, 1991).

These particular problems have been described and explored in New Zealand nursing research using a variety of methods in order to better understand how nursing education is fulfilling its obligation to prepare nurses for practice in the political and social climate now and in the future (Boyle, 1994; Clare, 1991; Dyson, 1998; McLeland, 1999; Mayson & Hayward, 1997; Orchard, 1998; Pearson *et al.*, 1996; Pearson, 1998; Rummel, 1993). The views of student nurses, staff nurses and polytechnic lecturers have been presented in these studies and the findings have helped to guide this action research study. This study examined the local situation of the researcher, a group of student nurses, and a sample of staff nurses in the contemporary context of clinical nursing education in New Zealand.

The educational context

The history of nursing education has been influenced by political, economic, technological and social development (Nursing Council of New Zealand, 2001). One major change to nursing education was the move from hospital-

based schools of nursing to tertiary educational institutions. This took place in New Zealand from 1973 and reflected similar trends in other countries aimed at developing a professional qualification for the nursing profession (Dyson, 1998). Most importantly, since 1973, the service needs of the healthcare system were separated from the educational needs of the student nurses.

This meant that students were no longer considered to be part of the workforce in clinical areas and their education was organised around their learning needs rather than the service needs of the healthcare organisation. This change of status was a major shift in the philosophy of education for student nurses. The nurse training model was replaced by a broad-based professional education which was believed to better prepare students for a more autonomous role within the healthcare team.

There were, however, advantages for hospital administrators and for students when the traditional apprentice-style training was in place. This type of training provided students with an experience of the daily realities of nursing practice. Students were part of the team in the clinical areas and worked alongside a variety of health professionals. It was possible to develop technical clinical skills, and service providers benefited from an inexpensive workforce (Dyson, 1998).

Bachelor degree preparation

In New Zealand, bachelor degree nursing programmes organised within universities and polytechnics have prepared students for nursing registration since the early 1990s. Nightingale and O'Neil (1994, p. 53) propose that the overall purpose of education within these tertiary institutions is "to develop independent thought and action which is supported by problem solving abilities, interpersonal skills, communication and strategic thinking abilities, and critical and evaluative skills, including logic". In this view, knowledge is

composed of both theory and practice and there is a necessary relationship between these two elements for praxis, or informed action, to take place. In nursing, the application of theoretical knowledge occurs in the many diverse areas of patient care within the healthcare environment. These areas are referred to as the clinical setting.

All bachelor nursing degree programmes are three years in length and are required to adhere to the standards set by the Nursing Council of New Zealand (Nursing Council) and the New Zealand Qualifications Authority (NZQA) in order to receive accreditation. The Nursing Council currently requires that as well as the theoretical content, every programme must comprise a minimum of fifteen hundred hours of clinical experience in a range of settings (Nursing Council, 2001). Each tertiary institution organises their specific curriculum, however, graduates must have certain basic competencies for beginning practitioners and these are also prescribed by Nursing Council.

Polytechnic nursing lecturers working within this system frequently have both theory and clinical teaching responsibilities (Dyson, 1998). Registered staff nurses employed in the clinical area also continue to have a role in teaching student nurses however, their preparation for this role and the support of both the service provider and the polytechnics for the nurse to fulfil this role varies widely (Orchard, 1998).

Teaching and learning in clinical settings

One of the problems of the current organisation of nursing education is providing the required level of the skills and the knowledge for clinical competence of new graduates. This was highlighted in the Ministerial Taskforce Report on Nursing in New Zealand (Hercus *et al.*, 1998). The Taskforce report outlined that there are difficulties for students gaining clinical experience in the current dynamic and complex healthcare system that is of

sufficient quality to prepare them for the realities of beginning professional practice as registered nurses.

One aspect challenging the provision of quality clinical experience for nursing students in New Zealand was the change in government funding structures during the 1990s which led to increased student fees. This put financial pressure on students, and value for money in tertiary education became a prime concern. A culture of consumerism was introduced and those teaching and learning within polytechnic institutions adopted the language of quality service and customer satisfaction (Fulljames, 1997). In nursing education this business approach also encouraged competition for clinical placements. In particular, a funding review by government in 1992 resulted in restructured arrangements for clinical training, resulting in the transfer of funding from Ministry of Health to Ministry of Education for the purchase of clinical undergraduate education (Hercus *et al.*, 1998). This increased pressure on the availability of clinical placements.

The requirement that hospitals operate as businesses was the first of three factors identified by the 1998 Taskforce on Nursing that influenced clinical experiences for student nurses (Hercus *et al.*, 1998). The newly introduced charges for clinical training were greater than the subsidy provided by the Ministry of Education. Educational institutions managed this by either further increasing student fees, decreasing the length of clinical placements, or diverting funding to subsidise them. This new environment also involved competition between educational institutions for clinical placements. Healthcare providers, traditionally aligned with a local university or polytechnic, began to offer access to students from other programmes in other locations.

Secondly, a timing difference in the budget cycle of the service provider and the educational institution was problematic. Information on clinical placement

costs needed to be identified before the educational institution could set fees. At the same time the service provider needed firm clinical placement numbers before they could calculate their costs and therefore their charges. Effective communication was needed to minimise the tensions arising from the emphasis on cost recovery, and this was often lacking. This compounded the pressures on those involved in negotiating for clinical access.

Thirdly, polytechnics were required to pay for placements in a growing number of clinical settings outside the traditional hospital setting, and this was influencing the quality of clinical experiences gained by student nurses during their education. Originally the Ministry of Education provided funding only for hospital clinical areas while agencies such as accident and emergency clinics, general practitioner practices and elderly care units, which previously did not request payment, now expected financial reimbursement for student placements. One result of this was a reduction in the number of available clinical placements. The philosophy of the tertiary educational institutions of providing nursing courses when a market exists, and the healthcare providers' interest in receiving payment for placements, has resulted in problems for undergraduate nursing students.

A further comment from the Taskforce related to the clinical component of nursing education was that due to ongoing problems of clinical access, the definition of clinical competence expected of new graduates may need to be re examined by both the service providers and the educational system (Hercus *et al.*, 1998). Traditionally, employers of new graduate nurses had expected the nurse to be clinically competent in a range of nursing skills and to assume a defined level of patient care. Debate continues as to whether it is possible—or desirable—to educate nurses with a broad range of learning skills such as critical thinking while at the same time developing clinical competency in focused areas (Adamson, Harris, & Hunt, 1997).

Nursing leadership groups have also expressed their concern about the effectiveness of the current nursing education system in preparing clinically competent graduates. The Nurse Executives of New Zealand, a group of senior nurse executives employed by healthcare agencies, have contended that the preparation of undergraduate nursing students when assessed against the competencies for beginning nursing practice set by the Nursing Council of New Zealand is lacking (Nurse Executives of New Zealand, 1998). These nurses argued that currently the clinical preparation of student nurses aimed at developing the role of a registered comprehensive nurse is inadequate in several aspects, and these are mainly related to problems in providing adequate clinical experience.

In particular, these nurse leaders maintained that students in the current system do not have the opportunity to consolidate knowledge and develop confidence in nursing practice settings. Difficulties identified were the pressures resulting from several students being present in one area and the limited hours of work. Students worked primarily Monday to Thursday; this increased demand on clinical areas and did not consider the actual work commitments of registered nurses in practice who provide a service for hospitalised patients and those in acute care institutions twenty-four hours a day, seven days a week. This resulted in further pressures for the registered nurses in the clinical setting as they were being asked to provide increasing student supervision with increasing patient workloads.

Another problem identified from the perspective of this group of nurse executives was that students tended to focus on one or two patients only and did not develop time management skills related to the overall organisation of nursing care expected of a registered nurse. Further deficiencies noted were the level of experience and confidence of graduate nurses in the areas of basic

nursing care, knowledge of anatomy, physiology and assessment skills, and prioritising of patient care.

The 2000/01 review of undergraduate nursing education

The debate on the best educational preparation for a nurse for the future was the focus of the review of undergraduate nursing education commissioned by the Nursing Council of New Zealand and completed by the firm of Klynveld Peat Marwick Goerdeler (KPMG, 2001). This review examined health and education trends so as to make recommendations on the best method for preparing nurses for the future. The discussion papers released during the review confirmed the findings of the Ministerial Taskforce on Nursing (1998) and identified the ongoing difficulties for new graduate nurses, particularly in their first year of practice. The review suggested that difficulties new graduates face in coping with workplace pressures have resulted in many leaving the profession, and this was one factor contributing to the developing nursing shortage in this country.

The third report to the Nursing Council as part of the review identified many issues for nursing education (Nursing Council of New Zealand, 2001). One of these was that "effective management of clinical teaching and learning is a major challenge for both nurse educators and service providers now and in the future" (Nursing Council of New Zealand, 2001, p.34). Discussion in the report centred on the existing requirement for fifteen hundred hours of clinical experience and, while most submissions to the review strongly agreed to retain this requirement, it was also argued that the clinical component should be guided by the quality of the experience more than the hours provided.

The issue of effective supervision of students in diverse clinical settings was also discussed. The use of facilitators was common and these were usually practising nurses who, although clinically competent, were not necessarily

prepared for a facilitation role that encouraged students to develop higher thinking abilities as well as competency in technical skills. The preceptorship model that identified a specific teaching role for a staff nurse in a relationship with a student is discussed in the report as one method for students to develop clinical confidence.

The report discussed a variety of options for improving current clinical teaching and learning in New Zealand and emphasised the importance of partnership relationships between education and health providers in developing these. It was suggested that effective relationships of those involved in the education and health sectors required communication and commitment to professional as well as to healthcare development. It was proposed that the role of the polytechnic nursing lecturers and staff nurses within these organisations should be to facilitate student teaching and learning.

Teaching and learning in the local context

In the three-year Bachelor of Health Science (Nursing) programme in the polytechnic where this research took place, the lecturer-to-student ratio for the student group in clinical practice during the final semester is approximately one to fifteen. The polytechnic nursing lecturer acts mainly as a facilitator in the clinical areas with no direct patient care responsibilities. The nursing lecturer is responsible for student assessment and participates in some clinical teaching in one-to-one interactions. The students are paired with the staff nurses and the majority of the clinical teaching occurs within that relationship. In most cases, the student works alongside several different staff nurses throughout their experience in each clinical area and these staff nurses have a range of experience and interest in teaching students. The selection of the staff nurses who will assist a student in an area is generally done by the clinical

nurse manager of the area, and not every staff nurse will be involved in clinical teaching. This is typical of the current model of clinical teaching which has been in place in New Zealand for the past twenty years (Dyson, 1998).

The settings where the students are placed for their final clinical experience reflects the diversity of nursing practice settings in New Zealand. These include among others acute care speciality areas in the local hospital, community-based mental health services and rural public health settings throughout the region. The nature of nursing practice varies from the highly skilled technical nurse working in a structured environment to the nurse involved in health education and promotion working with families on a wide range of health-related issues in the community. The students' interest in a particular setting is considered when organising their experiences. Generally they are able to consolidate their previous experiences in an area or extend their practice by working in a new area.

The students' perspectives

The students in their last semester, or elective clinical placement in the local polytechnic, have had experience in several clinical settings throughout the course. Comments from formal evaluations done for the polytechnic by those students completing their final clinical experience suggested that a more consistent one-to-one relationship with a staff nurse in the clinical area would improve the clinical learning environment. The students also commented that frequently the staff nurses felt unable to teach students, as their patient care responsibilities required all of their attention. Clarifying the roles of the polytechnic lecturers and staff nurses in teaching and assessment responsibilities was also identified as important in these student evaluations. More time in one clinical setting rather than moving to several different areas was also identified by students as a factor that would improve their learning.

The staff nurses' perspectives

There is no existing data on clinical teaching and learning from the staff nurses' or service providers' perspectives in this local context. However, as mentioned, New Zealand and Australian studies agree that staff nurses frequently find it difficult to fulfil their teaching role as well as carry out patient care responsibilities (Dyson, 1998; Napthine, 1996; Orchard, 1998). The clinical access agreement negotiated by the local polytechnic with the local district health board (DHB) states only that patient care delivery is the responsibility of the provider.

There is no documented requirement for nursing staff to provide student teaching other than a general agreement to give students and polytechnic lecturers access to facilities. In the job description for a staff nurse there is a requirement that the nurse act as a role model, assist less experienced staff to identify individual learning needs and contribute to plans to meet identified needs. Since undergraduate student nurses are not considered to be staff members in the clinical area it appears that the teaching and learning interaction between the staff nurses and the students is not recognised in current documentation.

Researcher perspective

As a nursing lecturer at this polytechnic, the learning experience of students during their clinical placements is an area of professional concern and interest. I constantly assess my role in this complex area and look for ways that I can facilitate the learning experience for students. I was interested in developing my role in clinical teaching through reflection on my own practice.

My interest in a study examining the clinical teaching and learning context also came from my observations of the local environment in which I was involved. I believe that the students are adult, self-directed learners with the ability to negotiate and communicate with the staff nurses in clinical areas assertively in

order to meet their learning needs. I believe also that, as the clinical experts, the staff nurses are willing and able to carry out a teaching role in addition to their patient care responsibilities. However, these beliefs frequently did not reflect the reality of the local clinical situation.

As previously mentioned, although clinical settings are considered in many ways ideal learning environments for student nurses, the priority in these areas is patient care. Student nurse teaching responsibilities of the staff nurses in the local settings are secondary to their role as patient care providers; therefore, their ability to carry out teaching activities varies depending on their workload requirements as well as their interest and motivation towards teaching students. As Dyson (1998, p.11) observed, learning in this model is often "informal, haphazard and accidental".

The role of the polytechnic nursing lecturer in clinical teaching also varies in the local setting and depends on the clinical background of the lecturer as well as their assigned number and the location of the students. The students are placed in a variety of settings, and it is not possible for the lecturer to be clinically proficient in the entire range of areas or to travel to widely spread locations. Polytechnic nursing lecturers from hospital clinical backgrounds are more comfortable in that environment, while those with community nursing experience offer more to students in community settings. This is another reason why lecturers often look to nursing staff to provide the clinical expertise as well as the daily organisation of work for the students. The polytechnic nursing lecturers work with students in tutorial situations commonly held at weekly intervals, and these focus on developing the students' ability to use these clinical experiences as learning opportunities.

Many of the problems in the local setting that affect both staff and students are the result of funding issues previously outlined. As hospitals now operate as businesses competition from other educational institutions in New Zealand

exists within the local District Health Board (DHB) environment. The regional polytechnic is now only one of several institutions contracting for clinical access. Accepting students from other programmes has increased pressure on the staff nurses, who now work alongside students from a variety of institutions with a range of learning needs. Nursing lecturers from the local polytechnic find it increasingly difficult to negotiate the students' placements in areas that may also be supplying access for students from other institutions.

Another result of funding issues in the local area is that students have been withdrawn from previously negotiated clinical settings such as community mental health agencies, private hospitals and general practitioner practices. This is due to requests from these providers for payment for student placements. This further decreases availability of clinical placements, and one option has been to place students out of the area. This increases related travel and accommodation costs to students.

The research process

From my knowledge of research methods I have come to value the qualitative approaches to human inquiry. The emphasis on naturalistic inquiry and exploring the multiplicities of life experiences appealed to me and seemed well suited to a study into teaching and learning outside of the traditional classroom setting. Exploring the uniqueness of the individual and the idea that individuality affects our different roles within groups had meaning for me as a person, a nurse, a teacher and, perhaps now, as a researcher.

Action research

From this interest in qualitative methods and as a nursing lecturer in a degree programme, I became interested in the use of participatory research processes to explore educational issues. Research undertaken by academic staff with undergraduate nursing students has been undertaken in many forms (Conn,

1995; McDrury, 1999; O'Connor, 1995). An action research process seemed to offer an opportunity to explore the experience of being involved with undergraduate students in every phase of the research process. This is further discussed in the following chapters as part of my reflections during of this study.

Since the method has developed in more than one field of social science, there is no single, universally accepted definition of action research. Hyrkas (1997) suggests the problem of defining the method is that action research is viewed by some more as a change strategy than a research method. Poskitt (1994) argues that a carefully defined precise label would be too authoritative, and this would deny the principles of participation and collaboration.

Despite their difficulties in finding one definition of action research, Carr and Kemmis (1986, p.5) describe the nature of collaboration between researcher and participants that outlines the essential features of action research in educational settings as:

A form of collective, self-reflective, enquiry undertaken by participants (teachers, students or principals, for example) in social (including educational) situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations (and institutions) in which these practices are carried out. ...The approach is only action research if it is collaborative though it is important to realise that the action research of the group is achieved through the critically examined action of individual group members.

This definition is particularly fitting to this study as the action research group is composed of an educator and students examining a teaching and learning situation. The group members are acting individually in the clinical setting, and these actions are examined in the group in order to develop understanding of the factors influencing the quality of the experiences. This

knowledge is then applied to plan, implement and evaluate a practical change strategy.

Significance of the study

Problems within the current model of clinical undergraduate nursing education in New Zealand have persisted despite concerns identified by research, government reviews and nursing leaders. These difficulties have a direct impact on the preparation of graduate nurses to practise effectively in the current healthcare environment as well as maintaining and developing a professional nursing workforce. The role of the staff nurse is expanding and graduates require a foundation of knowledge and skills on which to build. In this study, teaching and learning in clinical settings is examined in the context of the contemporary educational and healthcare system and a way forward is suggested by those involved.

The process used in this study demonstrates a method of participatory action that may benefit students, staff nurses and nursing lecturers. Staff nurses are part of a healthcare team and students who have experience in developing constructive ways of making decisions and taking action will be better prepared for taking a leadership role within a team. For those in nursing education, the action research process applied in this study demonstrates a method of gaining students' perspectives on their educational experiences, that may inform the teacher's practice and suggest better ways of teaching and learning.

Structure of the thesis

In this chapter background information has been provided on nursing education issues for teaching and learning in clinical areas in New Zealand and in one local setting. The position of the researcher as a polytechnic

lecturer has been described and the definition of educational action research that guides this study has been given. The research question that the student and lecturer action group identified in the initial stages of the inquiry was "How can we improve the teaching and learning in clinical settings?"

Current nursing and educational literature is examined in the next chapter in order to develop an understanding of the issues for teaching and learning in clinical settings. A broad look at the aims of nursing education and the meaning of quality teaching and learning provided theoretical guidance for myself, as a teacher seeking to facilitate this for students. Theories of experiential learning are included to explore factors that influence the ability of individuals to learn from their experiences. The conflict between the aims of higher education and the needs of service providers are examined through a critique of the literature on the tension between theory and practice. The role of reflection in promoting quality teaching and learning in nursing education is also explored. The need for the current study is identified from this review.

In chapter three action research methodology is described and the reason for choosing this approach is given. The particular model chosen for this study is explained and action research as a change strategy is discussed. The development of the method in the nursing field is presented and data from previous action research studies on issues in clinical teaching and learning are explored. Issues of rigor in action research are debated. The action research process applied in this study is discussed in terms of the sampling method used and the participant group is described. Ethical considerations are discussed. Data collection and data analysis methods are summarised and central findings are outlined.

In chapters four to seven the central findings of the study are described as they evolved during the phases of the action research and developed over three identified action cycles. This explains what happened, how decisions were

made and how these influenced the process and the outcomes of the study. As Elliott (1978, p. 356) suggests the account takes shape as a case study in which those involved are working together towards a positive change.

In explaining "what is going on", action research tells a "story" about the event by relating it to a context of mutually interdependent contingencies, ie. events which 'hang together' because they depend on each other for their occurrence. This 'story' is sometimes called a case study. The mode of explanation in a case study is naturalistic rather than formalistic. Relationships are 'illuminated' by concrete description rather than by formal statements of causal laws and statistical correlations. Case study provides a theory of the situation but it is a naturalistic theory stated in propositional form

First, the reconnaissance phase of the study is outlined to demonstrate the development of a shared understanding between participants of the current teaching and learning situation in clinical settings. From this the group decided to focus on staff nurse and student nurse interaction. The action planning phase of the study is then described as a critically informed phase that developed as the group gained an awareness of the possibilities for change and focused on the chosen practical strategy of introducing contract learning.

In chapter six the plan is implemented and the nature of the action is described. In chapter seven the outcomes and the process of this study are evaluated by all participants. Factors that facilitate or hinder the students in their own action in clinical settings are explored and researcher reflection is discussed. In chapter eight the main findings are discussed and integrated with literature. In the final chapter recommendations are made based on these findings and the strengths and limitations of the project and implications for further research are discussed.

Chapter Two

Literature Review

Introduction

This chapter presents a review of the literature that assisted me, as the initiator of this study, in developing an understanding of the current teaching and learning situation for student nurses in clinical settings. This theoretical and research literature provides a basis for identifying the current language in use and the current patterns of interaction between the main elements of an educational situation. The elements relevant to nursing clinical education are the polytechnic lecturers, the staff nurses, the students and the milieu, or the environment. Kemmis and McTaggart (1988) suggest that assessing the current situation in this way is the first part of the reconnaissance phase of educational action research and prepares the researcher for proposing and identifying a positive change. This facilitated the first task for the research group in this study. This was to select a thematic concern, or educational issue, for the project from the many issues evident in the literature.

This literature review was part of an ongoing process. In action research the study direction is not predetermined, and as this project developed some of the literature was more useful to the group than others (Miles & Huberman, 1994). Therefore, it was necessary that some of the literature be analysed twice. This occurred first with the original research question and later when data collection and analysis led to a refining and refocusing of the study.

For an action research study, there are two types of literature for review. These are literature related to the practice area and literature related to the action research process (Kemmis & McTaggart, 1988). The literature relating to the latter is included in the methodology chapter. In this chapter I will outline the literature connected with the practice area of both education and nursing.

As the initiator of this study I began by examining educational issues for student nurses that were discussed in both educational theory literature and nursing research studies. Questions guiding this initial review were:

- What are the aims of nursing education?
- What defines 'good' teaching and 'quality' learning?
- How do students learn from experience?
- How can a teacher promote 'quality' learning?
- Which factors hinder and which facilitate learning in clinical settings?
- What influences the clinical teaching role for the polytechnic nursing lecturer and for the staff nurse?
- What defines the roles for the polytechnic lecturer and for the staff nurse in clinical teaching?
- What do nursing students learn in clinical settings?
- What are the influences of the clinical learning environment on student learning?

What are the aims of nursing education?

Several authors claim that developing student autonomy and a positive attitude to lifelong learning is the main aim of higher education (Boud, 1988;

Boughn, 1992; Nightingale & O'Neil, 1994; Robbins, 1988). Educational theorists propose that teachers create situations in which autonomy can develop by avoiding rigid and unresponsive structures to teaching situations, by making the goal of autonomy for the learner explicit, and by encouraging it in interactions with teachers. These authors warn that promoting independence does not mean that students work in isolation or that structured teaching is completely removed. Negotiating learning opportunities with the student and recognising that the goals of learning should come from the needs of the student are the main characteristics of teaching that promotes autonomy in the learner.

Theorists in adult learning further explain that promoting autonomous, self-directed learning involves working with the whole person. The meaning of experiences is developed through both affective and cognitive processes (Boud, 1988; Knowles, 1986; Kolb, 1984). This assists students in developing knowledge and skills necessary to provide them with positive attitudes towards learning that are also important for quality learning. Knowles (1986) particularly emphasised in his theory of andragogy, or adult learning, that to enhance learning the learner should be independent in identifying and pursuing personal learning goals. This contributes to high quality, or deep learning, and an aim of education should be to promote conditions that encourage this. Surface learning, on the other hand, occurs when there is a heavy workload, relatively high class contact hours, and an excessive amount of course material. Nightingale and O'Neil (1994) agree that a lack of opportunity to pursue subjects in depth and a lack of choice over the method and content of study encourages surface learning.

What defines 'good' teaching and 'quality' learning?

On a broad scale, there are many interactive elements that may influence the whole system of education and these, in turn, influence the quality of specific teaching and learning situations. Nightingale and O'Neil (1994) point out in their edited text on learning in tertiary education that government policies, various educational institutions, prospective employers, professional bodies, university organisations, academic and allied staff and, ultimately, the students, are part of the educational system that contribute to its success or failure. Lecturers in tertiary education contributed their teaching experiences in the text and discussed how individuals gain quality learning in certain environments. These lecturers outlined the defining features of high-quality learning and commented that, although the context is important, there were also intrapersonal conditions required for learning to occur.

Personal attributes of an individual that enhance their ability to learn particularly in rapidly changing environments such as work settings are discussed. These are identified as the ability to research for information and to critically analyse and synthesise content. An ability to link old knowledge and action to new and different situations as well as to show a desire to gain more knowledge are also characteristics of a skilful learner. Other conditions necessary for high-quality learning are that the learner is cognitively and emotionally ready to meet the demands of the learning task (Nightingale & O'Neil, 1994).

Carr and Kemmis (1986) further propose that the learner needs an internalised belief that the knowledge is important, that it is relevant and that the quality of learning outcomes also depends on how confident the learner is about their own learning. Exponents of adult learning theory agree that the learner must be active during the learning. A teacher needs to be a facilitator creating

experiences that prompt learning, rather than merely a transmitter of knowledge (Carr & Kemmis, 1986; Knowles, 1986; Nightingale & O'Neil, 1994).

Ramsden (1988) adds to the discussion from a relational view of learning and suggests that good learning involves changes in perception rather than simply adding more and more facts and procedures to the store of knowledge. The relational view challenges the idea that generalisations can be made about the nature of learning. Therefore, from this perspective, developing quality learning requires that the teacher understands the individual student's perspective and the contextual nature of individual thoughts and actions.

How do students learn from experience?

The literature on learning from experience also emphasises the unique, personal nature of learning. One definition of the key terms 'learning' and 'experience' that I find particularly fitting to nursing education identifies factors that facilitate or hinder this form of learning:

Learning involves much more than an interaction with an extant body of knowledge; learning is all around us, it shapes and helps create our lives - who we are, what we do. It involves dealing with complex and intractable problems, it requires personal commitment, it utilises interaction with others, it engages our emotions and feelings, all of which are inseparable from the influence of context and culture.
(Boud, Cohen, & Walker, 1993, p.1)

Several authors agree that experience may be the foundation of and the stimulus for learning, but it is not all that is needed for learning to occur (Boud, Cohen & Walker, 1993; Carr & Kemmis, 1986; Winter, 1989). The influences of previous experiences are recognised, however learning also requires interaction in thought or action with the world outside the individual's environment. Several contributors to an edited text by Boud, Cohen and Walker (1993) discussed the influences of experience on learning.

These teachers argued that previous positive or negative experiences with learning affected how new learning is developed as well as how much risk the individual was willing to take in pursuing new knowledge and skills. From this view, learning is best conceived as a process rather than as an outcome. This means that ideas are not fixed, but are formed and reformed through experience. No two thoughts are ever the same because experience always intervenes.

Boud (1988) also presented teachers' views on developing student autonomy in his edited text. Several teachers in higher education from various disciplines and institutional settings discussed their adult teaching experiences. A common theme was that learning is a holistic process that includes both the cognitive and the affective domain as well as the psychomotor. One teacher argued that the socio-emotional context in which learning occurs and the emotions and feelings produced are key pointers to both possibilities for and barriers to learning. Others maintained that the way experience is interpreted is intimately connected with how the individual views the self and that confidence and self-esteem are the most powerful influencing factors on learning from experience. From this view, how learning tasks and opportunities are approached and how much risk the individual is willing to take depends on whether the individual believes he or she will succeed.

Experiential learning theory presents one explanation for the central role that experience plays in the learning process. One of the foremost theorists of experiential learning theory was John Dewey (1929, 1938). Dewey promoted the educational philosophy of experiential learning in higher education by challenging his contemporary education system. In the traditional view of his time, teachers were seen as knowledgeable while students were dependent on these experts and passively absorbed information given to them. Dewey

proposed that there must be an interconnection between the processes of experience and education in order for meaningful learning to occur. He believed there was a need for lifelong learning to enable the individual to adapt and cope with change, and this has remained an aim of higher education.

Another consistent theme in experiential learning theory is concern for the integration between theory and practice. Kurt Lewin (1948), an early action research practitioner, found during his work as a social psychologist that learning is a type of problem-solving situation and is best facilitated when both the immediate, concrete experience and the reflection of the experience are considered as part of the whole. Lewin is credited with developing a theory of learning that has been further explored in the work of Kolb (1984). Kolb's theory states that experience is tied directly to formation of new ideas, and theories must be relevant and effective in the practice arena. This form of relationship between theory and practice became an integral part of action research methodology as well as a theoretical explanation of the experiential learning process. (Fig. 1).

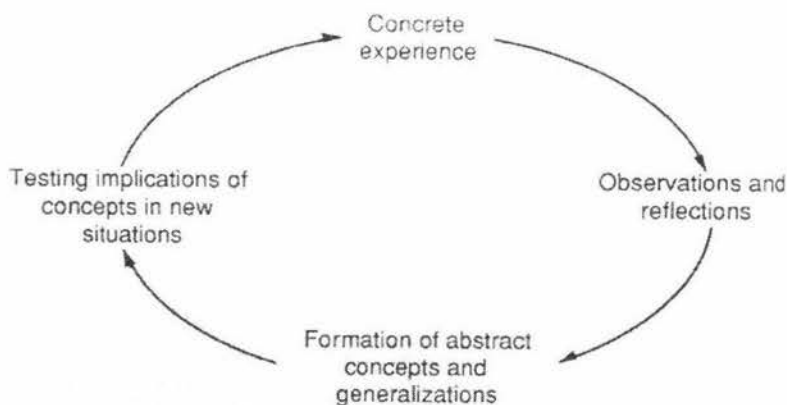


Figure 1: Kolb's experiential learning cycle

(Source: Kolb, Rubin & Osland, 1991, p. 59).

Heron (1989) gives another definition of experiential learning through his work over many years as a facilitator of experiential groups. He presented a model, developed from his experiences, which he suggested is a starting point for others to develop further. He was committed to collaborative inquiry and believed that group work involves all participants working together to learn through experience and reflection. Heron's (1989) framework of experiential learning proposes that there are four interdependent forms of learning that complement and support each other. These are called the practical, the conceptual, the imaginal and the experiential, and each is grounded in the lower as in a pyramid.

To summarise, practical learning is described as learning about doing something and involves skill acquisition. Conceptual learning is the abstract intellectual learning about subject matter that is expressed in statements and propositions. Imaginal learning involves an intuitive grasp of the whole, and experiential learning is learning by encounter and direct interaction with a person or an event. Experiential learning is the feeling—the resonance level of learning—and is composed of the whole hierarchy. This view is useful as one way to explain how different forms of learning may develop in student nurses during clinical experiences.

The philosopher Habermas (1972) has also influenced learning theories and he developed a critical theory of knowledge development that differentiated the more theoretical ways of knowing with the application of knowledge. He called these expressions of learning the technical, the practical and the emancipatory. These domains are grounded in different aspects of the experience of the learner, which are identified as work, interaction and power.

