PREPARING NURSES TO PRACTICE IN CONTEMPORARY HEALTH CARE SYSTEMS: AN ANALYSIS OF THE INSTRUCTIONAL AND SUPERVISORY PRACTICES AS PERCEIVED BY NURSING FACULTY TEACHING IN CLINICAL SETTINGS

by

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Dissertation submitted to the Faculty of the Graduate School
of The University of Maryland in partial fulfillment
of the requirements for the degree of
Doctor of Education
1989

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ABSTRACT

Title of Dissertation: Preparing Nurses to Practice in Contemporary Health Care Systems: An Analysis of the Instructional and Supervisory Practices as Perceived by Nursing Faculty Teaching in Clinical Settings

Dianne E. Taylor, Doctor of Education, 1989

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The purpose of this descriptive study was to determine the nature of the perceived instructional and supervisory practices utilized by clinical nursing faculty during the clinical teaching of baccalaureate nursing students.

A survey research design was used to collect data by means of a self-administered questionnaire consisting of thirty-three multiple choice and open-ended questions. The questionnaire was distributed to 95 full and part-time clinical undergraduate nursing faculty teaching in varied clinical settings in five baccalaureate nursing programs (both public and private) in the State of Maryland. The questionnaire was completed by 72 nursing faculty representing a 76% rate of return.

The results of the study indicated that faculty spend at least thirty percent of the clinical time instructing students and seventy percent of the time supervising

students. The faculty indicated that they use teaching methods which might be categorized as "student-centered" a greater percent of the time than the methods categorized as "teacher-centered". The results of the study indicated that faculty are using all types of questioning strategies during the clinical experience. Five of the nine questioning strategies which are advocated as increasing higher-order thinking skills of students were reported as being used "frequently" to "most of the time" by a third or more of the faculty.

When faculty are engaged in supervising students most of the time is spent in observation (51%), as opposed to role modeling (38%), conducting conferences (16%), analyzing data (13%), or recording and processing data about the performance of the students (12%). The faculty reported that they spend between twenty and forty minutes observing an individual student, conduct a conference with the student prior to the observation, use informal notes during the observation, and conduct a post-observation conference immediately after the observation. The faculty in this study appeared to be using a structured system for observing and conferencing with students, which is similar to the clinical supervision model used in teacher education.

The findings from the descriptive and quantitative

analyses of the instructional and supervisory practices indicate that differences do exist among the clinical specialties.

ACKNOWLEDGMENTS

The completion of this study would not have been possible without the guidance and support of the many persons who helped me along the way. To the following persons I express my deep appreciation and gratitude.

To Dr. Linda Gambrell who has served as both my advisor throughout my graduate study and as the chairperson of my dissertation committee, a heartfelt thank you.

To Dr. Jessie A. Roderick, Dr. V. Phillips Weaver, Dr. Donald K. Pumroy, and Dr. Robert Wilson, who agreed to serve as members of my dissertation committee, a special thank you.

To Dr. David B. Young, who provided knowledge, assistance and support, a very special thank you.

To my colleagues at Towson State University, Department of Nursing, thank you for listening.

To my colleagues in nursing throughout the State of Maryland, thank you for participating in my study.

To my friends and family, thank you for being there.

To my son, James Carroll, thank you for once again waiting patiently.

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CHAPTER I

INTRODUCTION

In recent years, the health care system in the United States has undergone something short of a revolution. Health care services have expanded rapidly with a trend developing toward more outpatient services and urgent care centers. Health Maintenance Organizations have become common place and health care plans are numerous and diverse. Not unlike the rest of society, medical technology has exploded into all dimensions of practice within the health care system. Computers are used to operate systems and maintain records. Lasers and CAT (computerized axial tomography) scans are used routinely to diagnose and provide treatment (Restak, 1988).

At the same time, the health care professions are experiencing many crucial problems. For example, the everpresent threat of malpractice suits and the high cost of insurance restricts the practice of many health care providers.

While all of these developments have implications for the health care professions, it is the nursing profession which is effected most directly. Nurses must be educated in the new technologies and be prepared to cope and respond appropriately to the complexities and problems of

contemporary health care. In addition, there is an increased burden upon the practicing nurse due to the current shortage of nurses (Rich, 1988).

Consequently, today's professional nurse must be able to function independently and solve a variety of problems. This requires the ability to apply the skill of critical thinking, as well as extensive knowledge and competence in the technical skills of nursing.

The responsibility to prepare this nurse for practice rests directly on the shoulders of nurse educators. Therefore, faculty must design curricula which prepare nurses who possess the requisite knowledge and skills and are competent to practice in the contemporary health care system.

Rationale

Traditionally, nurse education curricula have included two components: a knowledge component which takes place in the classroom and an application component which takes place in a clinical setting. Nurse educators view the application component as complementary to classroom learning and essential for preparing qualified professional practitioners.

A review of the nursing literature reveals considerable evidence which documents the relative effectiveness of different classroom instructional

practices for the knowledge component (Armington, Reinikka, & Creighton, 1972; Hassenplug, 1965; Kiker, 1973). The literature, however, is sparse with regard to what is effective for preparing nurses who are competent in the skills required in today's settings, especially as it applies to the clinical setting (Stafford & Graves, 1978).

Nurse educators have defined clinical teaching as that instruction which occurs in settings and situations in which the student is giving direct care to real clients as part of a planned learning activity (O'Shea & Parsons, 1979). What are the characteristics, behaviors and functions of effective clinical instructors? The answer to this question remains a challenging one for nurse educators (Hassenplug, 1965).

In general, nursing clinical instructors lack formal training in instruction (Meleca, Schimpfhauser, Witteman, & Sachs, 1981) and they teach as they were taught (Heidgerken, 1955). Reilly and Oermann (1985) believe that knowledge of subject matter and clinical competence is not enough to be an effective clinical teacher; one must also know how to teach.

Nurse educators have identified the ideal behaviors and characteristics of the effective clinical teacher (Barham, 1965; Jacobson, 1966; Karns & Schwab, 1982; Knox

& Mogan, 1985; Mannion, 1868; Pugh, 1980; Rauen, 1974) but they have not determined what instructional skills and strategies are most effective (McCabe, 1985). In fact, as Infante (1975) points out, " ... for whatever reason, nursing education has had historical difficulty in identifying what clinical teaching consists of" (p. 17).

Infante's (1975) basis for this statement is the results of her research findings on faculty beliefs concerning the essential elements of the clinical laboratory. Infante based her study on the results of an earlier unpublished doctoral dissertation (Zasowska, 1967) which analyzed the process of clinical teaching and from which the investigator concluded that clinical teaching in nursing education was ambiguously defined and obscurely identified. The results of Infante's (1975) study also revealed an incongruence between what faculty believed and what they actually practiced in terms of clinical teaching. Another study designed to investigate clinical teaching skills in nursing, medicine, and dentistry also demonstrated a discrepancy between what faculty considered ideal and what they actually did (Meleca, Schimpfhauser, Witteman, Sachs, 1981). The results of these three studies, spanning fourteen years, indicate that nursing faculty who teach in the clinical component of the nursing program are still not in agreement on their purpose and

function in the clinical practice setting. Not only is there a lack of data on the relative effectiveness of different instructional behaviors but there is little in the literature which describes in any detail the nature of the clinical day or the instructional strategies and/or supervisory behaviors and strategies used by the clinical instructor. The clinical experience is regarded as crucial to nursing education and the primary component in the curriculum for developing essential nursing skills. Therefore, nurse educators must give these areas of research high priority.

It is essential that the profession become clear about the actual nature of present clinical experiences. This is a first step in determining the effectiveness of the clinical instruction and supervision for preparing competent nurses who are able to function in today's complex health care system.

Research on clinical teaching in nursing education needs to investigate how clinical teaching is conceptualized and there also needs to be investigations on the study of the clinical teaching processes. These two areas of investigation, the conceptualization and study of teaching processes, are referred to in Dunkin and Biddle's (1974) model for studying teaching as the first class of knowledge. At the present time nursing education is still

not clear about the definition of clinical teaching (Infante, 1975) or what comprises clinical teaching (McCabe, 1985; Pugh, 1983). Studies are needed that describe the teaching practices as perceived by nursing faculty teaching in the clinical practice settings. Research studies are also needed that focus on what nursing faculty are actually doing in the clinical setting, the process variables (Dunkin & Biddle, 1974).

Nursing education research on clinical teaching has studied the characteristics of nursing teacher behavior (process variables) in the clinical area (Barham, 1965; Jacobson, 1966; Karns & Schwab, 1982; Knox & Morgan, 1985; Pugh, 1980; Rauen, 1974). There are studies reported in the nursing literature which investigated the sites (context variables) for clinical teaching (Bevil & Gross, 1981; Corcoran, 1977; Graham & Gleit, 1981; Grimes, 1977; Williams, 1979; Yuen, 1981). There are also studies concerning process-product research (Finley, Kim, & Mynatt, 1979; Menikheim & Ryan, 1985) in the clinical area.

Nursing education research on clinical teaching seems to have skipped a few steps in its evolution process when compared to education's research on teaching. Research on clinical teaching in nursing education has not studied the presage variables (i.e., teacher characteristics) or the

process variables (i.e., the actual activities of the clinical experience). Clinical teaching still lacks an acceptable definition as well as a description of the processes involved in clinical teaching. The present study is undertaken for the purposes of providing a general description of the practices involved in clinical instruction as perceived by the nursing faculty teaching in the clinical practice settings.

Significance of the Study

This study has the potential to add to the theory base underlying teaching in the clinical setting. Knowledge needs to be generated as to the process of clinical teaching in nursing. It is hoped that this research study will contribute to that knowledge.

The identification of instructional and supervisory practices currently being used in the clinical practice setting has significance for curriculum planning in graduate programs that prepare nurse educators.

This study also has the possibility of identifying areas of clinical teaching which need to be improved in order to effect the desired outcomes for today's nurse graduates. Workshops and inservice programs could be developed to assist faculty in improving their clinical teaching effectiveness.

The questionnaire instrument could be developed into

a self assessment tool to be used by nursing faculty to evaluate areas of their clinical teaching that need improvement and from this assessment a plan for improvement could be developed.

Problem Statement

Nurse education programs must be assessed to determine the degree to which they adequately prepare nurses to function effectively in today's complex health care system. The clinical practice setting is considered one of the most crucial aspects of nurse education yet little is known about how the clinical experience is conducted. Therefore this study focused on the clinical experience in nursing education programs.

The purpose of this descriptive survey research study was to determine the nature of the perceived instructional and supervisory practices utilized by clinical nursing faculty during the clinical teaching of baccalaureate nursing students.

The specific objectives of this study were:

1. To describe the perceived frequency of use of instructional practices utilized by nursing faculty during the clinical experience of baccalaureate nursing students.

2. To describe the perceived frequency of use of supervisory practices utilized by nursing faculty during the clinical experience of baccalaureate nursing students.

3. To describe how the frequency of perceived use of the instructional and supervisory practices differ across the clinical specialties.

Research Questions

Research Question One

What are the instructional practices as perceived by nursing faculty teaching in the clinical practice setting?

Research Question Two

What are the supervisory practices as perceived by nursing faculty teaching in the clinical practice setting?

Research Question Three

How do the perceived instructional and supervisory practices differ across clinical specialties?

Definition of Terms

For the purposes of this study, the following definitions will apply.

Baccalaureate nursing student - one who is enrolled in a four year nursing program in a National League of Nursing accredited college or university and will receive a baccalaureate degree in nursing upon graduation.

Clinical nursing faculty - one who is prepared at the Master's and/or Doctoral level and who instructs and supervises undergraduate nursing students in the clinical

setting (i.e. clinical instructor).

Clinical practice setting - a patient care environment in which a faculty member is responsible for the teaching and supervision of a small number of students who practice providing care to clients in institutions or communities as part of their learning to be nurses.

Clinical experience - the application component which is the process of combining knowledge and skill and applying them in situations unique to the profession of nursing (i.e., apprenticeship learning).

Instructional practices - external events planned and executed by the teacher in ways that serve to activate, maintain, facilitate, or enhance the processes of learning by the student (Gagne, 1976).

Supervisory practices - the act of directing, guiding, and overseeing student learning and performance through the use of a systematic method of observation and critique.

Clinical specialties - specific areas of nursing within the clinical setting (e.g., medical-surgical, maternal-child, community, psychiatric, pediatrics).

Limitations of the Study

The limitations of the study were the small sample size, validity and reliability of the survey instrument and the use of a self-reporting questionnaire. Data collection in this study was limited to the two functional

categories identified on the questionnaire (instruction and supervision). These two categories are not intended to be interpreted as exhaustive. The findings of this study would not be generalizable to a larger population of nursing faculty, because the sampling technique used was purposeful rather than random, thereby limiting the findings of the study to those baccalaureate nursing programs in the State of Maryland (both public and private).

Assumptions of the Study

The following assumptions are presented as they relate to factors involved in this study.

1. The clinical experience is an integral part of the nursing curriculum.
2. The clinical experience provides students' with the opportunity to apply the theoretical knowledge and skills learned in the classroom to real life nursing situations.
3. The structuring of the clinical experience is based upon the principles of the teaching learning process.
4. The respondents in this survey will answer the questions on the survey instrument truthfully.

Summary

This chapter has presented a discussion of the issues related to the importance of clinical teaching in baccalaureate nursing programs, a statement of the purpose

of the study, and an overview of the entire study. Chapter 2 presents a review of related literature and research in the fields of nursing and education. In Chapter 3, the research design, procedures for data collection, and methods of data analysis are presented. The findings resulting from the analysis of the data are presented in Chapter 4. Chapter 5 includes the summary, conclusions, implications, and recommendations of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The review of related literature is intended to develop a knowledge base for conducting the present study and analyzing the resulting data.

Since there are significant parallels among the various professions and the nursing profession, this review of literature will begin with a brief review of the literature on professional education and the development of the apprenticeship. In order to gain a clearer picture of the apprenticeship (clinical) aspect of nursing education, a brief review of the historical evolution of professional nursing education is also included. In addition, a major section of this literature review will focus on the clinical aspects of nursing education in preparation for the present study which will investigate the type of instructional and supervisory practices used in the clinical experience.

Since a search of the nursing literature did not provide an acceptable conceptual framework for this study, a variety of conceptual models from the education literature will be discussed as they relate to clinical teaching practices. This review of literature will conclude by addressing the issues of self-perception and

self-reporting as they are integral to understanding the survey method of data collection used in this study (i.e. a self-administered questionnaire).

The review of literature focuses on the following areas:

1. The distinguishing characteristics of a profession and professional education.
2. The development and functional characteristics of the application component in professional education.
3. The evolution of professional education in nursing.
4. The identification of the functional components of the clinical experience in nursing education and the identification of the relative effectiveness of different teaching and supervisory skills and stategies.
5. The development of a conceptual framework for the study.
6. The concept of self perception and its effect on self reporting.

Review of Related Literature

The Professions

> "Professions profess. They profess to know better than others the nature of certain matters, and to know better than their clients what ails them and their affairs."
> Everett C.Hughes (1963, p. 656)

What is a profession? Originally the term profession was used to mean a public declaration or vow (Charlton, 1973). The earliest known mention of the word profession

is reported to have occurred in the sixteenth century (Brubacher, 1962).

The definition of a profession as well as the criteria that distinguishes a profession from other kinds of occupations has been debated, discussed and disagreed on for many years (Anderson, 1974; Becker, 1962; Flexner, 1915; Goode, 1960; Hughes, 1973; Mayhew, 1971). Abraham Flexner (1915) provides a definition and criteria of a profession. Flexner views professional activity as:

> basically intellectual, carrying with it great personal responsibility; it was learned, being based on great knowledge and not merely routine; it was practical, rather than academic or theoretic; its technique could be taught, strongly organized internally; and it was motivated by altruism, the professionals viewing themselves as working for some aspect the good of society (1915, p. 913).

Becker (1962) and Anderson (1974) suggest that Flexner's basic criteria for a profession represent an ideal and that perhaps his analysis is "too mechanical and too rigid" (p. 28; p. 3). Flexner may have also felt that his statement defining a profession was too idealistic. In a statement on the page after he wrote his definition he writes: "What matters most is professional spirit" (1915, p. 914). However, Flexner's statement on professions stood alone until Carr-Saunders and Wilson (1933) provided the following definition of a profession:

The application of an intellectual technique to

> the ordinary business of life, acquired as a result of prolonged and specialized training is the chief distinguishing characteristic of the profession (p. 491).

Tyler (1952) and Mayhew (1971) describe another essential characteristic of a profession. These authors suggest that a profession must have a recognized code of ethics. In addition, Mayhew maintains that a profession must also have a specified process by which an individual is "acculturated" into the profession (1971, p. 2). Blauch (cited in Becker, 1962) lists the following general statements as criteria for determining a profession:

> specialized skills requiring long study and training; success measured by the quality of service rendered rather than by any financial standard; the organization of a professional association to maintain and improve service and also enforce a code of ethics (p. 29).

Schein (1972) points out that the definition of the concept of the professional cannot be defined by a single criterion. He concludes that:

> The ultimate criterion of professionalization according to most sociologists is the achievement of "autonomy", which implies (1) knowing better what is good for the client than anyone else because of extended technical education or training (2) subjecting one's decisions only to the review of colleagues, and (3) setting one's standards pertaining to jurisdiction of the profession and entry into it through peer group associations (Schein, 1972, p. 10).

The problem of defining and differentiating among the professions has persisted until today. The literature

seems to be divided along the following three dimensions:

1. The term professional is used to classify types of persons obtaining professional degrees;

2. The term professional is defined by the designated occupations they profess to practice;

3. The general characteristics of a professional is determined by ways in which various professions distinguish themselves from one another (Nyre & Reilly, 1979).

Common to all definitions of a profession is that entrance into the profession requires an educational program composed of both theory and practice in a specialized body of knowledge.

Professional Education

Brubacher (1962) describes four stages in the evolution of professional education: first, professional training was provided exclusively through apprenticeships; second, professional training moved to more formal settings (proprietary professional schools); third, professional training moved to the universities (separated from the professional practice); and fourth, the current trend incorporates both theory and practice. Brubacher notes that today's apprenticeship is significantly different from those in earlier eras since today's apprenticeship is based on theory (1962).

Numerous writers cite the need to clarify the most effective relationship between theory and practice

(Hughes, 1933; Gartner, 1976; Mayhew, 1971; McGlothlin, 1960). "The division of time and attention to these two aspects of education has always been an issue" (Hughes, 1973, p. 15). Mayhew (1971) points out that the issue has a pendulum like characteristic. He notes that in recent years attempts to modify curricula have focused on integrating clinical experience with the traditional educational program (1971). Professional schools, it seems, have moved too far in the direction of theory and now there is an attempt at reform to reemphasize clinical and field work. Gartner (1976) insists that major attention needs to be given to the issues of design and structure of professional education, especially, "the ways and means of relating theory and practice, work and study" (p. 214). Hughes (1973) sums up the question between theory and practice by stating:

> It is not merely one of the length of time spent on each, or the total length of time spent on each, or the total length of time of professional education. It is also a matter of selecting certain kinds of practical training to be learned in certain settings upon certain clients and problems, and selecting certain parts of scientific knowledge, social knowledge, and ethics to be inculcated in the professional students.... We are clearly in a period when the balance between theory and practice and the whole economy of emphasis in higher education are matters of general public concern (p. 16).

This conflict of theory versus practice is common to all the professions. They all share a common professional

aim. They all expect their graduates to be competent to practice in their chosen profession, and there is also the expectation that new graduates from most professions will be required to accept immediate responsibility, sometimes without close supervision.

Some professions (i.e. nursing, medicine, social work, teaching) place more emphasis on practice prior to graduation than others do. Many of these professions require a supervised field experience, practical work, clinical study or other means to insure that practice does not fall behind the theory on which practice rests (McGlothlin, 1960). Even Hippocrates' demonstrated the value of clinical instruction by precept and by example, for he believed that medical students should be instructed at the patient's bedside (Dolan, 1978). There is a general expectation that a graduate will be competent enough to practice his/her profession. This expectation has significant implications for the pre-professional preparation of prospective candidates.

Generally, professional education curricula is made up of three parts: basic arts and sciences, the professional sciences, and application (McGlothlin, 1964). It is this application component that is professional education's most distinguishing feature and depending on the field in which the application takes place, it is

called "the apprenticeship", "the clinical", "the practical" or "the internship".

McGlothlin (1960) defines the term application, to mean the process of combining knowledge and skill and applying them in situations unique to the profession. In later writings, McGlothlin (1964) defines application as a art. He states:

> The art of application is the art of practice, never wholly a science because the factors involved are too numerous to fit into formulae, and never wholly susceptible to manuals and recipes. A profession's major responsibilities always require judgment based on knowledge concerning the problems to be solved and the means by which solutions are possible.... It is this combination of academic study and apprenticeship learning which gives professional education its peculiar and significant character (1964, p. 71).

Professional education combines the elements of apprenticeship with elements of academic education, in order that the student may gain knowledge and skills required for successful application on the job.

The different professional fields utilize a variety of methods of instruction during apprenticeship learning. Methods used are: direct observation, small-group discussion, demonstration, computers, videotapes, and simulations. Even though instruction in application (apprenticeship) provides the student actual experience in the service of the profession, it also assists the student

in applying the learning, testing the learning, learning more, recognizing gaps in the learning and gaining confidence in the ability to practice within the standards of the profession (McGlothlin, 1960). McGlothlin (1964) lists the following principles of instruction as a guide for the professional educator to use in the selection of methods for apprenticeship learning:

1. Instructional methods should be consciously chosen. The teacher should not merely repeat the methods which he observed as a student.

2. Methods should be chosen in accordance with the objective sought, the students to be affected, and the instructor who uses them.

3. Methods used should be subject to evaluation, and should be changed when it becomes apparent that other methods would be more effective or more economical in guiding learning.

4. Methods used should encourage "active" rather than "passive" attitudes in students wherever possible, so that students will develop the self-reliant scholarship which can carry them throughout their careers.

5. Methods used to instruct in application must be carefully designed and supervised for their educational effects to avoid such emphasis on "service" or "production" that the educational aspect of the experience for the student is subordinated to the need of the agency to get the job done.

6. Work-experience programs,if well planned and managed can be of great benefit to students both in learning the art of application and in helping them to integrate knowledge and skill obtained through other methods.

7. Careful organization and supervision can so increase the efficiency of work-experience

programs that the time devoted to them can be reduced without loss of learning or danger to the client.

8. New methods, such as programmed instruction or closed circuit television, should be used experimentally to determine their effectiveness. They should neither be discarded because new or adopted because others have found them helpful.

9. If two methods are equally effective, the more economical should be chosen.

10. The choice of method must ultimately be left to each instructor, since within the limits of cost he must choose those methods with which he is most experienced. The school has an obligation, however to aid instructors to become aware of the variety of methods that may be employed so that they can choose those which are effective for them and for students (1964, p. 80).

Apprenticeship

McGlothlin (1961) notes that the professional fields differ extensively in their use of clinical experience for teaching about professional practice. The activities and responsibilities of the instructors differ significantly and the characteristics learners bring to the apprenticeship differ significantly as well (McGlothlin, 1961).

In an excellent review of research on professional education, Dinham and Stritter (1986) summarize the components of apprenticeship into the following seven categories:

a. prerequisite student attributes,
b. preparatory educational experiences,
c. sites for apprenticeship,

d. characteristics and teaching behaviors of clinical instructors,
e. supplementary teaching strategies,
f. evaluation of student performance and
g. instructional evaluation (p. 955).

These authors conclude after researching each of the seven categories that "research on the teaching and learning processes in professional education's clinical component - apprenticeship - is virtually nonexistent in all but the health professions" (p. 963). Daggett, Cassie, and Collins (1979) in a previous review of research on professional education came to the same conclusion as Dinham and Stritter (1986). Dinham and Stritter offer the following as possible explanations for the lack of research on apprenticeship.

First, there are some professions whose educational research is still in its infancy. Second, the attention in the past has been to research traditional science teaching, not clinical teaching (1986). Dinham and Stritter also suggest that one can draw the following conclusions concerning the components of apprenticeship. First, there is no specific formula that will predict a learner's performance. Second, in order for a learner to be prepared for the apprenticeship they must learn more than just cognitive information. Other prerequisites include, ethical reasoning, technical skill, interpersonal skill, independent learning and professional role

characteristics. Some of these prerequisites have not received as much attention as others. Third, research examining the differences among clinical sites has been conducted in the health care fields, but not in other professional fields. The research evidence reported on about them is far from conclusive. Fourth, there is some substantiated research on the characteristics and behaviors of clinical instructors, again concentrated in the health care field. Fifth, supplementary teaching strategies are necessary, because clinical learning in apprenticeship settings typically focuses on "what's available" but this does not guarantee that learning objectives will be met. Sixth, evaluation of student performance can be measured reliably and validly using a variety of methods. Seventh, multiple methods can be used in evaluating teaching performance (1986).

Professional Education in Nursing

Professional education in nursing evolved along the same lines as the professional fields of law and medicine (i.e. apprenticeship, professional training in formal settings, and then the move to the universities).

Josephine Dolan (1978), in her book on the history of nursing, states that:

> Nursing evolved as an intuitive response to the desire to keep people healthy as well as to provide comfort, care and assurance to the sick.

> From the time of the first mother, certain women have proved to be particularly adept at providing a healthy home environment, protecting their children and caring for the elderly and sick members of their families. They even shared their services with neighbors during periods of illness.... These first nurses were independent practitioners who had the freedom of action to be as creative as their intellectual and personal skills permitted (pp. 1 & 2).

The early nurses were usually women of high social status, who shared their learning and techniques with others interested in learning to "nurse" and who were also motivated by a strong spiritual force. It was during the Renaissance in 1633 that the first educational program for nurses was established, which was a secular order known as the Sisters of Charity (Dolan, 1978). Up until the early nineteenth century the religious nursing orders of various Christian denominations were responsible for the education of nurses.

It wasn't until 1860 that Florence Nightingale opened the Nightingale Training School for Nurses, as a completely independent educational institution, which admitted thirty students for a one year program (Stewart, 1946). Dolan (1978) describes the aims of the Nightingale School to be: "to prepare nurses for health maintenance, prevention of disease and detection of illness; to prepare nurses to care for the sick; and to prepare nurses for nursing education" (p. 167). Because Miss Nightingale

believed that it was essential for nurses to teach and control nursing, she selected her faculty and students with great care, instructed her faculty and students to identify and use a body of nursing knowledge, encouraged her faculty to utilize modern teaching methods and learning skills, informed faculty and students of the need for practice-oriented research, cautioned faculty and students to recognize that nursing is aseparate entity from medicine, and indoctrinated faculty and students with the concept of accountability to clients (Dolan, 1978). Florence Nightingale is given credit for being the founder of modern nursing education.

The Crimean War provided an opportunity for Florence Nightingale to demonstrate to England and the world what good nursing was, and what must be done to improve nursing (i.e. quality nursing education). In the United States it was the Civil War that provided the opportunity for nursing leaders to emerge and fight to improve health care by encouraging the establishment of schools of nursing based on the Nightingale Plan (Austin, 1975; Dolan, 1975).

In 1873 three schools were started in the United States, the Bellevue Training School in New York City, the Connecticut Training School in New Haven, and the Boston Training School. "These three schools were purported to be patterned after the Nightingale Plan, but all three

differed significantly from that model" (Dolan, 1975, p. 989). These early schools had contracted with the affiliating hospitals for the provision of nursing service in exchange for educational services, which caused nursing service demands to supersede student learning needs. The conflict and confusion in the aims between hospital and school (i.e. nursing service versus nursing education) resulted in the union of the two at the expense of the educational program (Dolan, 1978). Dolan notes that:

> The principal similarity between early American training schools and the Nightingale school was that nurses were in charge of the programs, the teaching and the students. The advantage of utilizing even this small aspect of the Nightingale Plan was that nursing retained its identity and became recognized as a distinct department within the hospital organization (1978, p. 240).

It is interesting to note that in 1871, an editorial was written, by the editor of a magazine of the day, entitled "Lady Nurses", in which the author identified the need for "professional nurses" (Hale, cited in Dolan, 1978, p. 194). The author called for nurses who had completed an educational program from an educational institution rather than a service-centered institution, and granting an academic degree in addition to professional certification (Hale, cited in Dolan, 1978). Many of the respected nurse leaders of these early years,

such as Isabel Robb and Mary Adelaide Nutting, called for similar reforms as this editorial, but all these pleas appeared to fall on deaf ears (Nutting, 1910, 1926).

Nursing education, in 1922, was still on the apprenticeship system, even though this type of preparation had been abandoned by other professional fields by this time. It was apparent that nursing was still struggling with the problem of serving two master's, service and education. According to Dolan (1978), " the primary aim of nursing education is to provide an environment in which the student of nursing can develop self-discipline, intellectual curiosity, and the ability to think clearly and acquire knowledge necessary for practice" (p. 321). In most hospital schools of nursing at the this time, the aims of nursing education emphasized student service rather than student education.

Nursing education would not move into institutions of higher learning until fifty-two years later. In 1923, Yale University School of Nursing was established. Annie W. Goodrich's appointment as dean was of historic significance because she accepted the deanship of the first autonomous school within a university in the United States. The establishment of endowed collegiate schools at the University of Toronto, Yale and Vanderbilt Universities were primarily the result of a comprehensive

study on nursing education, called the Goldmark Report, which recommended advanced preparation for nurse educators, nurse administrators, and public health nurses. This study of nursing education was financed by the Rockefeller Foundation in 1922 (Winslow, 1923).

In 1948, on a grant from the Carnegie Foundation, Esther Brown conducted another study of nursing education. As a result of that study she made the following recommendations:

> Careful consideration should be given to the fact that professional schools in most other fields have already come within degree-conferring institutions to such an extent that possession of a degree is fast becoming a criterion of a person's having received professional as contrasted with vocational training (p. 77).

In 1965, The American Nurses' Association, the professional organization of nursing, published its position paper on nursing education. This report recommended that education for beginning level professional nurses take place in institutions of higher learning which granted the baccalaureate degree. At the present time, after all of the studies on nursing education and the American Nurses' Association's landmark position paper, nursing education is finally firmly entrenched in institutions of higher learning.

Apprenticeship in Nursing Education

Nursing, like many other professional fields recognizes that the practical (clinical) component is important and should be an integral part of the professional program. Nurse educators view clinical experiences as complementary to classroom learning and an essential in preparing qualified professional practitioners. Clinical experiences provide opportunities for the nursing student to integrate knowledge and practice, acquire psychomotor skills, and make the transition from student to professional person (Infante, 1975). As a requirement for graduation nursing students are expected to demonstrate a certain amount of independence and competency in the clinical area.

Dinham and Stritter's (1986) seven components of education through the apprenticeship will be used to analyze research in nursing apprenticeship (prerequisite student attributes, preparatory educational experiences, sites for apprenticeship, characteristics and teaching behaviors of clinical instructors, supplementary teaching strategies, evaluation of student performance, and instructional evaluation).

Prerequisite Student Attributes

Kissinger and Munjas (1981) investigated the student attributes which predicted student success in using

nursing process (i.e. assessing, planning, intervention, and evaluating). As a result of their study the authors identified four predictors of student success: verbal ability, vocabulary knowledge, convergent thinking, and field independent perceptual style. Based on these findings Kissinger and Munjas devised three short tests to measure the predictors of student success and suggest that these could be used to identify students who have the potential to successfully complete a nursing program (1982).

Because of the paucity of nursing research in this area and the importance of addressing the attributes necessary for successful apprenticeship learning, there appears to be a need for further investigation into predictors of success.

Preparation for Clinical Learning

Problem solving. Miller (1975) makes the point that before we can expect students to problem solve in the clinical area, we must first identify an appropriate body of knowledge which specifies the correct action to be taken by the nurse, given a specific pathophysiological problem. Wales and Hageman (1979) proposed a guided design systems approach, to teach the problem-solving process. This method combines concept learning and the development of decision-making skills needed to deal with

complex problems. As a teaching strategy for nursing education, this approach utilizes an instruction-feedback process to guide students through a step by step solution to a complex problem. Nehring, Durham and Macek (1986) suggest Pridham, Hanson and Conrad's Paradigm of Problem Solving (PPS) as an approach that gives nursing students a systematic means to solve problems and faculty a well-defined plan for teaching problem-solving skills. The authors concluded that the PPS provides a systematic, interpersonal approach to problem-solving, which can be integrated into the nursing process to provide a more effective, personal means to deliver individual nursing care, and to make effective nursing practice decisions.

Affective prerequisites. There is a need for nurse practitioners who are sensitive, insightful, and able to work effectively with people. As nurse educators we need to be able to teach affective behaviors as well as to help students develop these attitudes and beliefs. Conners (1979) demonstrated that nursing students could effectively use a modified Flanders' Interaction Analysis to analyze tape recordings of their own interactions with clients. Feather and Abbate recommend using hypothetical dilemmas as a teaching strategy for moral development of nursing students (1985). The authors felt that:

Hypothetical situations are helpful to the

> inexperienced student because it allows the student the opportunity to grapple with the complexities of a situation and realize that what appears complex to one student may be simplified in discussion with others. These situations give form and substance to what can be abstract until a similar situation is encountered in real life (p. 301).

Technical skills. Infante's research on the clinical laboratory concept in nursing education reveals that students are often placed in clinical settings before they are ready (1975). Elliott, Jillings, and Thorne (cited in Dinham and Stritter, 1986) report that most nursing schools have skill laboratories, but they are not employed to the fullest extent possible. There are studies in the literature on what to teach in the skill laboratory. Voight (1980) recommends that physical assessment skills of gross inspection, limited percussion, palpation, and auscultation be taught early in a nursing curriculum. Bauman, Cook, and Larson suggest teaching skill concepts and techniques through a series of selfcontained audio-visual modules (1981).

Interpersonal skills. Interpersonal skills have an important place in the practice of nursing. The nurse must be able to effectively communicate with people. Nurse educators' are primarily concerned with teaching students how to effectively use their interpersonal communication skills in clinical practice. Schweer and

Gebbie view a nurse's skill in interaction "as important in teaching clients as having sufficient knowledge to do so" (1976, p. 54).

Finley, Kim, and Mynatt (1979) used videotaping as a teaching strategy of interpersonal skills. The authors believe that the videotaping experience will be maximized if the following variables are attended to: learner, pretaping activity, equipment and personnel, playback/feedback, and frequency of experience. Friedrich, Lively, and Schacht (1985) designed a seven week workshop consisting of three to four hour sessions to teach nursing students to utilize communication skills consistently and effectively. They report that the workshop was successful with the following results: students showed growth in empathic responding; students were able to identify underlying feelings experienced by patients; students demonstrated independence in critiquing their own interpersonal style; and irrelevant questions decreased and selective open-ended questioning increased.

Menikheim and Ryden (1985) redesigned a course that taught students effective interpersonal skills to use with clients who present problems in communicating and relating. The authors replaced the lecture mode with small group discussion, used videotapes to show expert modeling of nurse intervention skills with simulated

clients and developed a work-book to provide students with clear direction and a means of active participation. The effectiveness of the innovations in course materials and methodology was evaluated using a measure of perceived competence. They found a significant increase in perceived competency between students pretest and post-test mean scores (Menikheim & Ryden, 1985).

Lopez (1983) used gestalt techniques to role model interpersonal skills in the clinical setting with beginning nursing students. The author states that even though no quantitative tools were used to measure the effectiveness of the gestalt approach, the student feedback was favorable to the use of basic gestalt techniques in providing for therapeutic nurse-patient contact.

Sites for Apprenticeship Learning

Historically, in nursing, clinical learning facilities were the in-patient hospitals, but as nursing education in college-based programs moved to an integrated curriculum with many new concepts and theories for nursing practice it became apparent that many other health care settings would also be appropriate clinical learning resources. Clinical sites used in baccalaureate programs now include schools, clinics day-care centers, nursing and residential homes, and community agencies (Graham & Gleit,

1981). Grimes (1977) makes the point that "The choice of clinical experiences can be influenced by many factors - among them the availability of appropriate agencies, faculty values, accreditation criteria, and the specific goals of the program" (p. 399).

Corcoran (1977) explores the pros and cons of the traditional practice of using service settings as a learning laboratory. She proposes specific conditions under which the service setting can and cannot be used as a learning laboratory and suggests the development of better guidelines for its use.

Yuen (1981) proposes that baccalaureate programs should prepare a generalist practitioner who is able to practice a nursing in a variety of settings at a beginning practitioner level, and that as nurse educators we have a responsibility to provide broad-based clinical learning experiences. Bevil and Gross (1981) responding to the need of assessing the adequacy of clinical learning settings developed an instrument using their school's program objectives to select or evaluate clinical facilities.

Dachelet, Wemett, Garling, Craig-Kuhn, Kent, & Kitzman report on a study using the critical incident technique to examine the conditions under which students clinical learning occurred (1981). The authors were able to

identify the specific factors, characteristics, and situations that affect the learning and teaching milieu in the clinical setting.

Williams (1979) conducted a study that examined the relationship among the clinical setting, level of anxiety, and cognitive achievement in nursing students during the clinical. She found that the clinical practicum setting had an effect on anxiety level between the groups at initial assignment and at the conclusion of the experience but did not produce differences in mean gain (reduction) of anxiety. The author also reports significant inverse correlations between anxiety and achievement, as anxiety levels decreased achievement increased.

Characteristics and Teaching Behaviors of Clinical Instructors

Clinical teaching, as defined in nursing, is that instruction which occurs in settings and situations in which the student is giving direct care to real clients as part of a planned learning activity (O'Shea & Parsons, 1979). What are the characteristics and behaviors of effective clinical teachers? The answer to this question remains a challenging one for nurse educators (Hassenplug, 1965).

Clinical teachers, in addition to lecturing skills, need to possess effective communication skills as well as

learner assessment in small groups, one on one tutorial relationships and clinical supervision (Meleca, Schimpfhaus, Witteman & Sachs, 1981). Nursing clinical instructors are subject to a formal lack of training in instruction (Meleca et al., 1981) and they tend to teach as they were taught (Heidgerken, 1955). Clissold writes:

> In nursing, generally, even less guidance is offered the new teacher; in fact, if she possesses an academic degree, it is presumed that no guidance is needed.... Many a young instructor, placed in the position of teaching nursing students in the hospital situation, discovers that her educational preparation and experience in this area are inadequate or totally lacking (1962, p. 8).

Stafford and Graves (1979) identified the need for intensive research into the problem of defining clinical and classroom teaching effectiveness in nursing. A review of the nursing literature does not reveal any studies on this subject until the late sixties. Since then a number of related studies that deal with characteristics and behaviors of effective clinical instructors have appeared in the nursing literature.

In 1965, Barham identified nineteen teaching behaviors, elicited from critical incident reports, that were considered by students to be critical. Barham defines the critical requirements of an effective nursing instructor to be the following: (a) does not let his anxiety influence a situation; (b) recognizes his

limitations; (c) demonstrates understanding in working with students by being available whenever the student finds himself/herself in a situation that he/she is unable to handle alone; (d) explanations are understandable; and (e) has the ability to stimulate the student to want to learn (1965).

Jacobson (1966) conducted a study of 961 undergraduate students in five of the eight university schools in the southern United States. She used a modified form of the critical incident technique and collected 1,182 critical incidents, which she grouped into 58 specific requirements comprising six categories: (a) availability to students; (b) apparent general knowledge and professional competence; (c) interpersonal relations with students and others; (d) teaching practices (mechanics, methods, skills) in classroom and clinical areas; (e) personal characteristics; and (f) evaluation practices.

Armington, Reinikka, & Creighton (1972) used a questionnaire developed by the student government of the University of Wisconsin-Milwaukee to develop a list of specific behaviors for effective clinical instruction. She sent her questionnaire to 20 randomly selected deans of baccalaureate schools of nursing throughout the country, with the request that they distribute them to

students for course and faculty ratings. She found that students identified the following four behaviors of instructors to be most important for effective instruction: (a) exhibited enthusiasm about their work; (b) impressed students as being experts in their field; (c) encouraged students to think; and (d) are easily accessible to them.

In 1973, Kiker conducted an exploratory study at two Texas universities in which she compared the characteristics of teaching effectiveness considered most essential by three different groups of students: junior level nursing students, junior level education students and graduate level nursing students. Using a questionnaire, she asked students to rank order 12 characteristics that were grouped into three categories: professional competence, relationships with students, and personal attributes. Kiker found that all three groups ranked professional competence as the most important characteristic and personal attributes were ranked as least essential for the good teacher by all groups of students. The two groups of undergraduate students ranked relationships with students higher than the graduate nursing students. The survey also revealed the students need for instructors who can function as role models, thereby demonstrating the skills, attitudes, and values

that all students hope to develop.

O'Shea and Parsons (1979) focused on the identification and comparison of effective and ineffective clinical teaching behaviors as described by students and faculty in one baccalaureate nursing program. Students and faculty were asked to list three to five teacher behaviors that facilitated or interfered with learning in the clinical area. The authors categorized the specific behaviors into three broad behavioral categories: (a) evaluative behaviors, (b) instructive/assistive behaviors, and (c) personal characteristics. The results indicated that both faculty and students agreed that faculty availability was the behavior to be most facilitative of earning. Faculty and students also agreed on the importance of feedback to learning. Frequently cited ineffective teacher behaviors were authoritarian, intimidating, criticizes in the presence of others, impersonal, takes over assignments, insuffficient feedback, and lack of clearly defined expectations.

Brown (1981) compared faculty and baccalaureate student perceptions of the characteristics of effective clinical teachers. Brown developed an instrument that was a composite of items found in the literature which included twenty characteristics of teachers. The twenty characteristics were classified into three categories:

(a) professional competence, (b) relationship with students, and (c) personal attributes. Faculty and students, using a Likert scale rated each item and then were to choose the five most important behaviors and rank order them. Two behaviors ranked by both groups among the top five characteristics of an effective clinical teacher were: (a) provides useful feedback on student progress, and (b) is objective and fair in the evaluation of the student. Faculty and students differed in their responses for the remaining three characteristics considered most important. It is interesting to note that students ranked relationships with students first, professional competence second, and personal attributes, third. When comparing these results with the study done by Kiker in 1973, it should be noted that Kiker's students rated professional competence as most important.

Karns and Schwab (1982) used Carl Roger's three concepts of empathy, congruence, and positive regard, as indicators of positive interactions, to identify effective teaching behaviors. Twenty-one junior level students were asked to list five specific teaching behaviors that promote a positive relationship between students and faculty. Student responses were analyzed and placed in the categories of empathy, congruence and positive regard. The category of empathy accounted for 93 percent of the

behaviors identified, 64.5 percent identified behaviors reflecting congruence, and 80.6 percent identified behaviors demonstrating positive regard. As a result of the student responses the authors conclude that conscious use of these interaction skills by clinical faculty will reduce stress in the clinical area, enhance cognitive gain, self-confidence, and increased critical thinking in the students. This approach was different than the other authors in that the emphasis was on the need for clinical instructors to apply therapeutic communication skills in their interactions with students in the clinical area.

Knox and Mogan (1985) compared important clinical teacher behaviors identified by university nursing faculty, students, and graduates. The investigators developed a forty-seven item instrument that was categorized into the following five specific behavioral categories: (a) teaching abilities, (b) evaluation, (c) interpersonal relationship, (d) personality, and (e) nursing competence. The results of this study did not demonstrate any significant difference between the rated importance of the five categories of effective clinical teacher behavior as perceived by faculty, students and graduates. There were significant differences in the perceived importance of a clinical teacher's behavior when students were grouped according to years in the program,

and then compared to faculty and graduates. Based on their findings the authors raise the question of, "whether a clinical teacher might be quite effective teaching students in the first year and less effective when teaching students in another year?" (p. 30).

Rauen (1974) explored role characteristics of the clinical instructor and found that students valued nurse role characteristics significantly more important than person or teacher role characteristics in helping them become the type of nurse they wish to become. Pugh (1980), as part of her doctoral dissertation, focused on faculty and student perceptions of the social roles of teacher and nurse. The majority of faculty in her sample identified themselves as "nurses who teach nursing" (p. 2522-A). Pugh found that students want faculty to enact both nurse and teacher roles (1980). Betz (1985) in her discussion of students as imitators of role models states:

> During the initial stages of nursing education, the faculty member is the primary role model.... The faculty member emulates for the student the ideal of the professional nurse. The attitudes, beliefs, and clinical performance the nursing instructor demonstrates will have a significant effect upon the student's developing role and conception (p. 302).

Other authors also stress the importance of the clinical instructor as a role model (Beckett & Wall, 1985; Griffith & Bakanauskas, 1983).

Another specific behavior that has been identified as being important for the nursing instructor is the skill of asking stimulating and challenging questions. Scholdra and Quiring (1978) found from their study that the types of questions used by many nursing instructors were remembering type questions. They pointed out the fact that most clinical objectives specify that students will use higher level cognitive operations than those involved in memorized learning. Scholdra and Quiring suggest that if nursing instructors used a higher level of questioning, students might demonstrate an increase in their ability to define and solve patient care problems in the clinical area. Craig and Page (1981) found from their experimental study that faculty who completed a self instructional module on improving questioning skills were in fact able to increase their level of questions in post-clinical conferences. There was also substantiated evidence, from their study, that nursing instructors generally lacked this skill.

A study by Wang and Blumberg (1983) describing the interaction techniques used by nursing faculty with students in the clinical settings, revealed a preponderance of low level questioning techniques. These authors, like Craig and Page (1981), inferred that faculty might lack the skills to ask higher level questions that

demand analysis, synthesis, and evaluation. Based on the previous studies cited there appears to be a need for clinical nursing instructors to improve their questioning skills.

In their review of the literature on effective clinical behaviors of faculty, Zimmerman and Waltman (1986) come to the conclusion that when comparing all of the authors, it appears that Jacobson's (1966) behavioral categories are broad enough to include most of the behaviors that have already been described. They suggest developing a tool for students' evaluation of their clinical faculty by using Jacobson's categories and go on to report that they are in the process of testing such a tool.

Supplementary Teaching Strategies

In nursing, the major apprenticeship teaching strategy used is one to one direct observation, although many other strategies are used as supplements. The supplements are necessary because learning in the clinical setting is organized around what cases are available. The cases available may not be what is needed in relationship to the concepts and theory being taught in the classroom.

The Meleca, Schimpfhauser, Witteman, & Sachs (1981) study identified instructional strategies selected most frequently by nursing faculty. The instructional

strategies selected most frequently were conference and study assignment, with less emphasis on demonstration method, lecturing, programmed instruction, tutoring, performance exercise and combination instructional methods. Kissinger & Munjas (1981), studied teaching methods emphasized in the clinical setting and which were rank ordered by nursing faculty. These methods were: guided experiential learning, self-study, small group, teacher demonstration, individual conference, audiovisual, and teacher-dominated presentation. The differences noted in the aforementioned studies could be due to the fact that the Kissinger study dealt with faculty teaching in the first clinical nursing course whereas the Meleca study surveyed nursing clinical faculty in general.

Simulation as a teaching strategy has been recognized by nurse educators as an effective teaching technique, especially for teaching the clinical aspects. deTornyay's (1968) research in the area of written clinical simulations for nursing centered on problem-solving skills. There have been a number of simulation techniques developed and tested by nurses since deTornyay published her work in 1968 (Clark, 1976; Dincher & Stidger, 1976; Jeffers & Christensen, 1979; Lincoln, Layton, & Holdman, 1978; Perry, 1973). It is apparent from the literature that clinical simulation as a teaching strategy is being

actively researched and utilized in nursing education. Whitis (1985) views simulation to be: "efficient and effective in these days of tight time schedules, 'full' curricula, and crowded clinical facilities" (p. 163).

Sasmor (1984) emphasizes learning contracts for clinical experiences as a useful teaching strategy in nursing education. She feels "it provides the opportunity for individualizing learning without compromising educational goals and objectives" (p. 173).

Marlene Kramer (1972) proposes the teaching strategy of modeling for use in the clinical setting. Kramer makes the statement that: "Collegiate students of today must be taught by, and afforded the opportunity to model themselves after, faculty members who can demonstrate how to practice nursing within our present health-care system and can show students how to effect change within that system" (p. 68).

Evaluation of Student Performance

Woolley (1977) in her article: "The long and tortured history of clinical evaluation", traces the search of nurse educators for the perfect method to evaluate students clinically. Woolley at the end of her search did not find a definitive prescription for the clinical evaluation of students but she did arrive at some conclusions:

1. Demonstration and practice of skills and evaluation of their mastery should take place under the controlled conditions of the college laboratory;

2. The student should be given less responsibility for actual patient care and more responsibility for finding and utilizing learning opportunities;

3. Use of the word "performance" in describing what the student does in the laboratory should be discontinued;

4. There is no valid or reliable method of grading students in the clinical area in baccalaureate education (p. 314).

Nurse educators have not given up on finding an appropriate method to evaluate students learning in the clinical area. Nurse educators are now looking to competency-based education (CBE), according to Beare (1985), as one method to help ensure accountability by measuring outcomes of educational experiences in a systematic, objective way. "Competency-based education emphasizes the specific knowledge or skills for the student to learn within clearly articulated performance standards" (Beare, 1985, p.75). CBE shifts the emphasis from what is to be taught, to what is to be learned. It is a learner-oriented philosophy. Beare (1985) suggests using a clinical contract as a strategy to evaluate student competencies in the clinical setting. She believes the advantage of using the clinical contract is that it specifically states what behaviors the learner is

to demonstrate for successful completion of the clinical experience.

Evaluation of Clinical Teaching

The evaluation of clinical teaching effectiveness has been a persistent problem for nurse educators as well as other professions that have an apprenticeship experience for students. The need for nurse educators to be clinically experienced does not guarantee expertness in teaching clinical content. Dorman and Hoover (1972) referring to medical education, insist that a skilled physician is not necessarily an effective clinical teacher. A number of nurse educators believe that the clinical experience and expertise of the instructor is crucial to successful teaching (Horowitz & Olivieri, 1985; Lipson, 1972; Miller, 1975).

In a study concerned with how students explained their success and failure in clinical experiences, Davidhizar and McBride (1985) found that the rating of instructors was the most frequent explanation given for both success and failure. The authors noted that there was a tendency for students to explain success in terms of the instructor's personality and/or style and to explain failure in terms of the instructor's lack of skill and/or knowledge.

The ability to teach and clinical expertise seem to

be the important attributes that need to be considered when evaluating clinical faculty. Zimmerman et al. (1986) stresses that nursing must identify variables for evaluation that are specific to instruction and the supervision of students. Stafford et al. (1978) cite the need for nurse educators to develop their own evaluation tools. They write, "Too often, nursing educators have borrowed instruments from psychology or education without evaluating their appropriateness to nursing" (p. 497).

Brown and Hayes (1979) developed a clinical teaching evaluation tool for student's to assess faculty. This tool was organized around three time categories: before, during and after the students' clinical experience. Before the clinical experience the instrument measured the following specific teaching qualities: rapport, setting of objectives, selecting appropriate experiences for meeting the objectives, and preparing students for the experience. During the experience the instrument was to assess how well the instructor is promoting transfer of learning by (a) providing constructive criticism, and (b) helping without taking over. How feedback is provided about student performance and how rapport is identified are measured after the experience.

Gorecki (1977) suggests using a faculty peer review process to evaluate and improve the teaching strategies of

clinical faculty. Curry (1981) proposes that academic clinical instructors be evaluated by the nursing department of the clinical setting used by the instructors. She views this as an important dimension of professional accountability.

There does not seem to be a universally accepted method to evaluate clinical nursing instructors. One could conclude that a combination of methods is useful in the evaluation process.

Conclusions

The review of literature on professional education and nursing education reveals the continued importance of apprenticeship learning by the professions. It also reveals the need to focus on the behaviors and functions of the clinical teacher during the nursing apprenticeship learning. The review of nursing literature indicates an effort by nurse researchers to identify the most effective clinical teaching behaviors of nursing faculty teaching in the clinical practice settings. For the most part these studies have been limited to self reports of instructors and surveys of student opinions. These studies have resulted in lists of what respondents think should be the ideal and acceptable functions, behaviors, and skills of the clinical instructor. There is no conclusive evidence in the nursing literature that clinical nursing faculty

are using any of the recommendations from the studies on effective clinical teaching behaviors. The nursing literature also does not provide any studies of the actual instructional and supervisory skills and strategies used by nurse educators in the clinical practice setting.

This study will investigate what are the instructional and supervisory practices utilized in apprenticeship learning by clinical nursing faculty and if these instructional and supervisory practices differ across clinical specialties.

Conceptual Framwork

Since no one conceptual model seemed to provide a conceptual framework for this study, a number of different conceptual bases were explored to support the rationale for studying the instructional and supervisory practices of nursing faculty teaching in clincial practice settings. First, two models for studying teaching and their relationship to the study of clinical teaching will be discussed. Second, using one of these models as a guide, the evolution of research on teaching effectiveness in education was traced and how it relates to research on clinical teaching in nursing education was discussed. Third, the models of teaching (Joyce & Weil, 1980) were analyzed as to their appropriateness to teaching in the clinical practice setting. Fourth, a conceptual model of

instruction was discussed as an organizing element to study clinical teaching. And fifth, two models of supervision were discussed as they relate to clinical teaching in nursing education.

Models for Studying Teaching

Dunkin and Biddle (1974) in their book, The Study of Teaching present a model to organize the findings of the research on teaching. The model consists of four categories of variables which are: presage variables, context variables, process variables, and product variables. The authors describe the presage variables as being concerned with teacher characteristics and attitudes and their effects on the teaching process. The context variables concern the student and the environment in which learning takes place. The process variables concern the actual activities of classroom teaching. The product variables are concerned with the outcomes of teaching (Dunkin & Biddle, 1974).

McDonald (1977) presents a structural model for studying teaching that examines the variables influencing teaching performance and student learning, which is very similar to the Dunkin and Biddle model. McDonald states, "A structional model is a description of potential causal relations. Each prediction assumes that if a variable in a domain is increased or decreased in amount, it will

produce corresponding changes in another variable" (1977, p. 137). This model, as designed by McDonald, was used in a long term study of teaching effectiveness which was conducted in actual classrooms and schools.

The types of variables analyzed by this model as having a relationship to teaching performance and student learning were: teachers' aptitudes, attitudes, knowledge of subject area, knowledge of teaching methods; characteristics of the classroom environment; and characteristics of the organizational climate of the school. The McDonald model does not seem to account for the interaction between the teacher's classroom behavior and the student's classroom behavior and their effect on each other.

The model developed by Dunkin and Biddle is more extensive in its design, than the one developed by McDonald, and is therefore more adaptable to the study of clinical teaching in nursing education. Dunkin and Biddle point out, that the model was not only designed to help understand the teaching process but to also summarize classes of knowledge about teaching (1974). They suggest that the knowledge of teaching can be divided into six classes.

The first of these classes of knowledge is the conceptualization and study of teaching processes. The

second class of knowledge concerns the rate at which teaching processes occur in the classroom and the kinds of processes occurring in the classroom. The third class of knowledge concerns the relationship between the characteristics of the environment and processes in teaching. The fourth class of knowledge concerns the relationship between experience and properties of teachers and the type of teaching they practice in the classroom. The fifth class of knowledge concerns the relationship and interactions between teachers and students in the classroom. The sixth class of knowledge concerns the relationship of the processes of teaching to student growth and development (Dunkin & Biddle, 1974).

Nursing education research in clinical teaching needs to investigate the first class of knowledge, the conceptualization and study of teaching processes. At the present time nursing education is still not clear about the definition of clinical teaching or what comprises clinical teaching. Studies are needed which describe the teaching practices as perceived by nursing faculty teaching in the clinical practice settings. Research studies are also needed that focus on what nursing faculty are actually doing in the clinical setting, which according to Dunkin & Biddle's model are the process variables.