Habermas (1972) suggests that in the area of technical or work learning, the learner needs to be able to control the immediate environment by having the knowledge and skills to do the job. The practical, or interaction, domain

involves learning social norms in the practice setting. The emancipatory domain requires students to develop self-knowledge through critical reflection. Knowledge at this level allows the student to gain power and control over their own life by recognising the reasons for the problems. To gain emancipatory knowledge the learner must know the structures that encourage understanding of the social world in which the interaction takes place. It is then possible to act from within the situation, using informed action to work towards improving the status quo.

How can a teacher promote quality learning?

The concept of reflection is promoted in teaching methods that encourage quality learning in nursing education. Reflection is discussed in the nursing and educational literature as a way of developing critical thinking and problem-solving abilities that will assist the nurse in learning within complex clinical environments. Reflection is also seen as a process that a learner needs to develop in order to understand how theory relates to practice (Baker, 1992; Durgahee, 1998; Greenwood, 1993; Macintosh, 1998; McManus, 1994; Mallik, 1998; Palmer, Burns, & Bulman, 1994; Richardson & Maltby, 1995; Street, 1991). Many nurse educators promote reflection as a method of facilitating learning from real clinical situations and suggest that it is an active process that encourages thinking about practice, experience, skills, knowledge and attitudes (McCaugherty, 1991; Reed & Proctor, 1993; Wheelhouse, 1996).

Reed and Proctor (1993) propose in their text on nursing education that reflection is demanding and does not occur in a vacuum, but in response to a given situation. In their view it is a social process in which understanding develops through discussion with others and is accepted or challenged within the specific situations. Reflecting on interactions with others is one way of bringing to the surface unexamined ways of knowing and being in the world.

This allows for new ways of thinking and acting and facilitates the learning process.

Using reflection as a learning tool has largely been developed from the ideas of Donald Schon (1983, 1987), and his theory has been applied in studies on teaching and learning in nursing clinical settings (Baker, 1992; Cameron & Mitchell, 1993; Clarke, 1986; Haddock, 1997; Heath, 1998; Palmer, Burns, & Bulman, 1994; Richardson & Maltby, 1995; Riley-Doucet & Wilson 1997; Street, 1990; Wellard & Bethune, 1996). Schon's (1983) theory of 'reflection in action' and 'reflection on action' describes two ways of relating action and thought. His work on professional knowledge development highlights that the traditional view of science as a method of problem-solving is unsuitable for learning from experience. The author explains that deductive, linear, logical processes may be useful in solving simple problems in artificial, controlled situations such as a laboratory, but are not useful in complex and often unpredictable problems such as those in nursing and teaching practice.

Schon (1983) further explains that a professional learns to recognise a new situation or problem and thinks about it while still acting. This is named 'reflection in action'. This ability to discriminate on the job is a goal for the proficient nurse and from this theory it is possible for a teacher to work as a coach to identify problems in the situation and assist the student to deal with immediate problems. In nursing education, the lack of availability of a guide or a role model during clinical practice has led to the more common practice of encouraging 'reflection on action' (Palmer, Burns, & Bulman, 1994).

This is the retrospective view of actions and occurs, for example, in critical incident debriefing carried out in a tutorial situation with a nurse educator and a group of students. In this situation, reflection on action still accounts for the contextual aspects and facilitates learning from experience; however, there are difficulties as students learn to say what they know the instructor wants to

hear. Durgahee (1998) suggests that it would be better that a teacher confirms with a student what they intend to do, why and how, prior to taking action. Greenwood (1993) agrees and cautions against promoting reflective practice that focuses on retrospection. Ideally, feedback should be provided before, during and after action and opportunities given to repeat the experience immediately in the presence of someone that can monitor and assess the action taken.

The use of reflection as a learning tool in nursing education, therefore, remains problematic. If used retrospectively the process may not necessarily generate an honest description by students of their innermost fears and anxieties, but rather what the students think the lecturer wants to hear. There are also problems translating Schon's (1983) ideas about learning to a nursing clinical environment. Again, these centre on the specific nature of the setting. The clinical environment is not a virtual world but a real world where student learning is secondary to ensuring patient safety.

Critical reflection is also encouraged for the professional development of a teacher, and authors advise that any new ideas aimed at improving the quality of teaching and learning must allow for the effects of the existing professional culture. Carr and Kemmis (1986), Winter (1989) and O'Hanlon (1996) explain that this is facilitated through critical reflection that provides a means to go beyond assumptions to critical analysis. They also suggest that not only should a teacher acquire critical reflection skills for their own development, but those who act as facilitators of learning need to encourage these skills in others. A skilful facilitator assists the student to recognise assumptions in order to challenge them. Examining underlying cultural traditions allows for deeper insight into everyday practice. These authors also promote the action research method as a way to develop critical professional practice.

Which factors hinder and which facilitate learning in clinical settings?

The literature on quality learning and good teaching, as well as experiential learning theory and developing reflective practice, facilitates understanding of the influences in the clinical learning environment for undergraduate student nurses. Authors suggest that encouraging student autonomy and developing self-directed learning skills theoretically leads to quality learning, and these theories are therefore applied by nursing lecturers during their classroom teaching. However, difficulties in translating these theories into educational practice within the clinical environment are evident (Jinks, 1991).

The theory and practice of adult learning is in conflict in nursing practice settings due to the imposed limitations to the educational experience available for students. Reed and Proctor (1993) state that the reason for this is that the clinical environment does not lend itself to student directed learning, experimentation or working at an individual pace. Learning opportunities must be negotiated within legal and an ethical boundary of student nurse practice and the first responsibility is for safe patient care. The work is also dictated by the schedules of others and time for practising technical skills is limited. This leads to conflict between the process of knowledge development, students' experience in the educational setting and what is possible in the clinical areas.

The discussion of teaching and learning for student nurses in clinical settings therefore involves several interrelated factors that hinder and facilitate a quality experience. These factors have been grouped into three main areas (Baillie, 1993; Horsburgh *et al.*, 1989; Kleehammer, Hart & Keck, 1990): the characteristics of the students themselves, the mentors (or staff nurses) and the placements (or clinical settings). Baillie (1993) proposed a model of those factors that influence student nurses' learning in community nursing

placements (Appendix A). This was developed from her phenomenological study of students' experiences in an English setting. Data was collected from eight students in unstructured interviews, that were taped and transcribed. These were analysed by taking statements related to factors, negative or positive, that affected learning and grouping these into categories.

Student characteristics identified in Baillie's (1993) study that affected learning were prior experience of the placement setting, the student's approach to learning, how the student felt about the role in the placement and the student relationship with the mentor. Characteristics of the mentor, who was usually a staff nurse, were crucial to student learning. Their attitude and knowledge concerning the student and the course, their skills in facilitating learning and their professional credibility as perceived by the students greatly affected student learning. The nature of the placement, which was important for learning, was the perceived relevance of the placement as well as the experience available in the placement. Although this model developed from a small sample and the researcher cautions against generalising the findings, I found it provided a rich, visual picture for a beginning perspective on the local clinical teaching and learning situation.

What influences the clinical teaching role for a polytechnic nursing lecturer and for a staff nurse?

In Baillie's (1993) model it is the staff nurse who acts as mentor and has the most direct teaching role. However, questions of whether the educationally based lecturer or the staff nurse is the best teacher of nurses in the clinical setting and what their role should be is debated in the nursing literature (Campbell, Larrivee, Field, Day, & Reutter, 1994; Clifford, 1996; Crotty, 1993; Dyson, 1998; Jinks, 1991; Lee, 1996; Loannides, 1999; Owen, 1993; Wong, & Wong, 1997). The tensions between values and beliefs of the nursing lecturers

and the staff nurses are highlighted in these studies and others (Davies, 1993; Dunn & Hansford, 1997; Dyson, 1998; Fothergill-Bourbonnais & Higuchi, 1995; Hart & Rotem, 1994; Nolan, 1998; Spouse, 1998).

Some of the difficulties for nursing students while in clinical settings are explained as the effects of these two different sets of beliefs, values and actions presented during their education. This clash of cultures also influences the role perceptions of the education-based lecturer and that of the staff nurse in clinical teaching. Greenwood (1984) submits that one belief system may be seen as 'for and from theory' and the other is 'for and from practice'. The first theory, promoted by nurse theorists and nursing lecturers, suggests that each individual is unique. From this humanistic perspective it is the person, not the disease, that is the focus of nursing. In the classroom students are exposed to the idea that nursing means to assist individuals in maintaining an optimum state of wellbeing, and nursing theory is meant to underpin nursing practice. Nursing lecturers also propose that nursing research provides a defence and rationale for nursing action. These lecturers, when involved in clinical work, bring these theories with them into their role with students.

Research studies have highlighted however, that nursing theories emphasised in classroom teaching and nursing theories evident in nursing practice are very different (Hart & Rotem, 1994; Hewison & Wildman, 1996; McCaugherty, 1992; Nolan, 1998). For example, Nolan's (1998) descriptive, interpretative study collected data from six second-year undergraduate nursing students during their two-week medical-surgical placement in a private hospital in Australia through unstructured interviews. One of the themes from this study was that what students learn from staff nurses in clinical practice was not consistent with the individualistic approach taught in theory classes. Emphasis in this clinical environment was on developing a skilled technical task performance, and these were organised around a disease-oriented model. Those clients with

the same diagnosis and treatment were offered the same nursing support. However, the researchers suggest that by experiencing the difference between the ideal and the reality of nursing practice, students became aware that problems existed and this developing awareness assisted the student in reducing the gap between theory and practice.

Greenwood (1984) argues that the tension between students' experiences in clinical settings and the nursing knowledge presented in the classroom has resulted in the development of a knowledge base for the nursing profession that comes not from experience, but from abstract research. It is also suggested here that research studies based on theoretical frameworks of holism and individualised care traditionally have high status in educational institutions and are more published in literature. Staff nurses, on the other hand, are working from practice realities and do not traditionally conduct or publish research.

This results in the perception that the knowledge and action demonstrated by staff nurses is less important than theoretical knowledge and it is therefore not explored, analysed or learned. This perpetuates a theory practice conflict and influences the teaching and learning for students in clinical areas. One way Greenwood (1984) suggests to address the conflict is to recognise the value of different perspectives on nursing and not to revere theoretical knowledge only. This would allow practice knowledge of experienced practitioners to be considered and analysed by students and it is one way to reconcile the theory practice divide.

One method to encourage the development of research-based practice in order to translate research findings into clinical settings that has recently been promoted in the New Zealand nursing profession is the publication of *Best Practice Guidelines* through the Joanna Briggs Institute (2001). This information is disseminated collaboratively by nursing and healthcare organisations. A

panel of research experts who extensively search for and assess the available research evidence have investigated specific nursing practice issues. Recommendations are made for changing or confirming current nursing practices based on these systematic reviews. This practical method of communicating research findings is aimed at making research more relevant and accessible to the staff nurses in a clinical setting. This may also serve to reinforce students' classroom knowledge of research methods and demonstrate that research is aimed at assisting the development of nursing practice.

Hyrkas (1997) and Booth (1997) both describe using an action research method to examine nursing education issues and focus on developing closer communication between those in nursing education and those in nursing practice. The aim of Hyrkas' (1997) study, set in Finland, was to develop clinical teaching more collaboratively between the education-based teachers and staff in clinical practice. A group of teachers formed the research group and decisions on the focus for the study were made collaboratively throughout.

Booth (1997) entered into discourse with a group of student nurses, nurse educators and registered nurses in clinical areas to develop improved partnerships between these individuals and groups. Using an action research methodology, she identified areas of concern that were similar and different among these key people in the teaching and learning environment. This resulted in a better understanding of the clinical learning context for those involved, particularly the impact of personal and organisational cultures on education in this environment. It is suggested that from this knowledge strategies for collaborative partnerships can evolve for the purpose of better preparing student nurses for clinical practice.

What defines the role for the polytechnic nursing lecturer and for the staff nurse in clinical teaching?

As discussed, the role identified for the nursing clinical teacher varies widely within the literature. However, the findings of several research studies point out that the effectiveness of clinical teaching is vital to the quality of learning and that a teacher from an educational institution is needed within the clinical setting in some form (Baillie, 1994; Dunn & Hansford, 1997; Durgahee, 1998; Dyson, 1998; Fothergill-Bourbonnais & Higuchi, 1995; Murphy, 2000; Owen, 1993; Wong & Wong, 1997). The role for the nursing lecturer is variously described as facilitator, mediator and negotiator with minimal involvement in direct clinical teaching, to a role as the clinical expert acting as a role model and an immediate resource for practical problems (Clifford, 1996; Crotty, 1993; Hsieh & Knowles, 1990; Murphy, 2000; Owen, 1993; Paterson, 1997). A role model, or mentor, from within the nursing staff practising in the clinical area is also highly influential (Orchard, 1998).

Much of the literature around clarifying a role for the 'nurse teacher' originates in the English setting; however, this literature lacks a clear definition of the term (Baillie, 1994; Carlisle, Kirk, & Luker, 1997; Clifford, 1996; Crotty, 1993; Lee, 1996; Owen, 1993). It appears that the nurse teacher is the education-based teacher, or nursing lecturer, who has a role in classroom teaching and a tenuous role in clinical teaching. The change in the English system of nursing education during the beginnings of the governmental Project 2000 review in the early 1990s has affected the role of the education-based teacher in the clinical areas in ways similar to New Zealand. Theory and clinical teaching are combined to some degree in both roles and the teacher is based within a tertiary educational institution. The details of what Project 2000 involved is also not contained in the research articles on the role of the nurse teacher. However, Crotty (1993) states that it was explicit within the Project 2000

document that nurse teachers will regain their clinical skills and have the opportunity to maintain clinical credibility.

Owen (1993) used an action research approach to investigate the role for the nurse teacher in the clinical areas just before the change to Project 2000. She found that the nurse teacher has a multifaceted role as a teacher, a researcher and a change catalyst. She suggested that to fulfil their role the focus of the teacher should be not only on the student, but also on the nursing staff by acting as a resource for practical help as well as research knowledge.

Much international research on clinical teaching argues, however, that clinical rather than educational staff carries out the most effective clinical teaching (Hart & Rotem, 1994; Naphine, 1996; Orchard, 1998; Owen, 1993). One way that this role for the staff nurse has been developed is through the introduction of preceptor programmes in which a staff nurse is responsible for one-to-one student supervision in clinical areas and the education-based lecturer functions mainly as a facilitator to this relationship (Dyson, 1998; Hsieh & Knowles, 1990; Kaviani & Stillwell, 2000; Myrick, 1988; Zerbe, & Lachat, 1991).

Preceptorship has been used in the United States and Canadian settings since the 1960s. It emerged from dialogue between those involved in education and health, where the need was identified for a better clinically prepared graduate nurse. Students were entering the profession and soon leaving as they felt unprepared for the realities of clinical work (Myrick, 1988). This method of clinical teaching and learning recognised the importance of the staff nurse, not only as an expert clinician, but also as a source of support within the healthcare team.

This model of teaching in the clinical setting was seen to facilitate the transition of student to registered nurse and particularly to prepare new graduates for full patient care responsibilities immediately. However, Myrick (1988)

cautioned against accepting this model uncritically as early research showed there was no significant difference in the clinical performance of student and graduate nurses who had been precepted and those who had not. The author also warned that separating clinical teaching from classroom teaching was not meeting the purposes of nursing education, which claimed to provide both theoretical and clinical education.

Dyson (1998) has examined the New Zealand experience of a preceptor model of clinical teaching in an exploratory, descriptive study using a sample of twelve polytechnic nursing lecturers. Findings from this study identified a role for the polytechnic lecturer in the preceptor organisation of clinical teaching and emphasised that continuing presence and involvement of the lecturer in clinical student teaching was important. It is yet to be determined whether graduates who have been precepted perform better in clinical areas in New Zealand than those who have not. It does appear that a world-wide shortage of nurses is continuing to worsen and that providing students and new graduates with preceptors has had little effect on retaining nurses in the profession.

Boyle (1994) also examined the teaching and learning relationship between staff nurses and students in New Zealand. In her study experiential learning was explored using a case study design. Three learning stages that students experience during their clinical experiences were identified. These were labelled initiation, exploration and consolidation. The key learning stage, identified in the research findings, was the exploration phase; this was dominated by the influences and teaching of the staff nurses in the setting. Control of the learning experiences by the staff nurse meant that students were not self-directed and did not develop independent ways of learning and working. Boyle (1994) recommends that ongoing research, particularly action research, is required to evaluate the involvement that registered nurses have in

clinical nursing education as well as to identify what promotes development of professional practice through experiential learning.

What do nursing students learn in clinical settings?

Several nursing studies have explored the influences of power relationships in nursing and their effects on what is actually learned during clinical experiences (Campbell *et al.*, 1994; Clare, 1991; McLeland, 1999). Judith Clare (1991), writing from a critical social theory perspective, suggested that there is an agenda that remains implicit and the student learns the art of nursing practice from working with staff in the clinical areas. This she termed 'the hidden curriculum' and suggested that this is what students are most exposed to.

Clare (1991) suggested that socialisation into the nursing practice world means that students learn the skills necessary to fit in and to work within the dominant practices of the particular area. However, she argues that it is important to encourage students to learn to question accepted work practices, rather than join in for the sake of being accepted by the team. Clare (1991) recognised that this is difficult for students; however, she suggested that by encouraging independent thought and action students learn to critique the culture of nursing practice. From this it is possible to identify the underlying power relationships that constrain teaching and learning. The author quotes that the educated person:

...is one who can form judgements not only on particular issues within context of a cultural tradition, but one who can also critically reflect on the cultural tradition itself. Such a person should be able to decide on a reasoned examination of the evidence and to accept, reject or modify any particular aspect of the cultural traditions into which he/she has been initiated (Bottorff and D'Crux, 1985, p. 3, cited in Clare, 1991).

McLeland (1999) also examined the learning experiences of student nurses in New Zealand in a clinical setting from a critical perspective and identified the powerlessness and marginalisation of nursing students. This author suggested that this was resulting in poor conditions for learning in clinical settings. McLeland further argued that as students were peripheral to the work of the organisation, few resources were being directed towards enhancing student learning. From her study she found that students did not have the opportunity for debriefing and for reflective sessions with a teacher during their time in clinical areas. This decreased the development of praxis, or informed action, that Benner (1984) theorised is a characteristic of the expert nurse.

Mayson and Hayward (1997) describe the characteristics of a clinical area that were most beneficial to the learning experience of third-year undergraduate nursing students in New Zealand. The aim of the study was to explore perceptions of nursing from students' perspectives and to examine how this is affected by 'the hidden curriculum' in nursing education. The students reported that registered nurses and tutors contributed to learning and it was very important to be accepted by the clinical team; however, peers also provided much support and teaching. The peer student group gave more open, honest feedback to individuals about clinical performance and was the most valuable resource as they were the most consistent group during a course.

What are the influences of the clinical learning environment on student learning?

Although the debate on problems of theory practice relationships and clarifying a role for the clinical teacher dominates much of the literature on teaching and learning in clinical settings, there are other factors in this learning

environment that have also been examined (Dunn, Stockhausen, Thornton, & Burnard, 1995; Dunn & Hansford, 1997; Kleehammer, Hart, & Keck, 1990; Windsor, 1987). The complex nature of the clinical setting is frequently a stressful environment for students, and research demonstrates that many students experience a high level of anxiety when first approaching a new clinical area. Anxiety decreases learning and Kleehammer, Hart and Keck (1990) identified that the fear of making mistakes and being observed and evaluated by instructors adds to the stress felt by students.

This American study collected data from junior and senior nursing students over a four-year period using a clinical experience assessment form tool. The researchers asked questions about communication, interpersonal relationships with healthcare providers and interactions with education-based teachers using a Likert scale response format. One open-ended question was added to identify the most anxiety-producing aspect of the experience. Findings were quantified and these indicated that the initial clinical experience on a unit, mastering new nursing procedures and talking with physicians were the most anxiety-producing experiences for these students. The researchers recommended that recognising and addressing these concerns could lessen anxiety to a manageable level and therefore increase learning.

An earlier American study by Windsor (1987) used naturalistic inquiry to gain student nurse perceptions of clinical experiences. Data was collected from nine volunteer students by interviewing each student twice using a focused interview approach. This data was analysed by organising it into categories, which were tested for internal and external plausibility against criteria developed by Guba and Lincoln (1981, cited in Windsor, 1987). The findings were that adequate student preparation, lecturer supervision style, approval from their instructor and peers all facilitated learning. The term instructor appears to be used for the education-based teacher with a clinical teaching

role. Barriers to learning from this study were, therefore, identified as lack of preparation, poor supervision structure and lack of support from an instructor as well as personal problems. The most important interpersonal relationships identified were those between the clinical instructors, staff nurses and fellow students.

Dunn and Hansford (1997) also confirmed poor staff relationships and a lack of staff commitment to teaching as barriers to learning in the clinical setting in a more recent study. This examined nursing students' perceptions of their clinical learning environment in the Australian setting from a relatively large sample of undergraduate students (n=229) in the second or third year of their course using both quantitative and qualitative methodologies. The researchers state that using this combination of approaches provided an overall picture of the situation and improves confidence in the findings. These findings indicated that the organisation of work by ritual and tradition and the strongly hierarchical nature of the institutional system prevented students from gaining confidence in this environment or suggesting or discussing alternative ways of working. Areas where the student was not allowed to perform certain duties without supervision limited students learning from experience as well, but was a necessary limitation to protect patient safety.

The influence of nurse managers on clinical learning was also highlighted in the Dunn and Hansford (1997) study. Students suggested that the attitude of managers towards students largely determined the attitudes of staff and, therefore, the quality of the teaching provided by the staff. Good collaboration between the education institution and the clinical setting usually improved the clinical manager's attitude to the student's presence in the area and also allowed for early intervention in identified problem areas for the student or the staff.

Summary

The theory of teaching and learning and the application of these principles in nursing education, particularly in clinical settings, for undergraduate student nurses has been presented. The goal of developing autonomous, self-directed learners has been identified as a main aim of education in tertiary institutions. Educational theory supports this aim and states that students who are capable of learning autonomously will succeed within settings, such as nursing practice areas, that are dynamic and complex. From their experiences in adult learning, teachers propose that in order to promote quality learning it needs to be recognised that learning is a process that involves both affective and cognitive elements, and that each adult learner brings their own previous experiences and feelings about their ability to learn.

Experiential learning theory has been reviewed in order to develop understanding of how students learn from experience. The relationship of theory to practice has been discussed from the view of influential theorists, and the concept of reflection has been explored as one method used by teachers to assist students to learn by relating thought to action. Schon's (1983) ideas on 'reflection in action' and 'reflection on action' have been examined and issues in the application of this theory to nursing education have been outlined.

Factors that hinder or facilitate learning in clinical settings identified in literature have been discussed. Baillie's (1993) model offered a visual picture of the characteristics of the clinical setting, or placement, of the staff nurse and the student that influence the nature of teaching and learning situations. From an examination of the research literature it appears that researchers have examined these factors mainly from the students' perspectives using descriptive, exploratory research methods.

Defining a role for the clinical teacher has been the subject of much of the literature on teaching and learning issues for student nurses, and the presence of an effective role model and teacher is generally recognised as vital to quality clinical education. Issues of whether an instructor within the healthcare agency or an educator based within a tertiary institution is best prepared and able to carry out a clinical teaching role have been considered. Preceptorship has been briefly defined as one method debated in the literature to create an effective relationship between a staff nurse and a student with a liaison role for the education-based teacher. The influences of socialisation and the clinical environment on what student nurses actually learn in the clinical setting have been described. These effects centre on the power relationships in a hierarchical organisation of work in an institution.

The theoretical and research literature examined has provided an initial understanding of the current New Zealand situation. As suggested in the Kemmis and McTaggart model of action research (1988) identifying the language in use and the current patterns of interaction between students, lecturers, staff nurses and the environment can be used by the researcher to guide the action group to plan for a change. Findings from these studies inform this action research and lead the group to decide on a practical change based on an informed analysis of their own situation. This study will add to the current research by providing an example of a method used to introduce change into a local clinical teaching and learning setting.

Action research methodology is outlined in the next chapter and reasons for the suitability of this approach in this form of inquiry are discussed.

Chapter Three

Action Research Methodology

Introduction

This chapter introduces the action research methodology chosen to answer the question that guided the inquiry: The question was "How can we improve the teaching and learning in the clinical setting?" The use of action research in nursing education is described to explain the suitability of this approach for this study. The processes of collaboration and reflection that are characteristic of the methodology are discussed. A framework for change through one educational action research model is detailed. The action research process applied in this study is then described and issues of rigor are debated. Ethical considerations and the selection of participants for this study are outlined. Data collection methods, data analysis procedures and identification of central findings are also outlined.

Selecting a suitable approach for a research study involves many practical and philosophical decisions. My challenge was to explore a teaching and learning situation using a process that had validity and trustworthiness. The research question identifies that a participatory method was used to propose an improvement to an existing situation: "How can we improve the teaching and learning in the clinical setting?" Examining issues of teaching and learning in a clinical environment, that aimed to include the perspectives of both a teacher and a group of students, appeared particularly fitting to this form of inquiry. From the literature reviewed it was evident to me that those seeking to

improve an educational situation need to promote the active role of the learner and that students learn by imposing personal meaning on their experiences. The review also highlighted problems transferring these learning theories from the classroom setting to nursing clinical settings. As I investigated action research, I discovered that these same processes particularly collaborative effort and reflecting on experiences, inform the methodology and its application in education and in nursing.

Action research and nursing education

Nursing's interest in action research is traced to the late 1970s and early 1980s, mainly in England and the United States, with a rapid increase in action research projects since then. Some researchers argue strongly that action research is particularly suitable for nursing education and practice as nursing is a social phenomenon and a practical discipline (Greenwood, 1984; Hunt, 1987; Webb, 1989; Webb, 1990). It is also debated in the literature that the close alliance between theory and practice, through reflection and action by individuals and groups involved in the process, is useful for the application of research findings in the clinical setting. The method is also recommended for nurses as a type of insider research where the nurse is best placed to critique practice and to successfully implement change. Action research has also been applied to identify issues for clinical teaching and learning of student nurses (Booth, 1997; McCaugherty, 1991).

Organising, monitoring and facilitating clinical experience for student nurses are responsibilities of nursing lecturers, and this involves recognition of the realities of the clinical environment. As outlined in the preceding chapters, clinical experience for student nurses is highly complex, and it is difficult to identify educational problems that are amenable to research within this

context. Schon (1987) aptly highlights this within other professions and has been widely quoted in nursing education literature:

In the varied typography of professional practice there is the high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy confusing problems defy technical solution. The practitioner must choose. Shall one remain on the high ground where one can solve ...problems according to prevailing standards of rigor, or shall he (sic) descend to the swamp. (Schon, 1987, p. 3).

Poskitt (1994) suggests that contradictions and tensions are part of action research methodology due to the contextual nature of problems. The interaction of people in professions is uncertain and inconsistent in response to an environment of rapid change. Poskitt (1994) further comments that different values and beliefs of those in the environment result in a struggle of ideologies. Action research is one method that seeks to include different perspectives through collaborative effort of individuals using group process. Group work is aimed at developing practical strategies to improve an existing situation. Action research is, therefore, a useful approach to the examination of complex problems of learning in clinical settings, that defy simple cause-and-effect solutions.

Action research methodology

Growing dissatisfaction with positivist methods by social science researchers has led to the increasing use of qualitative methods as an alternative to the traditional experimental forms (Miles & Huberman, 1994). Within the qualitative methods there are two main research approaches. One is the interpretative style that emphasises the value of individual experiences and aims to develop an understanding of reality as socially constructed. Critical research is the other main approach and from this viewpoint understandings

are applied to critique the influences of conflicting ideologies present in the organisations that individuals are a part of. The aim is to effect social change (Denzin & Lincoln, 1994). Action research has developed within these two forms however the degree of critical analysis will vary. The examination of a local situation may be limited to the forces within a particular setting while a larger scale inquiry may examine wider socio-political influences. The process is however, essentially active, and emphasises praxis or informed action (Carr & Kemmis, 1986; Winter, 1989).

The notion of practitioner as researcher, emphasised in the early work of Stenhouse (1975), characterises the methodology in the field of education. This approach stresses that teachers are best placed to identify and investigate educational problems. McNiff, Lomax and Whitehead (1996) agree that teachers should act as researchers into their own professional practice and Elliott (1991) adds that action research is a form of professional development. These authors also point out that action research is different from other research methods because it requires action as an integral part of the process, and the researcher's professional values rather than methodological considerations focus it.

Dominant characteristics of action research

Although there are differing forms of the method, evident in both the education and nursing literature, there are identifiable common characteristics and these relate to the underlying humanistic philosophy of the method, which values the integrity of the individual (Denzin & Lincoln, 1994). The method is always situational and is concerned with specific contextual problems that are historically and socially constructed. The method is also collaborative and participatory and all participants take an active role. Interventions are implemented and monitored through reflection as the

situation is modified and changed. The concepts of collaboration and reflection are common to all forms of action research; however, the nature of these will vary.

Collaboration

Further exploration of the concept of collaboration identified that the type and amount of collaboration in each action research project is a significant issue. This is influenced by the theoretical background of the researcher, the relationships that exist between participants and the length of time a group is engaged in the process. There have been three main types identified, and these have been called the technical, practical and emancipatory (Carr & Kemmis, 1986; Hart & Bond, 1996; Hyrkas, 1997; Titchen & Binnie, 1993). There is a specific role for the researcher and the participants in each category.

This typology originates in the work of Habermas (1972) who, as outlined in the literature review, described a critical theory of knowledge development in these terms. From his view a specific inquiry may change its orientation as the process unfolds. Participants become more involved in the collaborative processes as they gain more knowledge of the method and become willing and able to take a more active part in the decision-making processes. One example of this in a nursing education context was Adamson's (1997) study, which in part explored the development of her action research as the student nurse participants became more familiar with the method. The initial technical approach directed by the researcher changed to a more emancipatory inquiry during the length of the study.

Collaboration in action research methodology, may also involve more than the initial group of participants. The initial group may decide that due to the developing direction of the inquiry those affected by the practices in question should also be included. Kemmis & McTaggart (1988) suggest that in this way, the application of the method connects critical communities through a joint

analysis of situations as they are constructed through the institutions of work. Competing values and perspectives between individuals and organisations are made problematic, and participants in the action research collaborate to improve the understanding of these influences on situations in order to change them.

Winter (1989) observes that a common characteristic in collaborative processes such as action research is the challenge to one's subjectivity. He proposes that the accounts of various participants present a range of accounts that should be considered within the structure of the situation. The selection of which accounts to include is never arbitrary and never complete. Winter (1989) argues that the analysis is, however, more than just opinion and has an outcome in a practical proposal. This may not be the only approach or the best practical strategy, but it has emerged from the analyses as a theoretically possible option

Reflection: Experiential learning and action research

Experiential learning theory provides a rationale for the use of the action research method in education. As outlined in the literature review, the underlying assumption in these theories is that people learn and create knowledge on the basis of concrete experience, by observing and reflecting on that experience, and by forming abstract concepts and generalisations that can be tested out in new situations (Kolb, 1984; Lewin, 1948). It is suggested that this leads to new concrete experiences and therefore the beginning of a new cycle. The experiential learning cycle and action research identify similar processes that assist in knowledge development (Elliott, 1991). Efforts to improve an educational situation may therefore be enhanced by action research methodology and informed by experiential learning theory.

One integral part of each phase of the action research process as well as the experiential learning cycle is reflection, and this is recognised as a way of

learning (Elliott, 1991; Reason, 1988). Elliott (1991) proposes that there is a descriptive purpose in reflection that leads to an evaluative purpose, which is then transferred into the practical planning of the next action phase of the research. The research group may review and refine descriptions until they are an accurate representation of their individual experience and understanding. Improving practice requires a continuous process of reflection on the meaning and outcome of actions taken. Kemmis and McTaggart (1988) suggest that this develops the groups' understanding of their social situation and facilitates replanning and refining of action taken from these new understandings. Praxis is made possible through this development of informed, committed action.

Action research and change

Kemmis and McTaggart (1988) present a model for change that is particularly focused on improving education. In this model, educational reform involves an initial examination of the ways an individual influences and is influenced by the culture of groups, institutions and society. This culture is identified through the existing forms of language, activities and social relationships in use in an educational situation. Once these features of the existing culture are identified, a change can be planned, implemented and evaluated. Educational change is therefore identified through three main aspects of a situation (Kemmis & McTaggart, 1988, p.16). These are:

- *Changes in the use of language and discourses - how people identify and describe their world and work.*
- *Changes in activities and practices - what people do in their work and learning.*

- *Changes in social relationships and organisation - the ways people interrelate in the process of education, how these are structured and organised in institutions to achieve consistency between principles and practices of educational administration and teaching and learning.*

Improving education through action research connects this form of analysis and action to both the individual and the groups of which they are a part. Through this process it is possible for the group to work together to understand their shared languages, actions and relationships in order to change these. This raises the possibilities of change on a wider scale.

Change that is directed at an improvement therefore involves analysing and improving language and conversations, educational practices and forms of educational organisation (Kemmis & McTaggart, 1988). This includes influencing people to modify their own ideas and their interactions with others. Kemmis and McTaggart (1988) propose that this is best accomplished through the collaborative action of a group working towards improved understanding of a situation, making changes based on an informed analysis, as well as observing and evaluating the consequences of the action. This framework for change is applied in this study.

The action research model of Kemmis and McTaggart

The action research model of Kemmis and McTaggart (1988) suggests that an open-minded approach to the inquiry is required. Action and reflection are informed by the participants working collaboratively and individually. These authors agree with others in the field that the problems action research is interested in pursuing come from practitioners in the field and, therefore, are complex and filled with human inconsistencies (Lewin, 1948; Poskitt, 1994; Stenhouse, 1975). The aim of this type of research is to improve an educational situation by systematically examining the interactions between the language,

conversations and interactions of people in the situation. The influence of the wider context of institutions and society is also considered.

This model was developed from Lewin's (1948) original work, and he is generally credited with first proposing that the framework for the method include the four phases, or moments, visualised as a spiral of steps. These are described as the processes of planning, acting, observing and reflecting. These phases are repeated in several cycles of action research and represent increasing understanding and refined action-taking, resulting in an identified improvement in an educational situation (Figure 2).

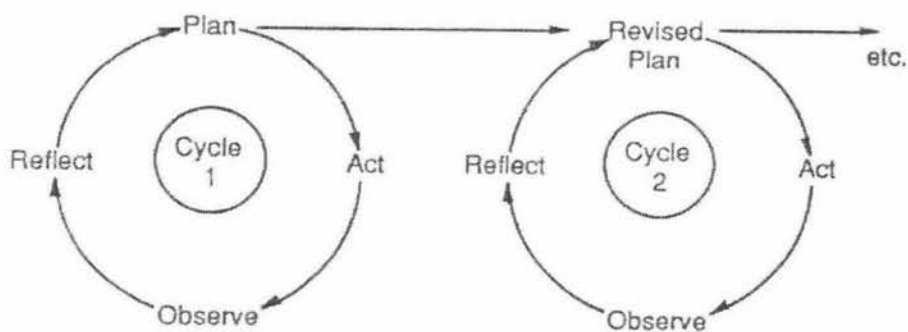


Figure 2: Action research spiral

(Source: Carr & Kemmis, 1986 reproduced in Nightingale & O'Neil, 1994, p. 102).

Kemmis and McTaggart (1988) have added to Lewin's framework of action research as a series of cycles and suggest that the research process begins with identification of a thematic concern – an educational issue that brings the rest of the process into motion. From a broad area of concern, a 'reconnaissance', or initial fact-finding, seeks to determine the historical and contextual effects on the current social situation. The research group uses this background information to further define the thematic concern and to focus on one aspect of the situation that is feasible for the group to explore. The next step is to plan and take action based on this. There is a close relationship between the planning and the action-taking, and each is informed by the other. Observing and collecting evidence about the action taken occurs. The group works

collaboratively through the process and the interpretation of the process, and outcomes includes the perspectives of all participants as well as the researcher.

Rigor in action research

Action research, as an alternative research paradigm, suffers criticism from traditional scientists as being less sophisticated, less disciplined and less able to be generalised than empirical research (Dick, 1997; Morse, 1994; Winter, 1987). Criteria for 'good' science has historically involved demonstrating rigor and control in the search for findings that can be generalised. It is argued, however, that the aim of finding universal answers is not a feature of qualitative methods. The question for this form of human inquiry is not "Is it true?" but rather "Does it increase understanding?" (Reason, 1994, p. 98).

Various authors suggest that due to the alternative purposes of qualitative research methods, evaluative criteria should be different from positivist methods (Denzin & Lincoln, 1994; Miles & Huberman, 1994; Winter, 1987). Criteria related to credibility, auditability, confirmability and transferability of the research are terms suggested as more applicable than reliability and validity of measurement tools and subject behaviour, which identify elements of control. At the least, commentators state that the systematic and public features of the research should be evidenced for readers to make a considered judgement of its merits (McNiff, 1988).

Reason (1988) has outlined the characteristics of collaborative inquiry. Although his view of collaborative group work is somewhat different than Kemmis and McTaggart's (1988) model, both agree that action research is one form of human inquiry that recognises the complex and dynamic social situations that individuals and groups live and work within.

What is important is that human inquiry is a process of human experience and of human judgement. There are no procedures that

will guarantee valid knowing, or accuracy, or truth. There are simply human beings in a certain place and time, working away more or less honestly, more or less systematically, more or less collaboratively, more or less self awarely to seize the opportunities of their lives, solve the problems which beset them, and to understand the things that intrigue them. It is on this basis that they should be judged. (Reason, 1988, p. 231).

Melrose (1999) suggested that knowledge claims that are presented with rigor in an action research project are those that are related to specific kinds of evidence used. She added that the techniques employed during the action and observation phases of the cycle to collect and analyse data also influence the rigor of the project. Melrose (1999) further stated that rigor in the method is increased through its focus on real practices and its cyclic nature. Within each cycle there are the different phases of the action research spiral. The first may explore the situation (reconnaissance), the second is an attempt to improve or change the situation (intervention) and the third is an evaluation of the intervention. Identifying the phases and cycles of an action research project provides a clear audit trail of decisions made, increasing the credibility of the findings. This also demonstrates to the reader that action was based on a systematic, informed process.

The action research in this study

The action research methodology applied in this study follows the Kemmis and McTaggart (1988) model for educational change. The identification of a thematic concern for this study originated in the research question, "How can we improve the teaching and learning in clinical settings?" The action group decided those developing independent methods of pursuing and negotiating their own learning opportunities would improve learning in the local educational situation in clinical settings. Teaching may also improve, as students who were self-directed and capable of identifying their learning

needs for teachers in the setting would be better prepared for a more active role in the relationship. From this broad area of concern, the group decided to focus on staff nurse and student teaching and learning interactions. A practical strategy to improve the current patterns of interaction was proposed in the form of contract learning. This was implemented by individual students in their particular clinical setting and evaluated in reflective sessions in the group.

To facilitate the writing of this thesis, the four phases of action research are represented as being linked into a cycle and eventually into a spiral of cycles (Kemmis & McTaggart, 1988). Hyrkas (1997) provides a diagrammatic representation of an action research project and I have adapted this to identify three action research cycles in this study (Appendix B). Each cycle was composed of the phases of reconnaissance, planning, action and reflection/evaluation. The research findings developed with this process. Kemmis and McTaggart's (1988, p. 10) criteria for change was used to identify these findings as follows:

- Reconnaissance - Analysis of current language and discourse, activities and practices and social organisations within the current educational situation: developing a focus for the study, refining the research question and further exploring staff nurse and student nurse interaction.
- Action planning - Developing a plan of critically informed action to improve what currently exists: planning for change in the use of language and discourse, activities and practices and social organisation. Using knowledge to improve staff nurse/student interaction through contract learning
- Action-- Observing the effects of the critically informed action in the context in which it occurs: enacting and observing changes in language and

discourse, activities and practices and social organisation. Identifying the nature of collaborative action by the participants during the introduction of contract learning in clinical settings.

- Reflection/evaluation - Reflection on the effects of the change as a basis for further planning, subsequent critically informed action and so on through a succession of cycles: reflection on the process and the outcomes of the study. Refining contract learning strategies. Suggestions for further research.

Poskitt (1994) suggests that representation of what occurred during an action research study using this type of framework is somewhat idealised. Each phase is more complex and contains aspects of all other phases, or 'moments'. Action research involves "a process of reflection on reflection, but it can never be exhaustive, never 'arrive' at an end point of full understanding" (Poskitt, 1994, p. 66). Therefore, the endless possibilities that are part of the developing understanding and action in the project are necessarily limited here to an account of one case study that is analysed using one framework.

Scope of the study

Although issues in educational practice are the focus of this inquiry, because the study involves student nurses' experiences in clinical areas there are three main variations from the Kemmis and McTaggart (1988) framework. First, these authors focus on using the process to improve their teaching and learning within an educational institution. In this study student nurses are outside the daily influence of the polytechnic nursing lecturer and are immersed in the world of nursing practice. The challenge for the nursing lecturer and student group in this study is to understand the factors within nursing practice settings that constrain or facilitate student learning. This

analysis is aimed at developing ways to act within this environment for the benefit of student learning.

Second, the model is similar to others that focus on teachers working together towards professional development rather than a teacher working with a student group to improve student learning (Kemmis & McTaggart, 1988; McNiff, Lomax & Whitehead, 1996). One reason for this is that the method involves opening up personal practices to challenge, which may be difficult. However, the benefit of working in this way is that students are more likely to develop trust if all participants in the action group share experiences. The power relationship, which is inevitable between a teacher and a student, can be made problematic and questions of role differences that influence teaching and learning activities may be addressed as part of the inquiry. My reflections on this are included throughout the thesis in my perspective of the situation.

Third, the timeframe for this study was relatively short compared to many action research projects described in literature (Adamson, 1997; Booth, 1997; Meyer, 1993; Titchen & Binnie, 1993). The time for each action cycle is not prescribed within the method; however, it is assumed that the longer a group is immersed in the inquiry the more a change would be critically informed. Kemmis and McTaggart (1988) advise novice researchers such as myself, that for newcomers to the method small-scale projects provide more achievable goals. Each step gives a sense of progress and provides some practice in planning, strategic action, observation and reflection.

Cycles of about a month are recommended as more rewarding for learning the process, although it is also emphasised that this will limit the scope of investigation and usually allow only a portion of a larger concern to be worked through. In this study the action group made strategic decisions about what could be accomplished with the proposed timeframe of approximately

four months, and this influenced both the scope of the change strategy and the critical analysis that took place.

Winter (1989) highlights the problem of time constraints for practising teachers when conducting action research and this assisted me in keeping the project feasible. He explains that the traditional division between researcher and practitioner, which is challenged in the action research method, has developed due to the nature of job commitments. The practitioner has little time within the working day to be involved "in investigation, evaluation or innovation even though one might agree in principle that these elements ought to be an integral part of the professional role" (Winter, 1989, p. 34). He argues, however, that there is value in small-scale practitioner-based action research projects, and making its procedures rigorous and available for critique assesses this.

Winter (1989) further argues that the method needs to be applied with economy and efficiency if it is to be truly feasible for practising teachers and, I would add, nurses. The work done in this study occurred during my everyday work as a nursing lecturer, and by documenting events it was possible for the process that is often undertaken by a teacher with a group of students to be made available for public scrutiny.

Whether it is used in small- or large-scale inquiries, the method has potential for affecting the future of society through improved understandings of how that society is shaped by individuals and organisations (Winter, 1989). The process of collaboration that was evident in this study demonstrates that the project maintained a philosophy of critical reflection and the perspectives of all participants informed the research. In this way the inquiry provides a basis for further research and further social understandings.

Ethical considerations

The ethical considerations for an action research project outlined by Winter (1989) were used to guide the researcher in this study. The first of these is that relevant persons in the organisations are consulted in advance. For this project, the Director of Nursing of the local hospital and the managers of the private facilities were notified of the study in writing and in person. All clinical unit managers where students taking part in the research were placed were given an information sheet and were visited in the early stages of the study by the researcher. The polytechnic nursing lecturers were also aware of the study and the head of the faculty was informed. Therefore, consultation with key people in the polytechnic and in the healthcare organisations was properly conducted. Any parties involved were informed of the study and the necessary permission and approval attained.

Ethical approval for this study was sought by submitting a detailed ethics application to the polytechnic research committee as well as Massey University Human Ethics Committee and was granted by both institutions. This included the background of the study, the proposed methodology and the aims, as well as the sampling method used, data collection, and data analysis procedures proposed and any ethical issues that might arise.

Permission was obtained from participants before observations were made or transcripts produced. The student participants were informed and, in fact, took part in deciding what type of data collection methods would be used. They were asked to give permission for meetings to be minuted and audiotaped for transcription. The use and storage of these written documents was outlined in the information sheets given to prospective participants. (Appendix C).

In action research, all participants influence the work and the rules for the group were outlined and renegotiated throughout the process. All participants were recognised for their work in the group, and as the initiator and facilitator I stated and documented that all members would be invited to participate in whatever manner they felt comfortable. Those who did not participate were not coerced, and each individual was informed that participation was voluntary. The consent form stresses that they would not be disadvantaged in any way if they withdrew from the study (Appendix D).

Research in progress is required to be visible and transparent to all participants, and documents were available for the group to view at any time. However, researchers and participants must accept responsibility for maintaining confidentiality and this was also emphasised in the group. Individual experiences were not discussed outside the group, and data was not available to persons not participating in the study. The verbatim quotes from transcripts of audiotaped meetings and interviews included in this thesis are anonymous.

A related ethical concern was the possible disclosure of unethical nursing practice that the students may observe. This was discussed and outlined as a concern in the ethics approval request submitted. It was stated that any concerns expressed by the students in the group would be referred to the nursing lecturer co-ordinating the module.

Therefore, the group of ten students who became the core action group had time to read the information sheet, to discuss the project with me and an intermediary. The voluntary nature of participation was explained. This was stated in the consent form, and ongoing consent was negotiated during the weekly meetings. This negotiation was done by presenting a summary of the minutes of the previous meeting prior to beginning the next meeting. Students decided whether they still wished to be involved as the focus for the study

developed. It was also documented in the consent form that although I am a lecturer in the programme, I had no assessment responsibilities with this group and their grades would not in any way be affected by participating in the study

The participants

Study participants are described in this thesis as two groups. One is called the core action group and the other is the expanded group (Melrose & Reid, 1999). These two groups participated in different ways in this study and their interaction is further discussed in the following chapters.

The core action group participants were ten student nurses and myself. After gaining approval for the study from the programme manager (Nursing) and the polytechnic research committee, this non-probability, purposive sample was chosen from the class of third-year nursing students at this polytechnic (N=30). One of the limitations of this form of sampling is the inability to generalise from the findings (Polit & Hungler, 1995). However, purposive sampling is practical and is advantageous when seeking a sample of those knowledgeable about the topic and willing to share experiences. These students were female and ranged in age from nineteen to forty-three years.

A sample of five staff nurses joined the study as an expanded group following a decision by the student core action group to include registered staff nurses. The rationale for this is discussed in the reconnaissance phase of the study. These staff nurses were employed in various clinical settings and were consistently paired with five students in the study. An application for an addition to the study protocol was submitted to the Massey Ethics Committee and permission was given to seek consent from these staff nurses. An information sheet was provided to these staff nurses and consent obtained

(Appendix E & F). All staff nurses were female and had been working in their clinical setting for at least two years.

Data collection

Data collection was guided by the research question, which was refined and refocused throughout the process. Different data collection methods were used at different stages to capture reflection and action cycles of the action research as the core action group worked towards developing understanding of teaching and learning in clinical settings in order to improve it.

These are summarised as:

- minutes of weekly meetings of core action group
- tapes and transcripts of weekly meetings
- tapes and transcripts of staff nurse/student interviews (5) – to gain initial staff nurse perspectives
- personal reflective journal
- tapes and transcripts of a separate staff nurse/student interview – staff (5), students (10) –at end of project as part of evaluation of process and outcomes.
- examples of written objectives/contracts/personal profiles used by students
- tape and transcript of critical colleague discussion mid-project.

The student group decided that weekly meetings would provide a forum for planning and reflection and that the taping of these meetings would provide the documentation needed for an audit trail of action decisions. A record of meetings methods of data collection and the type of evidence this provided are

presented in Appendix G. Attendance at these meetings was recorded in order to verify that sufficient numbers of students were consistently present to make decisions on the direction and scope of the study. Minutes and transcripts of group meetings were the main source of data, while interview data was attained to allow staff nurse perspectives and for individual participant comments at the end of the project.

The minutes of each meeting were distributed by me to each individual member prior to the next meeting. In these minutes progress towards planning for action and reflection on action taken were summarised. These proved valuable as a quick account of previous discussion and assisted in moving the project forward. Minutes were also a method of validating decisions made in the group.

As the initiator and facilitator of the study, I kept a reflective journal throughout the process. Kemmis and McTaggart (1988) advise all members of the action research group to keep a diary of reflections; however, students preferred to tape discussions in the group rather than add to their workload of written material. Journalling was a part of the learning process for students in all semesters of the programme and this was continuing alongside their participation in this study. I was reluctant to force the issue, and felt we would gain valuable data through the minutes and transcripts of meetings. As a result, however, as the study progressed I was unable to gain insight into the individual perceptions of each student other than what was shared in the group. Individual perspectives were gained however, at the end of the study from individual interviews when the students were asked to evaluate the process and outcomes of the study.

Data was also collected from interviews with staff nurse and student pairs in the early stages of the study to determine staff nurse perspectives on the current teaching and learning situation in their clinical areas. These interviews

were semi-structured with five open-ended questions. The interview schedule is included in Appendix H. This data was presented to the student group and was considered when planning our action.

As explained above, individual interviews with the ten students were undertaken at the end of the study. The five staff nurses were also interviewed at the completion of the study. These interview schedules are included in Appendices I and J. Data collected was part of the evaluation of the action taken to improve the teaching and learning in clinical areas and as an individual expression of the experience of being involved in a research process.

As students implemented the planned strategy of contract learning, they modified the sample contract format. These modifications were collected and shared in the group. This assisted in helping each student write meaningful learning objectives and to refine their document.

Data was also collected through a taped session with colleagues at the mid-point of the study. At this session I presented a report of progress to this point to enable me to visualise the different phases of the research and to verify that decisions the action group had made were developing through the process.

Data analysis

As this study is a form of collaborative inquiry, the researcher, the students and the staff nurses were involved in all stages of the process, including the analysis of data. Data analysis occurred concurrently as the students' experiences were discussed in the group meetings and decisions were made on the direction and process of the study based on these reflections. Although the research report has been written by the researcher, evidence is presented within the account of other perspectives that were included within the

interpretation. Winter (1989) describes this as a plural text in which accounts of the situation collected from participants are presented. Therefore, the students' and the staff nurses' perspectives as well as my personal reflection inform the data analysis in this study. The main findings identified from these perspectives guided the group in choosing a course of action and are validated in this thesis through presentation of supporting text from transcripts of audiotaped action meetings and interviews.

Elliott (1991) offers advice on data analysis methods in educational action research methodology that informed my interpretation of events. He argues that the fundamental aim of action research is to improve practice rather than to produce knowledge and analysis of data is therefore directed at considering the quality of both outcomes and process. In his view, generating theory is subordinate to the development of a practical wisdom grounded in reflective experiences of concrete cases. Analysis of data is focused on making sense of what is occurring in real-life situations and reflection is directed at examining the data collected in order to choose a course of action in a particular set of circumstances.

In this study, the core student action group was involved in data analysis throughout the project by validating strategic decisions made, and these were evidenced in the minutes of each meeting. This analysis was first assisted by examining the data to develop a shared understanding of the local situation and to refine the problem. 'Progressive focusing' helped the group determine which key issues were most relevant (McNiff, 1988, p. 82). Using this process the group chose to explore a particular aspect of the clinical teaching and learning environment.

Analysis of an action research study also implies identifying and resolving criteria in action that can be used to explain what has happened or to indicate that improvement has taken place (Elliott, 1991). One method of analysing a

current teaching and learning situation in a local setting that provides criteria to use to propose a change is defined as a ‘table of invention’ (reproduced in Kemmis & McTaggart, 1988, p. 93) (table 3-1.). Using this method it is possible to examine the essential relationships in an educational situation that currently exist between teachers, students, subject matter and the milieu, or environment. This is directed at identifying current language and discourse, activities and practices and social relationships and organisation in the relationships. As discussed, I used this method prior to the action group meetings through a review of the theoretical and research literature. Kemmis and McTaggart (1988) propose that this analysis is necessary in order to plan and implement a critically informed change.

	(A) teachers	(B) students	(C) subject matter	(D) milieux
(1) teachers				
(2) students				
(3) subject matter				
(4) milieux				

Table 3-1: Table of invention.

A small group instructional diagnosis (SGID) technique was used with the students for the initial group analysis of the current situation (Volden & Melland, 1999) (Appendix K). This is a tool used in education to obtain students' perceptions of a course of study. It is usually carried out by a consultant who is outside the immediate teacher/student interaction. The process is intended to improve communication between students and instructor.

In this study, an intermediary facilitated this process. Questions posed were "What is helping you learn in this course?" "What changes would assist you in learning?" and "What other comments do you have?" Students carried this

exercise out in pairs and wrote down their main points. The group then came together and discussed common concerns. Data from this was used to guide the group in the following sessions as we worked together to decide what the particular focus would be for the study from within the broad topic of clinical educational issues.

Kemmis and McTaggart's (1988) framework for identifying change was used throughout the study to analyse data collected. Data was categorised into evidence of language and discourse in use, social activities and practices and social relationships and organisation. Appendix L represents the linking of data sources to moments in the action research spiral and beginning analysis of data that occurred as the study progressed.

The patterns of interaction between participants that developed during the study were examined using a model proposed by Melrose and Reid (1999). This analysis of action taking gave a visual representation of the different ways that students, staff nurses and the researcher were collaborating on the project. These interaction patterns influenced the success of the action strategy and are more fully explained in the action chapter of this thesis.

Summary

Action research methodology has developed from qualitative research approaches, particularly those with an underlying philosophy of interpretative or critical theory. The purpose of developing understanding in this form of inquiry is to take informed action towards change. Issues of power may be uncovered as understandings of the wider influences on a situation develop through collaborative effort and reflection by a group of participants. In the model of Kemmis and McTaggart (1988), the phenomenon under study is a teaching and learning situation.

This model is applied in this study by examining the essential elements of an educational situation in terms of language and discourse, social activities and organisation of individuals in relationship to their work groups, and from this the group works together towards change. The essential elements examined using this framework in this study are the interactions between a polytechnic lecturer, a group of undergraduate nursing students, a sample of staff nurses, and the clinical setting.

This study is focused on developing understanding and taking a practical action to change and improve an existing teaching and learning situation for a group of student nurses in clinical settings. It is a small-scale practitioner-based project and consists of cycles that include phases of reconnaissance, planning, acting, observing and reflecting undertaken by a small group of collaborators that characterise the action research process. Using this process has helped to highlight issues for those involved and affected by the action taken.

Action research methodology is, therefore, applied in this study through a framework suggested by Kemmis and McTaggart (1988). An overall picture of the phases and cycles of action research in this study has been presented in Appendix B. This provides clarity for presentation of a report and one interpretation of events informed by participants in the research. The organisation of action group meetings within the students' clinical experience facilitated the self-reflective spiral through group critique. Participants were involved in a participatory style in all phases of the process and data is collected to identify that action taken is informed and consistent.

In the following chapters each phase of the action research is discussed as a way of explaining what happened, how decisions were made and how these influenced the process and the outcomes of the study. The action research

spiral is used to identify the findings that developed over the three identified cycles through the phases of reconnaissance, planning, action and reflection.

In the next chapter the reconnaissance phase, that is the developing analysis of the situation and subsequent refining of the research question, is discussed.

Chapter Four

Reconnaissance

Introduction

In this chapter the reconnaissance or fact-finding phases of the study are considered. As stated in the previous chapter, Kemmis and McTaggart (1988) suggest that examining an educational situation begins with the researcher and study participants identifying the patterns of language and discourses, activities and practices, and the social organisation inherent in the interaction between individuals and the groups they work in. This provides a basis for proposing a change aimed at improving the teaching and learning in clinical settings. The patterns of interaction between one group of students, a sample of staff nurses, a polytechnic lecturer and the environment, were examined in this study using this framework. In the Kemmis and McTaggart (1988) model the analysis also involves an examination of the historical influences that have shaped the contemporary situation. These influences were discussed in the introduction chapter.

Reconnaissance as discussed here was a part of each of the three action research cycles identified during the course of this study (Appendix B). Understandings were developed and extended as all participants reassessed the situation. The perspectives of a sample of staff nurses, as well as my own perspective as researcher and polytechnic lecturer, were considered as the student action group developed the focus for the study and refined the research question. The main finding in the first cycle was that the staff nurses'

and the student nurses' interactions are a vital part of the students' experience in the clinical environment influencing the quality of teaching and learning. This led to a further reconnaissance as the action group looked at ways to improve this interaction and the factors that influenced the effectiveness of the proposed change strategy.

Process - developing a shared understanding

As discussed in chapter two, the initial reconnaissance phase of this study involved a review of the literature on educational issues for teachers and students, particularly in nursing clinical settings. This review was conducted by me as a polytechnic lecturer and researcher and was directed at developing my own understanding of the aims of nursing education as well as the meaning of quality teaching and learning. Following this review I began an analysis of the current teaching and learning situation in the local setting using a 'table of invention' as described in Kemmis and McTaggart (1988) and discussed in the methodology chapter (table 3-1). This assisted me in identifying current patterns of interaction between the essential elements of an educational situation; specifically the interactions between students, teachers, subject matter and the milieu or environment.

From this initial analysis I identified that many of the issues influencing teaching and learning in the local situation resembled those in other settings both in New Zealand and internationally. For example, in the local situation the interaction between teachers and students in various clinical environments demonstrated that there was confusion between the teaching role of the polytechnic lecturer and the staff nurse. As identified in the literature, the academic background of the polytechnic lecturer influenced the subject matter that she/he considered important for the student, and this affected the content and style of teaching. The clinical background of the staff nurse influenced

his/her teaching and this was mainly directed at skill development. The limited availability of the polytechnic lecturer meant that their interaction with the student focused on planned discussions away from the bedside whereas the staff nurse carried out their work at the same time that they interacted with students.

This initial analysis confirmed many of the issues identified in the nursing education literature. At this point however, the analysis of the situation had been from my teaching perspective and I decided that gaining students' perspectives on conditions within the clinical setting influencing their learning would be useful. Nightingale and O'Neil (1994) suggest that access to the learners' perspectives on the activities of teaching and learning adds to the teachers' understandings and provides a strong base on which to plan for an improvement. As discussed, an action research process facilitates gaining the views of those involved in a current social situation using a group process. Therefore, I chose to work with a group of students while they were undertaking the final semester of the Bachelor of Health Science in nursing in the local polytechnic.

Initiating group process

I had been involved with these students during their programme as a classroom and a clinical nursing lecturer in their second year, but was not involved in their teaching or assessment during the last semester of the course. However, to avoid coercion by the researcher an intermediary first met with the whole student group at a time when the students were together for theory sessions and introduced the study. This intermediary, who has no teaching responsibilities within the programme, gave the information sheet to the students.

The intermediary was an employee of the local polytechnic and was familiar with the action research method. She explained the study, introduced students to the action research method and outlined the terms of participation contained in the information sheet. She was available at this time for any questions and gave her contact details to students. It was emphasised that participation was voluntary. Volunteers were asked to contact the researcher at a telephone number given on the information sheet. A consent form was then given to these volunteers and the first ten students to return this to the researcher at the contact address within two weeks were accepted into the study. These volunteers formed the action group for this study.

During the final clinical experience in the Bachelor of Health Science (Nursing) programme students worked four days a week in one selected clinical setting for eleven weeks. This action research took place during this time as it was the longest clinical experience of the programme and was therefore, the best opportunity for the researcher to work in collaboration with a consistent student group. The clinical areas involved were diverse and are summarised in table 4-1. The numbers in brackets indicate the student numbers in each area. The asterisks note the areas that student and staff nurses worked closely together.

Public Hospital (5)	Private facilities (3)	Community (2)
Acute medical ward – post-coronary care (1)	*Private surgical hospital ward (2)	*Public health centre (1)
Acute medical ward - acute renal care (1)	Private Accident and emergency unit (1)	Diabetes Clinic(1)
*Acute surgical ward - general surgery (1)		
Acute paediatric ward - including assessment unit and outreach (1)		
*Accident and emergency unit (1)		

Table 4-1: Clinical settings and numbers of student participants

Due to my continuing work commitments, an important consideration in this study was that the group was accessible. This group of students attended a

weekly tutorial at the polytechnic during their clinical experience, and those who volunteered for the study agreed to spend one hour a week after this tutorial to work with me. This would closely link group reflection with individual action, in clinical settings, throughout the project. Ten weekly action meetings were conducted in the course of the study.

As the study progressed and the focus of the project was refined, the student participants decided that to fully examine teaching and learning issues in clinical settings, staff nurse perspectives should be gained. The students believed that this was crucial to the development of a plan of action aimed at improving the current situation in clinical settings, and I agreed. As discussed, a feature of the action research methodology is that small groups of collaborators may decide to include those affected by the practices in question.