The present study is concerned with the first class of knowledge, the conceptualization and study of teaching. The study will attempt to describe the teaching practices as perceived by nursing faculty in the clinical practice settings.

Evolution of Research on Teacher Effectiveness

Dunkin and Biddle's model will be used as a guide to trace the evolutionary phases of the research on teacher effectiveness. Much of the early research on teacher effectiveness began with the study of teacher characteristics (presage variables).

Barr in the 1930s (as cited by Rosenshine, 1979) developed teacher rating scales based on teacher characteristics to determine which of these variables was related to student achievement or to high ratings of the teacher by the principal. Rosenshine (1979) observes that very little was gained from these studies and offers as a possible explanation the fact that teacher variables as measured by paper-pencil tests did not always correspond with the teacher's behavior in the classroom.

Ryans in the fifties conducted a large scale study entitled, The Characteristics of Teachers (1960), which focused not only on teacher personality characteristics but also on the behaviors of the teacher in the classroom. This study began the many studies which would now focus on

the behaviors of teachers in the classroom. These studies become the focus of the research on teaching effectiveness (process variables).

A study that was conducted by Lewin and others (1939) on group dynamics using different styles of leadership influenced educational thought on the research of teacher behaviors. The Lewin study examined different styles of adult leadership behavior upon the behavior of groups of boys involved in clublike activities. The researchers discovered that the autocratic style of leadership by the adult lead to either rebellion or submission behavior in the boys. When the democratic style of leadership was used the boys in the group were more friendly and task-oriented. Laissez-faire leadership resulted in nonproductiveness and intragroup hostility and scapegoating. These results led educators to wonder if the findings from the study could be applied to teacher behavior in classrooms.

At the same time as the Lewin study was being conducted, Anderson (1937, 1939) was studying the integrative and dominative behavior of teachers in their contacts with preschool and kindergarten children. The purpose of these studies was to develop reliable measures for recording the behavior of teachers in terms of the previously mentioned categories of integrative and

dominative behavior. Anderson was able to demonstrate that children's behavior was directly influenced by the kind of personality the teacher displayed in the classroom.

Flanders (1967) and Medley & Mitzel (1963) conducted studies which focused on the interactions between students and teachers. These studies counted specific teacher and student behaviors and then related these behaviors to gains in student achievement. Research in this area continues into the present day, with a shift from studying specific variables to looking at larger patterns, such as the size of the institutional group and effective instructional methods and strategies (Rosenshine, 1979).

While research on teacher effectiveness was being conducted in the areas described above, another movement was beginning in the sixties, that would effect the research on teacher effectiveness. This movement was the accountability movement, stemming from congressional concern for maintaining the high quality of the American educational system and the rising cost of that system (Borich, 1977). Pressure was increasingly applied on schools to be accountable in terms of measurable gains of students classroom performance in terms of tax dollars spent on education. Gage and Winne (1975) summarize:

The dissatisfaction with teacher education was

> accompanied by demands for teacher accountability -- demands that teachers be held responsible for the achievement, or lack of achievement, of their students. But practicing teachers, replied that their training had not prepared them with the skills and strategies necessary for insuring student achievement to the degree demanded by proponents of accountability. Thus, reform in teacher education was urged by teachers, educational statesman, journalists, parents, and taxpayers (p. 150).

The accountability movement led to the development of the "performance-based" and/ or "competency-based" teacher education (Stanford Research and Development Center, 1974) which in turn led to the development of instruments to measure teacher performance (Stanford Teacher Competence Appraisal Guide, 1959). Simon and Boyer (1974) point out that many of the instruments used to provide feedback to teachers, saw their beginnings as research devices used to observe and collect data on some aspect on human interaction.

Teacher training programs began to focus on the act of teaching and teachers' behavior as they are involved in the act of teaching. In 1963, an innovative approach to teacher training was developed by Stanford University's Center for Research and Development in Teaching (Stone & Morris, 1972). This was a technique identified as "microteaching". Microteaching involves the student teacher teaching a short lesson to a small group of students. The teaching performance is then analyzed and

the teaching is repeated with a different group of students (Stone & Morris, 1972).

Professional educators also realized that if teaching behavior was to be changed, then teachers had to be provided with feedback concerning their own teaching behavior based on observations of the teacher in the classroom. In order to examine teaching performance, criteria had to be developed which measured this performance (e.g., Stanford Teacher Competence Appraisal Guide, 1959 and The University of Maryland-Dimensions of Teaching, 1969).

Research on teacher effectiveness is presently moving in the direction of teachers developing a mastery of a repertoire of teaching competencies and in increasing their ability to use these competencies (Joyce & Weil, 1980). In the early 1970s, the Beginning Teacher Evaluation Study (Berliner, 1979) promoted research that analyzed teacher behavior and classroom climate and related these to measures of student achievememt and attitude (process-product variables) (Brophy & Evertson 1976; Good & Grouws, 1977; Soar & Soar, 1979). Research studies are also emerging on teachers' thought processes and how these processes affect teachers' actions in the classroom (i.e., teacher thinking and decision making) (Clark & Yinger, 1979; Clark & Peterson, 1986).

Nursing education research on clinical teaching seems to have skipped a few steps in its evolution process when compared to research on teaching in education. In that research on clinical teaching in nursing education has not studied the presage variables (i.e., clinical faculty characteristics) or the process variables of the actual activities of the clinical experience. Clinical teaching still lacks an acceptable definition (Infante, 1975) as well as a description of the processes involved in clinical teaching (Mannion, 1968; McCabe, 1985).

Nursing education research, especially as it relates to clinical teaching, has studied the characteristics of nurse teacher behaviors (process variables) in the clinical area (Jacobson, 1966; Pugh, 1980; Karns & Schwab, 1982). There are studies in the nursing literature on the context variables (i.e., clinical sites) as related to clinical teaching (Bevil & Gross, 1981; Corcoran, 1977; Graham & Gleit, 1981; Yeun, 1981). There are also studies concerning process-product research (Finley, Kim, & Mynatt, 1979; Menikheim & Ryan, 1985) in the clinical area.

The present study was undertaken for the purposes of providing a general description of the practices involved in clinical teaching.

Models of Teaching

The following models of teaching are proposed as an appropriate framework from which to consider clinical teaching in nursing education.

Joyce and Weil (1980) describe a model of teaching as a plan or pattern for instructing which is based on a theory or conceptualization of learning. Each model proposed by the Joyce and Weil is analyzed in terms of the following concepts: syntax (the model in action), social system (roles and relationships between teachers and students), principles of reaction (responding to the learner), the requisite support system, and the instructional and nurturant effects. These concepts for describing the operation of the model were developed by the authors as a way of communicating the basic procedures involved in implementing any instructional model. The models are grouped into four families: 1) information-processing, 2) personal, 3) social, and 4) behavioral.

Information-processing is a family of models which focus on intellectual functioning. The primary purposes of these models are the mastery of methods of inquiry, the mastery of academic concepts, and the development of of intellectual skills, such as the ability for logical thinking.

The second family of models are the personal models

which focus on the individual and the development of selfhood. The goals of teaching according to these models are:

(1) to increase the students' sense of self-worth,
(2) to help students' understand themselves more fully,
(3) to help students' recognize their emotions and become more aware of the way emotions affect other aspects of their behavior,
(4) to help them develop goals for learning,
(5) to help students' develop plans for increasing their competence,
(6) to increase the students' creativity and playfulness, and,
(7) to increase the students' openness to new experience (Joyce & Weil, 1980, p. 475).

The social interaction models are the third family of models which emphasize the relationships of the individual to society or to other persons. The social interaction models help students learn to work together to identify and solve problems, to develop skills in human relations, and to become aware of personal and social values.

The fourth family of models, according to Joyce and Weil (1980), are the behavioral models which encourage changing the visible behavior of the learner rather than the underlying psychological structure and the unobservable behavior. Each of these models represents a distinctive approach to teaching. And, as suggested by Joyce & Weil teachers should develop a repertoire of models to use in their teaching, since no single teaching strategy can satisfy all the purposes of teaching.

Developing a repertoire of these models and competence in the use of the models would seem appropriate for nursing faculty teaching in the clinical setting. Teaching in the clinical practice setting involves meeting multiple goals of multiple learning tasks in a multipurpose learning environment where knowledge, skill, and professional growth are the outcomes of that teaching (Reilly & Oermann, 1985).

A Conceptual Model of Instruction

Ryans (as cited in Strasser, 1972) indicated that the major function of a model is to serve as a framework for observation and analysis rather than a description of how phenomena operate. Strasser (1972) developed the "Conceptual Model of Instruction" based on an idea, provided by Smith (1963), that instructional behavior consists of a chain of three links - observing, diagnosing, acting (p.296). Another idea that was central to the development of this model was the notion of strategies and tactics and the relationship among strategies, tactics, teacher behavior, goals of education and the learners.

Applying Smith's idea of what instructional behavior consists of, Strasser then identified four aspects of instruction:

1. Teacher planning - in terms of what the teacher

knows of learner, the curriculum, the situation.

2. Teacher behavior, initiatory - to create a focus for thinking and working, what the teacher does to get things started.

3. Teacher observation, interpretation and diagnosis of learner behaviour - in terms of the situation, knowledge of prior experiences of the learner, prior observations of the learners' behaviours, enhancement of child's self-concept, the curriculum (affective, cognitive, and action dimensions).

4. Teacher behaviour, influenced/influencing - influenced by the observations, interpretations and diagnosis of learner behaviour and influencing to the degree that teacher behaviour stimulates further learner behaviour (1972, p. 176).

Considering the flow of the preceding aspects during the process of instruction, it can be seen that the potential lesson takes shape. The teacher makes decisions about goals, structure, and planned tactics and then begins the development of a strategy. Strasser (1972) concludes that the central focus of instruction is on the lesson strategy, and the essence of classroom interactions are the lesson tactic(s).

This model is used in the present study as a organizing element to study the instructional practices in clinical teaching.

Models of Supervision

The clinical and developmental models of supervision offer a framework for the analysis of the supervisory

practices used by nursing faculty teaching in the clinical practice settings.

Clinical Supervision

Morris Cogan, during the late 1950s coined the word "clinical supervision" while he and others were working at Harvard University's Master of Arts in Teaching program (Acheson & Gall, 1980; Cogan, 1973; Goldhammer, Anderson, & Krajewski, 1980). Clinical supervision evolved from the dissatisfaction students in the Harvard MAT program expressed concerning the supervision they received as beginning teachers.

Clinical supervision implies that the teacher and supervisor attack problems as colleagues. It "rests on the conviction that instruction can only be improved by direct feedback to a teacher on aspects of his or her teaching that are of concern to that teacher (rather than items on an evaluation form or items that are pet concerns of the supervisor only)" (Reavis, 1976, p. 360).

Clinical supervision assumes a humanistic approach which emphasizes the importance of communication and establishing rapport between supervisor and teacher. The relationship between the teacher and supervisor is viewed as one of mutuality, with each contributing toward a productive working relationship that benefits both. According to McFaul and Cooper (1984) "the supervisor's

role is not to coerce, demand, or evaluate, but rather to encourage, explore, and collaborate (p. 5). Clinical supervision presumes the professionalism of the teacher, as well as, the teacher's individuality and the necessity of collaboration in analyzing teaching (McFaul et al., 1984).

The clinical supervision model is a structured system for observing and conferencing with teachers which takes place in the real world of the classroom not in simulated settings. Goldhammer et al. (1980) conceptualized clinical supervision as:

1. A technology for improving instruction.
2. A deliberate intervention into the instructional process.
3. Goal-oriented, combining school and personal growth needs.
4. Assuming a working relationship between teacher(s) and supervisor.
5. Requiring mutual trust, as reflected in understanding, support, and commitment for growth.
6. Systematic, yet requires a flexible and continuously changing methodology.
7. Creating productive tension for bridging the real-ideal gap.
8. Assuming the supervisor knows more about instruction and learning than the teacher(s).
9. Requiring training for the supervisor (pp. 26-27).

The model consists of five stages referred to as the "sequence of supervision" which includes:

Stage 1: Preobservation conference: A contract is established regarding the purpose of the observation.

Stage 2: Observation: Data is collected in the classroom as it relates to the established contract.

Stage 3: Analysis and strategy: Review and interpretation of data by the supervisor.

Stage 4: Supervision conference: Feedback to the teacher on the analyzed data.

Stage 5: Post-conference analysis: Joint analysis of the usefulness of the clinical supervision cycle (Snyder, 1981, p. 523).

Garman (cited in Goldsberry, 1984) offers the following summary of clinical supervision:

> Clinical supervision consists of both a focused problem-solving procedure involving identifying, collecting and interpreting information explicitly germane to the educational goals accepted by the teacher and supervisor, and a congruent and permeating spirit of personal commitment to growth through colleagueship and collaboration (p. 14).

Developmental Supervision

The theory of developmental supervision, as developed by Glickman (1985), is based on three general proposition. First, teachers operate at different levels of professional development due to their backgrounds and experiences. Second, due to the fact that teachers operate at differing levels of thought, ability, and effectiveness, they will require different ways of being supervised. Third, the long range goal of supervision is to increase every teacher's ability to grow toward more independent thinking.

Glickman's model has three different phases and can be implemented with individual teachers or a group of teachers. The first phase is diagnostic. The purpose of this phase is to diagnose the teacher's level of abstraction (low, moderate, high). The second phase is tactical. This phase involves matching a supervisory approach to the teacher's level of abstraction. Glickman and Gordon (1987) stated: "The supervisor matches a directive approach with teachers exhibiting moderate abstraction, and a nondirective approach with teachers exhibiting high abstraction" (p. 66). Phase three is strategic. The purpose of this phase is to increase the development of the teacher's abstraction and to stimulate his/her problem-solving abilities. Glickman and Gordon point out that the developmental supervision model is complex, and that the level of abstractions will vary among individuals and groups and that a stage of development is not permanent and changes according to personal and professional life changes (1987).

The theories of clinical and developmental supervision have significance for nursing faculty teaching in the clinical setting, in that a combination of the clinical supervision cycle with a developmental approach could be used a conceptual framework. Supervision in the

clinical practice setting is concerned with those events occurring within nursing student-client relationship as well as the nursing student-clinical instructor relationship. Clinical instructors rely very much on their collection of data through observation as a means to supervise students in their interactions with clients, staff, peers and others. Clinical instructors are also concerned with applying an individualized and humanistic approach in their own interactions with students. The goal of the clinical instructor is to enable students to more fully develop their problem-solving abilities and to assist them in their professional growth.

Summary

In the present study the phases of the evolution of research on teaching effectiveness in education were used as a guide to assess the development and progress on clinical teaching in nursing education. The models used to study teaching in education were used to organize the research already completed on the study of clinical teaching in nursing education. The instructional and supervision models were used as a guide in the construction of the questionnaire in this study.

Self Perception and Self Reporting

The issuses of self perception and self reporting are extremely important considerations in the construction of

this survey research study design. Human perception is a constructive event, it is not simply a process of perceiving everything in the environment because a person's experience, knowledge, and expectations influence the products of perception (Marx & Winne, 1987). How the respondents perceive the research instrument (i.e., questionnaire) will have a direct effect on the accuracy of their self reporting. Based on the need to consider self perception and self reporting in this study, this portion of the literature review will address these issues.

Self Perception

Human behavior can be observed from two frames of reference: the external point of view (an observer) or an internal point of view (the self). The internal point of view is when the behaver observes and reports on his own behavior and has been called the "perceptual", "personal", or "phenomenological" frame of reference (Combs, 1969, p.16).

According to Combs (1969) the basic premise of perceptual psychology is that all behavior is a product of the perceptual field of the behaver at the moment of action (p. 69). The perceptual psychology view of behavior is to understand behavior by examining behavior from the individual's point of view (i.e. "how things seem

to him/her at that moment") (Combs & Snygg, 1959). When an individual perceives complex forms of stimulation he/she will automatically organize the features in some way (Kendler, 1963). The perceptual psychologist deals with the subject matter of how the individual organizes and arranges these complex forms of stimulation.

The individual behaves according to the facts as they see them not as others see them. The individual will govern his/her behavior from their unique perceptions of their selves, the world in which they live, and the meaning things have for them (Combs, 1959). These personal meanings which govern behavior are called perceptions.

Perception is the mechanism by which the living organism maintains contact with the environment (Travers, 1982). Travers states that this is accomplished through a complex system of sense organs and a musculature through which those sense organs can be directed to receive information from the environment (1982, p.30). The organism, when engaged in perceiving, does not give equal emphasis to every piece of information that impinges on the sense organs. Perception is selective in that individuals do not see everything in their surroundings. Kelly (1962) makes the point that what individuals perceive has to suit their purposes and fit into their past experiences.

Self Perception & Role

Perceptions are always organized and have meaning which comes from how the individual perceives himself or herself. Lecky (1945) points out, that the individual will perceive in ways that are consistent with our concepts of ourselves. These concepts held by the individual will then determine the perceptions he/she will have of any particular situation. Even though many perceptions are possible at any instant, the individual will only accept those which are appropriate and consistent with his/her concepts of self. Combs & Snygg (1959) claim that it is this selective process which determines the roles people play in any life situation. Combs & Snygg (1959) define the term role to mean "... the selection by the individual from his perceptual field of those goals, techniques, or ways of behaving that seem to him appropriate for the kind of person he feels himself to be in the situation he sees himself in" (p. 155-156).

Self Report

Combs (1962) refers to self report as the way in which an individual describes himself when asked to do so. The self report is a product of both the subjects perceptions of him/her self and his/her perceptions of the situation in which he/she is involved. How closely the self report approximates the subjects "real" perceptions

of self is thought to be dependent upon the following factors:

1. The clarity of the subject's awareness.
2. The availability of adequate symbols for expression.
3. The willingness of the subject to cooperate.
4. The social expectancy.
5. The individual's feelings of personal adequacy.
6. The individual's feeling of freedom from threat (Combs & Snygg, 1959, pp.440-441).

Gordon (1966) takes the point of view that the debate by researchers over which technique or procedure for assessing self perception is better is a meaningless debate. He argues: "Pragmatically, the validity of any approach is governed by its utility as a predictor of behavior; and cue for teacher behavior, rather than by any artificial standard" (1966, p.54). Gordon (1966) believes that truthfulness and meaningfulness are more important and therefore any procedure or technique used to assess self perceptions must be based on the expectation that the subject will answer truthfully. Gordon also feels it should be left up to the subject to determine for himself/herself whether or not the questions used are appropriate (1966).

From the discussions of self perception and self reporting it seems reasonable to expect that how the subjects respond to the questions on the survey instrument will depend on their personal perceptual selection from

past experiences and present needs; their current self concept in the role of teacher in the clinical setting; and their answering the questionnaire truthfully.

Summary

This chapter reviewed the literature in the areas of professional education and nursing education and presented the parallels among the various professions and nursing education. The nursing research literature was reviewed in order to identify and describe the various instructional and supervisory practices utilized in the clinical aspect of nursing education. A number of conceptual frameworks from the education literature were reviewed for their application to this study. And, finally the concepts of self perception and self reporting were briefly discussed as to their importance to this study.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this descriptive study was to obtain self-report data designed to describe the instructional and supervisory practices employed by nursing faculty teaching in the clinical practice settings in baccalaureate nursing programs. A survey research design was used to collect data by means of a self-administered questionnaire consisting of multiple-choice and open-ended questions which was completed by nursing faculty teaching in varied clinical settings.

Research Design

The use of self-report instruments, in survey research designs, allows for greater uniformity of responses; provides anonymity (which may encourage honesty and frankness); and may be more feasible and economical to reach a larger number, or more representative sample of people (Babbie, 1973; Isaac & Michael, 1981). Sudman and Bradburn (1974) report that there are data to support the fact that a subject will more accurately report about their own behavior than others and that self reports are a little better for behavioral data than the use of informant reports.

Survey research, according to Babbie (1973), does not

permit the direct measurement of behavior but it does permit the indirect measurement of behavior. The questionnaire developed for this study was used as an indirect measurement of the instructional and supervisory teaching practices as perceived by nursing faculty teaching baccalaureate nursing students in clinical practice settings.

Survey studies are descriptive and explanatory in nature. They merely search for accurate information about the characteristics of particular subjects, groups, institutions, or situations, or the frequency of a phenomenon's occurrence (LoBiondo-Wood & Haber, 1986). According to LoBiondo-Wood & Haber (1986) data collected from survey research studies are used to justify and assess current conditions and practices or to make more intelligent plans for improving them. This study is designed to describe the teaching practices of clinical nursing instructors as they direct and guide the learning activities of students in clinical practice settings in nursing education programs.

This researcher decided to use a mail survey method of data collection in order to secure the desired information from faculty teaching in the clinical component of nursing education programs. A critical objective to keep in mind when constructing a mailed

questionnaire is to present all respondents with questions that they will interpret and understand in the same way. Jaeger (1988) makes the point that "perhaps this goal can never be accomplished completely, but strict attention to detail and care in phrasing questions, definitions, and instructions will certainly reduce ambiguity and misunderstanding (p. 305).

Description of the Research Instrumentation

Development of the Instrument

The survey instrument, "A Profile of the Clinical Day", was constructed by the researcher for this study (see Appendix A). After a through search of the literature it was determined that an appropriate instrument for answering the research questions was not available in the nursing literature.

A number of different instruments were used as guides in the development of this tool. A self-assessment inventory developed by Irby (1978) to evaluate clinical teaching effectiveness in medicine, a Teaching Competency Record developed by the educational faculty at The University of Maryland Baltimore County (1972), and an Instructional Design Guide designed by Young (1985) are examples of the types of instruments that were used as guides to develop items for this tool. Other references used to develop items for the instrument were three recent

nursing education texts that specifically addressed teaching in the clinical practice setting (Carpenito & Duespohl, 1985; Infante, 1985; Reilly & Oermann, 1985). Questions on the instrument were derived from the concepts and theories proposed by the aforementioned authors.

Articles in the nursing literature which identified strategies important in clinical teaching were also used to develop items for the instrument (Clark, 1976; Scholdra & Quiring, 1973). Items on the questionnaire related to teaching methods in general were derived from Gage's book The Psychology of Teaching Methods (1976). Items related specifically to nursing teaching methods were derived from articles and books in the nursing literature (Carpenito & Duespohl, 1985; Schweer & Gebbie, 1976). This researcher also used her own experience as a clinical teacher to guide her in the development of items for the instrument.

The instrument consists of four parts containing thirty-three questions. The first part collects information about the clinical instructor (questions 1-4). The second part contains questions concerning the students currently in the instructors clinical practice setting (questions 5-6). The third part consists of questions about the characteristics of the clinical experience (questions 7-16). The influence of these demographic variables in parts one to four of the questionnaire

(questions 1-16) were included to determine if they could affect, or if differences could be detected, in the way in which faculty respond to the questions. The inclusion of the above variables as part of the survey data may also help to estimate the extent of any biases in the results (Polit & Hungler, 1897). In the fourth part data are collected on the clinical experience in terms of two functional categories: instruction, which includes student independent/group learning activities, and supervision (questions 17-33).

The instrument uses a four and five point Likert-type scale using different types of scale labels to measure the frequency with which respondents utilize the different instructional and supervisory practices. The respondents are also instructed to estimate the percentage of time engaged in instruction and supervision as well as percentage of time engaged in various instructional and supervisory methods. Jones and Pfeiffer (1981) propose that "when a questionnaire has more than twenty items, it is generally less boring for the respondent if more than one scale is used" (p.68).

A panel of nursing faculty with expertise in the field of clinical teaching were used to determine the instrument's content validity and to determine if there existed a questionnaire wording bias (i.e., leading

questions or emotionally loaded words). The panel was also asked to evaluate the instrument for comprehensiveness, clarity of directions, use of terms, and ease of response (see Appendixes B, C, D, and E).

All of the three nursing faculty used to evaluate the instrument have written extensively on clinical teaching and two have recently published books on clinical instruction. All three members of the panel are prepared at the doctorate level. One member of the panel is the dean of a large east coast university school of nursing, the other two members are currently on the faculty of two large midwestern university schools of nursing. Following the review of the survey instrument and an analysis of the suggestions made by the panel of nursing faculty, minor revisions were made.

Pretest of the Study Design

A pretest was conducted on the following aspects of the research study design: 1) the instrument (reliability of the questionnaire), 2) the data collection procedures, 3) the data processing procedures and 4) the computer program for analysis. The survey instrument was administered to a purposive sample of 25 baccalaureate clinical nursing faculty at a large land grant midwestern state university. Many authors agree that it usually takes no more than a small sample (12-25) of respondents,

similar to the population that you are sampling, to reveal the major difficulties and weaknesses in a pretest questionnaire (Rossi, Wright, & Anderson, 1983; Sudman & Bradburn, 1982).

The site chosen for the pretest was selected for many reasons. The first reason was that the program of nursing was very similar to the programs of nursing that were to be used in the actual study. The second reason was that the faculty of this school of nursing were, in this investigator's judgment, representative of the population that was to be used in the actual study. The third reason for using this particular program of nursing was that as part of this investigator's data collection procedures she would attend a faculty meeting to present the study and distribute the questionnaires. Because this researcher had already established a relationship with this institution (having previously been a member of the nursing faculty) it was felt that she would be able to obtain the permission (from the dean) and the cooperation (from the faculty) needed to test her data collection procedures (see Appendixes F and G).

Nineteen faculty, out of 25, responded to the questionnaire. Two questionnaires were returned not completed because the faculty did not at this time have clinical responsibilities. The response rate for the

pretest was 76%. According to Babbie (1973) and others (Williamson, 1981), 76% was a very good response rate since only 50% is needed for analysis and reporting on a new instrument.

In order to assess the internal consistency or homogeneity of the instrument, a coefficient alpha was computed using a statistical package entitled: Dyna-Stat Professional/Version 3.3 (1986). As shown in Table 1, a reliability coefficient of .80 was obtained for items on the instrument that dealt with instruction (questions 18-24).

Table 1

Reliability Analysis of Instruction Items

Number of Measures:	33
Number of cases:	17
Variance among measures:	12.7451
Variance among cases:	6.54501
Reliability Coeff R (XX):	.80056
Standard Error of Measurement:	1.14252

As demonstrated in Table 2, the reliability coefficient of .82 was obtained for the supervisory items on the instrument (questions 25-33).

Table 2

Reliability Analysis of Supervisory Items

Number of Measures:	29
Number of Cases:	17
Variance Among Measures:	15.0381
Variance Among Cases:	5.9569
Reliability Coeff R (XX):	.8234
Standard Error of Measurement:	1.02565

The reliability coefficient of .83 for the combined items of instruction and supervision (questions 18-33) is presented in Table 3.

Table 3

Reliability Analysis of Instruction and Supervisory Items

Number of Measures:	62
Number of Cases:	17
Variance Among Measures:	14.35002
Variance Among Cases:	7.54341
Reliability Coeff R (XX):	.83682
Standard Error of Measurement:	1.10949

The coefficients shown in Tables 1, 2, & 3, are well above

Nunnally's (1978) criteria for acceptable reliability standards (.70) of new instruments.

Setting

The setting for this study was all university baccalaureate programs of nursing in the State of Maryland. Five of these programs are state supported and two are private. To be included in the study all of these programs of nursing had to be accredited by the National League of Nursing. Accreditation by the National League of Nursing (NLN) signifies that these programs meet the minimum requirements set by law and NLN Board rules as of 1988 (NLN, 1988). At the time of this study one program of nursing was dropped from the study, due to its not being accredited by the NLN. Meeting the criteria for the study were four state supported and two private programs of nursing.

Subjects

The subjects of this study were the full and part time clinical undergraduate nursing faculty in each of the six programs of nursing. Since response rate is of major importance in this study a decision was made to use convenience sampling to select subjects instead of a random sample selection process due to the fact that the total population of subjects included in the study was not very large (N=95).