Of the ten students who formed the action group five were paired with several different staff nurses, and the remaining five worked consistently with one nurse throughout the course of the study. It was not feasible to identify and include all these staff nurses; therefore, the action group decided to ask the five registered staff nurses working closely with five students in the study if they wished to take part. As noted, the clinical areas these five nurses were working in are identified in table 4-1 by an asterisk.

It was agreed between the group and these staff nurses that, due to their work commitments, the nurses would not join the core action group in the weekly reflective sessions. Instead, these nurses were included as an expanded group and were interviewed twice during the study. Their interactions with the students informed all phases of the action research. An information sheet was given to these nurses and signed consent forms were obtained. The interaction between the core action group and the expanded group in this study is further discussed in the action chapter.

Student perspectives of the current situation

In the first action meetings data was collected from the students, initially using small group instructional diagnosis (SGID)(Table 4:2), and subsequently from minutes as well as transcripts of audiotapes of each action group meeting. The students' statements of their perspectives were collated into positive and negative aspects of learning in clinical areas and presented at the next action meeting for further discussion (Appendix K). Analysis of the key words used by the students to discuss the broad topic of clinical teaching and learning issues identified four main influences in the current situation. These were the one-to-one student and staff nurse interactions, environmental influences, student and nursing lecturer interactions, and student characteristics.

Student/staff nurse interactions	Environmental influences	Student/nursing lecturer interactions	Student characteristics
Attitude towards student	Availability of orientation information	Challenges your skills and knowledge	Need to have personal motivation
Clinically competent/role model	Organisation of work to allow staff time to teach	Gives feedback on journal/log work	Need to be proactive and seek learning opportunities
Teaching paced to level of student	Supportive team	Links theory to practice	
Questions student's knowledge to assess competencies	Good orientation to physical surroundings prior to work	Gives feedback on clinical performance throughout experience	
Recognises student's work and gives constructive feedback	Clarification of role between staff nurse and polytech lecturer	Tutorial sessions that are clinically related;debriefing time available	
Continuity of staff nurse helpful	Continuity of staff nurse helpful	Supports student intellectually and emotionally	

Table 4-2: SGID results

These main ideas were analysed using Kemmis and McTaggart's (1988) method of examining an educational situation. As discussed in the methodology chapter, their model proposes that the language in use can be

identified in the words people use to identify and describe their world and work. The existing activities and practices in the setting can also be identified in the description of what people do in their work and learning. Identifying the existing situation this way allows for the action research group to plan for a change. In this case, the students' descriptions of the interaction between themselves, the staff nurses in the setting, and the polytechnic lecturer distinguish the current situation in these terms.

For example, students stated that a staff nurse must act as a "positive role model" and demonstrate "clinical ability", as well as "challenge and question" a student, in order to promote student learning. Staff nurses who were able to "pace their teaching" to suit the individual and had a "positive attitude" towards working with a student formed effective teaching and learning relationships. The staff nurses who allowed for a student's previous experiences were able to individualise learning.

The students' comments in the SGID of the influences on learning in the clinical environment also identified the effects of the social organisation of work. Kemmis and McTaggart (1988) also suggest this as an essential element in an educational situation. For example, students felt that for staff nurses to fulfil their teaching role, these nurses required a "realistic workload" that allowed time for student teaching. The healthcare team in the environment also influenced learning. If the student was accepted and made to feel a valuable "team member", student motivation and interest was increased.

The students also remarked that a good "orientation" to the clinical environment organised by the charge nurse or nurse manager greatly assisted them in developing a familiarity with the setting and the different roles of those in the setting. Working with the same staff nurse or "continuity of buddy nurse" throughout the clinical experience or for several consecutive

days was also seen as an advantage for student learning; however, not all students agreed with this.

The students discussed their previous experiences working alongside staff nurses and there were a variety of responses to the benefit of working with one nurse for the entire clinical experience. If the student and the staff nurse could not develop a useful teaching and learning relationship it was not possible to "build trust" and it was a disadvantage for the student to continue in that relationship. Students who had worked with a variety of staff nurses in a clinical setting debated that there was an advantage in comparing and contrasting different work practices and it was useful to experience the various approaches to nursing practice. As this study progressed this debate continued.

"Clarifying the roles" of the polytechnic lecturer and the staff nurse was another comment that related to the social organisation of the service provider and the educational institution. The polytechnic lecturer was responsible for fifteen or more students working in various locations, and therefore her participation in clinical teaching on a one-to-one basis was limited. The polytechnic lecturer responsible for this group of students communicated with all managers of clinical areas and negotiated the number of students for each area. Throughout the students' time in the clinical settings, the lecturer met with the students once a week in a tutorial group. Students kept the lecturer informed of the shifts they were working and the lecturer visited each clinical area once a week. The staff nurses in the setting were the main resource for the student; however, it was the lecturer who had the assessment responsibilities. This created some confusion for the students, and those in the group discussed this further in subsequent action meetings.

The interactions between the polytechnic lecturers and the students, and the current activities and practices of the lecturers in the clinical setting, were also

discussed in subsequent meetings. The students stated that a nursing lecturer's role was to assist the student to "link theory and practice", and one way this was done was through clinically related tutorials. It was also helpful if lecturers maintained visibility in the clinical areas and communicated with the staff in the setting. In the initial SGID session the students agreed that lecturers who supported the student in developing both their "intellectual and emotional abilities" had a positive influence on learning. Giving regular feedback on journal entries and student performance in the clinical areas was also considered important.

The students also mentioned the personal features of a student that influenced learning. They were identified as being "proactive, motivated" and taking advantage of available learning opportunities to increase learning. However, these abilities were largely dependent on being accepted into the team and establishing good staff nurse/lecturer relationships.

This initial analysis led to further discussion aimed at developing our shared understandings and deciding on a particular method to address the thematic concern. This educational concern involved the broad area of clinical teaching and learning. For example, the students' perception of the current activities of the staff nurse as teacher was explored in more detail. One problem identified was that staff nurses did not see that part of their role was to teach nursing students, or they may not understand what it is that students want to learn. Another issue discussed was that staff nurses were not aware of what students had already experienced, and this led to a lack of individualised teaching. In contrast some students also noted that staff showed an interest in what the student wanted to learn in the clinical area and asked to view learning objectives.

Staff do not necessarily see that their role or responsibility in interaction with students is to teach them skill...May not be aware of

what the student wants to learn while in clinical. Or what they know already. What is their knowledge base? (student, meeting 2).

Staff have suggested that theory should be taught by polytech tutors and students should be taught skills by clinical expert (student, meeting 2).

The nurses, you know, they think, well, why should we teach you when tutors get paid to do it? We [staff nurses] don't get paid. It's getting back to that. Why don't the tutors visit each ward at the beginning of the year....and say this is why they come here. They come for hands-on experience....half of them don't know" (student, meeting 2).

The students also examined further the current activities and practices they were involved in while in clinical areas. The interaction with people in the setting taught them team skills. Implementing nursing actions helped students develop an understanding of the reasons for these interventions and a beginning feeling for what is effective for patient care.

People skills, assertiveness, doing the action of learning - learning and seeing the rationale behind actions. The little things you pick up in practice - the little details that no one can ever teach or tell you (student, meeting 2).

You develop intuition - get to use your gut feelings (student, meeting 2).

The students commented on the social organisation of the polytechnic. It was considered that because time was limited in any clinical setting, there was a responsibility for the polytechnic lecturer to ensure that learning opportunities were maximised and that there was a structure and organisation to the learning experience. Students felt they were clients of the polytechnic and

stated that they felt entitled to quality learning experiences in exchange for the fees they had paid.

Better not to leave learning opportunities to chance - need more structure to the learning in clinical (student, meeting 2).

We are paying money and feel there should be some responsibility from polytechnic to ensure that there is organised structured learning opportunities in clinical settings (student, meeting 2).

Areas can be too busy or too slack and learning suffers at either end (student, meeting 2).

The students also perceived that the current practice of polytechnic nursing lecturers assigning theoretical work to be completed during clinical experiences interfered with their clinical learning.

We have done a lot of nursing knowledge, which I find at this time in my [clinical experience] electives is vital to me. I'm finding it very frustrating that every day there is something that I want to go and research and learn and I have to concentrate on what I am doing now ...[the] state exam ... I'd like to be free of writing at this particular time (student, meeting 2).

We have so much hanging over our heads... in the way of assignments, exams and presentations. We cannot actually get into our clinical [studies]....(student, meeting 2).

Balancing the role of student with the role of worker also hindered learning.

Sometimes I am expected to go home and study medications and study this and look at that, but I have my log and other things to do. ... I have exams to organise and I am feeling a bit snowed [under]. I wonder if they [staff nurses] realise that we have quite a bit on and we're not just sitting around when we get home (student, meeting 3).

The staff nurse and student interactions identified by these students was different in each clinical area. However, all students described their interactions as largely staff nurse-directed and there was minimal formal discussion of the teaching and learning responsibilities. Students reported that there was an emphasis on task completion, and by getting through the work students gained the approval of staff.

The nature of the relationship between the student and the staff nurse was continually highlighted by the students in the action group as the key to the quality of their learning.

If staff have a good attitude towards the students then [the] student has confidence to try things (student, meeting 2) .

The actions of the staff nurse that assisted learning were described as using questioning and making the student feel part of the team.

[It is helpful if there is] Questioning by buddy of your knowledge so they know where you're at. Good to show when you do know something (student, meeting 2).

Being accepted onto team and being able to challenge. Being willing to put effort into team (student, meeting 2).

As discussed above, half of this group were not paired with a staff nurse consistently for a variety of reasons. These were related to the management of the area, problems with sickness of staff nurses, changes to rosters, holidays, staff working part-time only and, in some areas, the problem of too many junior nurses. This influenced the relationship that developed between the students and the nursing teams in those areas.

By the end of the third weekly meeting the action group had had time to consider and discuss various aspects of clinical teaching and learning. During each week the students were active in their own clinical situation and each individual brought their reflections on the teaching and learning environment they were experiencing to the group. The idea of focusing on developing learning goals was mentioned by one of the students. Further exploration of this idea identified that all students felt that their interactions that developed with the staff nurses in the clinical setting were a major influence on learning. It was suggested that communicating and negotiating personal goals and objectives with staff might be one method to improve teaching and learning in the clinical setting. Being actively involved in the process would also provide the students with an experience of directing their own learning that is recommended for quality learning.

Staff nurse perspectives of the current situation

As discussed, a sample of staff nurses joined the inquiry after the student action group decided that it would be useful to include their perspectives in order to further examine clinical teaching and learning. It was not possible to seek participation from all nurses interacting with this student group, however, the five staff nurses working in consistent relationships with five students in the group agreed to take part. As stated previously, their views were given in two interview sessions. The first interview session took place in the nurse's clinical area and included the student these nurses were paired with. The purpose of including the student in the first interview was to develop trust and open communication between participants. The second interview was undertaken with the staff nurse individually at the end of the study.

In the analysis of transcripts from the first interview with these staff nurses I focused on their perspective on the current situation as well as their views on how the teaching/learning experience could be improved. The main theme from the staff nurses' perspective was that in order to gain the most from clinical learning opportunities, students needed first to show they were enthusiastic, eager, vocal and proactive. These nurses felt that these characteristics were often lacking.

[They] need to aggressively market themselves (staff nurse, first interview).

If students sit back, too quiet, they will miss out (staff nurse, first interview).

If you don't push yourself a lot ... [it] can be taken for indifference (staff nurse, first interview).

I just think the most important thing is communication and being eager. It is easier to teach an enthusiastic student than it is to teach somebody who hangs back. And listening too. I mean they really have to hear what you are saying (staff nurse, first interview).

The staff nurses commented that, in the current pattern of communication, they were unsure of specific student learning objectives and were looking for better ways to communicate with students about their particular learning needs:

It's good to have them [learning objectives] written as well, and then you can actually tick them off and make sure that you have actually achieved what you set out to [accomplish] (staff nurse, first interview).

It is really good [to write objectives] also because it provides opportunity for feedback both ways (staff nurse, first interview).

In this case I have just glanced at some objectives, but it was very early on in the piece and I haven't seen anything since (staff nurse, first interview).

I like to talk to the student because it's really important that they let us know what they want to learn (staff nurse, first interview).

Several staff nurses suggested that one option that might improve the situation was a summary or personal profile of previous student experiences presented by the student early in the relationship.

First of all, I think it is important to find out where they are at in their training; that gives you a certain idea about what they should do (staff nurse, first interview).

It's really important that the student lets you know what they want to learn so you aren't telling them things that they already know (staff nurse, first interview).

The staff nurses also confirmed the students' comments that in the current organisation of work in the various clinical settings it is difficult for them to fulfil their teaching role. For example, staff commented that if a student is working with them they may be assigned extra, or more dependent patients, as it is assumed that a student will provide help and assistance. In every area there was no allocated time away from patient care responsibilities for the staff nurse to focus on teaching students. All teaching and learning occurred as part of the usual duties of the nurse. One staff nurse commented:

I love having students and I love having the time to do things, but you know, it's the added stress and the days are stressful enough, and you

only have that much time to do a dressing and to try and be patient with a student and you are standing there ... sweating, thinking, how am I going to get through my day? (staff nurse, first interview).

The staff nurses also explained that it is current practice in clinical settings for them to direct the learning and to organise the student's schedule for the day. Each staff nurse would organise the student's participation in the work in different ways depending on characteristics such as seniority in the workplace, whether the student had worked with them before, and the attitude of the staff nurse towards her teaching role. These nurses confirmed that there was little forward planning or written documentation identifying what the student felt was important for their individual learning and how progress towards meeting those goals was developing.

Following these interviews I summarised the main ideas and presented these in writing to the student action group at the next meeting. The students considered these views when deciding on a practical strategy to improve this current interaction. The students agreed that demonstrating motivation and initiative is well received by the staff nurses, but that currently this was difficult for them as they are entering an area as a new person. The students also agreed that it was difficult to identify to the staff nurses what they particularly wanted to learn in the specific clinical areas. During this discussion the student group revisited the idea of developing their learning goals and began to look at ways to communicate and negotiate these with the staff nurses as a way of explaining their individual learning needs. One tool discussed was contract learning. This idea was further developed in following meetings.

Researcher perspective of the current situation

As discussed in the literature review, as the initiator of the study and one of the participants, my own reconnaissance had involved several months of considering issues for teaching and learning in clinical settings. Much of the literature suggested that developing student autonomy and self-directed learning strategies were the most beneficial outcomes of a teaching and learning situation. Experiential learning theory explained that learning develops through concrete experience and reflection on that experience. Problems of theory practice relationships had been outlined in the research, and nurse educators had proposed methods to bring theory to the clinical settings. I considered these along with the student and staff nurse analysis of our local situation during the initial fact-finding stages of the study.

Another method I used to examine the current situation was to document my developing understanding in a reflective journal. Following each action group meeting I documented my initial reaction and reflection on what had been discussed. My current practice as a nursing lecturer, with previous experience as a staff nurse, influenced my observations. As the students began to focus on their teaching and learning interactions with the staff nurses in the setting, I noted that the position of the students as outsiders was influencing these relationships.

The purpose of separating nursing students from the workforce in the 1970s was to increase the emphasis on their learning role. However, from student reflections in the action group, this made it difficult for them to fit in and become part of the healthcare team. The students stated that they expected assistance from polytechnic lecturers to ease their way into the clinical settings. Students felt they were clients of the education system and they expected a quality learning environment for which they had paid considerable fees. This was further discussed in the action group, and students agreed that they

expected the polytechnic to organise useful learning experiences for them by effectively liaising with clinical staff.

As stated, however, activities of the staff in the clinical area are not organised to make student teaching a high priority. Nursing lecturers currently arrange for the clinical access for students, but they are also outsiders. Lecturers must constantly negotiate with staff, with the students' needs foremost in their minds. However, lecturers have no control over the environment, and clinical managers may refuse to have students temporarily or refuse to provide staff as clinical teachers.

During the group reconnaissance phase I reflected on these influences on student learning from a teaching perspective. I found that the current arrangement of the clinical component of the course in the local setting may encourage students to take a surface approach to learning (Nightingale & O'Neil, 1994). The workload in the area is not defined by learning objectives but by demands of patient care, which are often high for both the staff nurse acting as mentor or teacher and, consequently, for the student. Students are exposed daily to the stresses and realities of clinical nursing practice. In each clinical setting there is a great deal to learn and students expressed that there is an excessive amount of new language and routine activities. The student is directed by the staff nurse to perform tasks with little time to check for understanding or to decipher the rationale for these interventions.

The students also discussed that in many cases learning to cope with the personality of the staff nurses was the most exhausting aspect of clinical reality for them. In some areas students are frequently assigned to work with several staff nurses for the duration of their stay in one area. This is another reason that the learning in clinical settings can be superficial and involve just getting through the day. The students do not engage in deep learning while anxious about their relationship with the staff nurses. From my perspective this has

serious consequences for their future as registered nurses and contributes to the reality shock that new graduate nurses frequently describe. Therefore, I felt that developing a method to change this current form of student interaction with staff nurses could have potential to improve the teaching and learning in clinical settings.

Strategic decisions from this analysis

In the reconnaissance phases, the current patterns of the discourses in use, the activities and practices, and the social organisation and relationships between student nurses, staff nurses, polytechnic lecturers and the clinical setting were identified. Strategic decisions about the scope and process of the study were made through evidence obtained from the perspective of the students, a sample of staff nurses, the literature and my perspective as a polytechnic nursing lecturer. As discussed, the first decision made by the action group was to identify personal learning goals and to develop a process for working with staff nurses to achieve these. The research question became "How can we improve the communication and negotiation of learning objectives between staff nurse and student nurse in the clinical setting?" (Appendix B).

In the action group, students suggested that improving the current learning experience in clinical settings would require an individualised approach and strategies that might work for some and not others. The students and I debated whether one recommendation for change should address all student situations and have the potential to improve learning for each. The students were realising how different each of their experiences was as each participant outlined the various student and staff nurse arrangements for teaching and learning in their clinical areas.

Summary

Establishing a shared understanding of the current teaching and learning situation in clinical settings in order to improve it, began in the initial reconnaissance phase of this action research and was developed throughout the study. Reconnaissance is a phase of each action research cycle and in this study it is developed over three identified cycles (Appendix B). Reconnaissance occurs prior to the planning phases and in this study student, staff nurse and lecturer interactions were examined to inform the action plan.

Using the model of Kemmis and McTaggart (1988) to analyse an educational situation the current language in use has been identified in the words participants use to describe their every day actions. These have been presented using the collation of student comments from the small group instructional diagnosis (SGID) and followed by excerpts from transcripts of meetings. Staff nurse perspectives were gained during an interview undertaken by the researcher in the presence of the student they were paired with. The view of the researcher was presented from reflection on the literature reviewed and on participants' observations.

The participants' activities and practices that characterise the current local teaching and learning situation have also been identified and the influences of the social organisation of the educational and healthcare institutions have been presented. Practical strategies for improvement were informed by the analysis of the current situation and as action meetings began to discuss these the inquiry moved into the planning phases. This is discussed in the following chapter.

Chapter Five

Action Planning

Introduction

During the reconnaissance phase of each action research cycle in this study, a shared understanding between the study participants in the local teaching and learning situation developed. This knowledge of student and staff nurse interaction was examined using Kemmis and McTaggart's (1988) criteria for educational change. The words used by these participants to describe what they do in their work and learning outlined their perspectives of the current situation. This informed the planning phases as the action group progressed through their clinical experiences. The students adapted and refined an action plan during the weekly sessions as they reflected on this clinical experience. In this plan a practical strategy aimed at improving staff nurse/student interaction evolved. The strategy chosen was to introduce the use of contract learning into the teaching and learning relationship and to formulate a personal profile that would give the staff nurses useful background information on each individual student.

Both process and outcomes had to be considered, and planning for these was refined over the three identified cycles of this action research (Appendix B). In the first cycle there were practical considerations for the group to organise and the process plan for the project was developed. In the second cycle the planning centred on the findings from the initial cycle and the group's plan to introduce contract learning into the various clinical settings. From staff nurse

interview data it was also decided to develop a personal profile document for students to use when first entering a clinical area. In the last cycle, planning for contract learning was refined in response to individual experiences. In this chapter the planning phases are described in the three cycles of this study and the central finding of contract learning as a practical action to enhance student learning is discussed.

Process - practical planning considerations

Due to the short time frame, the student group and I felt some pressure to move through the process to get to the action-taking. This had the advantage of keeping the group focused on the project and discussion centred on our developing understandings and how these would help to formulate a plan. Another of the benefits of meeting weekly was that this group of students had little contact with each other at any other time. Hearing from peers about their different experiences - both good and bad - provided support.

One of the aims of this study was to include the students in all phases of the action research in a collaborative manner. However, the disadvantage of a short timeframe for an action research study is that the group was unable to develop collaborative relationships that truly characterise an emancipatory inquiry. Although the students had been together as part of a larger group for two and a half years, their knowledge of the process of action research was just beginning and they were unable to take full control of the inquiry.

As it was the students' first experience in this type of inquiry, the group deferred to me in my role as teacher and researcher. This influenced the participation of individuals, some more than others did, and therefore I took a directive role in the initial planning phases of the study. As discussed in the methodology chapter, this is typical of the interaction between researcher and participants in the early stages of an action research inquiry. I was conscious

throughout the project of encouraging power sharing in group meetings, and worked to develop a facilitation role.

For example, as facilitator of the group, I planned the physical setting with the aim of making the meetings enjoyable and to demonstrate my valuing of the student participants. The group would leave their previous tutorial with the module co-ordinator and the rest of the student group and enter a different room. This was to separate the research work from the other session and to give students time to refocus. The atmosphere was informal and refreshments were offered. As students were getting settled the minutes were available for all to read and this was very useful to keep all members who may have missed any meetings informed, as well as validating the direction the group was taking.

Part of the initial action planning was also that, as facilitator in the study, I would visit all clinical managers to ensure they were aware of the study. I had received permission to carry out the study from the Director of Nursing, however, I had not yet explained to the staff in the clinical areas that this was taking place. I informed the action group that if we were to include staff nurses I would need to write to the ethics committee for approval to include them in the study. This was done and permission given. A sample of staff nurses working with students were then approached by their assigned student. As stated in the methodology chapter, an information sheet was given to these nurses and consent forms were signed.

Planning for a practical innovation

From the findings of the first cycle of the study the research question had become focused in the second cycle on improving staff nurse/student teaching and learning interactions by improving communication and negotiation of learning objectives (Appendix B). The role of the staff nurse in clinical

teaching had been further explored through action group discussion, and this informed the action planning. This planning became centred on a method of structuring the current interaction between staff nurses and students during their teaching and learning in clinical areas, in a way that would improve student participation.

In the second cycle, therefore, the student group began to plan for a change in this particular aspect of the clinical environment that they could feasibly introduce in the form of a practical proposal. As mentioned before, in action research methodology this may not be the only or the 'best' practical strategy, but it emerged from the analyses as a theoretically possible strategy (Winter, 1989, p. 59). The nature of the collaborating group influenced what could actually be done, and this affected the action planning phases. Students discussed that as a group they lacked the power to introduce change into a healthcare setting without assistance from those within the environment, and this was another reason for planning for participation from a sample of staff nurses currently employed in nursing practice settings.

Introducing contract learning and a personal profile

The plan that developed within the student action group was directed at designing and implementing a form of written learning contract between a student and their assigned staff nurse. The students responded to the staff nurses' perspectives on the current situation by formulating a personal profile to introduce themselves to staff in clinical areas. This practical action plan was chosen by the student group following an assessment of the factors that helped or hindered their learning. As discussed previously, the influences of student and staff nurse interactions on student learning in clinical settings had been identified in the initial reconnaissance phase from the students' and the staff nurses' comments. Further examination of this in the action group led to the

suggestion by one of the students that communicating learning objectives to the staff nurses might improve the current educational situation.

It helps to improve learning if goals are written and a buddy nurse sees these and knows what we want to learn (student, meeting 2).

...I see the clinical area as very broad in its focus - I want to have structured objectives and the staff nurse can help me (student, meeting 2).

The group discussed methods they could use to develop learning objectives for the clinical area. Communication and negotiation strategies were also explored. The group questioned whether it would be possible to formulate long-term and short-term goals and how to tailor these to suit the learning opportunities in each setting. From the minutes taken in the second action meeting it was evident that the lack of a consistent staff nurse assigned to a student was also an influence on the communication and negotiation process. Students decided to spend the next week thinking about these aspects and to come to the next meeting with more ideas on this particular problem.

The students shared their reflections on developing learning objectives in the next action meeting. One method discussed regarding communicating and negotiating learning needs was the use of learning contracts. Students had previously experienced these in a theory class, and in further discussion these experiences were compared and contrasted. The benefits of using this form of learning in the clinical setting were subsequently debated.

To facilitate the students' understanding of the theory and practice of contract learning I returned to the literature during the planning phase of the second cycle. I found that contract learning has been used widely in many educational programmes as a method of promoting quality learning. The students were also given articles on contract learning in nursing education to

read and consider. This literature confirmed that students learn best when given an opportunity for negotiating for their own learning needs (Knowles, 1986; Yarbury, 1995). Students took this information to the clinical areas to share with the staff nurses.

From the literature the group discovered that the term 'learning contract' has been used to identify a student-centered approach. Clinical learning plan is a related term used to describe a method that required the students to define their own learning objectives to be achieved in the clinical setting. Rideout (1994) points out that this method is focused on the process of learning rather than on content to be learned. Several authors agree that the value is in the process of communication and negotiation required in developing contract learning rather than the actual document production (Donaldson, 1992; Knowles, 1986; McAllister, 1996).

Education literature also advises that contract learning is as much a philosophy of learning, developed from the theories of Knowles (1986), as a tool used to enhance learning (Sutcliffe, 1993). Mazhindu (1990) proposes that the value of the individual is recognised in this form of learning and this is congruent with nursing's philosophy of working in partnership with a client when planning patient care. The contracting process involves accepting differences in students' backgrounds, needs, aims, strengths and weaknesses while also providing a means to meet educational requirements (Boud, 1988). I discussed this with the students and emphasised that each individual would develop their own contract relationship with staff nurses.

The educational value of student autonomy is also promoted in this form of learning. Knowles (1986) proposes that the process include learners investigating resources and a wide range of learning strategies. This provides an alternative way of structuring learning that meets the needs of adult learning and decreases their dependency on teachers. The teacher's role

becomes supportive and focused on providing access to resources while encouraging students to follow their particular needs and interests. The use of this type of learning is particularly argued in the literature as a way for students to learn from experience in work settings.

It is also evident that as a result of increased interaction between the teacher and the learner, the learning contract is a useful tool to encourage motivation among adult learners (Carlisle, 1991; Chan & Wai-tong, 2000; Ghazi & Henshaw, 1998; Mazhindu, 1990). Students who set their own learning outcomes and identify their own learning resources take control of their learning and enjoy the freedom this involves (Ghazi & Henshaw, 1998). Richardson (1987), a nursing educator, argued that nursing students benefit from clinical learning experiences that are tailored to their particular needs and interests.

A particularly relevant study by Donaldson (1992) used an action research approach to examine the implementation and evaluation of learning contracts in the clinical area with a group of undergraduate nursing students in the United Kingdom. The findings were mainly positive with the students expressing satisfaction with this method of structuring learning. The students felt that formulating contracts facilitated their application of theory to practice, as the learning objectives set could be relevant to the ward allocation.

An interesting aspect of Donaldson's (1992) study was identification of the problem of maintaining clinical credibility for the polytechnic nurse tutor within the changing educational environment. This was evident for the polytechnic nurse tutors involved in supervising the students. The student mainly did the facilitation of the learning contract in Donaldson's (1992) study with the polytechnic nurse tutor, rather than the staff nurses in the area. The tutors felt this was a useful role for them, as they did not need to be seen as the clinical expert. Their work with the students was to identify resources in the

area that could help them meet their learning objectives. In contrast, in this current study the action group decided to negotiate learning objectives with the staff nurse as the clinical expert while the role of the polytechnic lecturer was unexplored. As the study progressed I reflected on my role and planned a method to support student and staff nurse interactions that were proposed.

Richardson's (1987) study described the use of contract learning in the final clinical section of a nursing course and suggested that students who have had clinical experiences are better prepared to actively participate in planning their own learning. Negotiating the contract helped students gain skills that would assist them in the development of their nursing practice. Richardson (1987) described these contracts as open documents that were not finalised until the student had had some experiences in the clinical area. This allowed for tailoring of objectives to suit specific learning opportunities in the area. The lecturer also prepared the students for this type of learning by working with a sample format in the classroom setting with guidance. This provided a baseline for future contracts and students and staff adapted the format to suit their individual situation. The student action group in this current study was at a similar stage to Richardson's students in their programme. They considered these recommendations and examined various sample formats during the planning phases.

Richardson (1987) also found that contract learning posed difficulties for some students. Those used to traditional teaching strategies and learning situations in which content was clearly outlined and tested, experienced anxiety with their different role in contract learning. The students in the current study had previous experience of using contracts in a theory-based course, and some had encountered difficulties. These experiences were further explored by the group as the planning for contract learning in clinical areas developed.

Benefits for staff nurses as well as students in the use of contract learning have also been outlined in literature (Mazhindu, 1990). Staff nurses have reported increased satisfaction in their clinical teaching as they are recognised for their expertise and enjoy making this relevant to students' experiences. Contract learning may give the teaching work of the staff nurse visibility in the clinical area. Working together to formulate objectives requires time allocated specifically for teaching and learning, and this demonstrates to others in the areas that the student is a learner as well as a worker, and the staff nurse is a teacher as well as a patient care provider.

This literature confirmed for the action group that there was a sound theoretical rationale for introducing contract learning as the chosen practical strategy for change. This type of learning promotes student autonomy and also has the potential to individualise learning opportunities. As outlined in the literature review, these are the espoused aims of higher education (Nightingale & O'Neil, 1994). The students agreed that developing autonomy would improve the quality of their learning, and this was the main objective of this study.

There was also evidence in the literature that developing self-directed learning strategies would improve the current relationship between staff nurses and student nurses by enabling students to take a more active role in negotiating for learning. My reflection was that the position of the nursing lecturer in the clinical settings could also be improved by structuring their interactions with the students and the staff nurses using the clinically focused document created.

The staff nurses that became involved in the study added, in the first interview session, that they had difficulty in beginning a relationship with a new student. The action group considered how to improve this and proposed the use of a personal profile. It was decided that informing the staff nurses of the previous

experiences the student had related to nursing, whether in the course to date, in other related jobs, or in their personal lives, would assist the nurse in planning for relevant learning opportunities. A student coming to a new area prepared with a personal profile would demonstrate to the staff nurses that the student was proactive and motivated to learn. This personal history would also assist the staff nurse in recognising the student as an individual rather than "just another student". A format for this was developed in the planning phase and each individual chose a way to use this as an introduction.

Planning for change

In Kemmis and McTaggart's (1988) model for educational change, as the plan develops the general idea of what is to be done proceeds to a more detailed plan. These authors suggest that the specific plan can be determined by proposing a change in the current situation in terms of the language and discourse, activities and practices, as well as the social relationships and organisation in which these occur. As discussed in the previous chapter, the initial reconnaissance phase had identified these.

A planned change in language and discourse aimed at improving communication between the staff nurses and the students was made possible with the introduction of this written form of contract learning. Objective writing had been taught to students using certain terms; however, the students now wanted the freedom to state their learning needs in words that they found had meaning for them.

I do think the learning contract is all right but I think the feeling we all have about learning contracts is related to something that we were given, that we had no idea what it was all about; it had no meaning, we couldn't interpret it (student, meeting 3).

I don't think it necessarily needs to be as formal as the way we've been taught because it's a lot of academic stupidity as far as I'm concerned (student, meeting 3).

From previous experience with contract documents the students were aware of the language used to formulate learning objectives and were able to choose what was useful for them. The plan was to include the staff nurses and they would add to the students' objectives from their specialist knowledge of the area. In this way clinical terminology would enter into the written document and students would learn the meaning of these terms. The actual format and wording of the document was discussed in the student group, and each individual planned how they wished to modify this for their situation.

Maybe people need to make up learning contracts with their buddy but to no set criteria... different layout, different format depending on the person and depending on the area they are in. They [clinical areas] seem so diverse and so different that one form is not going to suit all [situations] (student, meeting 5).

Planning for this innovation was also aimed at developing a way to reshape the current patterns of activities and practices that were occurring between the students and the staff nurses in the clinical setting. The staff nurses' interview data identified difficulties with beginning and developing a teaching and learning relationship with students. They frequently controlled the relationship and directed the students' activities.

When you are really busy or even when you are quiet you tend to go and do your own thing. You forget that someone else wants to be part of this (staff nurse, first interview).

I get so involved and obsessed with doing the right thing for my patients that I keep a major eye on what's going on because at the end of the day I am accountable, I know I have to be totally responsible. So,

I know I find it hard to give that responsibility over when I know that I have to be the one at the end of the day that has to sign those notes (staff nurse, first interview).

My own reflection during the planning was that if the aim of a learning contract is to provide a structure for the students and the staff nurses to work together to meet the student learning needs, it may also provide the students with a voice to select the activities they wish to be involved in. Instead of being directed primarily by the staff nurses, students would have an opportunity to demonstrate that they can be proactive and prepared to take an active part in patient care. This would be evidenced initially by an independently organised meeting with the staff nurse assigned to them in order for the students to present their personal profile and negotiate their learning experience by using a contract document.

From my perspective, I also thought that introducing this form of learning could change, and improve, the relationship between the staff nurses, the students and polytechnic lecturer. The facilitation role of the lecturer that is recommended in adult learning would be emphasised while the students and staff nurses would be active in creating their own interaction. The staff nurses would be recognised as clinical experts and have a part in developing learning objectives. It also appeared from student comments that they did need some assistance to write an objective. The polytechnic lecturer would facilitate their critical thinking abilities in identifying these.

Successful implementation of contract learning depends on the belief that adults are individuals who are self-directing and involved in a lifelong learning process (Gibbon, 1989). These ideals reflect the aims of higher education and, therefore, there is potential to transfer these ideals to the 'real world' using this method of communicating and negotiating learning objectives in a clinical setting. This may be one step towards changing the

culture of the healthcare institutions by legitimising the teaching role of the nurse and the learning role of the student. It also demonstrates a commitment to power sharing in making decisions about the content and process of learning among those involved.

Each individual in the action group planned to introduce contract learning into their particular clinical setting, while the whole group planned reflective sessions to continue in the weekly action group meetings throughout this process. The staff nurses involved and affected by these changes took part in the initial planning by providing data about what they would like to see the students bring to the area to show they were prepared for learning.

Developing a contract document

As mentioned above, this group of students had some experience with writing objectives and had been encouraged to formulate these at the beginning of their clinical session. Problems were that the students had not yet been exposed to the particular clinical area and were unsure what might be available in their different areas. As a result, their objectives were quite general. The action plan the students developed was based on the format that a contract and a personal profile would take.

I think I will put it [learning objective] in a simple way. I think it would be easy just to jot it down... but the ones [previous contract formats] we had were very wordy, and they wanted every word in the sentence structure to use the right verbs (student, meeting 3).

I don't think it can be too pre-set. I think it's got to be spontaneous and versatile, because you don't know until you're working during the day what your objective might be because you don't know what cases you're going to come across.... It might be half way through the day you get the opportunity to do something that you'd wanted to do for

the last six months, so you take it. If you have it too structured prior [it] wouldn't work (student, meeting).

The students also discussed methods they could use to present the contract to the staff nurses. They questioned whether to add a contract format to the existing learning logs. These were currently used in the undergraduate nursing course as one method of demonstrating to a polytechnic lecturer that the students were reflecting on issues raised during their clinical experiences. The students debated whether the logs should be kept private for discussion with the polytechnic lecturer but not the staff nurse. The students described problems they had had previously when the staff nurses read their logs.

I don't think the logs are for them [staff nurses]... I would keep this contract document separate. It's not that I'm critical of the ward that I'm working in, but there are just some things that are part of your learning experience to criticise it a bit [student, meeting 4].

Their [staff nurses'] comments on your achievement of learning objectives or something like that... to my mind come much more with a learning contract, separate from the log. It's a separate learning thing and that's where we want staff feedback. Not so much from a reflective point of view, because you can't turn around and say to staff, you're doing that wrong. Because you aren't going to win any friends and [you] are not going to get any help [student, meeting 4].

They [staff nurses] are not just gauging technical skills. They're gauging maybe your liaison with clients, your interaction with staff, all sorts of things that aren't technical skills. I think there should be an area for both: Technical skills with a yes and no and then also your written section - comments on settling in well, liaising with staff [student, meeting 4].

Formulating learning objectives was also discussed and the students planned how they would write these in a way that would be meaningful to them.

Another issue raised was the need to get prompt, useful feedback, particularly when working with several different nurses.

I think that objectives are pretty tricky things anyway, because you may have an objective to do something and you may do it well from beginner's luck when you first do that, but then if you're not doing that process or procedure again for another three or four months, it's nothing. You've got to keep that skill up in that area, and keep at it sometimes to become skilled. We may attain these objectives that we write now, but I think that these are also skills that are ongoing [student, meeting 4].

You are not always with your designated nurse when you do specific things. You need to just grab the nurse you have done a skill with and get her to initial that you have done this and sit down and discuss a few things on that topic and then sign it [student, meeting 4].

The staff nurses in the study responded to the idea of a written contract that identified the student's particular learning needs and agreed that this could be used to negotiate further objectives. The students were well aware of the competing priorities of a staff nurse and this tool provided a method of gaining the attention of busy nurses as well as the opportunity for dialogue directed at meeting learning needs. The students examined various contract formats and planned to take one basic format into their area; however, these would be modified according to each individual's needs (Appendix M).

Developing the personal profile document

In the action group students drew up a sample format to use for their introduction into a new clinical area. It was decided to keep it concise and no longer than one page. The students wanted to include their previous nursing or related experience prior to coming into the course. Clinical areas that the student had been to during their course would also be outlined. Skills that the

student had practiced and were confident with were stated as well as skills that they wanted to develop further. As discussed, the use of this document was aimed at facilitating staff nurse teaching and was one method of individualising learning. The document developed is included in appendix N.

Summary

Action planning in this study was informed by the reconnaissance phases of action research in each cycle. Initial analysis of the situation was developed throughout the subsequent cycles, and further exploration of literature gave a strong rationale for the action group's planned strategy for change. The students formed a commitment to the study as they planned meetings and developed a practical plan aimed at improving their learning in the clinical setting. An action plan was formed to introduce contract learning into the clinical areas as a way of communicating learning objectives between the staff nurses and the students.

This strategy for improvement was chosen in response to both student and staff nurse comments on their current pattern of interaction. There was a strong theoretical rationale for using contract learning as one educational method of facilitating student autonomy and self-direction in their own learning. This was also one way of demonstrating motivation that the staff nurses had described would assist them with their teaching role. The action group agreed that entering into a negotiation for learning opportunities using the contract learning philosophy would increase student participation in their learning. The plan was refined in the final cycle of the study in response to problems identified by the students during monitoring of their individual action-taking. Alternative formats and methods of using and adapting contract learning were planned and implemented.

A written personal profile was also taken by the students to their clinical areas and used in different ways to help the staff nurses understand each individual student's previous experiences. The action group decided to use this method of introducing themselves in response to staff nurse comments about the difficulties they experienced when beginning a relationship with a new student.

Implementation of this plan is described in the action phases of the study. Each individual student in the action group took the planned innovation into their clinical area. These action phases of the study are outlined in the following chapter.

Chapter Six

Action

Introduction

As this study progressed the action group moved through the analysis and planning phases of the action research and the student participants took the proposed planned action into their clinical learning environment. In this chapter the experiences of individual students and their interaction with the staff nurses as they implemented the chosen strategy for change are presented. The main strategy discussed is the introduction of contract learning. The use of a personal profile to give the staff nurses a picture of each individual student is also discussed. Although the action was focused on the students and the staff nurses, my action-taking is also described as I developed my role as a facilitator to this relationship and the research process. Reflection on, and evaluation of, these experiences are presented in the following chapter.

As in the other phases, the action was refined during the three action research cycles in response to student reflection in the action group as represented in Appendix B. A model created by Melrose and Reid (1999) is used to explain the interaction that took place between the students, the staff nurses and researcher. This model was developed from the work of Kemmis and McTaggart (1988) that has been used as a framework for this study. The discussion in this chapter also applies Kemmis and McTaggart's criteria for educational change and describes changes that were occurring to language,

activities and practices and social relationships of those involved in the situation.

To change the current pattern of activities and practices in this action research, the students used the plan to develop autonomy in interactions between themselves and the staff nurses in the area. The language of self-directed learning and contract use began to appear in the interaction and this highlighted the changing discourse in the relationship. Introducing contract work was also aimed at improving the current social relationship between the student as learner and the staff nurse as teacher.

Participants' interactions during the action research

As identified in the initial reconnaissance phase, each student's pattern of work in each clinical area was unique. Although the staff nurse is legally responsible for patient care, each nurse delegated different aspects to students depending on the working relationship they had established. The action group of ten students identified the various ways they were supervised during their time in the clinical areas. These are summarised as:

- Four students working closely with a staff nurse through all shifts, including night shifts and weekends.
- Two students worked with a different staff nurse on almost a daily basis.
- One student had a charge nurse overseeing her practice but worked quite independently, with no other staff nurse designated as her 'buddy' nurse.
- One student worked with three to four different staff nurses throughout the study, depending on the part of the clinic the student was in.
- One student began working with a nominated staff nurse, however changes in shifts and circumstances resulted in the student working

different shifts from the nominated staff nurse, instead she worked with several different nurses.

- One student began with one staff nurse but moved into a different area and had a charge nurse overseeing her.

This resulted in a complex research situation, however it was also a typical situation for a polytechnic nursing lecturer and a group of student nurses. As the group examined the differences in their clinical learning experiences participants suggested that specific and individual actions would be required in order to improve teaching and learning by introducing the practical plan of contract learning. As discussed in the planning phase, in contract learning it is necessary for both the student and the staff nurse to participate in developing learning objectives. The patterns of interaction between these two key players in the educational situation under study would influence the successful implementation of this plan.

As I began to analyse the action phases of this study, I discovered a model named 'The Daisy Model' (Melrose & Reid, 1999) (Fig. 3). This model was proposed by two professional development teachers in a New Zealand educational institution to describe participants collaborating in an action research study. It was helpful for me in examining the specific action taken in each clinical setting in the current study, the relationships that were developing and the changes taking place.

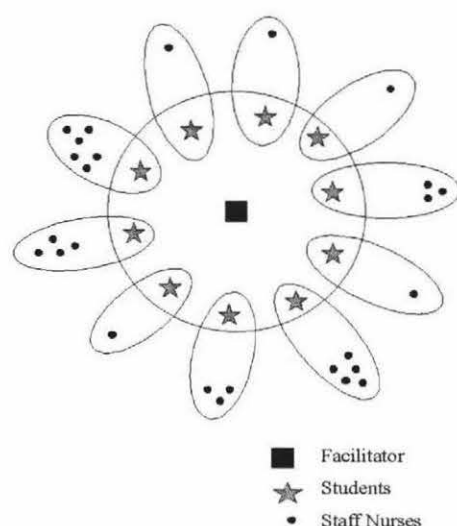


Figure 3: Representation of interactions of participants in this action research.

The analogy of a flower is used in the model to describe the interaction of individuals and groups in an action research study. The authors propose that the core of the flower remains constant throughout and this represent the core group in action research. In the current study this is the student action group. In the centre of the flower is the facilitator and this represents my role. Each petal of the flower is composed of a member of the core group and a varying number of members of an expanded group. Each is distinct yet part of the whole. In this study the expanded group represents the staff nurses. The five students that were working consistently with a single staff nurse are identified in five of the petal groups, while the five students working with a varying number of staff nurses in their clinical area are identified in the remaining petal groups. The staff nurses that took part in the study were those five working consistently with one student each.

As mentioned above, the authors developed The Daisy Model from the work of Kemmis and McTaggart (1988) as a way of visualising the interaction patterns of a core group of experienced and novice action researchers. Participants work on a range of what the authors described as related 'mini-projects' that occur within each petal group and are aimed at changing an existing situation.

Using this model, therefore, participants are described as either a core group or an expanded group in order to explain the interaction between the two groups. A core member - in this case a student - and one or more expanded members - or staff nurses - form what is called a 'petal group'. The students in this study took the action plan into their clinical areas as one of the 'petal groups' and returned to the core group meetings to reflect on the effectiveness of the strategies taken.

The authors describe the role of the facilitator as an equal participant to the rest of the core group; however, it is implied that this person has some specialist knowledge or skills associated with the practice of action research that are needed to keep the process moving forward. This explained my position in the group. The facilitator in the centre of The Daisy Model may have a different kind of commitment from other participants. This, ideally, is to assist others to use the power of the action research method to their advantage in order to improve their practice. Participation by group members is influenced by their position in the project and their personal level of interest and commitment. This also explained the differing degrees of participation among the ten students in the core group as well as the staff nurses in the expanded group.

It is also proposed in this model that although each participant has a unique contribution to make to the project there is a shared commitment to improvement of a common practice by all participants. The authors consider this essential for effective action research (Melrose & Reid, 1999). The model emphasises that individual action and theory on and in practice is strengthened and validated by the group. In this study students validated the action through reflection in the group.

The model also allows for engagement of every person in the research group and encourages commitment to an action research project. Core group

members are encouraged to take leadership roles in mini-projects and to actively involve other participants from the organisation(s). In the current study, students working closely with staff nurses involved them in the project. The students who were not working closely with a staff nurse were attempting within their particular 'petal group' to adapt the contracting process in order to gain staff nurse assistance in developing learning objectives. These students were working with varying degrees of participation from different nurses.

The model also shows that action research expands from one or two initiators to others in an organisation and, in this study, between healthcare and educational organisations. The ripple effect of an action research inquiry results in a widening circle of action researchers who participate in the process in different ways (Nightingale & O'Neil, 1994). In the current study, staff nurses were included as the focus of the inquiry became the interaction between themselves and the students. This model allows for changes in an individual's participation and the organisational context of the research. The functions of the core group influenced the collaborative efforts of each petal group.

Therefore, although the core action group in this study was focused on developing a plan of action to improve a teaching and learning situation, each individual was implementing the plan in different ways due to the varying nature of their clinical settings. Action taking was similar to the idea of mini-projects outlined in The Daisy Model. Each area had unique teaching and learning opportunities, organisation of nursing care and existing ways of students working with staff nurses. Each action could be considered a mini-project with specific aims, context and working partnership (Melrose & Reid, 1999).

Analysing group process using this model identified that the student group was in fact becoming more aware of the action research process, and they were

taking this with them into their interaction with staff in their clinical areas. It assisted me in clarifying my role as facilitator and validated my belief that students were taking action in the clinical areas and directing the process in this environment. This strengthened the collaborative nature of the inquiry and allowed students to develop and maintain a degree of control of the process as well as directing their own learning.

Process - individual action

In the core action group meetings, the students identified the different methods they used to introduce contract learning in their areas. As discussed, the idea of mini-projects with individuals immersed in their own unique teaching and learning situations explains the action that was taking place. Findings from the students' accounts were that the main influences on this action were whether the student was working in a consistent relationship with a staff nurse or working with several different nurses, the type of learning opportunities available in the clinical area, and the preferred learning style of the student.

In the group setting each student outlined the action they were taking, and this was evaluated and discussed. In this way, reflection in the group guided individuals in modifying the plan and taking further action in the clinical settings. The actions are described here while the reflection is presented in the following chapter.

Action in consistent staff nurse/student relationships

The experiences of the five students working in a consistent relationship with one staff nurse were monitored more closely than the five students working with several different staff nurses throughout the project. This monitoring was possible because, as outlined in the methodology chapter, an interview was

conducted with the researcher, a student and their assigned nurse at the beginning and end of the study. Data from the first interview with these five pairs provided information on the teaching and learning relationship that had begun as well as the way that these pairs proposed to introduce contract learning into this relationship. This information is summarised in the following paragraphs.

One staff nurse/student pair used contract learning on a daily basis. This student had negotiated with the charge nurse to work all shifts with this particular staff nurse. Their clinical setting was an accident and emergency department in a public hospital. The student prepared a beginning set of objectives using the sample contract format, discussed these with the staff nurse at the beginning of their relationship, and explained that she wished to negotiate this contract with the staff nurse daily throughout her elective experience.

The staff nurse and student had previous experience with contract learning. Both participants were committed to working with this document and agreed to evaluate this method of teaching and learning as part of the study.

I think J and I , when we have time, will sit down and go through these objectives I have begun and we will work through what resources we are going to use to get them and we are going to find the evidence and set a time on it and then J [staff nurse] can validate that things have been done. Some will be short-term and some long-term goals (student in student/staff nurse interview).

This pair developed the contract through daily discussion, which often took place following work hours. Throughout the day there was seldom opportunity to work on objectives due to the fast pace of the work area. Both the nurse and the student were willing to spend this extra time and remained committed to their teaching and learning responsibilities.

A second staff nurse/student pair chose to develop their own contract format. The staff nurse assisted the student with setting objectives and provided resources for learning. The clinical setting was a private surgical hospital. The focus of the learning in the contract was on developing technical nursing skills, identifying surgical procedures and practicing emergency procedures. The pair used this to monitor the teaching and learning in this area and the document provided evidence of the student's achievements.

The third pair was working in an acute general surgical setting in the public hospital. The student initially set a number of general objectives and the staff nurse assisted her in refining these to suit the learning opportunities in the area. The ward orientation manual was used as the main document for identifying key skills needed in the area and the staff nurse adapted this for student use. The pair chose not to use the sample contract format and preferred to use the ward material as a guide for teaching and learning.

The fourth pair was based in a community setting. Clients attended the clinic, or the staff nurse and student visited them in their homes. This pair discussed a suitable format for a learning contract and decided that in order to set objectives that were relevant to the opportunities in this setting, it would be most effective to tape discussions occurring in the car between client visits. The nurse would often question the student about what had occurred in the home and much of the learning was based on discussion of findings from the physical assessment as well as the assessment of the client's family and social environment. From the taped discussion the student formulated objectives for learning more about the various cases presented.

The last pair also worked in a private surgical hospital setting. This pair used the standard contract format in forming objectives and, again, the staff nurse modified those developed by the student to suit the priorities in this clinical

area. These were reviewed weekly and the student documented progress using this document.

Action without consistent relationships

The five students who were not working consistently with one nurse discussed their experiences during action group meetings and described the methods used to adapt the idea of contract learning. One student stated that she drew up a poster and placed it on the board in the nurses' station. This identified who she was, what she wanted to learn, and asked for assistance from the staff nurses working in the ward. Another student wrote in a book and placed this in the tearoom on the ward. She asked the staff nurses who had worked with her to write in the document about skills she had performed.

One student who worked in a private accident and emergency clinic drew up some objectives and placed them on the notice board after discussing this with the charge nurse. This was found removed the next day and following this the student was not able to gain assistance from a staff nurse in working through a written contract document.

Another student who worked in an acute medical ward in a public hospital preferred to assess the learning opportunities each day at handover time, when the staff was changing and reporting on patient progress. The staff nurses would ask her what she wanted to gain further experience in and she would negotiate patient care around learning objectives she had set for herself. This was negotiated verbally with different nurses each day and there was no written document of progress.

A student working in the paediatric ward in the public hospital found that she was working in several different areas and it was difficult to get anything written between herself and a staff nurse. She was assigned to various areas

during her experience and these included the inpatient ward, the acute assessment unit and the paediatric outreach team in the community. The nursing staff were different in each area. She was determined to develop a document that outlined her learning needs and thought of ways to communicate this with her different staff nurses.

In the different placements over the last couple of weeks I had to connect with different people who I didn't really know before so it was like having a new buddy ... and my first day in the assessment room I felt really lost and I thought this is really stupid. I went home that night and thought about it and I thought no, I believe you have to take responsibility for your own learning ... so I went back the next day and I had objectives written down and I just sat down with the nurse and I prioritised my learning objectives and she said that is really good because often they [staff nurses] don't know. Students just come there and then they go [student, meeting 4].

Monitoring the action

There are several choices for monitoring action. Kemmis and McTaggart (1988) suggest one essential method is that the initiator and facilitator keep a project journal for the purpose of recording impressions of progress. I found this invaluable for reflection on events as they were happening as well as providing documentation to return to for later analysis. Students' reports of their clinical experiences in the weekly action meetings also provided a method of monitoring action. Data from the transcripts of the meetings was used to examine changes occurring across the three registers of language, activities and practices and social organisations. This is represented in Appendix L.

Another option for monitoring action is for the researcher to undertake field observations (Elliott, 1991; Kemmis & McTaggart, 1988). This was discussed in the action group as one way of identifying whether a change was taking place.

The action group agreed that as the researcher I could begin to observe those students working closely with a staff nurse. This was because the current situation had been more clearly outlined and it would be possible to look for improvements. I undertook two episodes of field observation between one action meeting and another and discussed my experiences in the group.

At this point I also expressed to the action group that I wished to meet with a group of colleagues to discuss the project's progress and to gain critical comment. I explained to the students that this is suggested by authors of action research as one method to validate researcher actions and to discuss whether these actions remain consistent with the action research process (Elliott, 1991; Kemmis & McTaggart, 1988). The student participants agreed for me to do this. The lecturers who agreed to meet with me were also involved in clinical teaching and supervision.

I explained to my colleagues that I had felt somewhat uneasy in the observation role. One colleague suggested that the reason for this might be that I had moved out of the participant role as a group member into one that the students and the staff nurses might perceive as an assessment role. I had a previous relationship with these students and the staff nurses as a polytechnic lecturer, and I felt that this influenced their interactions while I was part of the situation. I agreed that this was problematic and decided to abandon further field observations. I chose to utilise the students' reports as a more natural, less intrusive and more student-focused method of monitoring action. I also decided that maintaining a focus on the students' perspectives of changes taking place allowed me to remain in a facilitative rather than a directive role.

The students reflected in the core action group on the action and spoke of the challenges they faced in attempting to be more self-directed in their learning. For some, using a learning contract facilitated discussions with the staff nurses

in which they could express their own goals. The students were able to take a proactive role in their own learning experience by presenting the staff with a considered set of learning needs.

I mean, it was easy for me because I could just sit down with T and say, look, this is what I would like to learn and she went out of her way to help me. Mind you, I wasn't looking at clinical procedures. I was looking along the lines of ... negotiating communication relationships and rapport out in the community because things are different out there. Nothing is certain out there and you are on your own (student, meeting 4).

J and I have discussed getting some learning objectives together and I have done that - I put my objectives on a page and asked J to go through them with me and discuss how I can achieve this. I will make it my job to actually tell J some things that I would like to learn and she can tell me the next day - so, it is up to me to tell J about things I have come across that I need to know more about ... (student, meeting 4)

The staff nurses working closely with the students began to allow them more freedom to direct their own activities and involvement in patient care. The students became more equal partners in the relationship and could demonstrate ways in which they were being proactive in negotiating for their own learning.

What I like about J, though, is she now actually trusts me and has faith in me. I don't feel threatened and she is very supportive. I don't feel intimidated when questioned by her and it is safe to be wrong in your answer (student, meeting 5).

It is really good as it allows for opportunity for feedback both ways (student, meeting 6).

The personal profile document

The students in the action group also discussed the methods they were using to inform the staff nurses of their previous experiences in order to assist the staff nurses in selecting useful learning opportunities. All students took the personal profile format suggested in the group and adapted it to suit their purposes in their clinical setting. Some of the students, in fact, decided not to use the profile at this time. Those students who did complete the form and showed it to a staff nurse described the advantages and disadvantages of the document in the action group. Their reflections are included in the next chapter.

Researcher action

As the action group reflected on their various methods of introducing contract learning in the clinical area, I worked on developing my skills in facilitation. The authors of *The Daisy Model* explain the actions of the researcher as the center of the core group who facilitates the process of the study (Melrose & Reid, 1999). As a nursing lecturer, relating to students within this process appeared to be one effective way of promoting student autonomy in directing their own learning in clinical environments and therefore, promoting quality learning (Rideout, 1994).

Heron (1989, p. 11) defines a facilitator as "a person who has the role of helping participants to learn in an experiential group". He suggests that good facilitation is useful in enhancing both the interpersonal skills and the technical skills of group members. Heron (1989) also submits that it is advantageous if the facilitator has knowledge of the process as well as some expertise in the area of practice that is the focus for improvement. In this study I was able to contribute knowledge and skills in research, nursing education and nursing practice.

One example of facilitation that I undertook during this study was that as the students and the staff nurses described their contract relationship and the various documents that were developed I worked with some of these pairs to add to their skill lists. As discussed, in the clinical setting students have the opportunity to practice technical skills and develop competencies required for new graduate nurses (Lofmark & Wikblad, 2001). The staff nurse is well placed to assist the student to take advantage of opportunities, and the nurses in this study were interested in formulating a contract that included achieving practical skills commonly practised in their clinical setting. The staff nurses included skills lists frequently selected from orientation manuals for new nursing staff in their contracts with the students. This provided a useful way of working, as the staff nurses felt confident in assisting students with this type of learning and the students felt satisfaction in developing clinical skills. The staff nurses guided the students in choosing skills that were within a beginning practitioner's scope of practice and gave students opportunities to practice these. Receiving feedback from the staff nurses was important, and one method of providing this was documenting in the contract that particular skills had been achieved.

However, to extend this documented form of technical, practical learning I worked with the student to encourage further reflection. For example, one student documented that she had performed the skill of taking an electrocardiogram (ECG), and a staff nurse had signed this stating that it had been carried out competently. Using this as a basis, I asked the student to consider why this was done for the patient, what other physical findings from their patient assessment were relevant and what the characteristics were of a normal ECG. The student used other resources available, such as the ward textbooks as well as other staff in the area to follow up on these questions and added this to the document. In this way the contract was useful for me as a

polytechnic lecturer to discuss patient care and to encourage student theoretical learning from practical skill experiences.

Durgahee (1998) adds that a facilitator creates a balance between confrontation and support and uses an educational framework within which students are encouraged to be active participants. The aim is to facilitate thinking and to develop insight through collaborative effort rather than through didactic teaching methods. Cross (1996) also suggests that facilitation is a process of enabling change and creates a climate for learning based in mutual trust, acceptance and respect for those involved. The process is student-centred and includes negotiation, effective communication and collaborative, mutually beneficial relationships. During this study I considered how I could work towards these aims as part of my role in the clinical setting.

Heron (1989) also suggests that a facilitator is necessary in experiential learning groups to monitor and give feedback about group process. However, participants are seen as primarily responsible for their own learning. The facilitator also improves their practice as an action researcher by being involved in the process. Ebbutt (1985) agrees but replaces the term 'facilitator' with 'coordinator'. He proposes that this person should provide the dynamic to drive the action research cycle, convene regular research meetings, keep a record of the plan that emerges, and coordinate negotiation between participants and those who are affected by the research. The facilitator should also help individuals to share insights and research strategies and coordinate the writing of research reports.

The writings of these authors guided me in developing my role as researcher. I took responsibility for moving the inquiry forward and for identifying the action research process as it evolved. I was conscious throughout the project of identifying the phases of reconnaissance, planning, action and reflection, and keeping track of the data assisted me in this. I was responsible throughout

for the written work involved and kept a weekly record of events, which I reported back to the group at the beginning of each meeting.

Summary

The action, introducing contract learning, evolved over the three identified cycles of this study. The action of individual students was refined and improved through reflection in the core action group meetings. The interaction that developed between the researcher as facilitator, the student participants as the core group, and the staff nurse participants as the expanded group influenced the specific nature of the individual action taken. This interaction has been explained using The Daisy Model developed by Melrose and Reid (1999).

Changes taking place have been discussed using Kemmis and McTaggart's (1988) criteria for educational change. The students' self-reports of actions taken identified that changes were developing in the activities and practices of some of the staff nurses and the students. Students working in consistent relationships with a single nurse contrasted their experiences and relationships with those students working with several different nurses.

The students chose to demonstrate to the staff nurses, using contract learning in various ways, that they were proactive and had identified their personal learning objectives. In some cases these were presented to the staff nurses as a basis for learning and further negotiation occurred with the staff nurses taking an active part in forming the learning contract. On the other hand, some students acted on their own and although each student documented learning objectives and attempted to make them visible to the staff nurses, there was little assistance.

The language in use was also changing to include ideas of self-directed learning. Communication between the students and staff nurses included negotiation skills, with the students initiating the discussions. Previous experiences with contract documentation were reviewed in order to address difficulties, and the action group decided that the contract would be written in words chosen by the student and staff nurse pair. Students not working consistently with one nurse chose to write their learning objectives and place them in an area where they would be seen by the nursing team. In this way the staff nurses would be informed of the learning needs of the student and could choose to assist them with one or more of the objectives.

Changes in the interaction patterns between the polytechnic lecturer, the staff nurses and the students were evident as the contract learning process evolved. Although the focus of the study was on the staff nurses' and students' interaction, as the researcher and polytechnic lecturer I developed facilitation skills that would support both students and staff nurses in developing communication and negotiation skills required for the contracting process. Facilitation is a role for the lecturer that is consistent with the principles of adult learning and self-directed learning.