Other reasons to use all available subjects were that the self-administered questionnaire was to be returned by mail and this researcher did not want the response rate to fall below 50%, also a larger sample would add to the data on the reliability and validity of the newly developed survey instrument. As mentioned earlier, Babbie (1973) reports that a response rate of 50% on a new instrument is adequate for analysis and reporting.

Description of Procedures

The following data collection procedures were employed. First, each of the administrators of the six nursing programs were contacted first by telephone to discuss the feasibility of the investigator being invited to the first faculty meeting of the fall semester (September, 1988), to explain her study to faculty and to also distribute the questionnaire to the faculty at that time. The investigator's attendance at the faculty meetings was an attempt to "personalize the procedures" which according to Dillman & Frey (1974) can increase the response rates from 85 to 92%. The personal contact with the respondents would also allowed this investigator to thank the respondents in person for participating in her study.

Second, after the initial telephone contact, a letter was sent to each administrator formally requesting the

participation of their faculty in the study (see Appendix H). The investigator also requested from each of the administrators a list of the undergraduate clinical faculty. The list of faculty names was needed ahead of time so that the investigator could prepare stamped, self-addressed postcards on which the faculty's name had been typed. The post cards were to be returned to the investigator signifying that the questionnaire had been mailed. This was necessary because the questionnaire was anonymous.

The support of each administrator was considered an important indicator to faculty respondents of the worth of the study and thereby, possibly, increasing the return rate. Five administrator's responded positively to this investigator's request to attend a faculty meeting. One administrator agreed to have her faculty participate in the study by completing the questionnaire, but refused to allow the investigator to attend a faculty meeting or to send the investigator a list of faculty names. This program of nursing was dropped from the study due to the use of different data collection procedures and the impossibility of follow-up mailings to nonrespondents.

Third, on the prearranged designated dates, this investigator attended the faculty meetings were she explained her study and distributed the cover letter (see

Appendix I) and questionnaire to the faculty. Faculty members were requested to return the questionnaire in the enclosed stamped, self-addressed envelope. Each participant was also requested to return the enclosed stamped, self-addressed postcard to signify that the questionnaire had been mailed.

Fourth, a follow-up letter of encouragement and a second copy of the questionnaire was sent, two to three weeks after the initial request for participation, to those faculty that agreed to participate but did not return the postcard (see Appendix J). Using this follow-up procedure it was anticipated that the response rate will be 50% or better (Rossi, Wright & Anderson, 1983). Increasing the response rate using the follow-up procedure described above should also serve to decrease the bias of nonresponse that can occur in survey research.

Treatment of the Data

Responses from faculty, in five baccalaureate programs of nursing, to a "Profile of the Clinical Day" survey instrument were coded, tabulated and entered into the computer using the StatPac Gold (1987) program. A data analysis was conducted using descriptive statistics (i.e., frequency distribution, percentages, measures of variability, central tendency) to answer the three research questions. A quantitative data analysis was

also conducted on research question three to test for statistical significance using a one-way analysis of variance (ANOVA) test. The parametric test of a one-way ANOVA was used a diagnostic tool. The hypotheses generated were descriptive in nature and were not intended to be definitive. According to Borg and Gall (1983) statisticians have conducted research to determine what happens when the assumptions underlying parametric statistics are violated. The results of the research indicates that these tests provide accurate estimates of statistical significance even under conditions of substantial violation of the assumptions (Borg & Gall, 1983). The value of the quantitative analysis performed on the data for research question three was intended as a heuristic one.

Summary

This chapter provided the methods and procedures used to answer the research questions developed for the study. Additionally, the chapter provided a description of the subjects, a description of the development of the survey instrument, and a description of the pretest of the instrument. Analysis of the data is presented in Chapter IV.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter begins with an overview of the study. Next a general description of the respondents, their students and the nature of their clinical setting was discussed. The remainder of the chapter is devoted to presenting and discussing the data obtained in the study and how it pertains to the research questions.

Purpose and Research Questions

The purpose of this study was to identify and develop a profile of the instructional and supervisory practices employed by nursing faculty in clinical settings. A survey research design was used to gather the data. All clinical nursing faculty in selected baccalaureate nursing programs were asked to report their perceptions of the instructional and supervisory behaviors they engage in during the clinical experience with students.

More specifically, the study was designed to gather data to answer the following questions:

1. What are the instructional practices as perceived by nursing faculty teaching in the clinical practice setting?
2. What are the supervisory practices as perceived by nursing faculty teaching in the clinical practice setting?
3. How do the perceived instructional and supervisory practices differ across clinical specialties?

Survey Instrument

A survey instrument was developed and distributed to all full and part-time clinical nursing faculty teaching in four public and one private baccalaureate nursing programs in the State of Maryland. The data was collected by means of a self-administered questionnaire consisting of thirty-three multiple-choice and open-ended questions. The survey instrument was comprised of four sections: a) demographic data, b) clinical procedures, c) instructional practices, and d) supervisory practices.

Response Rate

Of the 95 questionnaires which were distributed, 75 were returned. Three questionnaires were returned with incomplete information and were discarded. Thus, the net number of completed questionnaires returned was 72. The overall sample response rate was 76%, which exceeds the 50% response rate criteria set for this study.

Demographic Variables

In this section, the following demographic variables are described: a) characteristics of the respondents; b) characteristics of the nursing students in the clinical; c) characteristics of the clinical experience; and d) general characteristics of the clinical day.

Characteristics of the Respondents

The nursing faculty who responded to the question-

naire represented six different clinical specialities. Over a third of the respondents represented the medical/surgical area of clinical specialization (25 or 34.7%). As indicated in Table 4, the Maternal/Child specialization was the next largest group responding (16 or 22.2%) and the pediatric, community and psychiatric nursing faculty were somewhat equally represented (13.9, 13.9, 10.0% respectively). The remaining respondents (4.2 %) labeled their specialty, Adult Nurse Practitioners (ANP).

Table 4

Frequency & Percentage Distributions of Clinical Specialties

Clinical Specialty	Frequency	Percent
Medical/Surgical	25	34.7
Maternal/Child	16	22.2
Community	10	13.9
Psychiatric	8	11.1
Pediatric	10	13.9
ANP	3	4.2
Total	72	100.0

In the next section, data is presented which further describes the respondents as a group and by clinical specialization. These variables include; experience, highest degree, years of experience and study of teaching.

Experience. The respondents included the novice and veteran alike. The range of experience of the nursing faculty who responded to the questionnaire ranged from 1 year to 30 years. The mean years of experience is 12.04, the standard deviation is 7.19 and the median is 10 years. A summary of the means and standard deviations by clinical specialty is presented in Table 5. When this data is looked at according to clinical specialty, it is revealed

Table 5

Means and Standard Deviations of Years in Clinical Teaching by Clinical Specialty

Clinical Specialty	Mean	Std Dev	Cases
Medical/Surgical	12.7600	6.7902	25
Maternal Child	13.5625	8.3823	16
Community	10.2000	5.6332	10
Psychiatric	17.8750	7.4342	8
Pediatric	7.5000	2.7183	10
ANP	3.6667	1.5275	3

that the psychiatric nursing faculty are the most experienced, followed by the maternal child and medical/surgical faculty and the least experienced respondents are the pediatric, community and ANP faculty. A look at the standard deviations in Table 5, reveals that not only are the pediatric and ANP faculty the least experienced but their range of years of experience is the most narrow.

Education. As indicated in Table 6, fifty-eight or 80.6% of the faculty reported having a master's degree and only fourteen or 19.5% of the faculty indicated that they have an earned doctorate. Of the faculty who reported

Table 6

Frequency & Percentage Distributions of Highest Degree

Degree	Frequency	Percent
MS	39	54.2
MSN	16	22.2
PhD	11	15.3
EdD	1	1.4
DNSc	2	2.8
MEd	2	2.8
MPH	1	1.4
Total	72	100.0

that they had a master's degree, 39 (54.2%) hold a master of science degree and another 16 (approximately 22%) hold a master of science in nursing degree. However, this may not indicate a different degree, as such, but a different label for the same degree at different institutions. Of the fourteen faculty who hold doctorates, six are in the maternal/child specialty; five are in the medical/surgical specialty; and two each are in the psychiatric and pediatric specialties. None of the adult nurse practitioners or community specialty faculty reported holding a doctorate (see Table 7).

Study and training in teaching. Over eighty percent of the nursing faculty sampled reported that their graduate programs in nursing education included courses in teaching and over seventy percent of the faculty reported having had practice in teaching. These results are reported in Table 8.

Characteristics of the Students

The survey instrument included several questions concerning students. The first was concerned with the semester in college in which the student was admitted to the nursing major. The second was concerned with the number of semesters the student had completed prior to taking the clinical the respondent was responsible for at the time of completing the questionnaire. Finally, two

Table 7

Cross Tabulation of Nursing Specialty and Highest Degree

NURSING SPECIALTY	Highest Degree Earned							ROW TOTAL	ROW PERCENT
	MS	MSN	PhD	EdD	DNSc	MP	MED		
Medical/ Surgical	16	4	3		1	1		25	34.7
Maternal/ Child	7	3	5		1			16	22.2
Community	8	1				1		10	13.9
Psychiatric	2	3	1	1			1	8	11.1
Pediatric	4	4	2					10	13.9
Adult Nurse Practitioner	2	1						3	4.2
COLUMN TOTAL	39	16	11	1	2	2	1	72	
COLUMN PERCENT	54.2	22.2	15.3	1.4	2.8	2.8	1.4		100.0

questions were asked concerning the number of clinicals students had prior to and after the clinical the respondent was reporting on in the study.

As indicated in Table 9, over ninety percent of the faculty, reported that students were admitted to the

Table 8

Frequency & Percentage Distributions of Courses and Practice in Teaching During Graduate Education

	Graduate Education			
	Courses in Teaching		Practice in Teaching	
Rating	Frequency	Percent	Frequency	Percent
Yes	61	84.7	51	70.8
No	10	13.9	20	27.8
Missing	1	1.4	1	1.4
Total	72	100.0	72	100.0

nursing program in the second semester of the sophomore year (45.8%) or in the first semester of the junior year (44.4%). Approximately seven percent (6.9%) reported that students were admitted to the nursing program the first semester the student is in college.

As indicated in Table 10, approximately two thirds (49) of the faculty reported that the students they were currently teaching in the clinical experience were either in the first semester of their junior year (36.1%) or the first semester of their senior year (31.9%). Another 15 percent of the faculty reported having students who were

in the second semester of their junior year and approximately another ten percent indicated that their students were in the last semester of their senior year.

Table 9

Frequency & Percentage Distributions of Students Admitted to the Nursing Major by Number of Semesters in College

Semester	Frequency	Percent
1	5	6.9
2	2	2.8
3	0	0.0
4	33	45.8
5	32	44.4
Total	72	100.0

Characteristics of the Clinical Experience

The questionnaire included two open-ended questions, one concerning course content (question 7) and another concerning the nature of the clinical setting (question 8). A synthesis of the responses indicated that faculty did seem to be teaching the application of the course content. This observation is based on an analysis of question 7 (course content) compared to question 3 (the faculty's area of clinical specialization) which indicated

Table 10

Frequency & Percentage Distributions of Students According to Semester in College

Semester	Frequency	Percent
1	1	1.4
2	1	1.4
3	1	1.4
4	2	2.8
5	26	36.1
6	11	15.3
7	23	31.9
8	7	9.7
Total	72	100.0

that faculty were teaching course content in their area of clinical preparation (see Appendix K).

Another open-ended question (question 8) requested information on the type of clinical setting used for the clinical experience. The responses indicate that a wide variety of clinical settings are used for the clinical experience. The following are examples of the types of clinical settings used for the clinical experience: physician's office, public health departments, and

children's day care centers. The general hospital still seems to be the setting of choice for many clinical faculty (see Appendix L for a summary of faculty answers to question 8).

Number of students. The number of students in a clinical each day ranged from 4 to 10 with a mean of 7.40, a standard deviation of 1.56, and a median of 8 students per day. The distribution of faculty responses is presented in Table 11. Twenty five or 34.7% of the

Table 11

Frequency and Percentage Distributions of Numbers of Students Per Clinical Day

Number of Students Per Clinical Day	Frequency	Percent
4	3	4.2
5	5	6.9
6	19	26.4
7	1	1.4
8	25	34.7
9	15	20.8
10	4	5.6
Total	72	100.0

faculty reported teaching 8 students, nineteen or 26.4% report teaching 6 students, and fifteen or 20.8% report teaching 9 students per day.

Length of clinical. More than half the faculty (63.9%) reported having students an average of eight (8) hours per day for the clinical experience (see Table 12).

Table 12

Frequency & Percentage Distributions of Number of Hours Per Day for a Clinical Experience

Hours Per Day	Frequency	Percent
3	1	1.4
4	5	6.9
5	1	1.4
6	5	6.9
7	4	5.6
8	46	63.9
9	3	4.2
10	3	4.2
16	1	1.4
Missing	3	4.2
Total	72	100.0

Table 12 represents a mean of 8.72, a standard deviation of 9.22, and a median of 8.

Number of clinicals per week. Fifty-two (52) faculty or 72.2% of the total reported that they taught the same group students in the clinical experience two days per week and the remainder of the respondents (one case missing) reported a one-day-per-week clinical experience (see Table 13).

Table 13

Frequency & Percentage Distributions of Number of Days Per Week a Clinical Experience Group Meets

Days Per Week	Frequency	Percent
1	19	26.4
2	52	72.2
Missing	1	1.6
Total	72	100.0

Number of weeks in the total clinical experience. Faculty reported a wide variation in the number of weeks per clinical experience. The number of weeks ranged from 2 weeks to 18 weeks, with a mean length of 11.7, a standard deviation of 3.57, and a median length of 12 weeks. An inspection of Table 14 indicates that over half

of the respondents (51.4%) reported that their clinicals were either 12 or 14 weeks. Approximately, another third of the faculty reported clinicals of 13, 15, or 16 weeks (9.7, 6.9, & 5.6% respectively). Therefore, 73.6 percent of the faculty report that their clinical is roughly the

Table 14

Frequency & Percentage Distributions of Number of Weeks Per Clinical Experience

Number of Weeks	Frequency	Percent
2	1	1.4
4	6	8.3
7	7	9.7
8	1	1.4
10	1	1.4
12	20	27.8
13	7	9.7
14	17	23.6
15	5	6.9
16	4	5.6
18	1	1.4
Missing	2	2.8
Total	72	100.0

equivalent to a semester in most colleges and universities. It should be noted, however, that over 20 percent (22.2%) of the faculty reported a clinical which approximates something less than one-half of a semester.

Number of clinical experiences per program. The number of clinical experiences per program ranged from two to nine with a mean of 4.48. As indicated in Table 15, over fifty percent (51.5%) of the faculty reported that there were four clinical experiences in their program. Over 20 percent (21.2%) indicated that their program had only three clinicals while at the other end of the frequency scale, approximately 24 percent reported six (9.1%) or seven (15.2%) clinicals per program. At each extreme, one respondent reported two clinicals and another reported nine.

Table 15

The Number of Clinical Experiences Per Program

Number of Clinical Experiences	2	3	4	6	7	9
Number of Faculty Reporting	1	14	34	6	10	1
Percentage of Faculty Reporting	1.5	21.2	51.5	9.1	15.2	1.5

Note. Mean Number of Clinicals per Program = 4.48

Sequence and pattern of clinical experiences. Faculty were asked to indicate the number of clinicals students had prior to the one they were responsible for and the number of clinicals they would have afterwards. This data is summarized in Table 16. Nearly a third of the faculty (32.9%) reported that they were responsible

Table 16

Frequency and Percentage of Clinical Sequence Patterns for Students in Clinicals of Respondents

Pattern of Clinicals			
Number Prior	Number After	Frequency	Percentage
0	1	1	1.5
0	3	10	15.2
0	4	8	12.1
0	5	1	1.5
0	7	1	1.5
1	2	1	1.5
1	3	7	10.6
1	4	1	1.5
1	5	3	4.5
2	1	1	1.5
2	2	3	4.5
2	4	1	1.5
3	0	2	3.0
3	1	13	19.7
3	3	2	3.0
4	0	3	4.5
4	1	3	4.5
4	1	1	1.5
5	0	1	1.5
5	1	1	1.5
6	0	1	1.5
8	0	1	1.5

for the first clinical in a sequence and only 12.4 percent of the faculty reported being responsible for the last clinical in the sequence. Nearly 25 percent of the respondents (24.7%) reported that they were responsible for the next to last clinical in the sequence with 17.8 percent of this group reporting a five clinical experience sequence. Another 15.1 percent of the faculty reported that they were responsible for the second clinical in a sequence. If the data is restricted to a sequence of four or five (mean number of clinicals is 4.48 and slightly over half of the respondents), the data is almost evenly divided between the first or second clinical and the next to last and last clinical.

General Characteristics of the Clinical Day

Use of the nursing laboratory. Faculty were asked how frequently their students used the nursing laboratory to practice skills in preparation for the clinical experience. The frequency of use was recorded according to the following scale: Never (1), A Few Times A Semester (2), Weekly (3), Daily (4). Examination of the frequencies reported in Table 17 reflects that over 80% of the faculty have students use the nursing skills laboratory. A little over a third of the faculty (34.7%) report that their students use the nursing laboratory weekly and another fifty percent of the respondents

indicated that the their students use the laboratory a few times a semester.

Table 17

Frequency & Percentage Distributions of Use of the Nursing Laboratory

Rating	Frequency	Percent
1	7	9.7
2	36	50.0
3	25	34.7
4	2	2.8
Missing	2	2.8
Total	72	100.0

Beginning the clinical day. Faculty were asked to consider how frequently they begin and end a clinical day with a small group conference. The responses were reported according to the following scale: Never (1), A Few Times A Semester (2), Weekly (3), Daily (4). Examination of the frequencies presented in Table 18 reflects that faculty responses centered around the rating of 4 (Daily) for both items.

Planning the clinical day. One series of questions asked respondents how they plan for a clinical experience.

Table 18

Frequency & Percentage Distributions of Beginning and Ending a Clinical Day with a Small Group Conference

	Small Group Conference			
	To Begin Day		To End Day	
Rating	Frequency	Percent	Frequency	Percent
Never	3	4.2	0	0.0
A Few Times A Semester	8	11.1	5	6.9
Weekly	13	18.1	16	22.2
Daily	48	66.7	51	70.8
Total	72	100.0	72	100.0

Over three-fourths (61) or 87.7% of the faculty spend between thirty minutes (30) or less, and two (2) hours developing teaching plans for a typical clinical day. Over twenty percent (23.6%) reported spending 30 minutes planning, over a third (37.5%) reported spending up to an hour planning and nearly one-fourth (23.6%) indicated they spend between one and two hours planning the clinical. Over ten percent (11.1%) checked that they spend over two hours in planning (see Table 19).

Table 19

Frequency & Percentage Distributions of the Time Involved in Developing Teaching Plans for the Clinical Day.

Rating	Frequency	Percent
0 to 30 minutes	17	23.6
30 to 60 minutes	27	37.5
1 to 2 hours	17	23.6
2 hours or more	8	11.1
Missing	3	4.2
Total	72	100.0

Use of student input. When faculty were asked if they use student input in planning the clinical day, more than two-thirds (52) or 72.2% of the faculty responded that they do invite input from students. The frequencies and percentages of faculty using student input is reported in Table 20. As indicated nearly 20 percent (19.4%) involve students in joint planning activities and few faculty (5.6%) reported that they do not involve students in any aspect of planning.

Use of objectives. The clinical faculty were also asked to indicate how they use objectives in planning. As the data in Table 21 indicates, less than half of the

Table 20

Frequency & Percentage Distributions of Student Input in Planning the Clinical Day

Rating	Frequency	Percent
Not at all	4	5.6
Invite Input	52	72.2
Joint Plans	14	19.4
They Decide	0	0.0
Missing	2	2.8
Total	72	100.0

Table 21

Frequency & Percentage Distributions of Faculty Reporting Using Objectives to Plan the Clinical Day

Rating	Frequency	Percent
None	16	22.2
For some aspects	30	41.7
For most aspects	25	34.7
All aspects	1	1.4
Total	72	100.0

faculty (41.7%) use objectives for "at least some aspects" of planning the clinical day. A little over third (34.7%) of the respondents indicated that they use objectives to plan "most aspects" of the clinical day and over twenty percent (22.2%) checked that they didn't use objectives for any aspect of the clinical experience. Only one faculty member indicated that objectives were used to to plan all aspects of the clinical day.

Clinical activities. Another question requested the faculty respondents to rate various items related to advanced planning. The rating was Never (1) to Always (5). Over half (41) or 56.9% of the faculty reported that they plan the student's patient assignment(s) a day in advance (from "most of the time" 20.8% to "always" 36.1%). When asked if they plan the student's assignment(s) on the day of the clinical, over a third of the faculty reported that they do "some-times" (41.7%) and almost twenty percent (19.4%) indicated that they always do and an equal number reported that they "never" do. These two questions are independent and it is quite likely that a respondent could report making plans in advance and also on the day of the clinical.

It is also apparent from the data presented in Table 22 that a student's assignment(s) is changed on the day of clinical. Fifty percent (50%) of the faculty reported

that they "sometimes" have to change the objectives or activities due to patient availability and most of the rest of the respondents change plans even more frequently ("frequently" 20.8%, "most of the time" 5.6%, or "always" 8.3%).

Table 22

Frequency & Percentage Distributions of Procedures for Planning the Clinical Day

	Planning Procedures					
	Plan a Day in Advance		Plan on Clinical Day		Change Plans Due to Patient Availability	
Rating	n	%	n	%	n	%
Never	13	18.1	14	19.4	5	6.9
Sometimes	8	11.1	30	41.7	36	50.0
Frequently	2	2.8	3	4.2	15	20.8
Most of the Time	15	20.8	7	9.7	4	5.6
Always	26	36.1	14	19.4	6	8.3
Missing	8	11.6	4	5.6	6	8.3
Total	72	100.0	72	100.0	72	100.0

Summary of Demographic Variables

As described in the foregoing sections, the survey questionnaire included a number of questions regarding the general characteristics of the students, the clinical faculty, and nature of the clinical experience and setting. In this section, a brief summary of the responses to these questions is provided.

Faculty responding to the survey questionnaire have been in clinical teaching for an average of twelve years. Over eighty percent (80%) of the faculty reported having earned only a Master's degree. The area most represented by the respondents was the medical/surgical clinical specialty (34.7%) and least represented was the psychiatric clinical specialty (11.1%). More than two-thirds of the faculty respondents reported having had courses (n=61) and practice (n=51) in teaching in their graduate programs in nursing education. Also, the data confirms that faculty are teaching in their area of specialization and are teaching the application of the content which was taught in theory courses taken prior to the clinical.

The majority of faculty participating in this survey reported that students are admitted to the nursing program in either the second semester of their sophomore year or the first semester of their junior year and that the

students in the clinical are either first-semester juniors or first-semester seniors.

The general hospital was the most frequently reported setting for the clinical experience. Each clinical had an average of 8 students per day, for an average of 8 hours a day, for an average of 2 days a week, and for an average of 11 weeks.

Faculty report that their students use the nursing skills laboratory to practice clinical skills before the clinical experience from a few times a semester to weekly. Over two-thirds of the total faculty responding, reported starting and ending the clinical day with a small group conference.

In planning for the clinical day, over 80 percent of the faculty reported spending from 30 minutes to 2 hours developing teaching plans, over 70 percent reported inviting student input in the planning process and over 40 percent reported using objectives for a least some aspects of planning. Over half of the faculty reported that they planned the student's patient assignment(s) a day in advance ("most of the time" or "always"). Nearly thirty percent of the faculty plan the assignment(s) on the day of the clinical ("most of the time" or "always") and fifty percent reported that they "sometimes" had to change the assignment(s) due to patient availability.

Presentation of Findings For Research Question One

The purpose of the first research question was to obtain data which would describe the nature of the instructional practices utilized by clinical nursing faculty during clinical experiences. For the purposes of this study instruction was defined to include any time students are not engaged in patient care and the instructor brings the students together in some type of grouping to engage in a learning activity or when students are engaged in some type of independent or group learning activity without the clinical instructor.

Time Spent Instructing Students

Faculty were first asked to indicate what percentage of the time in an average clinical day is used to instruct students. As indicated in Table 23, the mean percentage

Table 23

Mean, Median, Mode, and Standard Deviation of Percent of Time Spent Instructing Students During the Clinical Day

Range of Scores	2 to 80
Mean	30.0139
Median	25
Mode	20
Standard Deviation	17.5107
Valid Cases	72

of time devoted to instruction is 30 with a mode of 20 and a median of 25. With a standard deviation of 17.5, it is evident that the percentage of time varied considerably among individual faculty.

Instructional Methods

Faculty were asked to estimate what percentage of the total instructional time (with students) they devoted to each of the following instructional methods: lecture, demonstration, recitation/drill, discussion, inquiry/discovery, problem-solving/decision making, and role-playing/simulations.

Lecturing. More than two-thirds (49) of the faculty reported spending between five and twenty percent of the instructional time lecturing. Of this number, respondents were nearly equally divided among the categories of five, ten, and twenty percent of time lecturing. Eight persons (11.1%) indicated that they spend no time lecturing and another seven (9.8%) reported that they lectured between 30 and 40 percent of the time. The distribution of faculty responses is presented in Table 24.

Demonstration. More than three-fourths (58) of the faculty reported using the demonstration method between 5 and 20 percent of the time. This includes one-third of the faculty who indicated that they use demonstrations five percent of the time; approximately one-fourth (23.6%)

Table 24

Frequency & Percentage Distributions of Percent of Time the Teaching Method of Lecturing is Used in Instruction

Rating	Frequency	Percent
0	8	11.1
5	17	23.6
10	15	20.8
20	17	23.6
30	3	4.2
40	4	5.6
50	1	1.4
60	1	1.4
70	2	2.8
80	1	1.4
90	1	1.4
Missing	2	2.8
Total	72	100.0

who reported ten percent; and approximately one-fourth (23.6%) who reported twenty percent of the instructional time. Three of the respondents indicated that they never use the demonstration method and the remainder of the responses (11.2%) ranged between 30 and 90 percent of the

time. See Table 25 for the distribution of responses.

Table 25

Frequency & Percentage Distribution of Percent of Time the Demonstration Teaching Method is Used in Instruction

Rating	Frequency	Percent
0	3	4.2
5	24	33.3
10	17	23.6
20	17	23.6
30	4	5.6
40	2	2.8
50	1	1.4
90	1	1.4
Missing	3	4.2
Total	72	100.0

Recitation/drill method. Approximately one-third of the faculty reported using a recitation or drill ten percent of the time. Fifteen (20.8%) and thirteen (18.1%) indicated that they use the recitation nor drill method five percent and twenty percent of the time respectively. Nine respondents (12.5%) indicated that they never use the recitation or drill methods in instruction. As with the

other methods, a few faculty report using the method as much as ninety percent of the time. Table 26 shows a distribution of faculty responses for the percentage of time the recitation/drill teaching method is used.

Table 26

Frequency & Percentage Distributions of Percent of Time the Recitation/Drill Method is Used in Instruction

Rating	Frequency	Percent
0	9	12.5
5	15	20.8
10	23	31.9
20	13	18.1
30	4	5.6
40	2	2.8
90	2	2.8
Missing	4	5.6
Total	72	100.0

Discussion. More than two-thirds (50) of the faculty reported using the discussion teaching method between five and thirty percent of the instructional time with students. Unlike the other methods described above, all faculty reported using the discussion method at least

five percent of the time. A review of Table 27 indicates that the use of the method ranges up to ninety percent of the time with the most frequently reported percentage falling at twenty percent. Eight faculty (11.1%) reported using discussion as much as forty percent of the time and thirteen (18.1%) indicated they use discussion thirty percent of the time. Finally, a little over fifteen

Table 27

Frequency & Percentage Distributions of Percent of Time the Discussion Teaching Method is Used in Instruction

Rating	Frequency	Percent
5	2	2.8
10	11	15.3
20	24	33.3
30	13	18.1
40	8	11.1
50	4	5.6
60	3	4.2
70	2	2.8
80	1	1.4
90	2	2.8
Missing	2	2.8
Total	72	100.0

percent (15.3%) reported they use discussion ten percent of the time.