The plan of using a personal profile to introduce the students to the staff nurses in a new area was also implemented and refined as the study progressed. Student participants discussed the effectiveness of this strategy in individualising their learning. Evaluation of this change, as well as the various influences on the success of contract learning are discussed in the next chapter as part of the reflection and evaluation phases of the study.

Chapter Seven

Reflection and Evaluation

Introduction

Each phase of this study was informed and influenced by the reflection of all participants. Action occurred during the students' clinical experience, and this was closely aligned with the reflection through weekly group meetings. In this chapter, participant reflection is focused on evaluation of the experience. The students' perspectives are presented from interview data collected at the end of the study as well as the last action group meeting. The five staff nurses included in the study also evaluated their experience in interviews at the end of the study and these are discussed. My perspective as the researcher and polytechnic lecturer is presented from my reflections on the process and outcomes of the study.

In the evaluative phase of action research, reflection is centered on reviewing the thematic concern in terms of the opportunities and constraints of the research situation. In the Kemmis and McTaggart (1988) model, reviewing the action steps allows the researcher to assess the achievements, to highlight the limitations of the study and to consider the consequences of the action. In this phase there is a synthesis of ideas across the categories of language, activities and practices and the social relationships and organisation in order to draw some broad conclusions.

Student reflection and evaluation

Each student was asked six open-ended questions in one-to-one interviews with the researcher at the end of the project (Appendix I). There was also a group session that ended the project and the students discussed their personal experiences of being part of the research group and the effects of the introduction of contract learning on the teaching and learning in their area.

Process - participating in action research

The students evaluated the experience of participating in action research during the one-to-one interviews with the researcher. Several commented that one benefit of being in a group focused on improving learning was that their awareness of their learning role while in clinical areas was increased. Some students felt they were more proactive in seeking learning opportunities in their areas than they would have been without support from the group. For some, being in the research group, gaining support from peers and hearing the experiences of other students was just as useful for their learning as the introduction of contract learning.

Being in the group made me open my eyes and look - focusing on the learning in the situation (student, interview).

Being part of the group added another dimension to clinical work (student, interview).

Gave me insight into how difficult it can be for some students in clinical settings (student, interview).

Discussing practice made me think about clinical practice while doing it and examine areas that were involved...[this] increased my critical thinking (student, interview).

Outcome - evaluating contract learning

As discussed in the action phases of this study, the change strategy chosen and developed by the action group was to introduce contract learning into the existing pattern of interaction between a student and a staff nurse in the clinical setting. The aim of using this learning tool was to improve the quality of clinical learning by facilitating the development of student autonomy and self-directed learning. The use of a personal profile was also implemented as part of establishing an individualised relationship. The students reflected on and evaluated these change strategies as the study reached its conclusion.

The students had various experiences with introducing and working with the contract learning process, and these were discussed throughout the research sessions in order to refine and adapt this action. At the end of the project they had mixed responses on the advantages and disadvantages of using this form of learning in clinical settings. In the final cycle, the students evaluated contract learning as a method that would suit their individual situations and learning styles.

[I] found that things changed all the time - each day - and you needed to be open to any experience you could get with perhaps the longer-term objectives in mind. [Contracting was] good to do at the beginning... check on progress at least once midway and then again near the end (student, meeting 10).

[The contract document] provided evidence of meeting [my] own learning goals ... could track progress, get to know one another ... both [staff nurse and student] more open in their comments about student strengths and weaknesses. Gives the student confidence to step out on [their] own (student, meeting 10).

I felt that the learning contract idea, although we didn't address it and go back to it as much as we thought we would, was really good because it focused on my objectives, what I wanted to learn and my buddy was

really good ... she took a lot of notice of what I did each day and she actually came up with what she felt I needed to work on (student, meeting 10).

Some of the students found working with the staff nurses on contract development was very useful and improved their communication and negotiation skills. However, those students who had minimal support from the staff nurses in their area found it difficult to gain assistance in developing a contract:

Didn't work well for me - I think basically because of individual personalities and people's expectations of what they thought we were doing and whether it was worthwhile. Some staff were not interested and didn't see the development of a contract as important (student, meeting 10).

Other students found that the pace of work made it difficult to plan ahead and they were frustrated in attempts to write down their objectives and make them current and useful.

The thing is that each day is so unpredictable that you don't know what each day brings (student, meeting 10).

I'm not very good at writing ... I set my goals in my head and I think, 'I need to do this and I need to do that' and I get myself psyched up, you know, like, I think I need to do this. So during the week I have a go at doing it (student, interview).

It just changes all the time, and you don't know until you are there that day and you hear that this is happening and you just say oh, can I do that? (student, interview).

Students who were working with different nurses throughout the study adapted the idea of contract learning to suit their situation. Some students felt

they were able to communicate with others effectively in order to negotiate their own learning needs without entering into a formal agreement to develop contract learning.

I don't feel it's a problem to my learning as such because I communicate and I am aware of what my own needs are and I sort of speak up.... I'm happy with my progress (student, meeting 10).

I set the objectives and if I couldn't get the follow through with the staff or whoever, I just did it myself and got them to agree or disagree ... Rather than them having to put any effort into it that they weren't too keen on doing, I felt as though I learnt because I identified things I learnt along the way. So, it was a more one-sided approach, I feel (student, interview).

I think it boils down to communication and who you are with and how you can get around. If you find that you have difficulty communicating, you just have to find different ways of going about it. Because you are always going to have different personalities and wherever you are working you have got to get around that. It is sort of improvising and finding ways of getting your needs met if some things don't work (student, interview).

As identified in the accounts of individual students, during the implementation of the plan there were some students who met with resistance from some staff nurses when introducing the idea of contract learning. These students reflected on their attempts to overcome this.

Given patient care responsibility, so no time to stop and consolidate learning ... Nursing shortage on acute care wards affecting staff time for teaching (student, meeting 10).

I tried to keep more of a conversation going that, you know, we would get together and that sort of thing ... but it was very difficult to make a time to talk about it so ... I got the feeling that they weren't keen so

the more I persisted and the less I got back the more I sort of did my own thing (student, meeting 10).

One of the nurses had a real negative attitude about the students because she thought that a lot of the students that go to the ward don't really want to be there and it comes across ... I think if you verbalise what you want to achieve and you really go for it and try and make the best of your clinical placements, then it really comes in favour for you. So after that day when I put forward all my objectives to the nurse, it just was such a good two weeks after that she just knew what I wanted to learn and there were certain things that I wanted to do and it was just all go (student, meeting 10).

As identified in the initial analysis of the current situation the students agreed that if the staff nurses have a good attitude towards their teaching then confidence grows and this builds self-esteem. Working with a staff nurse on a contract document facilitated the development of a relationship that was based on mutual respect and trust, and this gave the student confidence to ask for learning opportunities. For example, one student had written that one learning objective for her was to learn the skill of inserting intravenous cannulas as this was done frequently in the area she worked in. The staff nurse agreed that this was a useful skill and spoke to the manager of the area. Together they developed a protocol to provide a process for students to gain practice doing this. This benefited the student currently in the area as well as students who would follow.

The students emphasised in the final group meeting that the diversity of learning situations makes each experience unique. Different settings and various student and staff nurse working relationships influenced the quality of learning for the student. Those students who had worked consistently with one staff nurse contrasted their experience to those who had worked with several different nurses throughout. One student had great difficulty with her assigned nurse and was supported by others in the group during the study.

Working consistently with this nurse had been very hard for the student, and she suggested that she would have preferred to work with different nurses.

Outcome – evaluating the use of a personal profile.

The students also evaluated using a personal profile document to provide nursing staff with a summary of their previous experience. This was aimed at assisting the staff nurses to individualise student teaching. Some students chose not to use this for various reasons. For example, one student had worked previously with the same staff nurse in a different area, and therefore each knew the background of the other. However, students working closely with a staff nurse throughout the experience found it particularly useful in beginning the relationship. Those students who used a profile commented that:

[It was a] good idea to introduce yourself as a new student in the ward. Recognition for prior experience, recognition as an individual instead of just another student was possible using a written personal profile (student, interview).

Streamlines some of the teaching - nurses know where you are at and don't need to go over some things again (student, interview).

One student found that using a personal profile helped her to gain recognition for her previous experience from the staff nurse. Previously she had expressed frustration at the lack of recognition she received for prior learning in clinical areas.

The thing I have disliked about the course the whole way through, being an older student, is that you might not know a lot about nursing, but you have a lot of other experience in life, experience that helps you along a little bit. You come in and you have always been a viable member of the team in your previous employment and all of a

sudden you are just this stupid student and you feel useless (student, interview).

Staff nurse reflection and evaluation

As mentioned above, the staff nurses who had agreed to take part and were working closely with the students in this study were also interviewed at the end of the study. These nurses were asked for their reflection and evaluation of the process and outcomes of the study. The interview schedule is included in Appendix J. These staff nurses commented that being part of the action research gave them an opportunity to explore their clinical teaching role and to hear the perspectives of the students.

Often when you are out on the ward with the students you don't get the time to actually sit and go over things, so being part of the study was good in that respect (staff nurse, interview).

[At the end of the study] I went away and thought about how we can all improve ... from the nurses being on the ward and from the students' point of view. How to make a better learning environment, really (staff nurse, interview).

I enjoyed hearing the views from the group and what had been discussed, and I think it is actually quite exciting to do a study and try to improve the education of the students and their placements (staff nurse, interview).

Outcome - evaluating contract learning

The staff nurses evaluated their experience of working with a student using the contract learning philosophy, and considered the effectiveness of this in changing and improving their clinical teaching. The staff nurses working in a consistent relationship with one student throughout the study enjoyed

working with a system that they had a part in constructing. These nurses negotiated the contract format with their paired student.

The student wrote her objectives and then we went through those ... then I added some objectives to those, some things that I thought she would benefit from and things that I had noticed in her practice that I thought she could improve on and that's how we worked it. But it was definitely good to have it written down because you forget as time goes on ... it makes you realise how much you have achieved just by having them written down in the first place (staff nurse, interview).

Keep language simple. More likely to help the student if not too time-consuming (staff nurse, interview).

[The learning contract was a] flexible document ... kept changing it ... thought the theory behind it was good (staff nurse, interview).

[The] benefit for staff in having one student throughout is [to] see the progress and feel that teaching was worthwhile (staff nurse, interview).

One aspect of the sample contract format that was changed as a result of the staff nurses' evaluation was that the fourth column, entitled 'Validation of Evidence', and was removed. The staff nurses found this repetitive and suggested that evidence to show accomplishment was enough to demonstrate meeting learning objectives. This made the document more concise and easily understood and facilitated the contracting process.

The staff nurse and student pair who taped their teaching and learning interactions found that this was a good teaching tool. This method of reflection captured the subtleties of nursing practice and learning from experience was facilitated. The student used these tapes to follow up on

learning objectives and to guide her in seeking more knowledge in specific areas.

It is subtle. The things we are talking about are actually subtle but they have great meaning for nursing. Reflection is very important anyway, but M. could grasp what I was getting at (staff nurse, interview).

You want to try and get the true essence of it rather than something that has been put in your mind. We just sort of went with the flow and focused on certain objectives and pursued them in our interviews in the car (staff nurse, interview).

Some staff nurses looked to the student to begin interactions, appreciated initiative, and was willing to work with them to develop a learning contract.

[I am] willing to stop for 10 minutes when convenient if student wanted to go over progress, and using a written document made that more easily visible. [I] don't want to be sitting down and having to think, what do they want to know? [The] student should already have started [the writing process] and staff add what they know is important for that area (staff nurse, interview).

They [students] might come to me ... and ask am I being realistic (with objectives) or am I being unrealistic. They want to do a lot of doctoring at the end, you know. That's unrealistic. But they make the contract and they should put the terms in and work in with the staff nurse and see if it's realistic and then go for it. That's their own contract that they are making with their nurse and with themselves (staff nurse, interview).

The staff nurses also commented that task learning is the skill most easily identified and worked on. Objectives related to skill learning were often taken from current staff orientation books. Time management was also an important

skill for most students to work on, and this was often a goal that was negotiated and worked on within the contract.

Outcome – evaluating the use of a personal profile

The staff nurses also evaluated the use of the personal profile and commented that it was useful for students to introduce themselves using a short written summary of their previous experience.

Introducing yourself in the beginning as to how much experience you have is really important, because often a lot is expected. We have no idea that students might have only had two weeks' experience in a hospital (staff nurse, interview).

Because you can relate [previous experiences] ... maybe you see something happening here and you could ask if they might remember when they were in a similar situation and may have seen this before (staff nurse, interview).

Researcher reflection and evaluation

As part of developing reflective teaching practice I examined the process and the outcomes of the study. I found that applying a structure to the reflection process helped me make sense of the data. I attempted to maintain critical subjectivity (O'Hanlon, 1996) throughout the project and documented my impressions of each group session according to group process, action research, the change process, and practical issues. One example of this is represented in Table 7-1. This also provided documentation that I was able to return to following the project to extend the analysis.

Research process	Change process	Practical issues	Group process
Summarised points of process so far to group. Summary used terminology from McNiff's <u>You and your action research project</u> - I felt it was good user friendly language for the group. Interviewing staff nurses = still wondering if that is identifying the problem and/or part of the action plan?	Getting a clearer idea about the role of this type of contract/ agreement - seems to be focusing more on personal objectives now and the input from staff nurses is needed next. Discussed types of contract format and students will trial the form - M. maybe in her area.	Some students do not have identified staff to work with, i.e. L., M. away, Mi. going on different shifts. Will have to deal with that Organised about 4 interviews this week so will get those done and transcribed to feed back to group next week Looked at a learning contract format.	Working well, supportive of each other. Participation seems evenly spread in meetings between listening, suggesting to others how to approach problem of staff nurse interactions

Table 7-1: Example of reflective journal format

Group process

Part of my reflection was on the influences of group process in action research. Although the Kemmis and McTaggart (1988) model provided guidance for identifying and working through a change process, it provided little information on group dynamics that affect individuals and their work within a group. One of the aims of action research as part of the critical research paradigm is to raise awareness of power relationships in a situation. Poskitt (1994) suggests that the nature of collaborative group process influences the ability of a group to move beyond practical concerns towards an improved theoretical understanding of social issues of educational reform. I reflected throughout the study on the power relationship between myself as teacher and researcher, but also as a participant in the action group and the influence of these roles on my collaboration with the students that evolved from this action research.

Reason (1994) and Heron (1989) provided theoretical guidance in analysing group process. Their ideas on co-operative inquiry assisted me as I began work in the group. I explained to the students that group process in action research involved participation from all members in all phases of the study. I

believed that the participation by individuals in the group would be affected by their understanding of this process. Another related issue was the movement of the group through the stages of developing a common purpose and learning to work as a group.

Reason (1994) proposed that in the early stages of a study it is common for the group to begin at a superficial level and ideas first discussed may be largely assumptions and commonplace observations. In his view, at this stage the group is relatively unformed and relationships are tentative with little 'authentic collaboration' or challenge to others. Reason (1994) uses the term 'authentic collaboration' to describe the engagement of group members in pursuing a common goal. This is characterised by commitment and open, honest communication in an atmosphere of mutual trust. My first impression of the data from the first action group sessions was that the information students were sharing on the teaching and learning experiences for them in clinical areas described well known factors in their environment that had been identified and explored previously in literature.

One of the reasons for this initial superficial data may be that in an existing group there is a history of group dynamics, and this may constrain open and free dialogue (Reason, 1994). On the other hand, an existing group may also be a productive, co-operative inquiry group if members are already considering this type of inquiry as an appropriate strategy to explore problems in their lives and workplaces.

This student group was formed from an existing group, and the individuals had been together in the larger group of thirty students for two-and-a-half years during the nursing programme. The students in this group had expressed dissatisfaction with their learning experiences in clinical settings and were interested in exploring this further. This presented the possibility for the inquiry to develop past the initial superficial stage to a more critical

exploration of their experience, and throughout the project I worked to facilitate this.

During the first meetings the student group was, therefore, involved in forming a group in which they felt safe to explore their experiences more critically. This would allow individuals to determine what focus they believed would be suitable for a worthwhile project in which to be involved. This collaborative method of decision-making was used to facilitate communication and to develop interest and commitment in the project. This phase also provided an important reflection time and was an opportunity for the group to understand what the project would involve.

Reflecting on the initial stages of the group process in this study, I realised that this type of initiation was different from the experiences that Lewin (1948) had in his original work. The group he worked with were black Americans who felt a deep disaffection with the society they lived in and had sought help. They desperately wanted a change in their social situation that would address the discrimination they experienced. Lewin's participants had a great deal of energy for an action research project that only needed to be 'harnessed' for the study to proceed. I thought of this as the group was forming in response to my call for volunteers and could see that this study was much more driven by me, particularly in the early stages, than by the group.

This affected my role in the group, the amount of collaboration possible and, as mentioned, reflects the practical nature of an action research process in its early stages (Habermas, 1972; Hart & Bond, 1996). Lewin (1948) suggests that while the group is forming, the researcher may need to be more directive. As the process develops, the researcher may step back into the facilitative role. My aim was to empower students to take an active part in all phases of the process. In the first few research sessions the group was developing ownership and responsibility for the direction of the study. Although the group did not

truly move to an emancipatory inquiry with the process totally directed by the participants, students participated in the decision-making processes and influenced the direction that the research took.

Reflecting on group process also involved examining the influences of the institutional setting for the study and the inherent hierarchical nature of the relationships that exist within this setting. Although these participants were brought together as a group of students and may have limited power within an educational institution as well as the healthcare setting, these same individuals shared similar membership in groups as women, as adults, and people with other forms of identity (Reason, 1988). The student identity is transient and my reflections in the planning stages were that individuals in the group take on that identity in different ways. As discussed, this affected how individuals related to me in my role as researcher as well as to each other. Although it was my aim to empower the students to make decisions in the process, I believe that for some it was more likely that the teacher/student dichotomy continued and this affected the style of participation for these individuals in the group.

As the project evolved, I identified that communication patterns of individuals in the group were changing as the group moved beyond the initial stages into a more critical inquiry. There were those who were more vocal and freely contributed their experiences and reflections on the introduction of contract learning in their clinical areas. There were also those who contributed to discussion less frequently. Challenges were made to individuals' accounts and discussion became focused on comparing and contrasting different experiences.

Action research process

My reflection on the research process at the end of the project was that working with a group of students in this way, as a researcher as well as a

teacher, was effective and appropriate for addressing the thematic concern of teaching and learning in clinical settings. The action research process facilitated gaining and including the students' perceptions in planning for improvement and the action group learned about the theory and practice of the action research method. Meeting weekly with the group provided a forum for discussion that was useful for reflection on our area of concern, and the topic was relevant to students. They remained interested and motivated throughout the study. The work required of them throughout the project was concentrated on the reflective group meetings, and they responded by articulating their personal experiences of the clinical environment.

The research process also facilitated gaining the staff nurses' perspectives and this gave the inquiry a wider picture of the current educational situation as well as another view of the change strategy that was implemented. The process of including the staff nurses in the study seemed also to be an effective way to increase communication between those representing the healthcare providers and students and polytechnic nursing lecturers representing the educational setting. Including the staff nurses' also highlighted the collaborative nature of the inquiry.

Identifying the research process as the four phases of reconnaissance, planning, action taking and evaluation assisted me in maintaining a systematic approach to a complex investigation. The situation that the students and I were examining was a typical representation of the interaction between a polytechnic nursing lecturer, students and staff nurses during a time of clinical experience. Understandings and action developed through each phase, and I interpreted the action research as occurring within three cycles with the main findings occurring at the end of each cycle (Appendix B). This also helped to identify changes taking place and provided an audit trail for decisions the group made.

Outcome - Educational change

The educational issues that arose from this project were that students in clinical settings often have difficulty negotiating and developing teaching and learning relationships with the staff nurses in the areas. The students perceive the staff nurses as very influential to their learning in clinical settings and the staff nurses have the ability to form an individual's experience by accepting them into the team and easing their way. The intended effects of the proposed change were that the students and the staff nurses would have the skills and knowledge to use the contract learning philosophy in the clinical area to their advantage.

I anticipated that this action would meet with limited success, may need constant modification and perhaps would not suit certain students or staff nurses in particular situations. The description of the experiences of this particular group of students and staff nurses confirmed this. From my perspective the most effective role for the polytechnic lecturer within this form of learning is to develop facilitation skills needed to maintain and develop an effective contract learning environment.

Contract negotiation did, however, provide a strategy that allowed for individualised learning as well as the opportunity for the students to develop independence in creating their own learning relationship with the staff nurses. As the students described their unique experiences and the many variables in each learning situation, it appeared that the students were capable of deciding what type of learning could best be achieved in the clinical setting in which they were involved. Each student entered a new setting with a general idea of what they wanted to learn; however, after the first few weeks they were much better able to identify specific learning objectives.

In some cases, the staff nurses involved with these students added their knowledge of the setting in terms of what learning opportunities were

available, and a useful teaching and learning relationship developed during the negotiation of the contract. It appeared that the process of active participation of the students and the staff nurses in constructing this teaching and learning tool changed the patterns of communication as well as the usual staff nurse-directed activities. The students took a more proactive role in negotiation of learning objectives and were also, as a result, able to gain more feedback from the staff nurse.

On the other hand, in some cases there was resistance from the staff nurses and some of the students to enter into this type of teaching and learning relationship. The difficulties in introducing this change to staff nurse/student interaction were related mainly to the organisation of work in the clinical area as well as the personal characteristics of the staff nurses and the students. The students who found it difficult to write down objectives and use a contract format to identify how they would achieve these were reluctant to initiate this form of learning into their clinical area. The staff nurses who did not see their role as teaching students, were disinclined to negotiate with a student. I reflected that where these problems existed it would be a good opportunity for the polytechnic lecturer to act as facilitator to guide both the staff nurses and the students in expanding their knowledge of the theory and practice of contract learning. This is a role that I would develop in my future teaching practice.

Outcome - developing a facilitation role

As discussed previously, part of the action that I took in this study was directed at developing skills in facilitating group process. These skills were developed greatly during my interaction with this group of students. I learned when to talk and when to listen. My appreciation of the difficulties the students experience during their work in clinical settings was enhanced. I felt that relating to the group as adults broke down some of the barriers between

student and teacher. Much of the work done with students by polytechnic nursing lecturers is carried out in tutorial settings; this experience of intense work with a typical student group provided a chance to focus on developing my teaching role.

From my learning of the skill of facilitation, I reflected that this would also be a useful role for a polytechnic nursing lecturer in the clinical area. Returning to Baillie's (1993) model, I would place the polytechnic nursing lecturer in the centre of the model as a facilitator and mediator between the three important factors influencing student learning in clinical settings (Appendix A). From the findings in this study, I could see that a lecturer needs an awareness of the features in the environment, the staff present in the setting, and the individual student, in order to provide an effective learning opportunity for students. The role of the nursing lecturer in facilitating student clinical experiences involves communicating and negotiating with individuals and groups in the clinical setting as well as the educational setting. There are many factors that influence staff nurse and student nurse interaction, and lecturers are well placed to co-ordinate these in order to promote the best possible relationship between a staff nurse and a student.

As I reflect on the process of the study and the action that took place, I realise that the initial reconnaissance phase was extensive. Subsequent reconnaissance or fact-finding was more focused and this facilitated the planning stages. The action plan that evolved was based on theoretical and research literature on educational issues as well as the views of the students and the staff nurses. It appeared however, that by choosing to introduce contract learning the group was working mainly within the constraints of the system rather than seeking to change the system. I believe we adopted a pragmatic approach to the issues and decided how we could work best

towards developing our goal of autonomous, self-directed learning for the students within the current constraints evident in the clinical setting.

Carr and Kemmis (1986) suggest that to change institutions and organisations, change for the individual can be a beginning. Members of work groups can learn from considering different perspectives and extending their awareness of the role individuals have in creating situations. Change may be brought about by learning new ways of behaving and interacting and new ways of analysing situations in which they are involved. In this study, the students, the staff nurses and myself as researcher worked towards a more effective form of interaction aimed at improving the teaching and learning in the clinical setting.

From my perspective as a teacher I was interested to see the idea of contract learning developing in the student action group. I have described the action research phases and the collaborative work students undertook in the group to devise a way of introducing this strategy into their particular settings. My clinical teaching role appeared to be developing at the same time into a supportive and facilitative position directed at encouraging the student and the staff nurse to work together as much as possible to develop contract learning as a written learning tool. I worked very much as a resource person to both the students and the staff nurses. This was a change from my previous pattern of activity in which I focused on the student, and when in the clinical area communicated primarily with students only.

Summary

The evaluative phase of this study brought together the reflections of each of the participant groups as well as myself as the researcher and a polytechnic lecturer. Issues in clinical teaching and learning environment were examined and from these one particular area of concern was identified. The inquiry became focused on a method to improve staff nurse and student teaching and

learning interactions. This was the contract learning process and this strategy was developed in the phases of action research in the three identified cycles

The staff nurses and the students were asked to reflect on and evaluate their involvement in the process of the action research as well as the effectiveness of the outcome of the study, the introduction of contract learning and the use of a personal profile. I considered these views in my own reflection on the usefulness of action research as a method of working with others in an educational situation to change and improve teaching and learning. As the researcher I also considered the influences of group process on the decisions made as well as the factors that facilitated or hindered the development of a contract learning relationship in clinical settings.

The main findings from this study are further discussed in the following chapter. Tentative answers to the research question that have emerged from the study data are presented. The educational action research process is considered a suitable approach to this type of inquiry. Literature is re-examined in order to integrate the overall findings of this study with previous studies. In the light of the findings of this current study, recent publications in the field of nursing education in clinical settings in New Zealand are also explored

Chapter Eight

Discussion

Introduction

The main aim of this study was to improve the teaching and learning for a group of participants involved in nursing education in clinical settings. The students worked towards improving their learning in their interaction with the staff nurses, while a sample of staff nurses and a polytechnic lecturer contributed their perspectives on their teaching role in the current situation. Several factors that influenced the quality of teaching and learning in the clinical environment were examined. The findings confirmed previous research: that the teaching role of the staff nurses remained secondary to their patient care duties (Boyle, 1994; Fothergill-Bourbonnais & Higuchi, 1995; Napthine, 1996). It was also evident that the students' relationships with the staff nurses had a major influence on how effectively the student coped with the stresses and constraints that existed in patient care areas.

As presented in this thesis, an action research process was applied to decide on a practical strategy to improve the current situation. Contract learning was chosen and was explored as both a process and an outcome of teaching and learning. It was found that given certain conditions, there was potential for this form of learning to provide a possible solution to the research question and improve the teaching and learning in clinical settings. In this chapter, the usefulness of contract learning in the students' and the staff nurses'

interactions is discussed in relationship to previous research studies as well as recent literature.

The secondary aims of this study were to develop self-reflective teaching practice for me as a polytechnic nursing lecturer and to involve a group of student nurses in a collaborative research process. In this chapter my professional development will be discussed in light of existing literature. The students used their experiences to apply the action research process to develop practical improvement in their learning situation. Their experiences will be related to the literature on collaborative inquiry methods.

Improving student learning - the teaching role of the staff nurse

Several factors that influenced the quality of teaching and learning in the students' and the staff nurses' interactions were identified in the study findings. It was evident that the staff nurses controlled the learning experience for the students, and frequently the students were directed to carry out tasks in order to get through the work rather than to fulfill their learning objectives. The staff nurses also stated that they had difficulty beginning and developing effective teaching and learning interactions with the students for a variety of reasons. The staff nurses further expressed frustration with students who were unable to communicate their learning needs or indicate that they were motivated to learn.

From the students' perspectives, it was found that the attitude of the staff nurses towards the students and towards their teaching role strongly impacted on their learning. When the staff nurses were negative in their attitude to their teaching role the students found it difficult to develop effective interactions with them. On the other hand when the staff nurses were positive in their teaching, students felt encouraged to make the most of the learning

opportunities in the clinical setting. The importance of staff nurses having a positive attitude to clinical teaching and learning had also been highlighted in an extensive study done in England from 1991–1994 (Carlisle, Kirk & Luker, 1997). This research explored the changing clinical role of the nurse teacher within the Project 2000 framework. It was identified that the clinical staff nurses were more likely to work with students than educators in providing direct patient care in practice settings. The staff nurses were therefore more likely to be involved in teaching clinical skills than the education-based nurse teacher.

In the Carlisle *et. al.* study, one factor influencing the attitude of the staff nurses towards their clinical teaching role was the changes developing in the health service. The role of the staff nurses in practice settings was expanding. The staff nurses were gaining more autonomy and more responsibility for patient care management. This in turn was limiting the time available for the clinical teaching of pre-registration nursing students. Carlisle *et. al.* suggested that, in the United Kingdom healthcare environment, clinical commitments would have first priority. The researchers argued that if the staff nurses were to continue to spend time teaching students, service providers would require financial compensation.

Two New Zealand studies mentioned in the literature review also included staff nurses in their investigations of clinical nursing education (Boyle, 1994; Orchard, 1998). Boyle (1994) identified an increasing involvement of hospital staff nurses in the educational process of nursing students while polytechnic nursing lecturers maintained a low profile in the clinical setting. Furthermore, this author found that the students were neither self-directed nor developing independence in their learning in the clinical settings that were explored. The findings in Boyle's study were confirmed by the experiences described by the students in this action research; that it was their desire to please the staff

nurses in order to be accepted as members of the nursing team. This was most effectively accomplished by becoming competent in nursing tasks.

The staff nurses in Orchard's study (1998) explained that involvement with the students changed their relationships with patients and their pattern of work. These staff nurses also felt that frequently they were too busy to teach students and they were not rewarded for working with the students either by formal recognition in career progression or in salary increases. The staff nurses expressed that they did not have up-to-date knowledge of the pre-registration nursing curriculum. Good communication with the polytechnic nursing lecturers, adequate preparation for the role, and skill in providing students with learning opportunities were identified as necessary requirements for the staff nurses to feel more satisfied in their teaching responsibilities. The participants in the current study found that the work involved in the students and the staff nurses developing learning contracts, assisted the staff nurses in their teaching by developing effective, individualised learning opportunities. Structuring the learning contract in this manner was also found to improve the facilitative role of the lecturer and improved communication with the staff nurses.

The current action research confirmed Orchard's findings. The staff nurses in the local setting did not receive recognition for their teaching activities, either in additional pay, in a decrease in patient care responsibilities, or in preparation for the role. Since healthcare institutions were directed during the 1990s to operate as businesses, as discussed in the introduction, funding was exchanged between the educational institution and recognised healthcare providers as payment for clinical access. However, because there was no tangible benefit to the staff nurses, they found it difficult to see any direct advantage from funding provided to their institution.

As described in the previous New Zealand studies, the staff nurses in this action research had not had formal preparation for their clinical teaching role with undergraduate students. This has also been identified as a problem by overseas researchers (Crotty, 1993; Lofmark & Wikblad, 2001; Owen, 1993; Windsor, 1987). It was more likely in the current organisation of clinical nursing education that staff nurses were chosen by their clinical nurse managers to be involved in student teaching due to their clinical expertise rather than their teaching expertise. The staff nurses in this study were also unsure of the particular learning needs of students, and it was difficult for the polytechnic nursing lecturer to intervene and assist in areas where there was a high staff turnover.

The findings in this action research also indicated that their increasing responsibilities and expanding role influenced the role of the staff nurses in clinical teaching. The staff nurse participants described that they were required to maintain full patient care duties as well as responsibility for a student. Student teaching occurred within the workday of the staff nurses, and there was no allotted time away from patient care. This is verified in current New Zealand legislation. The 1993 Health and Disability Services Act and the 1997 amendment does not allow for the time that staff nurses and other health professionals had historically spent teaching nursing students and students of other health professions.

A further issue that the staff nurses in this action research highlighted was the difficulty they had in beginning an effective relationship with a new student. The students in this study were not the only students that these staff nurses would be involved with. One staff nurse would often work alongside a continuous array of different students from different learning institutions with various learning needs. There might also be students from the local

polytechnic undertaking their first clinical experiences who required a different level of supervision and assistance.

The students also described frustration at being seen as 'just another student' and wanted recognition for their prior experiences. A written personal profile was implemented as one method to improve this current situation. The students and the staff nurses in this study found that when this was done it assisted the staff nurses to develop relevant learning opportunities. The profile was also useful as a beginning discussion point and helped to decrease the students' anxiety that is frequently experienced in new clinical settings. Kleehammer, Hart and Keck (1990) proposed that students are more anxious in their initial clinical experience. As anxiety tends to decrease learning, it is desirable to use strategies that help to overcome this.

Another strategy that is promoted to decrease student anxiety in teaching and learning interactions in clinical settings is students having various one-to-one relationships (Dyson, 1998; Hsieh & Knowles, 1990). However, the research on the benefit for students of working continuously with one staff nurse for the duration of a clinical placement has been inconclusive. For example, the staff nurses in Orchard's (1998) study stated that continuity was beneficial to both the staff nurses and the students as it promoted a good understanding of the students' learning needs as well as the staff nurses' expectations. Nevertheless, there were problems of maintaining continuity. Although there may be a commitment by those in the clinical setting to provide this and develop useful staff nurse/student relationships there were problems and these were related mainly to working a variety of shifts. Some of the students in this action research attempted to overcome this constraint by working the same shifts as their supervising staff nurse. This was not possible for all students for a variety of reasons related to family and other job commitments. The practical problems of organising consistent staff nurse/student relationships

demonstrated that although this may be a beneficial strategy, it is not always possible.

Preceptorship programs continue to be a method of one-to-one supervision of students by staff nurses that is promoted in the current teaching and learning situation in clinical settings in New Zealand (Dyson, 1998; KPMG, 2001). Dyson (1998) proposed that the advantage of this method was that it formalised the involvement of the staff nurse and promoted their accountability and responsibility towards students. The role for the polytechnic lecturer in this form of clinical education was to act as a facilitator to the relationship.

In the local setting, however, there have been practical problems promoting this for students and there has been resistance in some of the clinical areas to developing formally recognised preceptorship programmes for undergraduate student nurses. This resulted in an organisation of clinical teaching that varied according to the management style of the clinical nurse managers as well as the availability of senior staff nurses willing to undertake a student teaching role. The nurse managers and the staff nurses in many of the clinical areas supported and actively implemented preceptorship for new graduate nurses. However, they did not promote this relationship with the students. Although the staff nurses in this study accepted that part of their role was to teach students, as mentioned above there was minimal support for them from clinical nurse managers and no financial or formal recognition. The student and the staff nurse participants stated that in the current environment many staff nurses were reluctant to commit themselves to what was perceived as an extra responsibility.

It was confirmed in this study, however, that the staff nurses acted as role models involved in the real world of nursing practice and they provided the students with clinical learning experiences. Several nurse researchers

suggested that this is not sufficient for learning to occur and that it was the reflection on these experiences that developed the quality of learning (Palmer, Burns, & Bulman, 1994; Reed & Proctor, 1993; Richardson & Maltby, 1995). Experiential learning theory identified the impact that the teachers' experiences have on the students' learning (Kolb, 1984; Lewin, 1948). From this view, the ability to apply thought to action was developed by reflecting on concrete experiences in order to explore alternative and improved ways of acting in a situation. Therefore teachers who facilitated reflection with students encouraged the use of experiences as a basis for learning.

As noted previously, however, the nursing literature cautions against using reflection in nursing education if it is based totally on the retrospective account of actions, as students may learn to say what the teacher wants them to say (Macintosh, 1998). Rather, it is suggested that students learn by having the opportunity to reflect prior to action-taking by identifying a rationale for planning and implementing an intervention.

From the findings of this study, in the present local situation the opportunity for students to discuss patient care prior to action is more likely to occur with the staff nurses. It was proposed by the staff nurses in this research that those who were aware of the students' learning needs would be more effective in planning and negotiating relevant aspects of patient care. The planned strategy of contract learning chosen by the student group was aimed at facilitating this form of communication and negotiation of learning objectives.

Improving teaching and learning through contract learning

This practical strategy for improving teaching and learning in clinical settings in the current pattern of interaction between the students and the staff nurses was aimed at improving communication and negotiation. The students found that the contract learning process provided a way for the students to enter into

discussion with the staff nurses and this increased their participation in their learning. This was validated in literature. Knowles (1986) explained that the educational values of student-centered learning and involving adults in creating their own learning experiences were the basis of contract learning. Gibbon (1989), an educational theorist, suggested that the process of discussing and negotiating for learning is as beneficial to a learner as the product and acquisition of skills and knowledge.

From the perspective of the participants in this action research, it was found that introducing contract learning changed the pattern of interaction between the staff nurses, the students and the polytechnic lecturer. However, the success of this action on improving teaching and learning was affected by several factors. It became evident that implementing contract learning in the diverse clinical settings required innovation and perseverance. In some clinical settings the staff nurses greeted the idea with enthusiasm, and the students were able to develop a working document that was used throughout the experience to chart progress. Other students met some opposition to the idea from the staff nurses they worked with, and in these cases it was difficult to develop commitment and a shared responsibility to develop a written contract document.

As discussed, not always being able to work with only one staff nurse throughout the clinical experience strongly impacted the implementation of contract learning. For some of the students, working with one staff nurse appeared to facilitate contract learning. On the other hand, some of the students enjoyed interacting with several staff nurses and managed to develop strategies for getting their learning objectives accepted and developed. It cannot be concluded from this study that working consistently with one nurse is always more advantageous than working with several nurses, particularly when using a contract learning philosophy and practice. It is further

suggested from the findings of this study, that contract learning might be one way to promote effective teaching and learning in an environment that does not provide consistent one-to-one supervision.

The students in this study also described their previous experiences of using contract learning in the nursing programme, and this provided a foundation on which to build. However, their experiences were limited to one course that was part of their programme six months previously, and there had been a return to traditional learning and assessment strategies following this. Knowles (1986) suggested that one method to improve the success of contract learning strategies is to co-ordinate its use consistently throughout a programme of study.

One example of the use of contract learning over the length of a course that was given by Knowles (1986) occurred in a Canadian nursing programme. McMaster University School of Nursing has developed courses that rely exclusively on this type of contractual learning arrangement and included self-assessment as part of the process. The use of contract learning in the clinical areas in this Canadian setting has been particularly successful and one of the most useful applications of contract learning.

Knowles (1986) explained that the philosophy of adult learning principles was emphasised to students during their preparation for working in this form of teaching and learning. The active involvement of the learner was also acknowledged as necessary for quality learning. Self-direction was required as well as clear criteria for evidence to demonstrate that course expectations had been achieved. The contract was renegotiated throughout the clinical experience in consultation with the staff nurses, the students and the faculty advisers. The role of the staff nurse in this form of contract work was similar to that promoted by the students in this current action research. In both

studies, the contract document remained open and the staff nurses assisted the students to relate their objectives to their clinical experiences.

Nightingale and O'Neil (1994) confirmed that in dynamic and complex environments such as nursing clinical settings, the ability to form lifelong learning strategies was essential for the students to improve their own learning. These authors suggested that programmes developing these characteristics in students provided structure and direction when first introducing these principles, and teachers worked closely with students to help them learn the process. As the students' experiences grew, their participation in forming their learning increased. Therefore it appears that the benefit of contract learning is best developed over a sustained period. In nursing education in New Zealand, this would be accomplished by applying contract learning philosophy and practice throughout the three years.

Improving teaching and learning through facilitation

One of the secondary aims of this study was to develop reflective teaching practice for me. This is promoted in the educational action research process as a 'self-reflective spiral' that occurs for each individual within the group (Kemmis & McTaggart, 1988). While students focused on changing and improving their learning practices, my view of the experience was from a teaching perspective. The action I took was aimed at clarifying and improving my own teaching role with students during their work experiences.

The findings of this study indicated to me that there was potential for the roles of the polytechnic lecturer and the staff nurse to be more clearly defined using the contract negotiation process. Previous research findings had suggested that students who are given a structure to outline their learning needs, as well as a background in self-directed learning techniques, would be more likely to negotiate successfully with staff in the clinical area for guidance and support

(Chan & Wai-tong, 2000; Gibbon, 1989; Knowles, 1986; Tompkins & McGraw, 1988). The work that the staff nurses undertook with the students was also made more visible in the development of a learning contract. The polytechnic nursing lecturer became part of the relationship through discussions based on student progress identified in the contract; however, the main creators were the staff nurse and the student.

As discussed in the action chapter, I found that the clinical role of the polytechnic lecturer in contract learning was primarily one of facilitation. As the students in this group developed their relationships with the staff nurses, my role in the clinical area was to support and encourage the students' efforts. The staff nurses in this action research accepted that student teaching was part of their job; however, they were looking for ways to improve the effectiveness of their interactions with the students. I found that the structure provided by a contract document was useful in focusing teaching and learning for the participants, and this finding was confirmed by the students and the staff nurses. Those who worked collaboratively through the process of deciding on learning objectives, the resources needed, and the evidence necessary to show achievement developed a shared commitment and responsibility for student teaching and learning.

The role of the polytechnic lecturer was also to prepare the students and the staff nurses for this change in their current pattern of interaction. Educationalists promoting contract learning note that negotiation of a learning contract is not an easy process for teachers or students, particularly when first encountered (Boud, 1988; Knowles, 1986). For example, Donaldson (1992) argued that preparation for using contract learning was very important and was one way to minimise initial difficulties. I found that this was best accomplished by providing sample contracts, explaining the contracting process and recounting experiences of planning a contract.

In this action research the students found it helpful to review contract learning literature and to further explore their previous experiences using contracts. These students were familiar with the standard format of contracts and the philosophy behind their use was revised. Some of the staff nurses had also had previous experience using contract learning, and this was discussed with them. My role as the nursing lecturer was to provide guidance to the students in the group and to suggest possibilities rather than be directive in my approach. One reason that I was able to work towards a supportive role was that the pressure of student assessment was not part of the research process.

Although I was a polytechnic lecturer as well as the researcher in this study, I was not responsible for the clinical assessment of this group of students and I attempted to work with the group without that element of power over them. I found, however, that the students took some time to adjust to my role in the research. The students were aware of criteria they needed to meet in order to pass this final clinical placement and were working with their assigned lecturer towards this. Therefore, the focus of the work done in this study was removed from that role. From my observations, this helped the students to be creative and more adventurous in their approach to planning and implementing contract learning. The staff nurses' interactions were also focused on working with the students to improve their learning rather than to produce a document solely for the purpose of assessment.

If contract learning is to be recommended as one option for students during their clinical experiences, the role of assessment needs to be clarified. In some programmes students negotiate not only their individual contracts but also their grades, and distinguishing between the two is an important issue (Gibbon, 1989; Mazhindu, 1990; Richardson, 1987). For example, Boud (1988) discusses one engineering programme in which a group of students was removed from the traditional course and the students were given the

opportunity to state their own learning objectives for the semester and proceed independently towards meeting these. These students also awarded themselves a grade. The teacher involved initially found this method difficult to facilitate; however, it was discovered that the students chose appropriate objectives and realistic grades. When these students rejoined the traditional programme, they performed better in subsequent assignments than those who had remained in the traditional programme.

Knowles (1986) also outlined an example of the application of contract learning in nursing clinical settings that applied the process to decide on a grade. Contracting for a grade was done by considering that course expectations listed were minimal requirements for a C grade. The students were required to meet these criteria and demonstrate them in evidence provided in their learning contract document. Those students who wished to work towards a higher grade were assisted in developing learning objectives aimed at higher-level learning, and this was done with the faculty adviser. The difference between the grades was demonstrated in the depth of knowledge, skill or attitude outlined in the contract.

Dyson (1998) discussed evaluation of student clinical performance in her study and found that in the preceptorship programme she explored, it was the nursing lecturers rather than the staff nurses who undertook the evaluation role. From the perspective of the lecturers in Dyson's study, although the staff nurses contributed their observations of the students' performance, the polytechnic nursing lecturers were more familiar with the achievement criteria. The staff nurses found the criteria complex and had difficulty interpreting them. The lecturers commented that they developed their own method of evaluation related to the criteria, but that the process lacked a degree of reliability and validity.

These issues would need to be further explored if the contract process and document preparation became formally assessed in our local situation. However, if the student, polytechnic lecturer and the staff nurse have agreed to the contract as a means of gaining the knowledge and the skills required, an assessment based on fulfilling the contract would make the grading process explicit to all participants.

The polytechnic lecturer may also facilitate contract learning development through negotiation with clinical nurse managers for time for the staff nurse to develop the teaching interaction, particularly in the early stages of the relationship with a student. One disadvantage of using contract learning in nursing clinical settings identified by the staff nurses in this study was the limited time available to work on the document. This has also been identified in related literature and it is noted that contract development requires intensive one-to-one time, particularly at the beginning of the process (Gibbon, 1989; Mazhinu, 1990; Richardson, 1987). As discussed, the staff nurses carried out their teaching role during their workday. Students who seek assistance with this form of learning will need to learn to take advantage of opportunities that may present and to make maximum use of available time.

McAllister (1996) identified another issue in introducing contract learning. This was the resistance from the students who were conditioned by traditional teaching strategies and experienced anxiety when required to take more control over their own learning. The students in this study found that time was required to prepare for this new form of interaction with the staff nurses. The support of the peer group was useful in overcoming concerns about taking a more active part in their learning. The students found it very helpful to hear the experiences of others and to realise that the difficulties they were facing also affected their fellow students. Polytechnic lecturers can facilitate this form of support within tutorial discussions.

Improving teaching and learning using a collaborative process

A further secondary aim was to involve a group of students in a collaborative research process. As discussed above, throughout the study I attempted to develop a role in the group that would facilitate the students' experience of directing their own learning through the action research process. While I initiated this study as a polytechnic lecturer dissatisfied with the current situation of clinical education for undergraduate student nurses, I believed that students could develop ownership of the process as well.

The students participated in this study through the reflective sessions as part of each weekly action group meeting. The analysis, planning and action phases developed from the work of this group and this demonstrated that students remained an integral part of the process. I found that, for students, reflecting on action taken in a group of their peers enhanced their ability to learn from their experiences. The students learned about theories of experiential learning and adult learning and the group reflective sessions considered the practical application of these theories to developing their clinical learning. In this way the relevancy of theory to practice was brought to the forefront.

During the study, the students described an increase in their ability to identify a learning role for themselves while in the work setting. Not only were these students developing an understanding of the educational setting, but they were also learning new ways of behaving and interacting with others. By being involved in all phases of the research, the students were gaining the knowledge of how to learn about themselves and how individuals create their own opportunities and situations.

The action research process is also promoted as one way to develop collaboration between students and teachers and in this way minimise the

power relationships that are part of teaching and learning in institutions (Winter, 1989). My first readings of action research suggested that collaboration was a central feature of the methodology. However, as I continued my reading, I discovered that collaborative inquiry has developed from action research into a separate and different research method.

Bray, Lee, Smith and Yorks (2000) describe collaborative inquiry as both a strategy for adult learning and a method for conducting research; a particular inquiry may emphasise one or the other. From this view, the main difference is whether the participants are seeking new meaning and knowledge for their own learning or producing meaning and knowledge for the public arena; typically an inquiry moves between these two aims. In this action research participants were exploring the situations and experiences in which they were involved in order to develop a shared understanding of the factors that hinder and facilitate teaching and learning in clinical settings. This knowledge was applied to improve their own learning; however, by documenting and presenting this data, this knowledge is also available for public scrutiny.

Conclusion

The findings of this study have highlighted the experiences that shaped the teaching and learning experience for the participants in clinical settings and suggested ways to answer the research question by improving the existing situation. The diversity of the work in clinical areas that the student participants were involved in reflected the range of the skills and the knowledge required for competent nursing practice. One common feature in all of the clinical environments was the presence of the staff nurse as patient care provider, as well as role model and teacher for the students. It was found in this study that this key person in the environment greatly affected the quality of student learning. Factors that influence the patterns of interaction

between the staff nurses and the students were identified and methods to improve this interaction were implemented based on this analysis.

Improving student learning, as well as staff nurse and polytechnic lecturer teaching, through contracts was the main outcome that evolved through the research process. This was one educational method to promote the communication and negotiation of learning objectives by providing a structure for the students to take into their interactions with the staff nurses. The use of a personal profile document was also aimed at assisting the staff nurses to recognise the students' previous experiences and therefore to facilitate individualised teaching and learning interactions.

Factors that influenced the success of contract learning for this group of participants in clinical settings were found to be the consistency of staff nurse/student pairings, the type of learning opportunities that were available and the preferred way of learning for the student. If students worked closely with one staff nurse throughout their clinical experience, it was more likely that they worked effectively on learning objectives, identified progress and became committed to the process. However, those students who were not working closely with a staff nurse utilised the contract learning idea in different ways and some were satisfied with the results, while others felt they did not get the assistance from staff nurses that they needed. The different patterns of interaction that developed between participants in this action research influenced the ways that contract learning developed.

The staff nurses identified other factors that affected the implementation of contract learning. The ability of the students to approach the staff nurses with a beginning set of objectives greatly influenced the attitude of the staff nurse towards teaching. Nurses were generally willing to develop student learning needs; however, they wanted the student to begin the process and to show they were motivated and prepared to take an active part. Students who were

reluctant to outline what they wanted to learn or were unable to articulate their learning needs were more likely to be ignored. This was partly due to the time pressures on the staff nurses and the continued responsibility for patient care that left little time to encourage students who were perceived to be unmotivated.

Developing self-reflective teaching practice was part of the professional development of the action research. I found that working with both students and staff nurses to develop their teaching and learning interactions provided a facilitation role for myself. My skills and knowledge and those of the staff nurses were recognised and directed towards improving student learning. This type of interaction also improved communication between the clinical nursing staff and me.

Developing reflecting practice for myself and involving students in an action research process were secondary aims of this study. It was discovered that this experience provided students with an example of group work and collaborative decision-making. The process of fact finding, planning, action, reflection and evaluation highlighted a method of practical problem-solving through informed action. Interacting with a polytechnic lecturer in this way also provided students with an active part in shaping their own learning experience.

In the final chapter, the strengths and limitations of the action research methodology are discussed. Implications of the findings from this study for nursing practice and recommendations for future research and practice are also presented.

Chapter nine

Conclusion

*We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.*

'Little Gidding' by T.S. Eliot (cited in Burgess, 1985, p. 152).

Introduction

In this chapter the strengths and limitations of using action research methodology as a means to answer the research question are discussed. Also, the implications of the findings of this study for clinical nursing education are outlined, and recommendations are made for improving teaching and learning in clinical settings and for future research.

Action research is a continually evolving process that makes it difficult to present final and firm conclusions from a particular project. This study ended as the student group completed their clinical experience, and the findings evident at that point have been presented within the 'story' of events that took place. The data collection for this case study of action research in nursing education took place in the group sessions conducted in a New Zealand polytechnic and in several clinical settings where the students were placed during the July to November semester, 1999.

The strengths and limitations of this action research

Strengths

The action research process, as applied in this study, provided a method for participants to work together to identify and to plan for a practical change aimed at improving their teaching and learning in clinical settings. The process was effective in gaining the perspectives of all participants and the change strategy was informed by this shared understanding. The systematic nature of the action research process presented a clear audit trail for the reader and validated the origins of the claims made in the research. Winter (1989) proposed that by making the process and outcomes visible for public scrutiny, the research process is emphasised and the inquiry is more than the usual activities of a teacher and a group of students.

Situating reflective sessions within the students' final clinical experience was a strength of this study. Immediate experiences were presented as alternatives and possibilities to the group and this allowed for the emerging nature of the inquiry. Reflection occurred at both an individual level and as part of the group process. A further strength was that the action group in this study remained constant and worked to apply the action research model consistently throughout the project.

The process and outcomes of this study were strengthened by the consistent membership of the group. This increased the credibility of the research group as well as the perceived rigor of the research (Melrose, 1999). As mentioned above, the students' reflection in the group, written researcher reflection and staff/student interviews informed the action and the research. This represented triangulation of data that allowed for constant challenging of the interpretation of events by all participants and added to the credibility of the findings.

Melrose (1999) proposed that group experience and knowledge in the practice area is also essential for credibility in the research group. She argued further that establishing credibility among and between participants is one way of validating action research. Building trust and credibility within the group comes from being useful and helpful to one another. The members of the action group in this study were senior nursing students and active adult learners. This group came from an existing group of students that had been together for two and a half years. They had experienced the current situation for students in clinical areas and, as a lecturer in the polytechnic system, I also worked with students in clinical settings. The staff nurses that joined the inquiry were also working consistently with the student group during the study. Therefore all participants came to the study with some shared understanding of the area of concern, albeit from student and teacher perspectives.

The participants in this study used the action research process to fulfil some of the conditions for high-quality learning outlined by Nightingale & O'Neil (1994). These included: Those participating were there by choice and they were ready and motivated to begin to inquire into their own teaching and learning practice. Another condition outlined by these authors was that the action group works on something they wish to improve and this should be assessed through previous experiences, understandings and knowledge. The group in this study chose to focus their efforts on improving the teaching and learning in clinical settings and their reflections informed the research. Nightingale and O'Neil (1994) also proposed that learning be promoted when the facilitator assisted participants to examine both process as well as outcomes. I worked towards this in my research role. These authors also point out that acting in this way identifies that there are many layers of learning for all participants through involvement in the action research.

Limitations

Heron (1989) and Reason (1988) suggested that this method of collaborative inquiry attempts to decrease the power relationships inherent in the teacher/student interaction and promotes active participation in practical problem-solving. However, although the influences of power were explored in the relationships and type of collaboration in the group process, the student group in this study chose to examine existing patterns of work rather than how these are created and influenced in the broader context. The group adopted a pragmatic approach, and perhaps the time constraints and the amount of energy the group had for the project influenced this. Rather than directing a change to an existing system, the group decided on a practical plan that could change a current local interaction for them.

This study represented one case of a small-scale practitioner-based action research inquiry. Limitations of this type of study are their contextual nature and this restricts the ability to generalise. However, Winter (1987, p. 121) suggested that 'naturalistic generalisation' is established in the description of an educational case study through which readers are able to recognise similarities to cases of interest to them. Elliot (1991) adds that the practice wisdom of a teacher is developed through comparing past cases and recognising those features that are relevant to a present situation.

Doing action research is working on the run (Winter, 1989). Attention to practicalities and planning for the next stage leaves little time for in-depth reflection on the more subtle issues of group process. I found that during the study it was difficult to keep up with developments and the different experiences of the ten students as they were unfolding. This type of study would benefit from allowing the action cycles to continue over a longer period. However, this might need to be weighed against a changing student group.

Implications for clinical nursing education

An interface between the healthcare system and the nursing education system in New Zealand occurs when polytechnic nursing lecturers and student nurses enter clinical settings. Both systems are affected by government policies and funding processes that determine the ways health and education services are provided. Student teaching and learning is subsequently influenced by these policies and processes, and strategies to provide the best learning opportunities within this dynamic environment need to be constantly reevaluated and refined.

As outlined in the introduction of this thesis, during the time of the data collection and analysis for this study, The Nursing Council of New Zealand commissioned a strategic review of undergraduate nursing education by the KPMG consulting group and discussion papers were released as the review progressed. The most effective educational preparation for a registered nurse was the focus for the review and one ongoing area of concern identified was the problem of quality and access for appropriate clinical experience. In the final report, released in May 2001, there are recommendations for more effective management of this vital educational component and these are now discussed in relation to the findings of this study.

It was noted in the review that although nursing staff in clinical areas have a student teaching role, there are factors within the clinical environment that make this a difficult role to fulfil (KPMG, 2001). For example, as discussed, staff nurses might not receive preparation and support for this role. As well, there is increasing pressure on staff nurses to provide quality patient care in areas of high patient acuity and decreasing numbers of skilled, experienced nurses. The final report recommends that one method of addressing these issues would be removal of the payment for clinical access. The report also

suggests that incentives be developed for clinical preceptors such as providing honorary status in an educational institution.

From the findings in this study, eliminating payment for clinical access may remove some of the barriers to accessing quality experiences for students; however, this would need to be translated into benefits for staff nurses in recognition of their teaching role. Decreasing patient care workloads for staff nurses that are involved in clinical teaching would be one way to improve their ability to carry out this role. Incentives would be one method of improving the staff nurses' attitudes to their teaching role.

Alternative models of clinical teaching and learning are also discussed in the report and the development of preceptorship programmes is recommended. However, successful preceptorship programmes depend on a stable nursing workforce that is not present in the local setting. The experiences of the students and the staff nurses in this study suggested that working with a consistent staff nurse may assist student learning. However, the findings also suggest that a student who learns to communicate and negotiate learning opportunities may be better prepared to gain quality learning in interactions with several different nurses. Developing independent learning strategies helped the students in this action research to work in a variety of situations and decreased their dependence on the staff nurses to organise their learning.

Improving communication and collaboration between education and service providers is a constant theme in the final report, as it has been in related literature (Booth, 1997; Dyson, 1998; Hercus *et al.*, 1998; Orchard, 1998). One model recommended in the report suggests a role for a coordinator who would act as a liaison between education and service providers. The coordinator would have an understanding of both environments and be responsible for ensuring that the organisation of the clinical setting allowed

students to meet learning objectives. Another model proposes that a service provider fund preceptors to work with students and tutors in clinical settings.

The findings of this study indicated that one way to improve communication and collaboration in specific teaching and learning interactions was to develop a contract learning process. The role of the polytechnic nursing lecturer becomes one of facilitation, while the staff nurses and the students create an individual contract learning experience. This makes it more likely that all participants would be aware of the students' learning needs and could monitor their progress towards meeting these.

Further research

Further research in an action group composed of clinical nurse managers and polytechnic lecturers may provide additional strategies to improve teaching and learning in clinical settings. Those who hold budget responsibilities may look at ways to support the staff nurse in her/his clinical teaching role while maintaining safe staff:patient ratios. This type of collaborative participation in an action research inquiry could improve communication between education and healthcare professionals and facilitate joint responsibility for the development of the future nursing workforce.

Recommendations

From the findings in this study, the following recommendations are made to improve teaching and learning in clinical settings:

- The role of staff nurses in clinical undergraduate nursing education should be recognised by employers through financial and/or educational incentives.

- Contract learning philosophy should be introduced as a way of promoting student-centred learning from the first year of the nursing programme and developed consistently in all clinical teaching and learning settings.
- Polytechnic lecturers should work with the staff nurses in the clinical settings as required to support the early stages of their relationship with students and to facilitate the development of effective teaching and learning interactions when using contract learning.
- Students should use a personal profile document when first entering a new clinical area.
- The contract learning process should be used to negotiate a grade by students in the last semester of the programme.

Concluding statement

T.S. Eliot suggested that exploring a familiar situation could contribute fresh insights. The findings of this study indicate that those involved in teaching and learning in clinical settings can offer new perspectives and practical action that provide a way forward.

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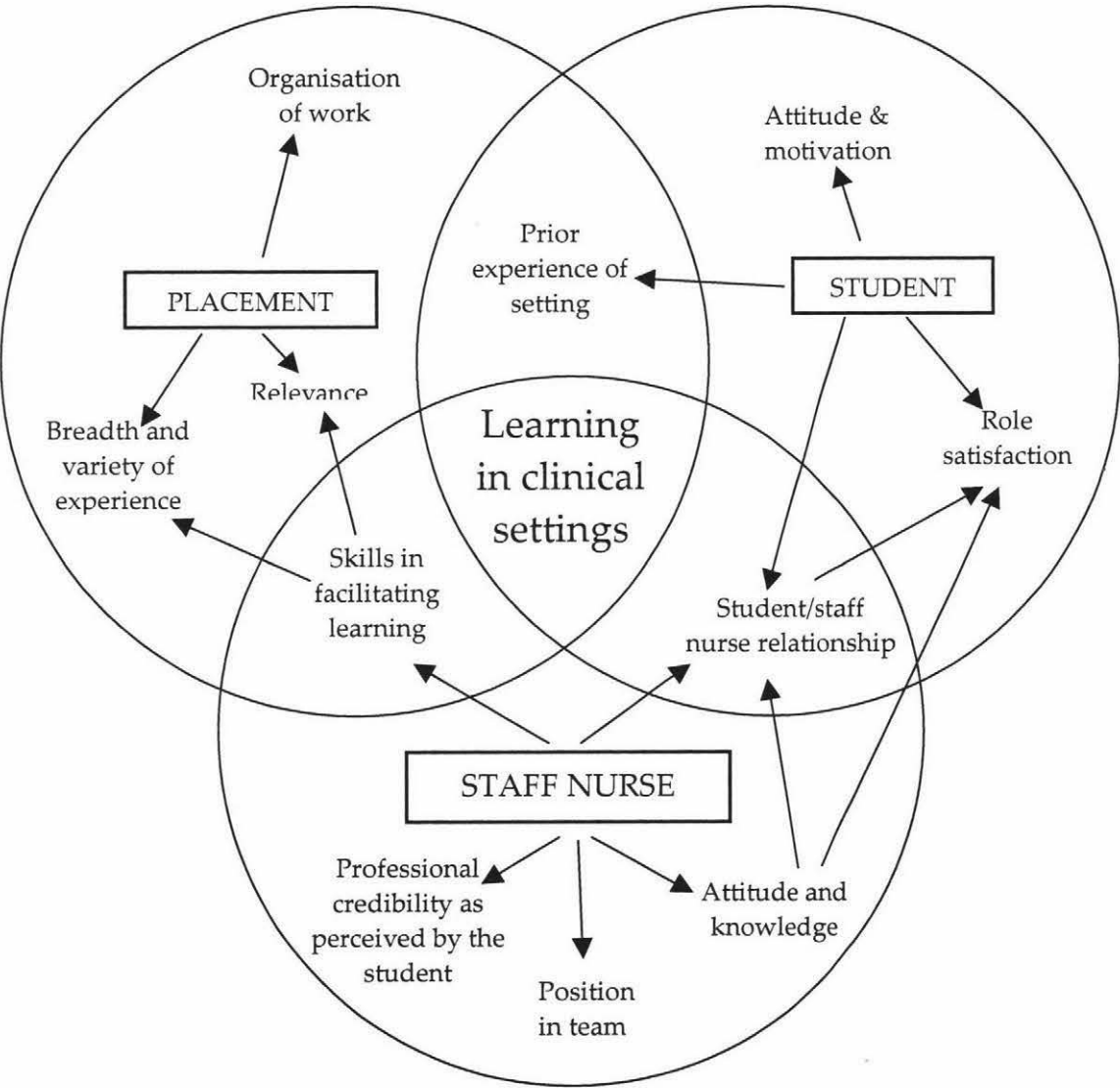
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Appendices

Appendix A Clinical learning environment model



Adapted from: Baillie (1993). Factors affecting student nurses' learning in community placements: A phenomenological study. *Journal of Advanced Nursing*, 18, 1043-1053.