Inquiry/discovery. Nearly thirty percent (29.2%) of the faculty reported that they use the inquiry/discovery teaching method at least twenty percent of the time. Another 15 persons (20.8%) reported they used the method ten percent of the time, 11 faculty (15.3%) indicated thirty percent, and an additional 8 faculty (11.1%) reported they use the method five percent of the time. The percent of use ranged between zero and ninety percent. See Table 28 for the frequency and percentage distributions for the percentage of time the inquiry/discovery method is used in clinical instruction with students.

Problem solving and decision making. An inspection of Table 29 will reveal that all of the faculty but one reported using problem-solving/decision making during instruction with students. For a few (4), it was the primary mode of instruction (70%, 80%, 90%, 100% respectively) and another thirteen indicated that they used the method 40 (7), 50 (3), and 60 (3) percent of the time. However, the greatest number of faculty reported using problem-solving/decision making only ten percent (37.5%) and twenty percent (18.1%) of the time.

Table 28

Frequency & Percentage Distributions of Percent of Time the Inquiry/Discovery Teaching Method is Used in Instruction with Students

Rating	Frequency	Percent
0	1	1.4
5	8	11.1
10	15	20.8
15	1	1.4
20	21	29.2
30	11	15.3
40	5	6.9
50	4	5.6
60	1	1.4
80	2	2.8
90	2	2.8
Missing	1	1.4
Total	72	100.0

Role-play/simulation. As indicated in Table 30, only five persons reported using role-play/simulations more that 10 percent of the time and the maximum percentage of time reported was fifty percent. Approximately one-fourth

Table 29

Frequency & Percentage Distributions of Percent of Time the Problem Solving/Decision Making Teaching Method is Used in Instruction with Students

Rating	Frequency	Percent
0	1	1.4
5	5	6.9
10	27	37.5
20	13	18.1
30	8	11.1
40	7	9.7
50	3	4.2
60	3	4.2
70	1	1.4
80	1	1.4
90	1	1.4
100	1	1.4
Missing	1	1.4
Total	72	100.0

(23.6%)of the faculty never use role-play/simulation teaching methods. Approximately two-thirds of the faculty

use the methods five percent (34.7%) and ten percent (30.6%) of the time.

Table 30

Frequency & Percentage Distributions of Percent of Time Role-Play/Simulation Teaching Method is Used in Instruction with Students

Rating	Frequency	Percent
0	17	23.6
5	25	34.7
10	22	30.6
20	3	4.2
40	1	1.4
50	2	2.8
Missing	2	2.8
Total	72	100.0

Summary of Teaching Methods Used

Table 31 includes an analysis and comparison of the percentages of time the different teaching methods were reported used in instruction by clinical nursing faculty. The data reveal that discussion is used the greatest percentage of time (mean 29.86) followed by inquiry /discovery (mean 24.72) and problem-solving/decision

making (mean 24.58). Role-play/simulations were used the least (mean 7.8) and the rest of the methods were each used around fifteen percent of the time. It should be noted that the methods which might be categorized as "student centered" (i.e., discussion, inquiry/discovery, and problem-solving/decision-making were used a greater percent of the time than the methods categorized as "teacher centered" (i.e., lecture, demonstration, recitation/drill, and role-play/simulation).

Table 31

Rank Ordering of Means & Standard Deviations of Percent of Time Different Teaching Methods were Reported Used by Clinical Faculty During Instruction with Students

Teaching Methods	Means	Standard Deviation
Discussion	29.8571	19.4298
Inquiry/Discovery	24.7183	19.8006
Problem-Solving/ Decision Making	24.5775	21.1246
Lecture	17.7857	19.4421
Demonstration	14.0580	13.7540
Recitation/Drill	13.8971	16.2730
Role-Play/Simulations	7.7857	9.6172

Instructional Strategies

Faculty were asked to rate how frequently it was appropriate to use the following instructional strategies: use student's past knowledge and experience, encourage student questions and comments, and use media in presentations to students. The instructional strategies were rated according to the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5). As indicated in Table 32, more than ninety

Table 32

Frequency & Percentage Distributions of Instructional Strategies Used By Faculty During The Clinical Experience

	Instructional Strategies					
	Knowledge & Experience		Student Questions & Comments		Use Media	
Rating	n	%	n	%	n	%
Never	0	0.0	0	0.0	2	2.8
Sometimes	4	5.6	0	0.0	17	23.6
Frequently	22	30.5	14	19.4	31	43.1
Most of the Time	26	36.1	26	36.1	17	23.6
Always	20	27.8	32	44.4	5	6.9
Total	72	100.0	72	100.0	72	100.0

percent or 68 of the faculty reported that they "frequently" to "always" use the student's past knowledge and experience to relate the content to the principles or concepts being taught. More than eighty percent of the faculty (58) reported that they "most of the time" to "always" encourage student questions and comments. Another nineteen percent of the faculty (14) reported that they "frequently" encourage student comments and questions. Forty-three percent of the faculty (31) reported that they "frequently" use media in their presentations to students during the clinical day. Another twenty-three percent of the faculty (17) reported that they "most of the time" use media in their presentation.

Types of media. Faculty were asked to indicate the frequency with which they used the following kinds of media in their presentations to students: transparencies, simulated or real patient charts or kardexes, audio-tapes, video-tapes, film/slides, and handouts (see Table 33). Faculty were asked to rate the different kinds of media used according to the following scale: Never (1), Sometimes (2), Frequently (3), Most of the Time (4), Always (5). Slightly more than half of the faculty (39) reported using transparencies "never" to "sometimes". More than eighty percent of the faculty (60) reported

using simulated or real patient charts or kardexes between "sometimes" to "most of the time". Slightly more than half of the faculty (38) reported that they "sometimes" use audio-tapes. Over forty percent of the faculty (35) reported that they "sometimes" use video-tapes. Over fifty percent of the faculty (39) reported that they "sometimes" use films and slides. One third of

Table 33

Frequency & Percentage Distributions of Types of Media Used By Faculty During The Clinical Experience

	Rating									
	Never		Sometimes		Frequently		Most Of The Time		Always	
Media	n	%	n	%	n	%	n	%	n	%
Trans-parencies	19	26.4	20	27.8	12	16.7	12	16.7	5	6.9
Patient Charts	6	8.3	27	37.5	19	26.4	14	19.4	3	4.2
Audio-Tapes	24	33.3	38	52.8	4	5.6	3	4.2	0	0.0
Video-Tapes	10	13.9	35	48.6	22	30.6	1	1.4	3	4.2
Films/ Slides	14	19.4	39	54.2	13	18.1	2	2.8	0	0.0
Handouts	1	1.4	12	16.7	24	33.3	19	26.4	14	19.4

the faculty (24) reported that they "frequently" use handouts in their presentations.

Summary of Instructional Strategies

The data analysis of the instructional strategies reveals that over fifty percent of faculty are using these strategies "frequently" to "most of the time". The data analysis of the types of media used indicates that 20 percent to 50 percent of faculty (20-39) use transparencies, patient charts, audio-tapes, video-tapes, and films/slides at least "sometimes". Handouts are "frequently" used by a third (24) of the faculty.

Questioning Strategies

Faculty were asked to respond to a series of items related to the frequency of use of different types of questioning strategies. Faculty were asked to rate the types of questioning strategies used according to the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5).

For each of the items listed, thirty percent or more of the faculty responded that they "frequently" use all these strategies when conducting a discussion with students. Of these, the one most "frequently" used by fifty-three percent of the faculty was the strategy of asking questions which require interpretation, synthesis, analysis, and evaluation.

Five of the nine questioning strategies are advocated as increasing higher-order thinking skills of students. These five include: (b) ask questions which require interpretation, synthesis, analysis and evaluation; (c) ask probing questions to require students to go beyond superficial "first answer" responses; (e) ask questions which require students to "discover facts, concepts or principles; (f) require students to formulate questions that needed information to establish facts or solve problems (inquiry); and (g) ask questions which elicit student divergent thinking (refer to Appendix A for a complete description of the questioning strategies).

From forty to over fifty percent of the faculty rated four of the five higher-order questioning strategies as being "frequently" used and thirty-eight percent rated the fifth strategy as being used "most of the time". The percent distribution of faculty responses to each item is presented in Table 34.

Teaching Methods Specific to Nursing Instruction

Faculty were asked a series of questions concerning the frequency of use of methods of instruction specifically related to teaching in the clinical area of nursing. These methods were cited in the nursing literature as being appropriate for use in clinical instruction (Carpenito & Duespohl, 1985; Schweer & Gebbie,

1976). Faculty were asked to rate their responses using the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5).

Table 34

Percent Distributions of Responses to Questioning Strategies by Faculty

	Rating				
Questioning Strategies	Never	Sometimes	Frequently	Most Of The Time	Always
Recall	0.0	22.2	38.9	23.6	13.9
Interpre-tation*	0.0	2.8	52.8	22.2	20 8
Probing*	0.0	12.5	30.6	37.5	18.1
Feelings Values	0.0	18.1	45.8	25.0	9.7
Discover Facts*	0.0	18.1	41.7	26.4	12.5
Inquiry*	0.0	20.8	44.4	20.8	8.3
Divergent Thinking*	0.0	23.6	43.1	20.8	9.7
Use Wait-Time	4.2	11.1	31.9	31.9	19.4
Different-iate Responses	0.0	11.1	41.7	22.2	18.1

* indicates higher-order questioning strategies

Nursing care conferences. Table 35 indicates that sixty-five or 90 percent of the faculty reported that they "frequently" to "always" used a nursing care conference format when using discussion as a teaching method. Only seven faculty or 10 percent report that they "sometimes" used a nursing care conference format.

Table 35

Frequency & Percentage Distributions of Faculty Responses to the Use of a Nursing Care Conference

Rating	Frequency	Percent
Never	0	0.0
Sometimes	7	9.7
Frequently	25	34.7
Most Of The Time	23	31.9
Always	17	23.6
Total	72	100.0

Nursing rounds format. Over two-thirds (51) or 70.8 percent of the faculty reported that they "sometimes" to "frequently" used a nursing rounds format when using discussion as a teaching method. Another 15 percent or 11 faculty reported that they "most of the time" used this

format. Table 36 presents the frequency and percentage distributions of faculty responses to this item.

Table 36

Frequency & Percentage Distributions of Faculty Responses to the Use of Nursing Rounds

Rating	Frequency	Percent
Never	3	4.2
Sometimes	26	36.1
Frequently	25	34.7
Most Of The Time	11	15.3
Always	6	8.3
Missing	1	1.4
Total	72	100.0

Case analysis and case incident. When faculty used inquiry/discovery as a teaching method, a case analysis format was used "sometimes" to "frequently" by over 70 percent of the faculty (55) and over 60 percent of the faculty (48) used a case incident format "sometimes" to "frequently". Table 37 presents the responses of faculty to these items.

Table 37

Frequency & Percentage Distributions of Faculty Responses to the Use of Case Analysis and Case Incident

	Case Analysis		Case Incident	
Rating	Frequency	Percent	Frequency	Percent
Never	5	6.9	3	4.2
Sometimes	29	40.3	21	29.2
Frequently	27	37.5	27	37.5
Most Of The Time	7	9.7	15	20.8
Always	3	4.2	5	6.9
Missing	1	1.4	1	1.4
Total	72	100.0	72	100.0

Independent & Group Learning Instructional Methods

Faculty were asked a series of questions concerning instructional methods used when students are engaged in independent and group learning activities without the instructor. Some items were subgrouped as individual projects/written assignments. The items classified as written assignments were: nursing case study, process recording, nursing care plans, clinical logs, and teaching/learning plans.

As indicated in Table 38, over thirty percent of the faculty (24-30) reported that they "sometimes" used case study, process recording and clinical logs as written assignments. The written assignment of developing teaching/learning plans was used "frequently" by only thirty percent of the faculty (22). Over fifty-five percent of the faculty (40) reported that they "most of the time" to "always" used the written assignment of developing nursing care plans.

Items grouped as individual projects and or group projects included the following: observation within the clinical setting, assigned tasks, programmed learning, audio-taped materials, and video-taped materials. Forty percent of the faculty (29) reported that they "frequently" used observation within the clinical setting and assigned tasks as individual projects. Fifty to sixty percent of the faculty (43-49) reported that they "sometimes" used audio-taped and video-taped materials and over fifty percent or 39 faculty reported "never" using programmed learning as an individual project for the students in the clinical experience.

Field Trips

The last question on the questionnaire dealing with the instructional practices of faculty was concerned with the use of field trips as part of clinical instruction.

Table 38

Percent Distributions of Faculty Responses to Instructional Methods Used in Independent and Group Learning Activities

	Rating				
Instructional Methods	Never	Sometimes	Frequently	Most Of The Time	Always
Nursing Case Study	5.6	41.7	29.2	13.9	6.9
Process Recording	30.6	33.3	9.7	6.9	18.1
Nursing Care Plan	1.4	15.3	26.4	27.8	27.8
Clinical Logs	18.1	33.3	18.1	6.9	22.2
Teaching/ Learning Plans	5.6	27.8	30.6	18.1	15.3
Observation	0.0	12.5	40.3	12.5	30.6
Assigned Tasks	1.4	26.4	37.5	15.3	15.3
Programmed Learning	54.2	34.7	6.9	1.4	0.0
Audio-Taped Materials	19.4	68.1	6.9	1.4	0.0
Video-Taped Materials	15.3	59.7	18.1	1.4	1.4

Over ninety percent of the faculty (70) reported "never" to "sometimes" using field trips as part of clinical instruction. Table 39 presents the responses of faculty to this question.

Table 39

Frequency & Percentage Distributions of Faculty Responses to the Use of Field Trips

Rating	Frequency	Percent
Never	25	34.7
Sometimes	45	62.5
Frequently	1	1.4
Most Of The Time	0	0.0
Always	0	0.0
Missing	1	1.4
Total	72	100.0

Summary of Findings for Research Question One

Analysis of the data related to percent of instructional time spent with students indicates that faculty spend at least thirty percent of the clinical time instructing students. In responding to types of teaching methods used during instructional time with students,

faculty indicated that they use all the methods presented at least five to thirty percent of the time. The teaching method of discussion is used an average of twenty-nine percent of the time, and only seven percent of the time is spent using the methods of role-playing/simulations. The data revealed that faculty are using more student-centered teaching methods that teacher-centered methods.

The instructional strategies used "frequently" to "most of the time" when faculty are presenting information to students were: (a) use student's past knowledge and experience to relate the content to the principles or concepts being taught, and (b) encourage student questions and comments. The instructional strategy of use of media to reinforce/complement a verbal presentation was used "frequently" by over 40% of the faculty. Of all the types of media used during clinical instruction, handouts appear to be used most frequently by faculty when they are presenting information to students.

Thirty percent or more of the faculty respondents indicated that they "frequently" use all the questioning strategies when conducting a discussion with students. Forty to fifty percent of the faculty respondents rated four of the five higher-order questioning strategies as being "frequently" used and thirty-eight percent rated the fifth strategy as being used "most of the time".

Of the teaching methods related specifically to clinical instruction, faculty indicted that they used the method of a nursing care conference more frequently than the nursing rounds method. The data also indicated that the method of case incident was used more frequently than the case analysis method. The instructional method used most frequently when students were engaged in independent (written) learning activities was nursing care plans. The method of using observation within the clinical setting was used most frequently as an independent or group project learning activity. The least used instructional method for independent or group learning activities was programmed learning. Faculty also indicated that they do not use field trips very much during the clinical experience.

Presentation of Findings For Research Question Two

Research question two sought to determine the nature of the supervisory practices utilized by clinical nursing faculty during the clinical teaching of baccalaureate nursing students. For the purposes of this study supervision was operationalized to mean when students are individually engaged in patient care and the clinical instructor circulates through the facility to observe each student as they perform their tasks and confers with them individually about their performance.

Time Spent Supervising Students

Faculty were asked to indicate what percentage of time, during an average clinical day, they spend supervising students. As indicated in Table 40 they

Table 40

Mean, Median, Mode, and Standard Deviation of Percent of Time Spent Supervising Students During the Clinical Day

Mean	69.9861
Median	75
Mode	80
Standard Deviation	17.5107
Valid Cases	72

reported spending at least seventy percent (70%) of the time involved in supervising students.

Supervising Activities

The respondents were asked to indicate the percentage of time they engage in the following supervisory activities while students are caring for patients: (a) observing students; (b) analyzing observation data and preparing for conferences; (c) conducting conferences; (d) recording and processing data about the performance and progress of individual students; and (e) role modeling. A perusal of Table 41 reveals that faculty reported spending 51% of the

time observing students, 38% of the time engaged in role modeling, 15% of the time conducting conferences, 13% of the time analyzing observation data and preparing for conferences, and 12% of the time recording and processing data about the performance and progress of individual students.

Table 41

Rank Order of Means and Standard Deviations of Percent of Time Spent in Supervising Activities

Supervising Activities	Means	Standard Deviations
Observing Students	51.05	24.06
Role Modeling	38.45	35.17
Conducting Conferences	15.89	9.99
Analyzing Data	13.10	13.35
Recording & Processing Data	12.45	15.62

Time Spent Observing Students

As shown in Table 42, approximately a third (30.6%) of the faculty observe students for a period of ten to twenty minutes when supervising students. Twelve faculty (16.7%) reported that they observe for a period of twenty to thirty minutes. It should be noted that over forty

Table 42

Frequency & Percentage Distributions of Time Spent Observing Students During The Clinical Day

Rating	Frequency	Percent
Under 10 Minutes	6	8.3
10 to 20 Minutes	22	30.6
20 to 30 Minutes	12	16.7
30 to 40 Minutes	15	20.8
Over 40 Minutes	15	20.8
Missing	2	2.8
Total	72	100.0

percent of the respondents indicated that they observe students for more than thirty minutes (20.8% for 30 -40 minutes and 20.8% over 40 minutes). It is also interesting to note that six faculty (8.3%) reported observing students for less than ten minutes.

Conferencing Prior To Observing Students

Table 43 indicates that thirty percent of the faculty (22) "frequently" conference with a student before observing them. Seventeen (23.6%) of the faculty indicated that they confer with students "most of the time" and fifteen (20.8%) "always" confer with students

prior to observing them. It should be noted that three respondents reported that they "never" confer with students prior to observing them and another fourteen (19.4%) indicated that they "sometimes" confer with the students.

Table 43

Frequency and Percentage Distributions of Conferencing with Students Prior to Observing Them

Rating	Frequency	Percent
Never	3	4.2
Sometimes	14	19.4
Frequently	22	30.6
Most Of The Time	17	23.6
Always	15	20.8
Missing	1	1.4
Total	72	100.0

Conferencing Activities Prior to Observing Students

One item on the questionnaire was concerned with the types of activities faculty used during the conference with students prior to an observation. Faculty were asked how frequently they use the following activities: (a) discussion of the objectives for the day; (b) discussion

of the procedures the student will demonstrate; and (c) discussion of how and what the clinical instructor will observe.

One-third (24) of the faculty responded that they "always" before observing a student discuss the objectives with them. Over sixty percent (63.9%) of the faculty (46) reported that they "most of the time" to "always" discuss the procedures the student will demonstrate before observing them. Over one-third (28) or 39% of the faculty reported that they "most of the time" to "always" discuss how and what they will observe before observing the student. Another third (25) or 34.7% of the faculty reported that they "frequently" discuss how and what they will observe before observing the student. Table 44 presents the responses of faculty to these activities prior to observing students.

Methods Used During the Supervision of Students

The respondents were asked to rate the frequency with which they use the following methods when observing a student. The methods are: (a) informal notes; (b) selective verbatim notes; (c) narrative/systematic description; (d) performance checklist; (e) rating scale. Faculty were asked to rate the above listed methods according to the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5).

Table 44

Frequency & Percentage Distributions of Conferencing Activities Prior to Faculty Observing Students

	Conferencing Activities					
	Discuss Objectives		Discuss Procedures		Discuss How & What Observe	
Rating	n	%	n	%	n	%
Never	2	2.8	2	2.8	1	1.4
Sometimes	7	9.7	7	9.7	17	23.6
Frequently	19	26.4	15	20.8	25	34.7
Most Of The Time	19	26.4	24	33.3	14	19.4
Always	24	33.3	22	30.6	14	19.9
Missing	0	0.0	2	2.8	1	1.4
Total	72	100.0	72	100.0	72	100.0

The responses indicated that informal notes were "most of the time" to "always" used by more than one-half (39) or 54.2% of the faculty; verbatim notes were "sometimes" used by less than one-half (31) or 43.1% of the faculty; narrative notes were "sometimes" used by less than one-third (23) or 31.9% of the faculty; a performance checklist was "never" used by less than one-half (31) or

(43.1%) of the faculty; and more than half (45) or (62.5%) of the faculty "never" used a rating scale when observing students. It is interesting to note that none of the methods were overwhelmingly used by a majority of the faculty when observing a student during supervision. Table 45 presents the results of the responses by faculty to these methods.

Table 45

Percent Distributions of Faculty Responses to Methods Used During Supervision of Students

Supervision Method	Rating				
	Never	Sometimes	Frequently	Most Of The Time	Always
Informal Notes	6.9 (n=5)	25.0 (n=18)	12.5 (n=9)	23.6 (n=17)	30.6 (n=22)
Verbatim Notes	26.4 (n=19)	43.1 (n=31)	16.7 (n=12)	8.3 (n=6)	4.2 (n=3)
Narrative Notes	20.8 (n=15)	31.9 (n=23)	19.4 (n=14)	15.3 (n=11)	12.5 (n=9)
Performance Checklist	43.1 (n=31)	26.4 (n=19)	13.9 (n=10)	5.6 (n=4)	11.1 (n=8)
Rating Scale	62.5 (n=45)	25.7 (n=18)	4.3 (n=3)	2.9 (n=2)	2.9 (n=2)

Supervisory Behavior

Faculty were asked a series of questions concerning

their supervisory behavior when observing students. Faculty were asked to rate the frequency of use of these behaviors according to the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5).

As indicated in Table 46, over one-third (26) or 36.1% of the faculty reported that they "most of the time" allow the student to recognize and correct errors on their own. Over three-quarters (61) or 84.7% of the faculty reported that they "sometimes" step in and take over for the student. Over one-third (32) or 44.4% of the faculty reported that they "frequently" provide assistance without taking over. Less than one-third (23) or 31.9% of the faculty reported that they "most of the time" provide feedback to discourage certain behavior. Over one-third (25) or 34.7% of the faculty reported that they "always" provide feedback to encourage certain behavior.

It is important to note that more than eighty percent of the faculty report that they only "sometimes" have to "step in and take over" for a student when they are supervising them.

Post-Observation Conference

Frequency of a post-observation conference. Faculty were asked a series of questions concerning their supervisory behavior after observing students. The first

Table 46

Percent Distribution of Faculty Responses to Supervisory Behavior During the Observation of Students

Supervisory Behavior	Rating				
	Never	Sometimes	Frequently	Most Of The Time	Always
Allow student to recognize and correct errors on their own	0.0 (n=0)	20.8 (n=15)	30.6 (n=22)	36.1 (n=26)	9.7 (n=7)
Step in & take over	6.9 (n=5)	84.7 (n=61)	6.9 (n=5)	0.0 (n=0)	0.0 (n=0)
Provide assistance without taking over	1.4 (n=1)	15.3 (n=11)	44.4 (n=32)	29.2 (n=21)	8.3 (n=6)
Provide feedback to discourage certain behavior	2.8 (n=2)	22.2 (n=16)	25.0 (n=18)	31.9 (n=23)	16.7 (n=12)
Provide feedback to encourage certain behavior	1.4 (n=1)	6.9 (n=5)	27.8 (n=20)	27.8 (n=20)	34.7 (n=25)

question asked how frequently do they conduct a post-observation conference after observing an individual student (see Table 47). Faculty were asked to rate their responses according to the following scale: Never (1),

Table 47

Frequency & Percentage Distributions of Responses of Faculty to Conducting a Post-Observation Conference

Rating	Frequency	Percent
Never	1	1.4
Sometimes	9	12.5
Frequently	17	23.6
Most Of The Time	28	38.9
Always	17	23.6
Total	72	100.0

Sometimes (2), Frequently (3), Most Of The Time (4), Always (5). Twenty-eight or 38.9 percent of the faculty responded that they "most of the time" conducted a post-observation conference. Seventeen faculty or 23.6% reported that they "frequently" conducted a post-observation conference and another seventeen faculty responded that they "always" conducted a post-observation conference. Only one faculty reported that they "never" conducted a post-observation conference.

Time for a post-observation conference. The second question asked how soon after observing a student do

faculty conduct a post-observation conference (see Table 48). Faculty were asked to rate their responses according to the following scale: Immediately (1), Within The Hour (2), Several Hours Later (3), The Next Day (4), During The Next Clinical Day (5). Over sixty percent (61.1%) of the faculty (44) reported that they conduct the post-observation conference "immediately" after observing the student. Another twenty-nine percent (29.2%) or 21 of the faculty reported conducting the conference "within the hour" after the observation of a student.

Table 48

Frequency & Percentage Distributions of Responses of Faculty to the Time for a Post-Observation Conference

Rating	Frequency	Percent
Immediately	44	61.1
Within The Hour	21	29.2
Several Hours Later	5	6.9
The Next Day	0	0.0
The Next Clinical Experience	1	1.4
Missing	1	1.4
Total	72	100.0

Conferencing activities. The third question concerning the post-observation conference behavior of faculty asked how frequently it was appropriate to include certain activities when conducting the conference (see Table 49). Faculty were asked to rate their responses according to the following scale: Never (1), Sometimes (2), Frequently (3), Most Of The Time (4), Always (5).

More than forty percent (47.2%) of the faculty (34) reported that they "sometimes" asked students to state the learning objective for the clinical day. Forty-two percent or 30 of the faculty reported that they "always" asked students to reflect on their performance during the clinical day. Twenty-seven or 38% of the faculty reported that they "always" asked students to evaluate the day's activities. Forty-six percent or 33 of the faculty reported that they "most of the time" asked students to identify problems encountered during the clinical day. Forty percent of the faculty (29) reported that they "most of the time" provided objective descriptive feedback on their performance for the day.

More than forty percent (48.6%) or 35 of the faculty reported that they "always" provided positive feedback to students concerning their performance for the day. Thirty-eight percent of the faculty (27) reported that they "sometimes" provided negative feedback to students

Table 49

Percent Distributions of Responses of Faculty to Post-Observation Conference Activities

Conference Activity	Rating				
	Never	Sometimes	Frequently	Most Of The Time	Always
Student state learning objectives	13.9 (n=10)	47.2 (n=34)	19.4 (n=14)	6.9 (n=5)	9.7 (n=7)
Student reflect on performance	0.0 (n=0)	8.3 (n=6)	18.1 (n=13)	30.6 (n=22)	41.7 (n=30)
Student evaluate the day's activities	0.0 (n=0)	8.3 (n=6)	16.7 (n=12)	36.1 (n=26)	37.5 (n=27)
Student identify problems	0.0 (n=0)	4.2 (n=3)	18.1 (n=13)	45.8 (n=33)	30.6 (n=22)
Provide objective feedback	0.0 (n=0)	2.8 (n=2)	22.2 (n=16)	40.3 (n=29)	33.3 (n=24)
Provide positive feedback	0.0 (n=0)	1.4 (n=1)	18.1 (n=13)	30.6 (n=22)	48.6 (n=35)
Provide negative feedback	6.9 (n=5)	37.5 (n=27)	23.6 (n=17)	11.1 (n=8)	19.4 (n=14)
Suggest-ions to improve	1.4 (n=1)	1.4 (n=1)	25.0 (n=18)	34.7 (n=25)	36.1 (n=26)
Ask questions to analyze performance	0.0 (n=0)	4.2 (n=3)	15.3 (n=11)	45.8 (n=33)	33.3 (n=24)
Engage in problem-solving	0.0 (n=0)	5.6 (n=4)	26.4 (n=19)	41.7 (n=30)	25.0 (n=18)
Develop new skill or knowledge	1.4 (n=1)	5.6 (n=4)	29.2 (n=21)	38.9 (n=28)	23.6 (n=17)

concerning their performance for the day. Thirty-six percent or 26 of the faculty reported that they "always" made suggestions on how the students could improve their performance for the clinical day.

More than forty-five percent (45.8%) or 33 of the faculty reported that they "most of the time" asked questions which requested the students to analyze their performance for the clinical day. Thirty or 41.7% of the faculty reported that they "most of the time" engaged the students in problem-solving steps to develop a revised plan for performance. Thirty-nine percent of the faculty (28) reported that they "most of the time" assisted students in developing a new skill or knowledge.

At least sixty percent or more of the faculty indicated that they "most of the time" to "always" included most of these activities in their post-observation conferences with students. At least thirty percent or more of the faculty reported only "sometimes" engaging in the activities of asking the student to state the learning objective for the patient care experience and providing negative feedback on student's performance.

Summary of Findings for Research Question Two

Analysis of the data related to supervisory time spent with students indicates that faculty spend at least seventy percent of the clinical time supervising students.

When faculty are engaged in supervising students most of the time is spent in observation (51%), as opposed to role modeling (38%), conducting conferences (16%), analyzing data (13%), or recording and processing data about the performance of the students (12%). During supervision, more than half of the faculty reported that they spend from twenty to over forty minutes observing an individual student.

Less than half of the faculty reported that they "frequently" conference with the student prior to observing them. When faculty conference with a student prior to observing them, over fifty percent reported that they "frequently" to "always" discuss the objectives, discuss the procedures the student will demonstrate, and discuss how and what the instructor will observe.

Of the methods used during the observation of students, over fifty percent of the faculty reported using informal notes "most of the time" to "always". Over sixty percent of the faculty reported "never" using some type of rating scale.

Concerning the supervisory behavior of faculty during the observation of students, faculty perceive themselves as "most of the time" allowing the student to recognize and correct errors on their own, "sometimes" stepping in

and taking over for the student, "frequently" providing assistance without taking over, "most of the time" providing feedback to discourage certain behavior, and "always" providing feedback to encourage certain behavior.

Over thirty-eight percent of the faculty indicated that they "most of the time" conduct a post-observation conference and over sixty-one percent reported conducting this conference "immediately" after observing the student. Of the eleven items included in the post-observation conference activities, over sixty percent of the faculty found it appropriate to "most of the time" to "always" include nine of the eleven items. These items were: (a) ask students to reflect on their performance, (b) ask students to evaluate the clinical day's activities, (c) ask students to identify problems encountered during the clinical day, (d) provide objective descriptive feedback, (e) provide positive feedback to students (f) make suggestions on how to improve students performance, (g) ask student to analyze their performance for the clinical day, (h) engage students in problem-solving steps to develop a revised plan for performance and (i) assist students in developing a new skill or knowledge.

Presentation of Findings For Research Question Three

Research question three sought to determine if the instructional and supervisory practices differ according

to clinical specialties. For the purposes of this study clinical specialties were operationalized to mean specific areas of nursing within the clinical setting (e.g., medical/surgical (M/S), maternal/child (M/C), community (COMM), psychiatric (PSY), pediatric (PEDI), adult nurse practitioner (ANP)). In order to answer this research question the respondents of this study were categorized according to their clinical specialties. Their responses were then compared, according to clinical specialties, to each of the questions on the survey instrument that dealt with instruction and supervision.

A one-way analysis of variance (ANOVA) was then performed on the data to test for the significance of differences between the means of the ratings of the clinical specialty groups and the instructional and supervisory questions. After computing the ANOVA, a multiple comparison procedure (Tukey's procedure) was computed on those variables indicating a significance difference at the .05 level in order to determine which clinical specialty group means are causing the difference. The multiple comparison tests are only used when the F value is found to be significant (Polit & Hungler, 1987).

In this study, the ANOVA statistical test was used as a descriptive tool to further analyze the data obtained in answering research question three. According to Borg and

Gall (1983) statisticians have conducted research to determine what happens if the assumptions underlying parametric statistics are violated. The results of the research indicates that these tests provide accurate estimates of statistical significance even under conditions of substantial violations of the assumptions.

Instructional Practices By Clinical Specialty

Time Spent Instructing Students

Data analysis has already revealed that faculty spend at least 30 percent of their time during an average clinical day instructing students. In comparing the percent of time spent instructing students by clinical specialty it appears that the community faculty spend the most time (46%) and the pediatric faculty spend the least amount of time (24%). A rank ordering of the means and standard deviations of percent of time spent instructing students by clinical specialty are presented in Table 50.

Teaching Methods

Table 51 compares the clinical specialties with the percent of time different teaching methods were used during instruction. It appears that the community faculty used each of the teaching methods more than any of the other clinical specialties. The community faculty even used the teaching method of role-play/simulations, twice as much as any of the other clinical specialties.

Table 50

Rank Ordering of the Means & Standard Deviations of Percent of Time Spent Instructing Students by Clinical Specialty

Clinical Specialty	Number (72)	Mean	Standard Deviation
Community	10	45.6000	18.7154
Adult Nurse Practitioner	3	43.3333	5.7735
Psychiatric	8	36.2500	22.3207
Medical/Surgical	25	26.0800	13.7808
Maternal/Child	16	24.6250	16.6408
Pediatric	10	23.9000	15.4952

All the specialties indicated spending more time utilizing the teaching methods of discussion, inquiry/discovery, and problem solving/decision making (i.e., student centered teaching methods) as compared with the methods of lecture, demonstration, and recitation/drill (i.e., teacher centered teaching methods).

Instructional Strategies

The data analysis of the means of frequency of use of different instructional strategies by clinical specialty as reported in Table 52, indicated that five out of the

Table 51

Summary of Means & Standard Deviations of Percent of Time Spent Using Different Teaching Methods by Clinical Specialty

Teaching Method		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Lecture	M	14	19	36	14	9	18
	SD	17	18	30	14	8	19
Demonstration	M	10	17	27	11	12	10
	SD	7	11	28	9	9	9
Recitation/ Drill	M	10	12	28	8	15	13
	SD	9	9	33	10	13	11
Discussion	M	27	29	41	33	28	23
	SD	13	23	29	10	19	23
Inquiry/ Discovery	M	22	28	32	18	25	27
	SD	14	26	31	8	15	21
Problem Solving Decision Making	M	21	27	34	23	23	20
	SD	16	30	26	10	19	17
Role-Play	M	7	5	15	9	7	5
	SD	8	6	19	5	6	0

Note. Means and standard deviations were rounded off to nearest whole number.

six clinical specialties rated using all of the instructional strategies "frequently" (3) to "most of the time" (4). The clinical specialty group of adult nurse

practitioner rated the frequency of use of media as only being used "sometimes" (2). The maternal/child group was the only group to give a rating of 3 ("frequently") to using the instructional strategy of encouraging student questions and comments, all the other groups rated this as

Table 52

Summary of Means & Standard Deviations of the Ratings of Frequency of Use of Instructional Strategies By Clinical Specialty

Clinical Specialty	Instructional Strategies					
	Knowledge & Experience		Student Questions & Comments		Use Media	
	M	SD	M	SD	M	SD
Medical/ Surgical	3.92	.89	4.52	.65	3.00	.96
Maternal/ Child	3.31	.95	3.75	.78	3.06	.85
Community	4.40	.84	4.20	.92	3.50	.97
Psychiatric	3.75	.46	4.36	.52	3.00	1.07
Pediatric	4.00	.82	4.20	.79	3.10	1.00
Adult Nurse Practitioner	4.33	1.15	4.70	.58	2.70	.58

Note. Means and standard deviations were rounded off to the nearest hundredth.

a 4 ("most of the time"). The specialty groups seemed to be evenly divided in their ratings on the use of the instructional strategy of using a student's past knowledge and experience to relate the content to the principles being taught.

Types of Media

The comparison by clinical specialty of the means for the ratings of the six types of media used by faculty during instruction revealed that all the clinical specialties rated five of the six types of media from "never" (1) to "sometimes" (2) (see Table 53). All the clinical specialties indicated using the media of handouts "frequently" (3).

Questioning Strategies

The analysis of data comparing the frequency of use of different types of questioning strategies by clinical specialties, indicated that three of the nine strategies were given a rating of "frequently" (3) by all of the clinical specialties. These three strategies were: ask questions which require students to "discover" fact, concepts, or principles; use "wait-time" between asking a question and calling on a student; and differentiate responses to student answers.

The clinical specialty group of maternal/child rated all the questioning strategies as "frequently" (3) used

Table 53

Summary of Means & Standard Deviations of the Ratings of Frequency of Use of Media By Clinical Specialty

Types of Media		Clinical Specialty M/S	M/C	COMM	PSY	PED	ANP
Transparencies	M	2.36	2.36	2.40	2.00	3.00	2.33
	SD	1.18	1.44	1.17	1.41	1.51	.58
Patient Charts	M	2.68	2.93	2.60	2.88	2.50	2.67
	SD	.99	1.10	1.17	1.13	.96	1.15
Audio-Tapes	M	1.68	1.88	1.70	1.62	2.30	2.00
	SD	.76	.81	.67	.52	.88	.00
Video-Tape	M	2.28	2.44	2.40	2.00	2.60	2.00
	SD	.93	1.09	.70	.53	1.01	0.00
Films/Slides	M	1.92	2.33	2.10	1.75	2.13	2.00
	SD	.65	.82	.74	.46	.99	0.00
Handouts	M	3.40	3.80	3.90	3.00	3.33	3.00
	SD	1.04	1.08	.99	1.31	.71	1.00

Note. Means and standard deviations were rounded off to the nearest hundredth.

during instruction. It is interesting to note that the psychiatric group was the only group to give a rating of 4 ("most of the time") to asking questions that elicit students' feelings and values.

The clinical specialty groups rated three of the five higher order questioning strategies as being used

"frequently" (3) to "most of the time" (4). The two remaining strategies of asking questions which require inquiry and asking questions which require divergent thinking were rated as being used only "sometimes" (2) to "frequently" (3) by the clinical specialty groups. A summary of these results are presented in Table 54.

Teaching Methods Specific to Nursing Instruction

Nursing care conference and nursing rounds. The comparison of the ratings of frequency of use of teaching methods specific to nursing instruction revealed that nursing care conference was rated as being used "most of the time" (4) by the community faculty, while the other specialties rated it used only "frequently" (3). Nursing rounds were rated "sometimes" (2) used by the medical/surgical and maternal/child faculty, while the other clinical specialties gave it a rating of "frequently" (3).

Case analysis and case incident. Case analysis was rated "frequently" (3) used by the community group and the adult nurse practitioner group, while the other clinical specialties gave it a rating of "sometimes" (2). Case incident was rated "sometimes" (2) used by the medical/surgical and pediatric faculty and rated "frequently" (3) used by the other clinical specialties. The means and standard deviations of the ratings by

Table 54

Summary of Means & Standard Deviations of the Ratings of the Frequency of Use of Questioning Strategies by Clinical Specialty

Questioning Strategy		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Recall	M	3.32	3.33	3.90	2.75	3.40	2.00
	SD	1.11	.82	.74	.89	.84	0.00
Interpretation*	M	3.60	3.60	4.00	3.25	3.60	3.67
	SD	.82	.91	.94	.46	.97	1.15
Probing*	M	3.64	3.33	3.80	3.40	3.80	4.33
	SD	.81	1.11	1.03	.74	1.03	.58
Feelings & Values	M	2.96	3.00	3.80	4.13	3.30	3.00
	SD	.84	.76	.99	.64	.67	1.00
Discover*	M	3.24	3.20	3.90	3.38	3.30	3.00
	SD	.97	.77	.99	.52	1.16	1.00
Inquiry*	M	3.25	3.14	3.56	3.00	2.90	3.00
	SD	.99	.77	1.01	.76	.74	1.00
Divergent Thinking*	M	2.88	3.07	3.50	3.38	3.40	3.67
	SD	.85	.80	1.08	.74	1.08	1.20
Use Wait-Time	M	3.40	3.67	3.50	3.63	3.50	3.67
	SD	1.15	1.17	.85	1.51	.71	.58
Differentiate	M	3.65	3.57	3.56	3.38	3.20	3.33
	SD	1.03	1.09	1.01	.52	.63	1.53

*Indicates higher-order questioning strategies.

Note. Means and standard deviations were rounded off to the nearest hundredth.

clinical specialties of the frequency of use of the instructional methods specific to nursing education are presented in Table 55.

Table 55

Summary of Means & Standard Deviations of the Ratings of Frequency of Use of Instructional Methods Specific to Nursing Education by Clinical Specialty

Instructional Method		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Nursing Conference	M	3.68	3.63	4.00	3.50	3.50	3.90
	SD	.80	1.09	1.05	.93	.99	1.00
Nursing Rounds	M	2.64	2.69	3.20	3.00	3.20	3.50
	SD	.91	.79	1.40	1.00	.92	2.12
Case Analysis	M	2.40	2.67	3.20	2.75	2.40	3.00
	SD	.58	.90	1.55	.46	.97	1.00
Case Incident	M	2.64	3.27	3.10	3.38	2.90	3.00
	SD	.86	1.10	1.29	.52	.99	1.00

Note. Means and standard deviations were rounded off to the nearest hundredth.

Independent and Group Instructional Methods

A comparison of the ratings by clinical specialty of the instructional methods used when students are engaged in independent and group learning activities without the instructor revealed that the only method given the same

rating by all the clinical specialties was the frequency of use of programmed learning (computer programs). This method was given the rating of "never" (1) used for the clinical instruction of students. A summary of these results are presented in Table 56.

Field Trips

A comparison of the clinical specialties and the use of field trips as an instructional practice indicates that all the clinical specialties gave this instructional practice a rating of one or "never" used. The means and standard deviations of the ratings of frequency of use of field trips by clinical specialty are reported in Table 57.

Summary of Instructional Practices By Clinical Specialty

The analysis of the data comparing the clinical specialties with the percent of time spent instructing students suggests that the community faculty spend the most time (45%) and the pediatric faculty spend the least amount of time (24%). In comparing the percent of time the different teaching methods were used by the six clinical specialty groups, it appears that the community faculty is using all of the teaching methods more than any of the other clinical specialties. All the clinical specialties seem to be using more student centered teaching methods rather than those methods considered to

Table 56

Summary of Means & Standard Deviations of Ratings of Instructional Methods Used in Independent & Group Learning Activities by Clinical Specialty

Instructional Method		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Nursing Case Study	M	2.40	2.93	3.10	3.38	2.50	2.67
	SD	.82	1.00	1.20	1.19	1.08	.58
Process Recording	M	2.20	2.27	3.30	4.40	2.20	1.67
	SD	1.29	1.39	1.70	1.41	1.25	.58
Nursing Care Plans	M	3.56	3.67	4.20	4.00	3.70	1.67
	SD	1.29	1.39	1.70	1.41	1.25	.58
Clinical Logs	M	2.36	2.53	4.50	3.63	2.20	2.33
	SD	1.38	1.30	.85	1.51	.79	.58
Teaching Learning Plans	M	2.76	3.36	4.10	3.76	2.80	1.67
	SD	1.09	1.01	.99	1.41	.79	.58
Observe	M	3.72	3.47	3.89	4.43	3.10	3.00
	SD	1.02	1.06	1.17	1.13	.88	1.00
Assigned Tasks	M	2.92	3.00	3.70	3.75	3.22	2.67
	SD	.91	1.11	1.25	.89	1.20	.58
Programmed Learning	M	1.52	1.73	1.40	1.25	1.78	1.33
	SD	.71	.88	.52	.46	.67	.58
Audio-Taped Materials	M	1.76	1.93	2.11	1.75	2.11	2.00
	SD	.52	.70	.78	.46	.33	0.00
Video-Taped Materials	M	1.96	2.20	2.33	2.13	2.11	2.00
	SD	.68	.68	.71	1.25	.60	0.00

Note. Means and standard deviations were rounded off to the nearest hundredth.

Table 57

Means & Standard Deviations of Ratings of Frequency of Use of Field Trips by Clinical Specialty

Clinical Specialty	Number (71)	Means	Standard Deviations
Medical/Surgical	25	1.44	.51
Maternal/Child	16	1.75	.45
Community	10	1.90	.32
Psychiatric	8	1.88	.35
Pediatric	10	1.70	.67
Adult Nurse Practitioner	2	1.50	.71

Note. Means and standard deviations were rounded off to the nearest hundredth.

be teacher centered methods.

When relating the frequency of use of instructional strategies with the clinical specialties, it appears that all of the clinical specialty groups use each of the strategies "frequently" to "most of the time". In reviewing types of instructional media used by the clinical specialties, they all reported using five out of the six types "never" to "sometimes". The only type of media that they seemed to be in agreement on was the use of handouts. They all reported using handouts

"frequently" during the clinical instruction of students.

All the clinical specialties gave the same rating of "frequently" (3) to three of the eight questioning strategies. These strategies were: ask questions which require students to discover facts, concepts, or principles, use "wait time" (5 seconds or more) between asking a question and calling on a student, and differentiate responses to student answers. Three of the five questioning strategies related to higher-order thinking skills were rated as "frequently" to "most of the time" being used by all the clinical specialty groups. Only one of the five questioning strategies (i.e., asking probing questions) was given the same rating (i.e., "frequently") by all the clinical specialty groups.

The community specialty group and the adult nurse practitioner group were the only groups to rate three of the four teaching methods that are specific to nursing instruction as being "frequently" used. The other three specialty groups rated these methods as being used "frequently" to "sometimes". The method of nursing conference seemed to be the only method that all the groups are using "frequently" to "most of the time" during clinical instruction.

All the clinical specialties gave a rating of "never" to using the instructional method of programmed learning

when students are engaged in independent and group learning activities. All the groups seemed to agree that they "frequently" to "most of the time" use observation within the clinical setting.

The use of field trips as part clinical instruction was also given a rating of "never" used by all the clinical specialties.

Supervisory Practices By Clinical Specialty

Time Spent Supervising Students

When comparing the clinical specialties percent of time spent supervising students, it appears that pediatric faculty spend the most time (76%) and the community faculty the least amount of time (54%). Table 58 shows a rank ordering of the means and standard deviations of percent of time spent supervising students by clinical specialty.

Activities of Supervision

The following activities of supervision were compared across clinical specialties: (a) observing students, (b) analyzing observation data and preparing for conferences, (c) conducting conferences, (d) recording and processing data about the performance and progress of individual students, and (e) role modeling (see Table 59). The medical/surgical and maternal/child clinical specialties appear to spend the most time engaged in the supervisory

Table 58

Rank Ordering of the Means & Standard Deviations of Percent of Time Spent Supervising Students by Clinical Specialty

Clinical Specialty	Number (72)	Mean	Standard Deviation
Pediatric	10	76.1000	15.4952
Maternal/Child	16	75.3750	16.6408
Medical/Surgical	25	73.9200	13.7808
Psychiatric	8	63.7500	22.3207
Adult Nurse Practitioner	3	56.6667	5.7735
Community	10	54.4000	18.7154

activity of observing students (58%). The clinical specialty category of adult nurse practitioner appears to spend the most time involved in the activity of analyzing observation data and preparing for conferences (22%). The community clinical specialty seems to spend the most time of all the specialties conducting conferences (26%). The pediatric clinical specialty spends the most time of all the specialties in the supervisory activity of recording and processing data about the progress of individual

Table 59

Summary of the Means & Standard Deviations of Percent of Time Spent in Supervising Activities

Supervisory Activity		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Observing Students	M	58	58	39	41	52	23
	SD	22	22	27	24	22	6
Analyzing Data	M	14	8	18	9	15	22
	SD	14	7	11	8	22	8
Conducting Conferences	M	14	12	26	19	14	23
	SD	9	7	14	7	8	15
Record & Process Data	M	15	8	12	9	17	13
	SD	20	6	6	7	23	6
Role Modeling	M	48	24	26	53	37	42
	SD	40	23	29	37	35	51

Note. Means and standard deviations were rounded off to nearest whole number.

students (17%). It appears that the psychiatric clinical specialty spends the most time of all the specialties in the supervisory activity of role modeling (53%).

As a group the clinical specialties seem to spend the most time engaged in the supervisory activities of observing students and role modeling.

Time Spent Observing Students

The psychiatric clinical specialty was the only one to report spending under ten minutes observing individual students. The other clinical specialties reported spending from ten minutes to over forty minutes observing individual students. The results of time spent observing individual students by clinical specialties are presented in Table 60.

Table 60

Summary of the Means & Standard Deviations of Time Spent Observing Individual Students By Clinical Specialty

		Time Spent Observing Individual Students	
Clinical Specialty	Number (71)	Mean	Standard Deviation
Medical Surgical	23	3.2174	1.1161
Maternal/Child	16	2.7500	1.1255
Community	10	4.2000	1.1353
Psychiatric	8	1.8750	.6409
Pediatric	10	3.4000	1.5055
Adult Nurse Practitioner	3	4.0000	1.7321

Note. The values represent the following rating scale: 1=under 10 minutes, 2=10 to 20 minutes, 3=20 to 30 minutes, 4=30 to 40 minutes, 5=over 40 minutes.

Conferencing Activities Prior to Observing Students

Table 62 indicates that when conferencing with a student prior to observing them, the community clinical specialty appears to "most of the time" discuss the objectives for the clinical day with the student. The other specialty groups only "frequently" discuss the objectives for the clinical day prior to observation of a student. The psychiatric clinical specialty was the only specialty to "sometimes" discuss the procedures the student will demonstrate and to "sometimes" discuss how and what the instructor will observe prior to observing the student. The other specialty groups "frequently" to "most of the time" discuss the procedures and how and what the student will demonstrate prior to observing the student.

Methods Used During Supervision of Students

As indicated in Table 63, the comparison of methods used during the observation of students by clinical specialties suggests that informal notes were used "sometimes" by the pediatric clinical specialty, while all the other specialties used this method "frequently". Selective verbatim notes and a performance checklist were "never" to "sometimes" used by all the clinical specialties. A narrative/systematic description type of note was "sometimes" to "frequently" used by all the

Table 62

Summary of Means & Standard Deviation of the Ratings of Frequency of Use of Conferencing Activities Prior to Observing a Student by Clinical Specialty

	Conferencing Activities					
	Objectives		Procedures		How & What Observe	
Clinical Specialty	M	SD	M	SD	M	SD
Medical/ Surgical (n=24)	3.83	1.09	3.92	.97	3.13	1.03
Maternal/ Child (n=16)	3.81	.98	4.06	.93	3.44	1.03
Community (n=16)	4.50	1.27	3.78	1.48	4.00	1.41
Psychiatric (n=8)	3.75	.89	2.88	1.25	2.88	1.13
Pediatric (n=10)	3.10	1.20	3.90	.88	3.30	.95
Adult Nurse Practitioner (n=3)	3.33	.58	4.00	1.00	3.33	.58

Note. The values represent the following scale: 1=Never, 2=Sometimes, 3=Frequently, 4=Most of the Time, 5=Always.

Means and standard deviations were rounded off to the nearest hundredth.

clinical specialties. All the clinical specialties seemed to agree that they "never" used some type of rating scale when observing students during the clinical day.

Table 63

Summary of Means & Standard Deviations of the Rating of Frequency of Use of Different Supervisory Methods by Clinical Specialty

Supervisory Method		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Informal Notes	M	3.88	3.19	3.44	3.50	2.90	3.33
	SD	1.20	1.47	1.33	1.69	1.29	1.15
Verbatim Notes	M	2.32	2.19	2.44	2.25	1.80	1.67
	SD	1.07	1.17	1.33	.89	.92	.58
Narrative Notes	M	2.40	2.92	3.10	2.63	2.40	3.00
	SD	1.22	1.44	1.37	1.30	1.26	1.73
Performance Checklist	M	2.08	1.88	2.70	1.63	2.80	1.67
	SD	1.32	1.26	1.70	.74	1.45	.58
Rating Scale	M	1.52	1.50	1.50	1.63	1.80	1.00
	SD	1.04	1.03	.53	.74	1.13	0.00

Note. The values represent the following scale: 1=Never, 2=Sometimes, 3=Frequently, 4=Most of the Time, 5=Always.

Means and standard deviations were rounded off to the nearest hundredth.

Supervisory Behavior

All the clinical specialties rated using the

supervisory behavior of providing feedback to encourage certain student behavior from "frequently" to "most of the time". They all agreed that they "frequently" used the behaviors of allowing the student to recognize and correct errors on their own and providing feedback to discourage certain student behavior.

All the clinical specialties, except for the adult nurse practitioner group, agreed that they "frequently" provide assistance without taking over. The clinical specialties rated using the behavior of stepping in and taking over for the student from "never" to "sometimes". A summary of the results of the ratings of the use of different supervisory behaviors by clinical specialty is reported in Table 64.

Post-Observation Conference

Frequency of post-observation conference. The clinical specialty group of adult nurse practitioner reported that they "most of the time" conduct a post-observation conference with an individual student after observing the student. The other clinical specialties reported only "frequently" conducting a post-observation conference (see Table 65).

Time for a post-observation conference.

The clinical specialties of medical/surgical, maternal/child, community, and pediatric all reported

Table 64

Summary of Means & Standard Deviations of the Rating of Frequency of Use of Different Supervisory Behaviors By Clinical Specialty

Supervisory Behavior		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Feedback to encourage behavior	M	3.88	3.75	4.00	3.88	4.00	4.00
	SD	1.12	1.06	.94	.83	1.00	1.00
Recognize & correct behavior	M	3.24	3.27	3.60	3.63	3.33	3.33
	SD	.97	1.03	.70	.52	1.12	1.53
Feedback to discourage behavior	M	3.72	3.00	3.50	3.12	3.33	3.00
	SD	1.14	1.03	1.18	.99	1.12	1.00
Not take over for student	M	3.24	3.50	3.20	3.00	3.56	2.67
	SD	.88	1.10	.63	.76	.73	1.15
Take over for student	M	2.08	1.94	2.10	1.63	2.11	2.00
	SD	.38	.44	.32	.52	.33	.00

Note. The values represent the following scale: 1=Never, 2=Sometimes, 3=Frequently, 4=Most of the Time, 5=Always.

Means and standard deviations were rounded off to the nearest hundredth.

Table 65

Summary of Means & Standard Deviations of the Rating of the Frequency of Use of a Post-Observation Conference by Clinical Specialty

Clinical Specialty	Number (72)	Mean	Standard Deviation
Medical/Surgical	25	3.7083	1.0131
Maternal/Child	16	3.8800	.9274
Community	10	3.6000	1.2649
Psychiatric	8	3.3750	.9161
Pediatric	10	3.5000	.9718
Adult Nurse Practitioner	3	4.3333	.5774

Note. The values represent the following rating scale: 1=Never, 2=Sometimes, 3=Frequently, 4=Most of the Time, 5= Always.

conducting a post-observation conference with the student "immediately" following the observation. The psychiatric clinical specialty reported conducting the post-observation conference "within the hour" after the observation of the student. The clinical specialty group of adult nurse practitioner reported that they conduct the post-observation conference "several hours later" after observing the student (see Table 66).

Table 66

Summary of the Means & Standard Deviations of the Rating of the Time for a Post-Observation Conference by Clinical Specialty

Clinical Specialty	Number (71)	Means	Standard Deviations
Medical/Surgical	25	1.2800	.5416
Maternal/Child	16	1.3750	.6191
Community	9	1.4444	.5270
Psychiatric	8	2.0000	.7559
Pediatric	10	1.4000	.5164
Adult Nurse Practitioner	3	3.0000	2.0000

Note. The values represent the following scale: 1= Immediately, 2=Within the Hour, 3=Several Hours Later, 4=The Next Day, 5=The Next Clinical Day.

Post-observation activities. When comparing the ratings by clinical specialties of the post-observation conference activities, it appears that all the specialties "most of the time" request the student to identify problems encountered during the patient care experience. A comparison by clinical specialty of the means of the ratings of frequency of use of various post-observation activities indicated that all the specialties "most of the

time" use the activity of providing positive feedback to students on their performance. The following post-observation conference activities were rated as being used from "frequently" to "always" by all the clinical specialties: ask student to reflect on his/her performance during the patient care experience, request the student to evaluate the day's activities, request the student to identify problems encountered during the patient care experience, provide objective descriptive feedback on the student's performance, make suggestions on how to improve a student's performance, ask questions which request the student to analyze his/her performance, engage the student in problem-solving steps to develop a revised plan for performance, and assist the student in developing a new skill or knowledge. The post-observation activities of asking the student to state the learning objective for the patient care experience and providing negative feedback on the student's performance were rated by the clinical specialties as "sometimes" to "frequently" being used. The results of the ratings by clinical specialties of the post-observation activities are presented in Table 67.

Summary of Supervisory Practices By Clinical Specialty

Analysis of the data comparing percent of time spent supervising students by clinical specialty reveals that the pediatric faculty spend the most time (76%) and the

Table 67

Summary of Means & Standard Deviations of the Rating of Post-Observation Conference Activities

Conference Activity		Clinical Specialty					
		M/S	M/C	COMM	PSY	PED	ANP
Provide positive feedback	M	4.40	4.25	4.67	4.00	4.00	4.00
	SD	.87	.77	.50	.76	.94	1.00
Reflect on performance	M	4.20	3.81	4.78	4.00	3.50	4.33
	SD	.96	1.22	.44	.53	.97	.58
Evaluate Activities	M	3.88	4.06	4.78	3.75	4.00	4.00
	SD	1.20	.68	.44	.46	1.05	1.00
Identify problems	M	4.12	3.98	4.56	3.88	3.80	3.67
	SD	.88	.68	.53	.64	1.14	.57
Provide objective feedback	M	4.28	3.63	4.44	3.88	3.90	4.33
	SD	.79	.81	.53	.64	1.10	.58
Improve performance	M	4.20	3.94	4.00	3.75	4.10	4.00
	SD	.82	1.18	.87	.89	.88	0.00
Analyze performance	M	4.24	3.81	4.33	4.00	4.00	4.33
	SD	.78	1.05	.71	.53	.82	.58
Engage in problem-solving	M	3.96	3.69	4.33	3.63	3.70	4.00
	SD	.84	.70	.87	.74	1.25	0.00
Develop new skill	M	4.04	3.81	3.67	3.50	3.50	3.67
	SD	.88	1.17	.87	.93	.70	.58
State learning objective	M	2.40	2.44	3.25	2.75	2.20	2.00
	SD	1.04	1.09	1.75	1.39	.63	0.00
Provide negative feedback	M	3.48	2.56	2.44	2.75	3.10	3.00
	SD	1.45	1.15	1.01	.89	.99	1.73

Note. The values represent the following scale: 1=Never, 2=Sometimes, 3=Frequently, 4=Most of the Time, 5=Always.

Means and standard deviations were rounded off to the nearest hundredth.

community faculty spend the least amount of time (54%). In comparing the percent of time different supervisory activities were engaged in according to clinical specialty, it appears that the medical/surgical and the maternal/child specialties spend the most time (58%) of all the specialties observing students. The activity of analyzing observation data and preparing for conferences was used the most (22%) by the adult nurse practitioner group. The community specialty seems to spend the most time (26%) of all the specialties involved in conducting conferences with students. The pediatric specialty appears to spend the most time (17%) of all the specialties involved in the activity of recording and processing data about the performance and progress of individual students. The activity of role modeling was used the most (53%) by the psychiatric specialty group.

All of the clinical specialties, with the exception of the psychiatric specialty, spend from ten minutes to over forty minutes observing students. All the clinical specialties, with the exception of the psychiatric specialty, report that they "frequently" conference with a student prior to observing them. When conferencing with a student prior to observing them, all the clinical specialties, with the exception of the psychiatric specialty, "frequently" to "most of the time" engage in

the conferencing activities of: discussion of objectives for the day, discussion of procedures the student will demonstrate, and discussion of how and what the instructor will observe.

The comparison of methods used during the observation of students during the clinical day reveals that all the specialties agreed that they "never" used some type of rating scale. The only supervisory behavior to be given a ratings of "never" to "sometimes" was the behavior of stepping in and taking over for the student.

All of the clinical specialties appear to conduct a post-observation conference "frequently" to "most of the time". Four of the clinical specialties appear to conduct a post-observation conference "immediately" after observing the student, one specialty conducts the conference "within the hour", and one specialty conducts the conference "several hours later". In comparing eleven post-observation conferencing activities, on frequency of use, the only one that all the specialties seemed to agree using "most of the time" was providing positive feedback on a student's performance. All the other post-observation activities were rated as being used from "sometimes" to "most of the time" by all the specialty groups.

A Statistical Analysis of the Instructional & Supervisory Practices by Clinical Specialty

One-way ANOVA's were computed using clinical specialty as the independent variable. The clinical specialty group of adult nurse practitioner was not used in the analysis due to this group having only 3 subjects.

The following questions on the survey instrument pertaining to instruction were used in this analysis as the dependent variable: questions 17 (a), 18 (a-g), 19 (a-d), 20 (a-i), 21 (a-b), 22 (a-b), and 23 (a-j) (refer to the survey instrument in the appendix for a description of the questions). The computations consisted of forty dependent variables that were extracted from the questions concerning instructional practices.

The following questions on the survey instrument pertaining to supervision were used in this analysis as another dependent variable: questions 17b, 25, 27, 28 (a-c), 29 (a-c), 30 (a-e), 31, and 33 (a-k) (refer to the survey instrument in the appendix for a description of the questions). Thirty-two dependent variables were included in these computations pertaining to supervisory practices. One-way ANOVA's were not conducted on questions 24, 25, and 32 (because the scale categories were not as appropriate for a one-way ANOVA as the scale of Never to Always - refer to the survey instrument in the appendix

for a description of these questions).

Two general hypotheses were developed from research question three to answer the question of any statistically significant differences between the clinical specialty groups and the instructional and supervisory practices.

Hypothesis 1

There is a difference between the group means of the clinical specialties and instructional practices.

Hypothesis 2

There is a difference between the group means of the clinical specialties and supervisory practices.

Statistical Analyses of Instructional Practices

Nine of the forty one-way ANOVA analyses were statistically significant for instructional practices, thus indicating differences between the clinical specialty groups and evidence to support Hypothesis 1. Specifically, the questions causing the differences were questions 17a, 18a and b, 19a and b, 20d, and 23b, d and e (see Tables 68-76).

Application of the Tukey procedure revealed that the pairs of groups responsible for the significant difference at the .05 level reported in Table 68 were the community specialty group paired with the medical/surgical group and the community specialty group paired with the maternal/child group.

Table 68

Results of a One-Way ANOVA for Survey Instrument Question 17a

Source of Variance	SS	df	MS	F	P
Between groups	6.0194	4	1.5049	2.7408	.0361*
Within groups	35.1400	64	.5491		
Total	41.1594	68			

*Significant at the .05 level.

The pairs of groups responsible for the significant difference at the .05 level reported in Table 69 were the medical/surgical group paired with the community group, the maternal/child group paired with the community group, and the community group paired with the psychiatric group.

Table 69

Results of a One-Way ANOVA for Survey Instrument Question 18a

Source of Variance	SS	df	MS	F	P
Between groups	4337.1979	5	867.4396	2.5531	.0361*
Within groups	21744.5879	64	339.7592		
Total	26081.7857	69			

*Significant at the .05 level.

Application of the Tukey procedure revealed that the pairs of groups responsible for the significant difference at the .05 level reported in Table 70 were the medical/surgical group paired with the community group, the community group paired with the psychiatric group, and the community group paired with the pediatric group.

Table 70

Results of a One-Way ANOVA for Survey Instrument Question 18b

Source of Variance	SS	df	MS	F	P
Between groups	2229.6784	5	445.9357	2.6419	.0313*
Within groups	10634.0897	63	168.7951		
Total	12863.7681	68			

*Significant at the .05 level.

Results of the Tukey procedure indicated that the pair of groups responsible for the significant difference at the .05 level reported in Table 71 was the community specialty group paired with the maternal/child specialty group.

The Tukey procedure showed that the pair of groups responsible for the significant difference at the .05 level reported in Table 72 was the medical/surgical

Table 71

Results of a One-Way ANOVA for Survey Instrument Question 19a

Source of Variance	SS	df	MS	F	P
Between groups	8.0689	4	2.0172	2.8577	.0304*
Within groups	45.1775	64	.7059		
Total	53.2464	68			

*Significant at the .05 level.

specialty group paired with the maternal/child group.

Application of the Tukey procedure revealed that the pairs of groups responsible for the significant difference

Table 72

Results of a One-Way ANOVA for Survey Instrument Question 19b

Source of Variance	SS	df	MS	F	P
Between groups	5.9749	4	1.4937	2.7859	.0338*
Within groups	34.3150	64	.5362		
Total	40.2899	68			

*Significant at the .05 level.

at the .05 level reported in Table 73 were the community specialty group paired with the medical/surgical group, the psychiatric specialty group paired with the medical/surgical group and the psychiatric group paired with the maternal/child group.

Table 73

Results of a One-Way ANOVA for Survey Instrument Question 20d

Source of Variance	SS	df	MS	F	P
Between groups	12.1562	4	3.0390	4.8428	.0013*
Within groups	39.5350	63	.6275		
Total	51.6912	67			

*Significant at the .05 level.

Application of the Tukey procedure indicated that the pairs of groups responsible for the significant difference at the .05 level reported in Table 74 were the psychiatric specialty group paired with the pediatric group, the psychiatric group paired with the medical/surgical group and the psychiatric group paired with the maternal/child group.

The Tukey procedure indicated that the pairs of groups responsible for the significant difference at the .05 level reported in Table 75 were the community

Table 74

Results of a One-Way ANOVA for Survey Instrument Question 23b

Sources of Variance	SS	df	MS	F	P
Between groups	26.0520	4	6.5130	3.3929	.0141*
Within groups	120.9333	63	1.9196		
Total	146.9853	67			

*Significant at the .05 level.

specialty group paired with the pediatric group, the community group paired with the medical/surgical group, and the community group paired with the maternal/child group.

Table 75

Results of a One-Way ANOVA for Survey Instrument Question 23d

Sources of Variance	SS	df	MS	F	P
Between groups	43.7523	4	10.9381	7.0700	.0001*
Within groups	97.4683	63	1.5471		
Total	141.2206	67			

*Significant at the .05 level.

Application of the Tukey procedure showed that the pair of groups responsible for the significant difference at the .05 level reported in Table 76 was the community specialty group paired with the medical/surgical group.

Table 76

Results of a One-Way ANOVA for Survey Instrument Question 23e

Source of Variance	SS	df	MS	F	P
Between groups	15.0447	4	3.7612	3.3242	.0157*
Within groups	70.1493	62	1.1314		
Total	85.1940	66			

*Significant at the .05 level.

Statistical Analysis of Supervisory Practices

Four of the 32 one-way ANOVAs were statistically significant for supervisory practices, thus indicating differences between the clinical specialty groups and evidence to support hypothesis 2. The questions causing the differences were questions 17b, 25c, 30b, and 33b (see Tables 77-80).

Application of the Tukey procedure indicated that the pairs of groups responsible for the significant difference reported in Table 77 were the medical/surgical group

paired with the community group, the maternal/child group paired with the community group, and the pediatric group paired with the community group.

Table 77

Results of a One-Way ANOVA for Survey Instrument Question 17b

Sources of Variance	SS	df	MS	F	P
Between groups	10.1489	4	2.5372	4.6266	.0024*
Within groups	35.0975	64	.5484		
Total	45.2464	68			

*Significant at the .05 level.

The Tukey procedure indicated that the pairs of groups responsible for the significant difference at the .05 level reported in Table 78 were the community specialty group paired with the maternal/child group and the community group paired with the medical/surgical group.

Application of the Tukey procedure showed that the pair of groups responsible for the significant difference at the .05 level reported in Table 79 was the medical/surgical specialty group paired with the psychiatric group.

Table 78

Results of a One-Way ANOVA for Survey Instrument Question 25c

Sources of Variance	SS	df	MS	F	P
Between groups	1162.5867	4	290.6467	3.5532	.0114*
Within groups	4989.6708	61	81.7979		
Total	6152.2576	65			

*Significant at the .05 level.

Table 79

Results of a One-Way ANOVA for Survey Instrument Question 30b

Source of Variance	SS	df	MS	F	P
Between groups	1.5586	4	.3897	2.9081	.0284*
Within groups	8.4414	63	.1340		
Total	10.0000	67			

*Significant at the .05 level.

The Tukey procedure revealed that the pair of groups responsible for the significant difference at the .05 level reported in Table 80 was the community specialty group paired with the pediatric group.

Table 80

Results of a One-Way ANOVA for Survey Instrument Question 33b

Source of Variance	SS	df	MS	F	P
Between groups	9.2717	4	2.3179	2.5849	.0454*
Within groups	56.4931	63	.8967		
Total	65.7648	67			

*Significant at the .05 level.

Summary of the Statistical Analysis of the Instructional and Supervisory Practices by Clinical Specialty

Eighteen percent or 13 out of 72 ANOVAs were statistically significant. There does not appear to be any identifiable pattern related to the dependent variables, reported as significant, as they seem to go across a random subsection of variables.

The only pattern that appears in the independent variables is the community specialty pairing with the medical/surgical specialty on 8 dependent variables (i.e., 17a and b, 18a and b, 20d, 23d and e, and 25c); the community specialty pairing with the maternal/child specialty on 6 dependent variables (i.e., 17a and b, 18a, 19a, 23d, and 25c); the community specialty pairing with

the pediatric specialty on 4 dependent variables (i.e., 17b ,18b, 23d, and 33b); and the community specialty pairing with the psychiatric specialty on 2 dependent variables (i.e., 18a and b). It is interesting to note that the community specialty group interacted with each of the other specialty groups on all but 3 of the 13 dependent variables. It would appear that the community specialty group is the group most responsible for causing the differences of the group means and the instructional and supervisory practices.

The meaningfulness of these findings is questionable, even though there is statistical evidence to support the general hypothesis of differences in the clinical specialties and the instructional and supervisory practices.

Summary of Findings for Research Question Three

The analysis of the data by clinical specialty of the percentage of time spent in instructing and supervising students on an average clinical day revealed that the community specialty group spent the most time (45%) and the pediatric specialty group the least (24%). It is interesting to note that these two groups reversed their standing when comparing the percent of time spent supervising students on an average clinical day. The community specialty group spent the least amount of time

(54%) and the pediatric specialty group the most time (76).

The data analysis of different teaching methods and the frequency of use of these methods indicated that the community specialty group utilized all of the methods listed more than any of the other clinical specialty groups. All the specialties indicated spending more time utilizing the teaching methods of discussion, inquiry/discovery, and problem-solving/decision making (student centered methods) as compared with the methods of lecture, demonstration, and recitation/drill (teacher centered methods).

The analysis of the frequency of use of different instructional strategies revealed that with the exception of the adult nurse practitioner group the other five clinical specialty groups use all the strategies "frequently" to "most of the time". The instructional media of "handouts" was reported as being used "frequently" by all the clinical specialty groups.

Only three of the eight questioning strategies were given the same rating ("frequently" (3)) by all the clinical specialty groups. The remaining five questioning strategies were rated from "sometimes" to "most of the time" by all the clinical specialty groups. It is interesting to note that the maternal/child specialty

group give the same rating ("frequently" (3)) to all the questioning strategies.

It is also interesting to note that none of the instructional methods specific to nursing instruction were rated as "always" being used by any of the clinical specialty groups. All the clinical specialty groups seemed to agree that they "never" used the instructional method of programmed learning when students were engaged in independent and group learning activities. The clinical specialty groups also seemed to agree that they "never" use field trips as part of clinical instruction.

The data analysis of the supervisory activities indicated that the clinical specialty groups of medical/surgical and maternal/child spend the most time observing (58% respectively); the adult nurse practitioner group spend the most time analyzing data and preparing for conferences (22%); the community group spend the most time conducting conferences (26%) ; the pediatric group spend the most time recording and processing data (17%); and the psychiatric group spend the most time role modeling (53%). Collectively, all the specialty groups seem to spend the most time engaged in the supervisory activities of observing and role modeling.

Five of the clinical specialty groups spend from ten minutes to over forty minutes observing students (the

psychiatric group spend under ten minutes observing students). Five of the clinical specialty groups "frequently" conference with a student prior to observing them (the psychiatric group "sometimes" conference with a student prior to observing them). Five of the clinical specialty groups "frequently" to "most of the time" used the conferencing activities of: discussion of objectives, discussion of procedures, and discussion of how and what the instructor will observe (the psychiatric group "sometimes" use the conferencing activities). The psychiatric clinical specialty group appears to deviate from the other groups in time spent observing students, in conferencing prior to observing students, and in the frequency of use of conferencing activities.

All the clinical specialty groups agreed that they "never" use a rating scale when observing students. All the clinical specialties agreed to only "sometimes" using the supervisory behavior of stepping in and take over for a student when observing them.

All the clinical specialties conduct a post-observation conference "frequently" to "most of the time" after observing a student. All the groups seem to conduct the post-observation conference sometime during the clinical day on which the observation took place. Providing positive feedback on a student's performance was

the only post-observation conference activity that all the clinical specialties use "most of the time".

The results of the descriptive analysis of the instructional and supervisory practices by clinical specialty indicates that differences do exist between the specialties. The results of the ANOVA statistical analysis indicated instructional practice and supervisory practice differences between clinical specialties, but the relevance of these results are questionable due to only 18% (13 out of 72) of the one-way ANOVAs being significant.

Summary

Results of the analysis of data were presented in Chapter IV. Data were presented descriptively and statistically in order to provide a summary of the instructional and supervisory practices utilized by nursing faculty teaching in the clinical practice settings in baccalaureate nursing programs.

A summary of the study, findings, conclusions, and recommendations for further study are discussed in the following chapter.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER STUDY

Purpose

The purpose of this study was to describe the instructional and supervisory practices utilized by nursing faculty teaching in the clinical practice settings of baccalaureate nursing programs.

Review of the Research Questions

Answers to the following research questions were sought:

1. What are the instructional practices as perceived by nursing faculty teaching in the clinical practice setting?

2. What are the supervisory practices as perceived by nursing faculty teaching in the clinical practice setting?

3. How do the perceived instructional and supervisory practices differ across clinical specialties?

Review of the Research Design

A survey instrument, "A Profile of the Clinical Day", was designed to obtain answers to the three research questions stated above. A survey research design was used to collect data by means of a self-administered

questionnaire containing 33 questions related to the clinical experience.

The questionnaire was distributed to 95 full and part-time clinical undergraduate nursing faculty teaching in varied clinical settings in five baccalaureate nursing programs (both public and private) in the State of Maryland. The questionnaire was completed by 72 nursing faculty representing a 76% rate of return.

Summary of the Findings

First, a summary of the findings of the characteristics of the respondents, the students, and the clinical experience is presented. Then a summary of the findings for each of the research questions is presented following a statement of the research question.

Summary of the Findings of the Demographic Variables

Seventy-two nursing faculty responded to the survey representing six different clinical specialty areas: medical/surgical, maternal/child, community, psychiatric, pediatric, and adult nurse practitioner. The respondents, as a group, indicated that they have been teaching in the clinical practice settings an average of 12 years and hold a master's degree, with only 19% having an earned doctorate degree.

This is an interesting finding in view of the fact that in recent times the nursing profession has emphasized

the need to increase the number of doctorally prepared undergraduate faculty (NLN, 1988). This finding would seem to indicate a need for more doctorally prepared clinical nursing faculty in the five baccalaureate nursing programs that participated in this survey research project.

A large majority of the respondents reported that their graduate programs in nursing education provided them courses and practice in teaching. This finding is at odds with other nursing literature (Carpenito et al., 1985; Clissold, 1962; Meleca, Schimpfhauser, Witteman, & Sachs, 1981) which states that clinical instructors lack formal training in instruction. The finding from this study does not support that assumption, at least for clinical faculty teaching in baccalaureate programs of nursing in the State of Maryland. This contradiction could be explained by the fact that this study was restricted to the State of Maryland and that perhaps a large number of the respondents graduated from the same institution which required courses and practice in teaching.

The National League of Nursing, the accrediting body for nursing programs in the United State requires that clinical nursing faculty teach in the specialty areas in which they were educationally prepared. The clinical faculty in this study appear to be teaching the clinical

application component of the classroom theory courses and they are also teaching course content in the clinical practice setting that is appropriate to their area of expertise.

According to the respondents in this study, the general hospital is still the most frequently used clinical practice setting. This is a somewhat surprising finding given the changing patterns of society in relation to health care and that 90% of individuals who need or desire health care are neither hospitalized nor acutely ill (Carpenito & Duespohl, 1985, p.103). Society's health care needs in general have moved away from treatment primarily in the inpatient general hospital to the treatment of peoples illnesses in outpatient community health care agencies. The emphasis in today's society is on preventive health care. Carpenito and Duespohl (1985) lend support to the change in society's health care needs when they make the statement that: "The age of anxiety and stress has directed health care toward the emotional and physical well-being of individuals outside of hospital climate and into the community" (p. 2).

Over two-thirds (48-51) of the faculty respondents reported starting and ending the clinical day with a small group conference. Meleca et al. (1981) also reports that nursing faculty indicated that small group seminars was

the type of teaching that best typified their clinical teaching. These findings seem to indicate that the use of a small group conference is considered an important component of the clinical day. It was surprising to learn that more than half of the clinical faculty in this study do not use objectives at all or only use them for planning some aspects of the clinical experience. This finding seems to indicate that faculty are not using objectives on a regular basis to guide them in directing what the student will learn as result of the clinical experience. This seems to be at odds with what many nursing authors have advocated as an essential component of the planning process for the clinical experience (Carpenito & Duespohl, 1985; Infante, 1975; Schweer & Gebbie, 1976). Since the reason for this contradiction is not readily apparent, there is a need for further investigation to determine the reason why faculty would not use objectives to guide them in planning the clinical experiences.

Unfortunately, other studies on clinical teaching have not identified the same set of characteristics of the clinical day which were included in this study. Therefore, it is difficult to determine if the characteristics of a clinical day found in this study are comparable to any of the studies which have been reported in the nursing literature on clinical teaching.

Summary of the Findings for Research Question One

Research Question One

What are the instructional practices as perceiverd by nursing faculty teaching in the clinical practice settings?

The respondents reported spending at least thirty percent of the clinical time instructing students and reported using discussion more than any other teaching method. Those teaching methods which can be categorized as "student-centered" were reported being used a greater percentage of the time than those methods which can be categorized as "teacher-centered".

Faculty respondents reported that they are using a full range of questioning strategies when they conduct a discussion and the questioning strategies used are those which are considered essential for increasing higher-order thinking skills of students.

The findings indicated that the respondents are using teaching methods specific to nursing clinical instruction, such as the nursing care conference and case incidents. Handouts appeared to be the media of choice by over three-fourths of the respondents for presenting information to students during clinical instruction.

The survey instrument included a section on instructional methods used when students are engaged in

independent and group learning activities. The faculty indicated that they use nursing care plans most frequently when students are engaged in independent (written) learning activities. Observation is the method frequently used in independent or group project learning activity during the clinical experience. The least used instructional method for independent or group learning activities is programmed learning and field trips are also seldomly used as a supplement to the clinical learning experience.

Summary of the Findings for Research Question Two

Research Question Two

What are the supervisory practices as perceived by nursing faculty teaching in the clinical practice setting?

The findings indicate that the majority of the faculty spend seventy percent of the time supervising students during the clinical day. When faculty are engaged in supervising students most of the time is spent in observation (51%), as opposed to role modeling (38%), conducting conferences (16%), analyzing data (13%), or recording and processing data about the performance of the students (12%).

In general, the faculty reported that they spend between twenty and forty minutes observing an individual student, conducted a conference with the student prior to

the observation, use informal notes during the observation, and conducted a post-observation conference immediately after the observation.

The questionnaire asked faculty to report on their supervisory behavior during the observation of students. The results indicate that faculty perceive themselves as: "most of the time" allowing the student to recognize and correct errors on their own, "sometimes" stepping in and taking over for the student, "frequently" providing assistance without taking over, "most of the time" providing feedback to discourage certain behavior, and "always" providing feedback to encourage certain behavior. Of the eleven items included in the post-observation conference activities, over sixty percent of the faculty rated nine of the items as appropriate "most of the time" or "always". The remaining two items in the list of post-observation conference activities were rated by thirty percent of the respondents to be appropriate "sometimes" (see Table 49, p. 153).

Summary of the Findings for Research Question Three

Research Question Three

How do the perceived instructional and supervisory practices differ across clinical specialties?

Descriptive summary of research question three. The descriptive analysis of the instructional and supervisory

practices indicates that differences do exist among the clinical specialties. The results of the data analysis of the percentage of time spent in instructing students by clinical specialty indicate that the community specialty group spend the most time (45%) and the pediatric specialty group the least (24%). It is interesting to note that these two groups reversed their standings when comparing the percent of time spent supervising students on an average clinical day. The community specialty group spend the least amount of time (54%) and the pediatric specialty group spend the most time (76%).

The data analysis of the frequency of use of different teaching methods indicates that the community specialty group utilizes all of the methods listed more than any of the other clinical specialty groups.

The analysis of frequency of use of different instructional strategies reveals that five of the six clinical specialty groups used all the strategies "frequently" or "most of the time".

Only three of the eight questioning strategies were given the same rating ("frequently") by all the clinical specialty groups. The remaining five questioning strategies were rated from "sometimes" to "most of the time" by all the clinical specialty groups. It is interesting to note that the maternal/child specialty

group rated all the questioning strategies the same (i.e., "frequently"). It is not surprising to note that the psychiatric clinical specialty was the only group to give a rating of 4 ("most of the time") to asking questions that elicit students' feelings and values. It was surprising to note that the other specialty groups rated this strategy as being used only "sometimes" to "frequently".

The community specialty group and the adult nurse practitioner group were the only groups to rate three of the four teaching methods that are specific to nursing instruction as being "frequently" used. The other specialty groups rated these three methods as being used "sometimes" to "frequently". The teaching method of nursing conference was the only method that all the specialty groups reported using "frequently" to "most of the time" during clinical instruction.

The supervisory activity findings indicates that the clinical specialty groups of medical/surgical and maternal/child spent the most time observing (58% respectively); the adult nurse practitioner group spent the most time analyzing data and preparing for conferences (22%); the pediatric group spent the most time recording and processing data (17%); and the psychiatric group spent the most time involved in role modeling (53%).

Five of the clinical specialty groups spent from ten minutes to over forty minutes observing students (the psychiatric group spent under ten minutes observing students). Five of the clinical specialty groups "frequently" conference with a student prior to observing them (the psychiatric group "sometimes" conference with a student prior to observing them). Five of the clinical specialty groups "frequently" or "most of the time" used the conferencing activities of: discussion of objectives, discussion of procedures, and discussion of how and what the instructor will observe (the psychiatric group only "sometimes" used these conferencing activities). The psychiatric specialty group appears to deviate from the other groups in time spent observing students, in conferencing prior to observing students, and in the frequency of use of the conferencing activities.

All the specialty groups agreed that they "never" used a rating scale when observing students and they all agreed that they only "sometimes" step in and take over for a student when observing them. All the clinical specialty groups rated the conducting of a post-observation conference "frequently" or "most of the time" after observing a student. All the groups seem to conduct the post-observation conference sometime during the clinical day on which the observation took place.

Providing positive feedback on a student's performance was the only post-observation activity that all the clinical specialties rated using "most of the time".

Quantitative summary of research question three. The quantitative analysis also indicated that there are differences in the instructional and supervisory practices among clinical specialty groups. However, it should be noted that the statistical test (ANOVA) was only used as a diagnostic tool and that there was a small number of questions and subquestions (13 out of 73) causing the differences. There does not appear to be an identifiable pattern which can be related to those questions causing the differences, as they seem to be a random subsection of the questions on the survey instrument. The only discernible pattern is that of the community specialty group interacting with each of the other specialty groups on ten of the questions and subquestions. It is possible that this group accounts for most of the differences found in the instructional and supervisory practices among clinical specialty groups.

Conclusions

The following conclusions are drawn from this study's results of the three research questions pursued in this study.

Instructional Practices

The faculty respondents indicated that they spend at least thirty percent of the clinical time instructing students. In another study on clinical teaching (Meleca, Schimpfhauser, Witteman, & Sachs, 1981), the percentage of time devoted to clinical instruction was reported to be around fifty percent. It is difficult to compare the reported percent of time devoted to instruction in the Meleca study to the present study, due to the fact that the Meleca study did not provide a definition of the term clinical instruction.

The results of this study indicate that the clinical nursing faculty reported using teaching methods which might be categorized as "student centered" (i.e., discussion, inquiry/discovery, problem-solving/decision making) a greater percent of time than the methods categorized as "teacher centered" (i.e., lecture, demonstration, recitation/drill, role-play/simulations).

The findings of this study seem to indicate that the faculty respondents are using all types of questioning strategies during the clinical experience. Five of the nine questioning strategies which are advocated as increasing higher-order thinking skills of students were reported as being used "frequently" to "most of the time" by a third or more of the faculty. This finding somewhat

contradicts the findings of other studies (Craig & Page, 1981; Scholdra & Quiring (1978); Wang & Blumberg, 1983) in the nursing literature which imply that clinical nursing faculty are using a preponderance of low level questioning strategies (i.e., remembering type questions).

The clinical faculty in this study reported that the instructional method used most when students were engaged in independent (written) learning activities was nursing care plans. Observation (within the clinical setting) was reported as being used most frequently as an instruction method when students were engaged in an independent or group learning activity. The least used instructional method for independent or group learning activities was reported by faculty to be programmed learning. This finding concerning programmed instruction is supported by the Meleca et al. (1981) study, which found that less emphasis and interest was also given to programmed instruction by the respondents in their study.

Supervisory Practices

The self reports of the faculty respondents in this study indicate that they appear to be using a structured system for observing and conferencing with students, which is similar to the clinical supervision model used in teacher education. The repondents reported supervisory behaviors indicate an approach to supervision not unlike

the developmental supervision model used in teacher education.

Clinical Specialty Groups

The findings from the descriptive and quantitative data analyses of the instructional and supervisory practices indicated that there are differences in the practices according to clinical specialty groups.

Implications of the Study

Knowledge of faculty perceptions concerning the instructional and supervisory practices utilized during the clinical experience has implications for both nursing education and faculty development. Faculty can be encouraged to continue to use those instructional and supervisory methods and behaviors that are reported to facilitate learning for the student in the clinical setting. Examples of those methods and behaviors reported in this study as being used by the faculty to facilitate learning were: the use of student centered teaching methods, the use of higher order questioning strategies and the use of supervisory activities.

The faculty's perceptions can be of assistance in helping to analyze the process of clinical teaching as well as adding to the knowledge base on clinical teaching methodologies, of which there appears to be a paucity of information. From the increased knowledge on clinical

teaching methodologies, workshops and inservices could be developed to assist faculty in their efforts to improve their clinical teaching effectiveness by using those clinical teaching methods proven to be effective.

The identification of the instructional and supervisory practices also have implications for nursing graduate education. Even though this study found that the clinical nursing faculty did have courses and practice in teaching, it did not identify the type of course and practice. As nurse educators are being prepared to enter the arena of clinical teaching, it would seem appropriate for them to have courses on clinical teaching such as, the theories of instruction and supervision, effective clinical teaching methods and behaviors, as well as a practicum experience teaching in the clinical setting.

Recommendations for Further Study

The results of this self report survey by clinical nursing faculty suggest some other research approaches as well as some other research topics to be investigated. The major drawback of a self-administered questionnaire of the type used in this study, is the potential for the subjects to deliberately or unconsciously distort the data being collected. An observation method of data collection could be used as a means of validating the survey data gathered by the use of the questionnaire. The observation

method of data gathering allows for probing of and clarification of complex ideas; allows for the discovery of the unexpected; and allows the establishment of rapport to facilitate less superficial responses (Isaac & Micheal, 1981; Wilson, 1985).

The above discussion leads to the recommendation of a study incorporating both the use of the self-administered questionnaire developed for this study and the systematic observation of a randomly selected group of clinical faculty, representing all the clinical specialties. In order to analyze the process of instruction and supervision in clinical teaching, the study recommended above should be conducted on a local as well as regional level. Before conducting the proposed large scale study mentioned above, this investigator would suggest replicating the current study with a much larger population.

A number of research topics are suggested by the results of this study. Many of the characteristics of the clinical faculty and the clinical experience noted in this study, were informative but were not substantiated due to a lack of studies on these topics. This would seem to indicate a need for descriptive and exploratory studies on the characteristics of the clinical nursing faculty teaching in the clinical setting and also studies on the

characteristics of the clinical experience.

The faculty in this study reported using more student centered teaching methods than teacher centered methods during clinical instruction. An experimental study could be designed to examine the different teaching methods used in clinical instruction and their relationship to student achievement in the clinical practice setting.

Another topic suggested for investigation by the results of this study is the finding that the reported supervisory practices of the clinical nursing faculty have some parallels with the clinical supervision and developmental supervision models used in teacher education. A study could be designed to compare how these models are used in nursing education with how the models are used in teacher education.

Since this study suggested differences in the instructional and supervision practices across clinical specialties, a more intensive study of these differences is recommended.

APPENDICES

Appendix A

A PROFILE OF THE CLINICAL DAY

The purpose of this questionnaire is to develop a set of descriptions on the nature of the current practices utilized by nursing faculty teaching in the clinical practice settings in selected baccalaureate programs in nursing.

DIRECTIONS: Please indicate your response on the line provided or checking the answer of your choice.

THE CLINICAL INSTRUCTOR

1. How many years have you been a clinical faculty member?

   _____

2. What is the highest degree you hold? _____

3. What is your area of clinical specialization?

   ____Medical/Surgical ____Maternal/Child ____Community

   ____Psychiatric ____Pediatrics _____Other
   (please specify)

4. Did your graduate program include the following:
   ___ Yes ___ No course(s) in teaching?
   ___ Yes ___ No practice in teaching?

THE STUDENTS

5. In what semester are students admitted to the nursing major?

   ___1st ___2nd ___3rd ___4th ___5th ___6th

6. In what semester are the students in your present clinical section?

   __1st ___2nd ___3rd ___4th ___5th ___6th ___7th ___8th

THE CLINICAL EXPERIENCE

7. What course content is most closely related to this clinical? (e.g., psychiatric, pediatric nursing concepts etc.)

_____

8. What is the type of setting used for this clinical experience? (e.g., hospital, school, nursing home, etc.)

_____

9. Please describe the characteristics of your current clinical.

_____ number of students per day _____ number of hours per day

_____ number of days per week _____ number of weeks

_____ number of clinical courses students have prior to this one

_____ number of clinical courses students have after this one

10. How frequently do your students use the nursing laboratory to practice skills?

___ Never___ a few times a semester___ weekly___ daily

11. How frequently do you begin a clinical day with a small group conference?

___ Never___ a few times a semester___ weekly___ daily

12. How frequently do you end the clinical day with a small group conference?

___ Never___ a few times a semester___ weekly___ daily

13. How long does it usually take you to develop teaching plans for a typical clinical day?

___ 0 to 30 min ___ 30 to 60 min ___ 1 to 2 hrs

___ 2 hrs or more

14. To what extent do you use student/s input in planning the clinical day?

___ Not at all ___ Invite input ___ Joint plans

___ They decide

15. To what extent do you use objectives to plan for clinical practice?

___None ___ For some aspects ___ For most aspects

___ All aspects

16. How frequently do you engage in the following planning activities? (Please indicate frequency by circling the appropriate letter) (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways).

N S F M A a) plan the patient assignments a day in advance

N S F M A b) plan the patient assignments of the day of clinical

N S F M A c) change learning objectives/activities due to patient availability

THE CLINICAL LEARNING EXPERIENCE

For the purposes of this survey the clinical day is divided into two functional categories:

INSTRUCTION - WHEN STUDENTS ARE NOT ENGAGED IN PATIENT CARE and THE CLINICAL INSTRUCTOR BRINGS THE STUDENTS TOGETHER IN SOME TYPE OF GROUPING FOR INSTRUCTION OR WHEN STUDENTS ARE ENGAGED IN SOME TYPE OF INDEPENDENT OR GROUP LEARNING ACTIVITY WITHOUT THE CLINICAL INSTRUCTOR

SUPERVISION - WHEN STUDENTS ARE INDIVIDUALLY ENGAGED IN PATIENT CARE and THE CLINICAL INSTRUCTOR CIRCULATES THROUGH THE FACILITY TO OBSERVE EACH STUDENT AS THEY PERFORM THEIR TASKS and CONFERS WITH THEM INDIVIDUALLY ABOUT THEIR PERFORMANCE.

17. Given an average clinical day, what percentage of time do you spend:

____% a) instructing students (students not engaged in patient care)

____% b) supervising students (students engaged in patient care)

100 %

INSTRUCTION (Please indicate average instructional time)

18. Given your instructional time with students, consider each of the following teaching methods and please indicate what percentage of the total instructional time you generally devote to each.

a) Lecture (explanation)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

b) Demonstration (teacher presentation)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

c) Recitation/Drill (questions about and answers on specific knowledge and skills)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

d) Discussion (teacher and student initiated questions on issues and procedures in patient care)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

e) Inquiry/Discovery (Students observe phenomena and through the instructor's questioning or students asking questions students derive principles, procedures, etc. - an inductive process)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

f) Problem Solving / Decision Making (Given a dilemma, problem, etc., students develop a strategy)

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

g) Role-Playing/Simulations

___ 0 ___ 5% ___ 10% ___ 20% ___ 30% ___ 40% ___ 50%

___ 60% ___ 70% ___ 80% ___90% ___100%

INSTRUCTIONAL STRATEGIES

19. When you are presenting information to students, how frequently is it appropriate to:

a) Use student's past knowledge and experiences to relate the content to the principles or concepts being taught.

____Never ____Sometimes ____Frequently
____Most of the Time ____Always

b) Encourage student questions and comments.

____Never ____Sometimes ____Frequently
____Most of the Time ____Always

c) Use media to reinforce/complement a verbal presentation.

____Never ____Sometimes ____Frequently
____Most of the Time ____Always

d) If you use media in your presentations, please indiindicate frequency of use by circling the appropriate letter: (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways

N S F M A 1) transparencies
N S F M A 2) simulated or real patient charts or kardexes
N S F M A 3) audio-tapes
N S F M A 4) video-tapes
N S F M A 5) films/slides
N S F M A 6) handouts

20. When you are conducting a discussion, how frequently is it appropriate to use the following?

(Please indicate frequency of use by circling the appropriate letter. (N)ever; (S)ome; (F)requently; (M)ost of the Time; (A)lways)

N S F M A a) ask questions which require recall of specific facts, procedures, or generalizations.
N S F M A b) ask questions which require interpretation, synthesis, analysis and evaluation.
N S F M A c) ask probing questions to require students to go beyond superficial "first-answer" responses (why do you agree, can you add, etc.).
N S F M A d) ask questions which elicit students' feelings and values.
N S F M A e) ask questions which require students to "discover" facts, concepts, or principles.
N S F M A f) require students to formulate questions that needed information to establish facts or solve problems (inquiry).
N S F M A g) ask questions which elicit student divergent thinking.
N S F M A h) use "wait-time" (5 seconds or more) between asking a question and calling on a student.
N S F M A i) differentiate responses t o student answers.

21. When using a discussion as a teaching method how frequently do you use the following?

(Please indicate frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways)

N S F M A a) Nursing care "conference" (A group discussion using problem-solving techniques in determining the nursing care to patients whom students are assigned on any given clinical day.)

N S F M A b) Nursing rounds (selected patient is the focus of a group discussion)

c) Other_____

22. When using inquiry/discovery as a teaching method how frequently do you use the following? (Please indicate frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; F)requently; M)ost of the Time; (A)lways)

N S F M A a) Case analysis (group analysis of a case history)
N S F M A b) Case incident (group analysis of a critical incident)
c) Other_____

23. When you engage students in independent and group learning activities, how frequently are the following methods of instruction used? (Please indicate frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; (F)requently; (M)ost of the time; (A)lways)

Individual project (written assignments)

N S F M A a) Nursing case study
N S F M A b) Process recording
N S F M A c) Nursing care plans
N S F M A d) Clinical logs
N S F M A e) Teaching/learning plans
N S F M A f) Observation within the clinical setting
N S F M A g) Assigned task (e.g., readings from the current nursing research journals)
N S F M A h) Programmed learning (computer programs)
N S F M A i) Audio materials
N S F M A j) Video-taped materials

24. How frequently do you use field trips as part of your clinical instruction?

____ Never ____ a few times a semester ____ weekly
____ daily

SUPERVISION

25. Consider the period of time when students are engaged in patient care. What percentage of that time do you spend:

___% Observing students

___% Analyzing observation data and preparing for conferences

___% Conducting conferences

___% Recording and processing data about the performance and progress of individual students

___% Role modeling

26. How long do you usually observe an individual student? (Please indicate in terms of minutes)

___under 10 ____ 10 to 20 ____ 20 to 30 ____ 30 to 40

___ over 40

27. How freguently do you conference with individual students prior to observation?

___ Never ___ Sometimes ___ Frequently

___ Most of the Time ____ Always

28. When you hold a conference prior to observing a student how frequently are the following activities appropriate?

(Please indicate the frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways)

N S F M A a) discussion of objectives for the day

N S F M A b) discussion of procedures the student will demonstrate

N S F M A c) discussion of how and what the clinical instructor will observe

29. When you are observing individual students how frequently do you use any of the following methods? (Please indicate the frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways)

N S F M A a) Informal Notes

N S F M A b) Selective Verbatim Notes

N S F M A c) Narrative/Systematic Description

N S F M A d) Performance Checklist

N S F M A e) Rating Scale

f) Other observational tools used

_____

30. When you are observing students how frequently do you:

N S F M A a) allow the student to recognize and correct errors on their own

N S F M A b) step in and take over for the student

N S F M A c) provide assistance without taking over

N S F M A d) provide feedback to discourage certain behavior

N S F M A e) provide feedback to encourage certain behavior

31. How frequently do you conduct a post-observation conference with an individual student after an observation?

____Never ____Sometimes ____Frequently
____Most of the Time ____Always

32. If you conduct a post-observation conference following an observation, how soon do you do it?

___immediately___within the hour___several hours later
___the next day ___during the next clinical day

33. During a post-observation conference, how frequently do you find it appropriate to include the following? (Please indicate the frequency of use by circling the appropriate letter. (N)ever; (S)ometimes; (F)requently; (M)ost of the Time; (A)lways)

N	S	F	M	A	a) Ask student to state the learning objective for the patient care experience.
N	S	F	M	A	b) Ask student to reflect on his/her performance during the patient care experience.
N	S	F	M	A	c) Request the student to evaluate the day's activities. (Did the day go as planned?).
N	S	F	M	A	d) Request the student to identify problems encountered during the patient care experience.
N	S	F	M	A	e) Provide objective (non-evaluative) descriptive feedback on student's performance.
N	S	F	M	A	f) Provide positive feedback on student's performance.
N	S	F	M	A	g) Provide negative feedback on student's performance.
N	S	F	M	A	h) Make suggestions on how to improve a student's performance.
N	S	F	M	A	i) Ask questions which request the student to analyze his/her performance.
N	S	F	M	A	j) Engage the student in problem-solving steps to develop a revised plan for performance.
N	S	F	M	A	k) Assist the student in developing a new skill or knowledge.

THANK YOU FOR YOUR ASSISTANCE. YOUR COOPERATION IS VERY MUCH APPRECIATED.

Dianne E. Taylor

Appendix B

5808 Hanna Road
Eldersburg, Maryland 21784

March 25, 1988

Mary Sue Infante, R.N., Ph.D.
Dean
Department of Nursing
Boston College
Cushing Hall
Chestnut Hill, Massachusetts 02167

Dear Dr. Infante:

As you may recall, from my telephone message, I am a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. I am also an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University, Towson, Maryland.

I am writing to ask for a copy of the research instrument you developed for the study of the clinical laboratory you reported in your book, "The Clinical Laboratory in Nursing Education", (1985).

I would also sincerely appreciate your critiquing an instrument that I have developed for my doctoral dissertation research study. The purpose of my proposed study is to determine the nature of the instructional and supervisory practices utilized by clinical nursing faculty during the apprenticeship learning of baccalaureate nursing students. Please find enclosed a copy of my dissertation research proposal, instrument, and a form for your comments. I hope this serves to orient you to the type of study I am proposing for my doctoral dissertation.

Thank you in advance for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Sincerely,

Dianne E. Taylor

Appendix C

5808 Hanna Road
Eldersburg, Maryland 21784

April 26, 1988

Elizabeth J. Pugh, R.N., Ph.D.
Associate Professor of Nursing
College of Nursing
University of Utah
22 S. Medical Drive
Salt Lake City, Utah 84112

Dear Dr. Pugh:

As you may recall, from our telephone conversation of April 21, I am a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. I am also an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University, Towson, Maryland.

I would sincerely appreciate your critiquing an instrument that I have developed for my doctoral dissertation research study. The purpose of my proposed study is to determine the nature of the instructional and supervisory practices utilized by clinical nursing faculty during the apprenticeship learning of baccalaureate nursing students. Please find enclosed a copy of my dissertation research proposal, instrument, and a form for your comments. I hope this serves to orient you to the type of study I am proposing for my doctoral dissertation.

Thank you in advance for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Sincerely,

Dianne E. Taylor

Appendix D

5808 Hanna Road
Eldersburg, Maryland 21784

April 26, 1988

Marilyn H. Oermann, R.N., Ph.D.
Associate Professor of Nursing
College of Nursing
Wayne State University
Detroit, Michigan 48202

Dear Dr. Oermann:

As you may recall, from our telephone conversation of April 21, I am a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. I am also an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University, Towson, Maryland.

I would sincerely appreciate your critiquing an instrument that I have developed for my doctoral dissertation research study. The purpose of my proposed study is to determine the nature of the instructional and supervisory practices utilized by clinical nursing faculty during the apprenticeship learning of baccalaureate nursing students. Please find enclosed a copy of my dissertation research proposal, instrument, and a form for your comments. I hope this serves to orient you to the type of study I am proposing for my doctoral dissertation.

Thank you in advance for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Sincerely,

Dianne E. Taylor

Appendix E

A CRITIQUE OF THE PROFILE OF THE CLINICAL DAY

A. Comprehensiveness of categories

Instruction: (comments)

Supervision: (comments)

B. Clarity of direction: (comments)

C. Use of terms: (comments)

D. Ease of direction: (comments)

E. Other comments:

Appendix F

Letter to Pilot Nursing Program

5808 Hanna Road
Eldersburg, Maryland 21784

May 27, 1988

Dr.
Dean
College of Nursing

Dear Dr.

As you may recall, from our telephone conversation of May 20th, I am a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. I am also an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University, Towson, Maryland.

Thank you for the opportunity to meet with the undergraduate clinical nursing faculty to obtain their participation in a pilot study of my survey instrument. I plan to attend your faculty meeting on June 9, to explain the study, to obtain faculty signatures on the consent forms, and to distribute the questionnaires and the enclosed stamped, self-addressed envelopes. I will ask the faculty if they would complete the questionnaire overnight, so that I may personally collect the completed questionnaires.

I will need a list of faculty names and addresses ahead of time so that I can prepare stamped, self-addressed postcards on which the faculty's name and address has been typed. Faculty who choose not to return the questionnaire on June 10, will be asked to return the postcard to signify that the questionnaire has been mailed. This is necessary because the questionnaire will be anonymous. I will send a follow-up letter of encouragement to those faculty who have not returned the questionnaire.

Please find enclosed a copy of my dissertation research instrument and a form for critiquing the instrument. I would appreciate any comments that you care to make concerning the study, the instrument, or the procedures for collecting the data.

Thank you in advance for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Sincerely,

Dianne E. Taylor

Appendix G

Letter to Nursing Faculty Pilot Nursing Program

June 9, 1988

5808 Hanna Road
Eldersburg, Maryland 21784
1-301-795-7178

Dear Colleague:

I am an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University in Maryland and a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. For my doctoral research study, I am trying to ascertain the specific characteristics of instruction in clinical practice settings in selected baccalaureate programs of nursing.

I need your help in conducting a pilot study of my survey instrument. Please complete the attached questionnaire entitled: "A Profile of the Clinical Day". The six page questionnaire takes approximately 25 minutes to complete.

After you complete the questionnaire, I would appreciate your completing the attached form entitled: "A Critique of the Profile of the Clinical Day".

When you have completed the questionnaire and the critique, please return the forms in the stamped, self-addressed envelope. To signify that the questionnaire has been mailed, please return the stamped, self-addressed postcard.

Your sincere and thoughtful responses are very much appreciated and they are essential to my developing a reliable instrument. Thank you for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Cordially,

Dianne E. Taylor

Appendix H

Letter to Participating Nursing Programs

5808 Hanna Road
Eldersburg, Maryland 21784

July 27, 1988

Dear Dr.

I am a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. I am also an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University.

I am writing to request an opportunity to meet with your undergraduate clinical nursing faculty to ask them to participate in my doctoral research study. I would like to attend a faculty meeting in August or September, in order that I may explain the study, obtain faculty signatures on the consent form, and to distribute the questionnaires and the stamped, self-addressed envelopes. I will only need five to ten minutes of the faculty meeting time.

I will need a list of faculty names and addresses ahead of time so that I can prepare stamped, self-addressed postcards on which the faculty's name has been typed. Faculty will be asked to return the postcard to signify that the questionnaire has been mailed. This is necessary since the questionnaire will be anonymous. I will also send a follow-up letter of encouragement to those faculty who have not returned the questionnaire.

Please find enclosed a copy of the abstract of my doctoral research study and a copy of my questionnaire. If you have any questions I may be reached at 1-301-795-7178.

Thank you in advance for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

Sincerely,

Dianne E. Taylor

Appendix I

August 31, 1988
5808 Hanna Road
Eldersburg, MD 21784
1-301-795-7178

Dear Colleague:

I am an Assistant Professor of Psychiatric-Mental Health Nursing at Towson State University and a doctoral candidate in the Department of Curriculum and Instruction at The University of Maryland. For my doctoral research study, I am trying to ascertain the specific characteristics of instruction and supervision in clinical practice settings in selected baccalaureate programs in nursing.

I would like to ask you to participate in my study by completing the attached questionnaire entitled: "A Profile Of The Clinical Day". The six page questionnaire takes approximately 25 minutes to complete.

My study has been approved by The Human Subjects Review Board of the Graduate School of The University of Maryland and by the Institutional Review Board for the Protection of Human Subjects at Towson State University. All subjects will receive a code number upon receipt of the questionnaire, and anonymity will be assured. Return of the questionnaire will be considered consent to participate.

I would appreciate your completing the questionnaire by September 14, 1988 and returning it in the stamped, self-addressed envelope. To signify that the questionnaire has been mailed, please return the stamped self-addressed postcard.

Your sincere and thoughtful responses are very much appreciated. Thank you for taking time from your busy schedule to assist me as I approach the final stages of my doctoral program.

If you are interested in the results of this study or if you have any questions, please do not hesitate to contact me.

Cordially,
Dianne E. Taylor

Appendix J

September 30, 1988

5808 Hanna Road
Eldersburg, MD 21784
1-301-795-7178

Dear Colleague:

Several weeks ago, I came to your faculty meeting seeking your help in completing my doctoral research study. This involved your completing a questionnaire entitled: "A Profile of the Clinical Day". I am hoping that the findings of my survey will be helpful to our profession by providing new insights into the nature of teaching in the clinical practice settings and perhaps better information for the preparation of nurse educators.

I appreciate your taking time from your busy schedule to help me complete this project. However, if by chance, you have not had the opportunity to fill out the questionnaire, or if the questionnaire has been mislaid would you please take the time to complete the attached questionnaire and return it in the enclosed stamped, self-addressed envelope by October 14, 1988.

Thank you for your time and cooperation. If you have any questions, please call me at 1-301-795-7178.

Cordially,

Dianne E. Taylor

Appendix K

Comparison of Survey Instrument Question Three With Question Seven

Question Three (Area of Specialization)	Question Seven (Course Content)
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Adult Nurse Practitioner	Community Health
Medical/Surgical	Health Assessment
Community	Community
Medical/Surgical	Medical/Surgical
Psychiatric	Psychiatric
Maternal/Child	Obstetrics
Community	Community
Medical/Surgical	Medical/Surgical
Maternal/Child	Maternal/Child
Psychiatric	Psychiatric
Medical/Surgical	Medical/Surgical
Community	Community
Medical/Surgical	Medical/Surgical
Maternal/Child	Pediatric
Maternal/Child	Maternal/Child
Community	Community
Medical/Surgical	Medical/Surgical
Maternal/Child	Obstetrics
Maternal/Child	Maternal/Child
Medical/Surgical	Nursing Fundamentals
Pediatric	Pediatric
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Pediatric	Pediatric
Pediatric	Nursing Concepts
Pediatric	Nursing Concepts
Maternal/Child	Maternal/Child
Psychiatric	Community Psych.
Medical/Surgical	Medical/Surgical
Community	Community
Psychiatric	Community Psych.
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Pediatric	Pediatric
Community	Community
Pediatric	Pediatric

Pediatric	Pediatric
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Psychiatric	Psychiatric
Maternal/Child	Maternal/Child
Community	Community
Pediatric	Nursing Role
Adult Nurse Practitioner	Physical Assessment
Adult Nurse Practitioner	Nursing Fundamentals
Medical/Surgical	Nursing Fundamentals
Medical/Surgical	Medical/Surgical
Pediatric	Pediatric
Maternal/Child	Psychiatric
Community	Community
Psychiatric	Psychiatric
Maternal/Child	Medical/Surgical
Medical/Surgical	Community
Medical/Surgical	Medical/Surgical
Medical/Surgical	Medical/Surgical
Maternal/Child	Maternal/Child
Pediatric	Pediatric
Psychiatric	Psychiatric
Maternal/Child	Maternal/Child
Maternal/Child	Obstetrics
Medical/Surgical	Community
Psychiatric	Community
Psychiatric	Nursing Concepts
Community	Community
Medical/Surgical	Medical/Surgical
Maternal/Child	Medical/Surgical
Maternal/Child	Pediatric

Appendix L

Summary of Written Responses to Survey Instrument

Question 8

Question 8: What is the type of setting used for this clinical experience?

1. Hospital - Public and Private
   Acute Care and Rehabilitation
   Out-Patient Clinics (60 responses)
2. Nursing Home (6 responses)
3. Schools (4 responses)
4. Health Maintenance Organization (HMO) (1 response)
5. Community Agencies - Senior Centers,
   Children's Day Care Centers
   Public Health Departments (10 responses)
6. Physician's Office (1 response)
7. Businesses (1 response)

Note. Due to the fact that faculty can place students at more than one setting during a clincial experience, the responses add up to more than 72.

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1965-1966	Park City Hospital Bridgeport, Connecticut	Staff & Charge Emergency Room
1964-1965	Union Memorial Hospital Baltimore, Maryland	Staff & Charge General Duty