Appendix B The different phases and cycles in this action research

Phase	Cycle 1 Jan. - Aug. 3, 1999	Cycle 2 Aug - Sept, 1999	Cycle 3 Sept. -Nov. 99
Diagnosing the problem – reconnaissance	How can we improve the learning in clinical? Researcher analysis of current situation using literature and table of invention from Kemmis & McTaggart, (1988). Analysis by students using SGID.	How to improve communication /negotiation of learning objectives? Ways to improve staff nurse/student teaching/learning interactions examined.	What factors help and what hinder the use of contract learning in clinical areas? Consistent buddy nurse Type of learning opportunities Showing initiative
Planning the action	Planning focus for project: Students planned weekly meetings with researcher during clinical to describe student learning experiences. Students in clinical identify specific learning issues. Plan for action/reflection to be closely related.	Practical solution: Designing a learning contract/personal profile for use in clinical area as a means of introducing students and communicating learning objectives between staff/student. Group reflection weekly to monitor progress of individuals. Staff nurse views on using contracts and current understandings gained from interactions in clinical and from interviews.	Practical solution: Describing alternate formats and ways of using and adapting contract learning to suit individual styles, aims, relationships with staff. Group reflection weekly to further identify progress.
Carrying out the plan - implementation	Group meetings –reflection. Student clinical work – action.	Students take learning contract/personal profile to clinical areas. Interviews undertaken staff/student/researcher.	Students using learning contracts in clinical area in different ways. Some staff nurses assisting.
Evaluation of the results	Main theme for further investigation identified by the group: Staff nurse/student interaction an important influence on learning.	Student/staff evaluation of usefulness of using learning contracts in clinical area from interviews and group meetings and personal log.	Change in staff/student interaction - contract learning and/or change in communication/ /negotiation strategies.
Identification of central findings	Developing autonomy and self directed learning strategies is the main aim of higher education. Students :Goal setting influences learning and communicating/ negotiating these with staff necessary to improve current situation.	Students with/without consistent buddy nurse working differently. Difference in learning styles of students influence effectiveness of this type of learning. Differences in type of learning opportunities affects objectives. Students expected to show initiative.	Staff nurses/students evaluate use of adapted contract learning/personal profiles - both beginning to reflect on advantages/disadvantages of using this strategy in clinical areas.

Adapted from: Hyrkas, K., (1997). Can action research be applied in developing clinical teaching? Journal of Advanced Nursing, 25, 801-808.

Appendix C Participant information sheet, students



School of Health Sciences -
Albany
Private Bag 102 904,
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Auckland, New Zealand
Telephone: 64 9 443 9700
Facsimile: 64 9 443 9372

LEARNING FROM CLINICAL EXPERIENCE: AN ACTION RESEARCH STUDY

WHO IS THE RESEARCHER AND WHO WILL BE THE SUPERVISOR(S)?

My name is Bonnie Schroyen and you will know me as a Nursing Lecturer in the Bachelor of Health Science in Nursing course at Northland Polytechnic. I am also a student who is researching at Massey University. My supervisor is, Senior Lecturer, Massey University Albany. J. will act as intermediary and has introduced the study to you. She is also available to answer any questions you may have. Our contact numbers are:

Bonnie Schroyen, Nursing lecturer, Bachelor of Health Science (Nursing),
..... Polytechnic
Contact number:.....
Address:

Supervisor:, Senior Lecturer, Massey University Albany
Contact Number: University: (09) 4439799 Ext: 9819
Address:
School of Health Sciences
Massey University at Albany
Private Bag 10 29-4
North Shore Mail Center
Auckland.

Intermediary:
Contact details:.....
phone:

INTRODUCTION:

You are invited as nursing students in the Bachelor of Health Science (Nursing) programme at ... Polytechnic to take part in an action research study during your third year elective clinical placement . The study aim is to improve the learning from clinical experiences. If you decide to join the study please contact me at the above number within one week after you have received this information sheet. You may wish to discuss this information sheet with others. Your participation is voluntary and your student assessment will not be affected in any way should you choose to participate or not. I am aiming for a group of about ten students and will accept the first ten volunteers who contact me at the above number. If there are more than ten volunteers I will randomly choose ten names from a hat. You will need to sign a consent form which will indicate you have been informed of the risks and benefits of the study to your satisfaction prior to volunteering to be a participant.

WHAT WILL BE EXPECTED OF YOU?

If you agree to take part, the study will begin in July, 1999 with a group meeting to look at what we might be able to accomplish, within time constraints ,to improve the teaching and learning in clinical experience. The rest of the study will take place when you begin your unit six in July, 1999. There will be no meetings during your holiday times and the study will be completed when you finish clinical. You will be an active member in decision making and therefore you will have the opportunity to make a difference to the clinical education of student nurses. You will need to bring your interest and energy to the group.

The action research process is not fixed and the group can decide what we want to focus on , how we want to approach our problem or area of interest, and how we will evaluate the clinical change to the education system we may put into action. As the researcher, my role is to act as a group facilitator and I will discuss with you possible themes that we can follow up as a group project. I will aim to work with you and guide you in the process. If you do not wish to participate in the project once the group has decided on the focus you may withdraw from the study. The writing up of the report will be done by me.

The group is, therefore ,very important and group sessions will form the main method of data collection. A set of guidelines will be established for the group in consultation with all parties involved. Issues of withdrawal from the study and the use of any data provided by the person withdrawing will be discussed

and action agreed upon by all members. One rule of the group will be that all information shared in the group is to be kept confidential. The times the group meets and the duration of the meetings will be negotiated. A proposed schedule is included below for your information. I recognise your other study commitments and will work with you and your unit six coordinator to minimise the extra work this study will involve. It is anticipated that group meetings will be at least once a week and of one to two hours duration in order for some progress to be made. These meetings will be within your clinical work time as much as possible and the time of 12:30 to 2:30 is one that may be the most convenient. Permission to audio tape the sessions will be asked for in writing. During these sessions we will aim to write up an action plan which will detail the process of change to be undertaken.

In action research, the use of reflective journals has been shown to be effective in assisting the group with the process of changing thought and discussion into action. To provide evidence of progress individuals in the group will be asked to keep a record of actions taken. This will be done in your clinical logs and will require at least five minutes of writing per entry. Your style of reflection will vary and a structure for entries may be agreed on by the group in order to focus on our problem area.

During the action phase there will be some individual interaction with the researcher. I will visit you in the clinical area to observe action taken to provide evidence that it has occurred. For example, if we want to look at improving our communication skills and have decided to focus on telephone message taking with a structure to try out we can discuss how this is working in your practice. This is called participant observation. I may also take field notes at that time.

As a researcher there is also a personal focus in this study. I am undertaking a Master of Arts in Nursing degree and wish to pursue this research method. I believe this study may assist me personally in developing my nursing education practice. My aim is also to gain experience in working with groups to facilitate improvements into the clinical environment. I hope this study will assist you as well in developing group work skills and learning one way to investigate ,challenge , and possibly change your own educational experience.

HOW WILL THIS STUDY AFFECT YOU?

In this study I will work with you in a participatory action research project. Group process can be difficult and frustrating at times and the going may get tough. We will aim to involve any other people that are affected by the change and negotiation with others who are also in the learning situation will come

before action taking. For example, you will inform staff nurses that you are working with that you are taking part in this study. The study has been supported by the Director of Nursing, and as facilitator I will inform nursing staff in your area about the study aims. We will also recognise that there are wider forces over which we have little control and action planned will aim to be feasible given time and constraints of the situation.

With the group's permission, the group meetings may be audiotaped and the data will be used by me to write up the study. Transcripts from the tapes will also be used by the group to clarify issues and to monitor progress. Any group member may ask that the tape be turned off during a part of the discussion and I will agree to do this. Any written or taped material during the study will be kept in a locked file on Polytechnic premises for the duration of the research and will be destroyed 3 months after completion of the research. The typist transcribing the data will sign a confidentiality agreement.

During any group sessions you have the right to decline to participate further. You have the right to refuse to answer any particular questions. You have the right to withdraw completely from the study at any time and to ask any questions about the study at any time during participation.

WILL ANYONE KNOW WHO YOU ARE?

It is likely that, because the Polytechnic has small student numbers, others will be aware that you are taking part in this study. Your name will not be used in the research report unless you wish. You may choose a different name that can be used for the report. The information shared within the group meetings will be strictly confidential. The only people who will have access to it will be myself, the supervisor and the confidential typist. All the typed information will be kept safely in my home during the research. Once the research is completed I will give the tapes to the Social Science Archives at Massey University for storage. This material will be stored in a secure place for a period of ten years and then the tapes will be destroyed. Typed material and computer discs will be stored safely for a period of ten years. Then typed material will be shredded and computer discs wiped clear of all information.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

A summary of the research findings will be available to you and held in the Polytechnic library. The completed research study will be published with Massey University as a Masters thesis. Although the qualification will be

gained by myself if you wish your name to be listed as action research group members you may inform me and this will be done with pleasure.

There may be an article or articles published as part of this study as well as verbal presentations at seminars or conferences and again if you wish your name to be included I am happy to do that.

The results will be available to the nursing department and the results may be used to recommend a change in the clinical teaching component.

APPROVAL:

This study is approved by:

- The Programme Leader, Bachelor of Health Science (Nursing),Polytechnic.
- Massey University Ethics committee
- Polytechnic Research Committee
- Director of Nursing

Appendix D Consent form, students



School of Health Sciences -
Albany
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Facsimile: 64 9 443 9372

CONSENT FORM: STUDENT

I have read the information sheet and have had the details of the study explained to me by J.... from education support and Bonnie Schroyen, researcher. My questions have been answered to my satisfaction, and I understand that I may ask J... or Bonnie any questions at any time .

I understand I have the right to withdraw from the study at any time and to decline to answer any particular questions. I will not be penalized or advantaged in any way in future learning situations that are managed by Bonnie Schroyen.

I agree to provide information to Bonnie Schroyen on the understanding that my name will not be used without my permission. The use of a pseudonym is acceptable to me.
(This information will be used only for this research and publications arising from this research project).

I agree to participate in making some change to my clinical learning. I consent to the audio taping of group interviews and I understand I can request that the tape be turned of at any time during the group sessions and the researcher agrees to do this.

I agree to participate in group interviews. I agree to keep any information discussed within the interview sessions confidential.

I agree to participate in this study under the conditions set out in the information sheet.

Signed:
Name:
Date:

Appendix E Participant information sheet, staff nurse



School of Health Sciences -
Albany
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Auckland, New Zealand
Telephone: 64 9 443 9700
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LEARNING FROM CLINICAL EXPERIENCE: AN ACTION RESEARCH STUDY

WHO IS THE RESEARCHER AND WHO WILL BE THE SUPERVISOR(S)?

My name is Bonnie Schroyen and you may know me as a Nursing Lecturer in the Bachelor of Health Science in Nursing course at Polytechnic. I am also a student who is researching at Massey University. My supervisor is, Senior Lecturer, Massey University Albany. J.... will act as intermediary and has introduced the study to you. She is also available to answer any questions you may have. Our contact numbers are:

Bonnie Schroyen, Nursing lecturer, Bachelor of Health Science (Nursing),
.....Polytechnic
Contact number:
Address:

Supervisor:, Senior Lecturer, Massey University Albany
Contact Number: University: (09) 4439799 Ext: 9819
Address:
School of Health Sciences
Massey University at Albany
Private Bag 10 29-4
North Shore Mail Center
Auckland.

INTRODUCTION:

Ten third year elective students from Polytechnic have volunteered to be part of an action research study which is focusing on improving the learning for this group of students during their clinical experience. I, Bonnie Schroyen, have initiated this study as part fulfilment of a Master's thesis. The students have formed the core group of participants in the study, however, the group now requests that the staff nurses in the areas they are working also be involved at certain points during the study. Learning in clinical requires negotiation with staff and we want to look at how students communicate their learning needs to staff nurses. Students are looking at whether some form of learning contract would improve the current situation as it may facilitate communication with staff about specific learning objectives for each student.

WHAT WILL BE EXPECTED OF YOU?

I have negotiated with students to visit the clinical areas during their work time and observe how they are working towards meeting their learning objectives. They will have already shown you a general information sheet to staff about the study. I would like to be able to speak to the staff nurses they are working with as well. This would probably be best done with the student present and I would like to have your permission to interview you both to discuss how learning needs are communicated and negotiated between the two of you.

This part of the study will take place September 6 to October 29 , the eight weeks that students are in the area. I anticipate one interview early on in the study and one at the end. Therefore, I am asking for permission to interview you twice during the eight weeks. This will give baseline information at the beginning and then help assess any improvement that has been made during the study. These interviews would be arranged at your convenience and would be not more than thirty minutes long. I would also be taking field notes as I observe the student's working towards meeting their learning objectives. I would also like permission from you to audiotape the interview sessions.

I am available to answer any questions you may have about the study and when you have had time to read this information sheet and think about your participation I will ask you if you wish to sign a consent form.

HOW WILL THIS STUDY AFFECT YOU?

I recognise that your work is your primary concern and your responsibilities to patient care are your first priority. Any interaction with myself will be organised around your other commitments. The data from the interview tapes will be used by me to write up the study. It may also be used within the student group sessions to help identify areas of negotiation and communication that could be improved. You may ask that the tape be turned off during a part of the discussion and I will agree to do this. Any written or taped material during the study will be kept in a locked file on Polytechnic premises for the duration of the research and will be destroyed 3 months after completion of the research. The typist transcribing the data will sign a confidentiality agreement.

During any interviews you have the right to decline to participate further. You have the right to refuse to answer any particular questions. You have the right to withdraw completely from the study at any time and to ask any questions about the study at any time during participation.

WILL ANYONE KNOW WHO YOU ARE?

It is likely that because the Polytechnic has small student numbers and the area you work on will be aware that I am present as a researcher, others will be aware that you are taking part in this study. The students in the area have circulated an information sheet to staff about the study and I will be speaking to the charge nurses/managers of each area. Your name will not be used in the research report unless you wish. You may choose a different name that can be used for the report. The information shared within the interviews will be strictly confidential. The only people who will have access to it will be myself, the supervisor and the confidential typist. All the typed information will be kept safely in my home during the research. Once the research is completed I will give the tapes to the Social Science Archives at Massey University for storage. This material will be stored in a secure place for a period of ten years and then the tapes will be destroyed. Typed material and computer discs will be stored safely for a period of ten years. Then typed material will be shredded and computer discs wiped clear of all information.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

A summary of the research findings will be available to you and held in the Polytechnic library. The completed research study will be published with Massey University as a Masters thesis. There may be an article or articles published as part of this study as well as verbal presentations at seminars or conferences however your identity will be kept confidential by not identifying you by your name.

APPROVAL:

This study is approved by:

- The Programme Leader , Bachelor of Health Science (Nursing)... Polytechnic.
- Massey University at Albany Ethics committee
-Polytechnic Research Committee
- Director of Nursing,...
- Module coordinator, year 3 Bachelor of Health Science (Nursing).....Polytechnic.

Appendix F Consent form, staff nurse.



School of Health Sciences -
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CONSENT FORM: STAFF NURSE

I have read the information sheet and have had the details of the study explained to me by Bonnie Schroyen, researcher, in an information sheet. My questions have been answered to my satisfaction, and I understand that I may ask Bonnie any further questions at any time .

I understand I have the right to withdraw from the study at any time and to decline to answer any particular questions.

I agree to provide information to Bonnie Schroyen on the understanding that my name will not be used without my permission. The use of a pseudonym is acceptable to me.
(This information will be used only for this research and publications arising from this research project).

I agree to participate in two interview sessions with the student I am working with and Bonnie Schroyen. Each of the two interviews will be not more than thirty minutes in length.

I consent to the audio taping of these interviews and I understand I can request that the tape be turned of at any time during the interview and the researcher agrees to do this.

I agree to keep any information discussed within the interview sessions confidential.

I agree to participate in this study under the conditions set out in the information sheet.

Signed:

Name:

Date:

Appendix G Audit trail

Research question "How can we improve the teaching and learning experience in the clinical setting?"			
AUDIT TRAIL			
Date	Classification	File types	Evidence of:
June 1998	Education support form	Student module evaluation - previous semester	Student assessment of clinical experience
May/June 1999	Personal diary	Notes #6#7	Reflection on thematic concern for study
May 1999	Ethics approval	Ethics application to Massey ethics committee	Ethical considerations
May 1999	Correspondence	Letter to Director of Nursing	Informing clinical areas of study.
June 1999	Meeting with prospective student group	Personal reflective notes	Information sheets distributed and students requested to think about taking part in study after break
June/July, 1999	Student consent	Consent forms signed	Informed consent
July, 1999	Ethics approval granted	Letter of approval from Massey Ethics committee	Ethics approval.
July 13, 1999	First student meeting #1	Minutes/ SGID analysis/info. Sheet on key points about action research	Brainstorming, Discussing what students perceived as positives and negatives for clinical learning at present Informing students about the research process
July 20	Meeting #2	Minutes	Reconnaissance Student's deciding on thematic concern
August 3	Meeting #3	Minutes Audiotape/ Transcript/minutes Written information on learning contracts distributed to students	Beginning action plan Commitment to weekly research meetings Focus on staff nurse/student learning relationship

Date	Classification	File type	Evidence of:
August 1999	Ethics addition to protocol	Letter	Permission granted to include staff nurses in study
September 7	Meeting #4	Minutes & audiotape/ Transcript/ Summary of progress/minutes	Action planning/reflection on individual action in clinical situations
September 14	Meeting #5	Audiotape/transcript/ minutes	Students discussing strategies taken with staff about learning objectives
September 15-24	Staff/student/ researcher interviews	Audiotapes x5/transcriptsx5/ Interview schedule	Baseline data of current situation in clinical
September 21	Meeting #6	Minutes Audiotape/transcript	Learning contract and personal profile format distributed for consideration and to begin to use in areas.
September 28	Meeting #7	Minutes	Students' experiences using contracts/profiles - plans for monitoring action in field
October 5	Field observation	Notes	Monitoring action
October 5	Meeting #8	Audio tapes/transcripts/ minutes	Reflection on action/refining action
October 6	Field observation	Notes	Monitoring action
October 12	Colleague meeting	Audiotape/transcript	Validation of evidence for action taken/process followed
October 12	Meeting #9	Audiotapes/transcripts/ Minutes/ written exercise on nature of learning	Reflection on action/ evaluating successes and problems with using learning contracts in clinical
October 19	Meeting #10	Raw data:Written exercise on evaluating use of learning contracts/personal profiles	Beginning evaluation of change to practice between staff nurses and students in clinical
October 18-28	Individual staff nurse x4 and student x10 interviews	Audiotapes/transcripts Interview schedule	

Additional data:

Date	Classification	File type	Evidence of
Ongoing during project	Individual student examples of learning contracts used	Photocopies of work	Action taking/refining Examples of adapting contract format to suit clinical areas
Ongoing during project Reflections	Personal notes /reflections following meetings and during initial analysis of data	Numbered chronologically in file	Reflection on process/action cycles/literature/role as researcher/teacher/ Nurse
Data reduction and analysis	Summaries of raw data with notes	Summaries from meetings with beginning data analysis Summaries of interviews with beginning data analysis Analysis of data using criteria for changes in language/activities/social organisation (Appendix L) Identification of phases and cycles of study. (Appendix B) Model of interactions between participants. (Daisy model)	Validation of decisions made by students research group Evaluation of change strategy Systematic approach to inquiry Inclusion of staff nurse/student/researcher perspectives and interpretations
Data reconstruction and synthesis	Discussion and conclusion chapter	Main data sources	Links findings to previous research Strengths and limitations of research

Adapted from:

Halpern, E.S. (1983). Appendix A Audit trail categories, file types, and evidence. Y. S. Lincoln & E.G. Guba (1989). Naturalistic inquiry. (pp. 382-384). Newbury Park, CA: Sage. In Wilson, D. (1997). Through the Looking Glass: Nurses' responses to women experiencing partner abuse. Unpublished master's thesis, Massey University, Palmerston North.

Appendix H Joint staff nurse/student interview schedule

Staff nurse/student interview schedule at beginning of study.

Introduction

I would like to ask you both some questions about student nurse teaching and learning that occurs in this clinical area. I am interested in what is happening now and would like to give both of you an opportunity to describe your experiences.

1. When you first work together how does the staff nurse know what the student wants to learn in this area?
2. How does the staff nurse know what the student may already have had experience with?
3. Does the student have written personal learning objectives that the staff nurse is aware of?
4. Does the staff nurse consider student learning needs when negotiating student participation in patient care?
5. What would you suggest to improve student learning in this clinical area?

Appendix I Individual student interview

Student interview schedule at the end of the study time.

1. How did you feel about being part of the research group?
2. How do you rate your learning experience in clinical?
3. Has the idea of using contract learning appealed, helped?
4. Has the idea of personal profiles appealed, helped?
5. What do you now think is most helpful to your learning in clinical areas?
6. What is the worst thing about learning in clinical?

Appendix J Individual staff nurse interview

Staff nurse interview schedule at the end of the study

1. How did you feel about being part of the research group?
2. Did you use written learning objectives in some sort of contract form to help you interact in your teaching role with your student?
3. How did you use these? For example, did you review them together weekly? Discuss at the beginning? Near the end?
4. Did the student draw up a personal profile of previous experience and show it to you?
5. If so, did it assist you in interacting with the student?
6. What other ways of communicating and negotiating learning opportunities did you use with the student you were working with?
7. What would you suggest for students coming to the area that would help them get the most out of the learning opportunities in your area?

Appendix K Results of small group instructional diagnosis.

(SGID).

Question: What helps and what hinders your learning in clinical areas?

Positive aspects	Negative aspects
If staff have a good attitude towards students then student has confidence to try things	Staff that have a bad attitude to students
"Buddy" nurses and lecturers need clinical experiences and skills to act as a good role model to give students confidence	Buddy nurses and lecturers without clinical skills - no role models
Realistic work loads for buddies	Buddy nurses overwhelmed with patient care responsibilities.
Teaching paced to level of individual student - some things are new and students come with different experiences	Teaching level too high or too low.
A good, complete orientation, plus a workbook	No ward orientation
Lecturer who can link course theory with clinical. Relief clinical tutors are unfamiliar with theory component of course	Lecturer unable to link theory to practice
Lecturer support and interest in what you are doing intellectually and emotionally	No lecturer support or interest
Feedback given right through the clinical experience. If no feedback find that efforts are not recognized.	No feedback.
A buddy nurse who questions your knowledge so they know where you are at.	Buddy nurse does not question or challenge
Working in a team that accepts you and to be able to contribute to the team and challenge.	Not accepted in the team - undermines confidence, too nervous to put effort in.
Tutorial sessions that are clinically related. Debriefing times in tutorial as well	Tutorials not related to clinical experiences - no opportunity to air problems, issues and get feedback from group on different ways to handle situations.
Personally being motivated and positive, proactive and seeking learning. Taking opportunities	Student not motivated, negative attitude, not proactive in seeking learning opportunities.
Learning logs that are read regularly with feedback given	No feedback on log entries.
Clinical assessments throughout experience in order to know how progressing	No clinical assessment until the end.
A tutor that challenges your skills on ward and observes you critically in action	No questioning or challenging or observation by lecturer.
Clarifying the role of staff nurse and Polytech lecturer	Confusion about responsibilities of staff and Polytech lecturer.
Continuity of buddy nurse builds trust	No continuity of buddy

Appendix L Phases/cycles and data analysis.

Data sources linked to moments in the action research spiral and beginning analysis of data using Kemmis & McTaggart's (1988) criteria for educational change.

Cycle one: Analysis of data

Phase/data source	Main themes
Identifying a thematic concern: Reconnaissance Developing shared understanding	Question - How can we improve the teaching and learning experience in clinical settings?
Module evaluation - previous student group	Students wanted : Defined objectives for each clinical area (activities/practices) More preceptoring in clinical (social organization) Identified role confusion polytech lecturer/staff nurse in teaching/assessment roles
Table of invention: Kemmis & McTaggart (1992) - self Personal diary throughout	Analysis of current situation done by self in terms of language/discourse, social activities/ practices social relationships/organisation between students/teachers/subject matter and milieu.
Meeting 1, and 2 minutes and transcripts	Further exploration by group of possible areas for the group to focus on for the project. Discussion of results of SGID. Main themes: Students identify what is learned in clinical: Skills (activities/practices) Understanding of broad range of acute conditions learned in hospital. Pressures on learning: (activities/practices) Too much theoretical assignments at same time Unstructured environment - need better organisation of polytechnic/hospital, better balance theory/practice Time is precious - can't leave learning opportunities to chance financial pressures and want to see value for money by having an organised , structured learning experience in clinical. Staff Nurse: (social relationships/organisation) often do not see their responsibility to teach students. Not aware of what students want to learn Not aware of what students already know Often ask what are your learning objectives One student had good experience with staff nurse - clarified her role, asked about learning style, communicated learning objectives. One student using orientation book with staff nurse to identify and tick off what skills have been "learned"

	<p>Researcher observation: Helps to improve learning if goals for placement are written and buddy sees these and knows what we want to learn</p>
Action planning	
Minutes meeting 2/3	<p>Action Plan: Students: Agreed to meet weekly Students to focus on goal setting ideas while in clinical during next week - using learning objectives , If so, how to best communicate and negotiate these with staff. Researcher: to visit all clinical areas to ensure that managers are aware of the study. To write to ethics committee for possible inclusion of staff nurses in study.</p>
Action taking/implementation	
Minutes/transcripts meeting 3	Students took idea to clinical area of how to improve goal setting/ possibilities of contract learning and discussed with staff
Reflection/evaluation of results	
Minutes/transcripts meeting 3	<p>Main themes: autonomy and self directed learning a goal Student and staff nurse interaction important for learning (change to social activities and practices) Students discussed that contract learning may improve current situation (change in discourse?)</p>

Cycle two

Phase and data sources Analysis of data/main themes

Reconnaissance Reassessing the situation	How can we improve the communication and negotiation of learning objectives between staff nurses and students?
Minutes/transcripts 4	Specific issues of using contract learning How to best design a format Including personal profile idea as may help address staff nurses need to know previous experience,etc.
Action planning	
Minutes transcripts meeting 4/5	Plan at this point was to : Student responsibilities Include staff nurses in gaining their perspective on contract learning as a way to improve current situation. Students to ask if staff would be willing to be interviewed - information sheet and consent forms given out Students to negotiate interview times Students think about how to improve the first contact with staff by having a personal profile written Students to take a form of contract to the area and negotiate its use with staff. Researcher responsibilities Researcher to interview staff nurses that agree to participate
Action taking	
Minutes/transcripts meeting 4/5 Field notes.	Self reporting on action taken in clinical - use of contracts and how it worked for individuals Reported in meetings that interviews had been done. Field observations of two staff nurse/student pairs.
Reflection/evaluation	
Minutes/transcripts Meeting 5/6 Interview transcripts	Main themes; Student reports: Students found that those working with consistent buddy nurse could develop contract while those not working with consistent buddy had to adapt this form of learning. (social organisation) Students different learning styles affected contract learning (discourse) Clinical area learning opportunities varied and therefore use of contracts was different (activities/practices) Staff nurse/student interviews: (discourse) Student needs to show initiative , be proactive (activities/practices) Would help to know previous experience (discourse)

Cycle three

Phase and data sources

Analysis of data/main themes

Reconnaissance - further assessment of situation and how it is changing	What factors help and what hinder the use of contract learning in the clinical area?
Minutes/transcripts Meeting 6/7	Students not working consistently with staff nurses discuss how that affects their learning (social organisation) Students in different clinical areas discuss how to adapt contract learning to suit their situation and how the different learning opportunities affect our action (activities/practices) How to show initiative - what happens now? Each student reporting on individual experiences with contract (discourse)
Action planning	
Minutes/transcripts Meeting 6/7/8	Individuals discussed in the group refinements to their contract formats and planned to use these amended learning plans in their areas during the next few weeks and report back on progress. Researcher planning to interview staff nurses and students as the project ends as a method of evaluating the use of contracts so far and how the research process has influenced progress.
Action taking	
Minutes/transcripts Meeting 7/8/9	Change to discourse, activities/practices and social organisation One student tried taping discussion with staff nurse in car following patient care One student tried stating at handover what learning she wanted to focus on for the day which could include patients on the ward One student tried writing up in a book and putting in the tea room for all to see as a means of communication.
Reflection/evaluation	Main themes: Advantages outlined: Allows a structure to the interaction between staff and student when first meeting Shows student is proactive, interested, motivated, prepared When staff aware of specific objectives can assist meeting them Worked best when staff nurse also motivated, interested in teaching Looking back on objectives allows for more valid assessment - can be used to measure what student has accomplished in the area. Disadvantages outlined: Fast pace of work makes it difficult to keep objectives up to date. Difficulties writing down new objectives and monitoring meeting others without some time allotted for this. Working with several different nurses not able to work through this
Minutes/transcripts Meeting 8/9 Interview data from transcripts.	

Appendix M Sample learning contract format

Adapted from: Knowles, M. (1986). Using learning contracts: Practical approaches to individualising and structuring learning. Maryland, U.S.A: Jossey-Bass Inc.

Learning contract for: Name _____ Clinical Area _____ Staff nurse contact person _____			
Personal Learning objectives	Resources needed	Evidence to show accomplishment	Validation of evidence

Appendix N Sample student personal profile format

Student personal profile
Third year elective placement

Duration: total 11 weeks

Clinical area: _____ Student name: _____

Student personal profile

Previous nursing/related experience prior to course:

Clinical areas experienced during course:

Year one

Year two

Year three

Skills practiced and confident with:

Skills needing more practice:
