

AN ASSESSMENT OF CONTINUING EDUCATION NEEDS
OF NURSES

A THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

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DENTON, TEXAS

AUGUST 1981

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DEDICATION

The many hours of thought that
went into this work is dedicated to
the memory of my father . . .

Joe J. Vasquez.

ACKNOWLEDGMENTS

The investigator wishes to express sincere thanks to Dr. Vera Harmon for her direction and guidance in this endeavor. Thanks are also extended to Dr. Carol Adamson and Ms. Edith Wright for lending their expertise to this project. Rosa Lee Bachtel is acknowledged for her manuscript and editorial suggestions. Special thanks are owed to friends who offered their support toward the completion of this thesis: Melissa Loftin, Mary Ellen Zboril, Marianne King and Judith McCollough. And finally, thank you is expressed to my husband, Robert, who always made all things seem possible.

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CHAPTER 1

INTRODUCTION

In recent years there has been a rapid upswing of interest in continuing education for nurses. This surge of interest has been attributed to rapid technological advances in the health field, public demand for quality health care and legislative changes affecting the practitioners of health care. In the late 1960s, a survey conducted by the National Commission to Study Nursing and Nursing Education (NCSNNE) disclosed greater than 98% agreement among medical societies, health insurance groups, nursing groups and other groups in the health care field, that "social change and technological advances will increase the emphasis on continuing education in nursing" (Lysaught, 1973, p. 174).

Increasingly, participation in continuing educational activities has become a standard for evaluating the competency of nurses. In a 1970 publication of the NCSNNE, it was recommended that "all state licensure laws for nursing be revised to require periodic review of the individual's qualifications for practice as a condition for license renewal" (Lysaught, 1970, p. 142). Support of this philosophy is evidenced by the passing of legislation in

several states requiring proof of participation in continuing education as a condition for relicensure. Historically, this same sentiment was expressed to nurses by Florence Nightingale over 100 years ago when she wrote "we must never consider ourselves finished nurses . . . we must be learning all our lives" (Cooper & Hornback, 1973, p. 19).

Haferkorn (1975) stated that "depending on their activities and responsibilities, nurses need knowledge and education of a particular kind to provide optimal service to their patients" (p. 245). In a past study where nurses were asked to rank their learning needs, those subject areas most related to the area of clinical practice were given the highest priority (Curran, 1977). Knowles (1978), a leader in adult learning theory, emphasized the autonomous nature of adults in determining educational needs. Hence, if relevant, democratically-conceived continuing education programs are to be offered, a learning needs assessment is inherent to the planning phase.

One mechanism for assessment of desired competencies or felt learning needs of nurses is the survey methodology utilizing an assessment tool. A needs assessment survey would provide sponsors of educational programs with guidelines for course offerings to be made available. In

addition, participation in a survey would allow the individual nurse the opportunity to make learning needs known to the appropriate sources. In 1979, a statewide continuing education needs assessment survey was conducted in Texas by the director of continuing education at a major state university (Wright, 1980). To date, no known surveys have been conducted which were limited to the general population of professional nurses residing in the geographic area of Harris County and adjacent counties. Considering the consolidation of health care facilities and the large population of licensed nurses in the area, the need for continuing education should be unprecedented. However, without a scientific needs assessment, continuing education offerings may contribute to the uncoordinated growth of poorly conceived programs.

Problem of Study

In an effort to maintain a timely knowledge base and to meet the standards of nursing practice, nurses must direct energy toward resources which promote professional growth. Continuing education programs provide a structured, organizational sponsored potential means to realize self-identified needs for learning. The problem of this study addressed the need to survey nurses of Harris County and

nearby surrounding counties to determine what they perceived their needs for continuing education to encompass.

Justification of the Problem

In Future Shock, Toffler (1970) predicted that because of the "rapid obsolescence of knowledge and the extension of life . . . the skills learned in youth are unlikely to remain relevant by the time old age arrives" (p. 361). Nursing practice, like other disciplines, is constantly evolving through changes perpetuated by technological advances, societal changes, health legislation and changing roles of nurses. These changes bring new knowledge to be gained, new skills to acquire and new values to adopt. However, unless

an educational process which builds upon and/or modifies previous experiences of nurses is available and utilized, nurses' knowledge and skills are unlikely to remain relevant for more than a few years. (Koonz, 1978, p. 6)

Research has indicated that a disparity exists between an individual's positive valuing of continuing education and poor participation in educational offerings. It has been suggested that perhaps nurses do not find continuing educational offerings relevant to their needs (Bush & Lewis, 1978). Increased relevancy could be achieved through a needs assessment providing nurses with the opportunity to express learning needs.

A scientific needs assessment would be valuable to those sponsors of continuing education who apply to have offerings approved for official credit. The American Nurses' Association (ANA) has charged the State Nurses' Association with the responsibility of accrediting educational offerings that grant official credit for recognition of participation. The accreditor reviews the offering and ascertains that it is "relevant to the educational needs of the learner and to the health care needs of the consumer" (American Nurses' Association, 1975a, p. 10). Furthermore, those agencies which wish to have total programs accredited must show evidence of a method for obtaining input from the consumers through assessment of learner needs (American Nurses' Association, 1975a). A scientific needs assessment could provide supporting evidence of these educational needs.

The American Nurses' Association has delineated the responsibility for continuing education among individuals, employers, sponsors, state nurses' associations, and the ANA. The ANA places the ultimate responsibility for identifying personal needs and making learning needs known to the appropriate sources with the individual nurse (American Nurses' Association, 1976b). By participation in a needs assessment, the individual nurse has the opportunity to express continuing education preferences.

A futuristic benefit of a needs assessment is that it may contribute to the identification of life long learning needs of nurses as they pass through different stages of their careers. Connelly (1976) noted that nursing has yet to define the stages through which its members pass in a life long career. He suggested that nurses must further determine "learning needs for other stages of career development for nurses of various types and in various fields of nursing" (p. 20). Styles (1976) proposed that continuing education be based upon a dynamic, life long educational blueprint for each nurse which would include goals, interests, self-evaluation and career counseling. Through learning needs assessment, existing patterns may be identified which contribute to the formation of common core curricula for life long learning, thus promoting greater professional coherence and confluence.

Theoretical Framework

Knowles (1978) has integrated concepts, insights, and research findings regarding adult learners to construct a framework for a unified theory of adult education. This andragogical theory of adult learning is based upon at least four assumptions regarding adult learners. These assumptions are: (1) the self-concept of adults changes to self-directed versus dependency; (2) a reservoir of life

experiences serves as a base for learning; (3) readiness to learn stems from the need to perform evolving social roles; and (4) adults have a problem-centered orientation to learning.

Knowles' andragogical model for teaching incorporates procedures and resources to help learners acquire information and skills. The andragogical teacher involves the learners in a process which includes:

- 1) establishing a climate conducive to learning;
 - 2) creating a mechanism for mutual planning; 3) diagnosing the needs for learning; 4) formulating programs and objectives . . . that will satisfy these needs;
 - 5) designing a pattern of learning experiences;
 - 6) conducting these learning experiences with suitable techniques and materials; and 7) evaluating the learning outcomes and rediagnosing learning needs.
- (Knowles, 1978, p. 108)

The interest of this study focused upon the third element, diagnosing the needs for learning.

According to Knowles, identification of learning needs can be facilitated through the construction of a three-component model. The first component of the model includes a listing of desired competencies needed to actualize the particular role. The three sources for such data are the individual, the organization and the society. To the andragogical theorist, the

learner's own perception of what he wants to become, what he wants to be able to achieve, at what level he wants to perform, is the starting point in building a model of competencies. (Knowles, 1978, p. 116)

The second component involves self-assessment of the present level of competencies specified in the model. The third component is self-assessment of the discrepancies between desired competencies and present competencies. These discrepancies constitute learning needs.

In summary, the content of education for adults should be directly related to what adult learners can self-identify as a learning need. The adult motivation for participation in an educational activity results largely from feelings of "inadequacy in coping with current life problems" (Knowles, 1978, p. 58). A nursing example could be a felt lack of competency in performing a new skill. These feelings of inadequacy perpetuate felt needs for educational endeavors and solutions to problems. If agencies of education are to provide relevant learning programs, then they must engage in the business of assessing learning needs for the community served.

Assumptions

The following assumptions were relevant to this study:

1. Nurses are adult learners.
2. Nurses, as adult learners, are able to assess and express their needs for continuing education.
3. Continuing education for nurses provides a means for professional growth.

Research Questions

This study addressed the following research questions regarding the continuing education needs of nurses residing in Harris County and nearby bordering counties:

1. What are the subgroup populations among the nurses within the population being surveyed as based upon the following variables: specialty area of practice, type of employment institution, position held, educational preparation, organizational memberships, length of nursing practice, and time lapse since practiced nursing?
2. Are there any trends toward a consensus for continuing educational preferences among nurses in the population under survey?
3. Are there any trends toward a consensus for continuing educational preferences among nurses in different specialty areas of practice?
4. Are there any trends toward a consensus for continuing educational preferences among nurses holding different positions within their employment?
5. Are there any trends toward a consensus for continuing educational preferences among nurses with different educational backgrounds?

6. Are there any trends toward a consensus for continuing educational preferences among nurses with different lengths of practice?

Definition of Terms

The following terms were defined for the purpose of this study:

1. Continuing education--

planned learning experiences beyond a basic nursing education program . . . designed to promote the development of knowledge, skills and attitudes for the enhancement of nursing practice, thus improving health care to the public. (American Nurses' Association, 1975a, p. 3)

2. Continuing education needs--those topic areas for which an individual communicates a learning need by selection of the choice "great need" or "moderate need" on a needs assessment questionnaire.

3. Expressed need--that which an individual is able to communicate to another by the act of completing a needs assessment questionnaire.

4. Self-identified need--that, which through the act of introspection, an individual diagnoses as a deficiency in a desired competency.

Limitation

The following limitation was imposed upon this study:

The sample included only those registered nurses licensed in the named counties. Therefore, findings cannot be generalized to other groups of nurses outside the geographical boundaries.

Summary

Continuing education for nurses has gained greater emphasis as a result of the knowledge explosion in the health fields, societal demands for quality health care and legislative changes affecting nurses. Maintaining continued and sustained capabilities in nursing has become recognized as an endeavor to pursue throughout the span of each nurse's practice. Among the modalities for continued growth are the planned learning experiences which promote improved health care to the public. The providers of these experiences must incorporate the principles of adult education into the planning and implementing of learning activities. According to adult learning theory, if educational activities are to have meaning and relevance to the learners, the offerings must reflect the needs of the nurse population being served. A continuing education needs assessment survey is one means of gathering data to plan meaningful educational offerings. It was the aim of this investigator to analyze continuing education needs for a select population. In addition, trends toward a consensus

for continuing educational preferences among nurses comprising four subgroup populations were analyzed.

Chapter 2 is a review of literature. Procedures for collection and treatment of data is discussed in Chapter 3. Chapter 4 contains the analysis of data. A summary of the study is presented in Chapter 5.

CHAPTER 2

REVIEW OF THE LITERATURE

Over two generations ago, Alfred North Whitehead (cited by Knowles, 1978) proposed that because of a reversing relationship between two basic dynamics of civilization, the purpose of education required redefinition. There no longer exists a body of knowledge from which an individual can abstract for the span of his/her life. In other words, "the time span of major cultural change has become shorter than the lifespan of the individual" (Knowles, 1978, p.165). Inevitably, the infinite growth of knowledge dictates that education be redefined as a "process of continuing inquiry" (Knowles, 1978, p. 165).

Intrinsic to professional nursing is the assumption of responsibility and accountability for one's own practice. This responsibility and accountability is characterized by a commitment to truth, information, knowledge, and professional competence (Cooper, 1980; Palmer, 1974). Participation in continuing education has increasingly become recognized as a means whereby nurses can expand their theoretical knowledge and ultimately improve clinical performance (American Nurses' Association, 1976a).

A precursor to entering an emerging field is consolidation of past experiences to provide guidelines for new growth. In the following sections an analysis and integration of literature addressing aspects of continuing education will provide an understanding of the accomplishments and future tasks in this field. Hence, a review of those factors which have led to a need for continuing education will be presented. Secondly, the historical beginnings of continuing education which led to its present state of existence will be reviewed. Thirdly, the contributions of the field of adult education which serve as catalyst to continuing education in nursing will be presented. The subsequent section will address controversial issues relevant to continuing education. Finally, the mechanisms for delivery of continuing education will be enumerated.

Why Continuing Education?

The emphasis on continuing education stems from the realization that like other fields of endeavor, the health professions are amidst a knowledge explosion. Toffler (1970) informed us that the number of scientific journals and articles in the advanced countries doubles about every 15 years. On an international scale, scientific and technical literature accumulates at a rate of 60,000,000 pages a year (Toffler, 1970). In 1968 it was estimated that

within five to seven years of completing formal education, half of the knowledge acquired would be outdated (Krekeler, 1975), while medical knowledge is estimated to remain timely for about two and one half years. It has also been estimated that by the mid-1980s, the applicability of medical knowledge will decline to 18 months (Rajabally, 1976). This rapid expansion of knowledge has made obsolete the concept of finished education.

Social changes in the clientele population require changes in nursing practice. For example, life expectancy continues to extend, creating an increase in the population over the age of 65, and thus an increase in chronic and degenerative illnesses. The incidence of mental illness continues to escalate, and it has been predicted that one out of every ten persons in this country will spend some time in a mental institution. Furthermore, the incidence of maternal and infant mortality in the United States remains high for a civilized nation (Cooper & Hornbach, 1973).

Changes in the health care system itself impose new demands on nurses today. In recent years, these changes in health care have created a crisis in this country. The cost of health care is soaring, health manpower is poorly distributed, comprehensive medical care is inaccessible and

certain groups do not receive adequate health care (Cooper & Hornbach, 1973).

Changes in professional nursing parallel societal changes, improvements in the health care delivery system and the expansion of scientific knowledge. Nurses must acquire highly specialized knowledge to function in technically advanced areas such as intensive care units. They may choose to leave one specialty area of practice for another. In addition, nurses are assuming extended roles in areas where the supply of physicians is limited. Inactive nurses are facing greater difficulty returning to practice because of the rapid obsolescence of their knowledge base (Cooper & Hornbach, 1973).

The ultimate goal of continuing education is to narrow the gap between knowledge discovery in health care and implementation of knowledge in nursing practice for the improvement of patient care. The American Nurses' Association defines the primary goal of continuing education as "to assure continued competence of nursing personnel in the delivery of health care to all people" (American Nurses' Association, 1975b, p. 3). The ANA identified goals of a continuing education program which are contributory to personal and professional growth:

1. Promote individual responsibility and accountability of nurses for their continued learning and its application to practice.

2. Provide opportunities for the non-practicing nurse to become aware of changes in nursing and health care.
3. Communicate nursing science and facilitate its incorporation into nursing practice.
4. Demonstrate emerging nursing content and competence required to accommodate to changes in the health care delivery system. (American Nurses' Association, 1975b, p. 3)

Palmer (1974) contended that continuing education is necessary because the variability of preparatory backgrounds of the labor force in nursing does not assure the standard of competence or a baseline of knowledge requisite of today's professional nurse. She further contended that the academic degree, providing the baseline for professional practice, is no guarantee of consistent updating of knowledge in the field of nursing practice (Palmer, 1974).

Styles (1976) proposed that continuing education serve as a means to promote professional coherence. She maintained that continuing education is likely to provide the framework for integration of research findings into nursing practice. Styles (1976) also projected that continuing education has the potential for bridging the interface between education and practice by virtue of concurrent experiences of learning and doing.

Puetz and Rytting (1979) identified continuing education as a means for nurses to develop leadership in promoting changes in the health care system as well as achieving

career satisfaction. Popiel (1977) stated that one purpose of continuing education is to demonstrate evidence of competence for periodic relicensure.

The assumption underlying active participation in continuing education as a condition for relicensure is that individuals participating in continuing education will subsequently change their professional performance. This changed performance will have a positive effect on consumers' health status. However, few studies have been done which demonstrate that continuing education improves performance behavior on the job (del Bueno, 1977).

In conclusion, it is the general consensus that a major goal of continuing education in nursing should be the improvement of professional practice. Improvement of practice could result by shortening the lag period between new knowledge and its implementation in practice. Also, improvement of nursing would be promoted by a homogeneous baseline of knowledge for practice which continuing education could serve to provide.

History of Continuing Education in Nursing

In 1900 at the Third Annual Convention of the Nurse's Associated Alumnae of the United States (NAAUS), Plumer (1901) stated that "the advance of medical science, and the constant changes it brings, makes the nurse of a few years

back decidedly a back number" (p. 754). Formal continuing education for nurses was scarce before the turn of the century, yet the concept of life long learning is as old as organized nursing. Improvement of the graduate nurse as a deliberate pursuit began soon after classes graduated from the first U. S. schools of nursing in 1873. This same period of history marks the beginning of the organization of nursing as a profession with common goals (Goodnow, 1939; Pfefferkorn, 1928).

In 1893, the first national nursing organization, the American Society of Superintendents of Training Schools (ASSTS) was formed. This society prompted the formation of an organization in which all nurses were eligible for membership. Thus in 1896, the first meeting of the Nurse's Associated Alumnae of the United States and Canada was called to order. The American contingent was later named the American Nurses' Association (Pfefferkorn, 1928).

Many activities for graduate nurse self-improvement were undertaken by both the NAAUS and the ASSTS. Early efforts of the ASSTS were directed toward organization of alumnae associations for "training schools." The Alumnae Associations were considered sources of potential power in graduate nurse advancement. These associations held regular meetings, provided study and sponsored scholarships, loans and special activities for nurses (Pfefferkorn, 1928).

The Nurse's Associated Alumnae established a Committee on Course of Study, the purpose of which was to "suggest courses of study for alumnae associations" (Pfefferkorn, 1928, p. 703). Jointly the two organizations established a journal, the American Journal of Nursing, to provide a learning resource for the graduate nurse. Many of the articles were directed at the graduate nurse to provide timely content and urge continued study (Pfefferkorn, 1928).

According to the literature, the first formal post-graduate courses designed for practicing nurses were those sponsored by schools of nursing. One of the earliest recorded post-graduate courses was provided in 1894 by the Illinois Training School for Nurses (Cooper, 1975). In 1900 Plumer reported that most of 50 "training schools" she surveyed allowed their own graduates to "return for two or three months and work in the wards" (Plummer, 1901, p. 755). In 1905, Noyes reported the results of a survey which addressed the availability of post-graduate courses in 114 general hospitals and 20 speciality hospitals. Twenty-six of the general hospitals with 100 beds or more offered post-graduate courses (Pfefferkorn, 1928).

Early leaders in nursing identified the need for continued learning for nurses. Post-graduate work was alluded to as an avenue for the nurse who found her basic

preparation deficit (Goodnow, 1939). However, post-graduate courses were often provided by hospitals with the motive of obtaining service at the expense of education. Only three of the 26 hospitals Noyes (cited by Pfefferkorn, 1928) surveyed that offered post-graduate work provided lectures or classwork.

The great depression of the 1930s fostered an increasing interest in post-graduate courses. Unemployment was not uncommon among nurses. Hospitals were under financial stress as well. Frequently room and board was provided to enrollees by the sponsoring hospital (Cooper, 1973; Gray, 1929).

Early in the 1920s reference was made to institutes, workshops and conferences. These activities frequently were sponsored by state nursing associations, the National League of Nursing Education and the American Nurses' Association (Cooper, 1973). Although university involvement in continuing education was scarce prior to the 1920s, the first university based nursing course was offered before the turn of the century. In 1898, the ASSTS formed the League Education Committee to study the subject of qualification as a nurse instructor. The committee recommended that an educational offering be provided for nurses who desired to advance to directorship positions in hospitals or nursing schools (Goodnow, 1939). As a result the first

university based course for graduate nurses was offered at Teacher College, Columbia University, in 1899 (Pfefferkorn, 1928).

Early university involvement in education for nurses took place during the summer sessions. Courses were offered on topics such as domestic science, physical education and chemistry. In 1927, summer courses for teachers, directors and supervisors were available in 10 universities. Courses for public health nurses were more rapid in development. In 1927, summer courses related to public health were published for 23 universities (Pfefferkorn, 1928).

In the 1930s, the inactive nurse became an important target group for continuing education. Refresher courses during the depression years were a means of keeping the unemployed nurse up to date. In 1941, the National Defense Nurse Training Act was passed making federal funds available for advanced nursing education as well as refresher courses for inactive nurses. Funds for retraining of inactive nurses were also made available through the Bolton Nurse Training Act passed in 1943 (Cooper, 1973).

In 1962, federal funds for inactive nurses were offered through the Manpower Development and Training Act. In 1967, the Division of Nursing, U.S. Public Health Service, contracted with state groups to facilitate the return of the inactive nurse to practice. Through these efforts inactive

nurses were provided with refresher courses in an effort to return them to the practice setting (Cooper, 1973).

Educational opportunities provided by employing agencies first appeared in the nursing literature in the late 1920s. The concept of staff education became increasingly important due to the employment of untrained nurses' aides during World War II. As society became more mobile, the attrition rate in nursing increased, thereby necessitating organized orientation of new employees (Cooper & Hornbach, 1973).

Today continuing education is widely accepted as a means for professional growth. In 1969, the first National Conference on Continuing Education was called to order. Since then a national conference has been held each year. Since 1974, these national conferences have been co-sponsored by the ANA's Council on Continuing Education (Cooper, 1978).

The ANA's Council on Continuing Education has been instrumental in improving the quality of continuing education. The council published several documents which set forth standards and guidelines for continuing education. An accreditation mechanism for continuing education offerings was also developed (Cooper, 1978).

In the late 1960s, a system for recognition of participation in continuing education was devised. By

1978, recognition systems for participation in continuing education had been developed by almost every state nurses' association ("Status of Continuing Education," 1977).

In 1971, the significance of continuing education in nursing had reached unprecedented recognition. The state of California successfully passed legislation linking continuing education to relicensure. By 1978, continuing education was mandatory in several states ("Status of Continuing Education," 1977; Cooper & Hornbach, 1973). By 1980, however, the trend toward mandatory continuing education had reached a plateau. Legislation to enact mandates for continuing education had not proceeded in several states. Furthermore, mandatory continuing education was under attack in Florida and Colorado. In 1979, the state of California introduced extensive amendments to the nurse practice act which included the elimination of mandatory continuing education. Other states have proposed regulations which would negate the mandate for continuing education by virtue of exceptions to the statute (Waddle, 1980).

Emphasis on Adult Education

Nationwide interest in continuing education spread rapidly after the 1950s when the federal government first became directly involved in promoting education for adults. Governmental interest was rooted in a war on poverty

movement underway in the United States. In support, the adult education program of the U. S. Office of Education was assigned the task of helping adults develop the tools necessary to become satisfied, self-sufficient citizens (U.S. Department of HEW, 1978).

Early legislation was directed toward adults who, because of life disadvantages, were functionally illiterate in modern society. The Economic Opportunity Act of 1964 (PL 88-452) provided a special program for adults 18 years and older who had not completed the eighth grade. Between 1964 and 1968, two subsequent amendments to existing laws provided educational opportunities for adults with restricted usage of the English language and to 16 and 17 year olds in need of vocational education (U.S. Department of HEW, 1978). Finally in 1966, the Adult Education Act (PL 91-230) was passed. Through the Adult Education Act (AEA) federal funds were to be appropriated to state planners responsible for approving local applications for needed programs (Bina & Dowling, 1978).

A significant change in governmental policy followed a major Texas study (The Adult Performance Level Study) conducted by the University of Texas between 1971 and 1974. The results indicated that less than half of the adults in the U.S. were sufficiently competent to deal with everyday problems (U.S. Department of HEW, 1978). As a result

energy was diverted toward educational programs which increased the competency level of adults as well as programs which furthered grade level completion. Hence, in the education amendments of 1976, a new national policy was set forth which redefined education as a life long learning endeavor (U.S. Department of HEW, 1978).

As the number of adult learners increased, the amount of research devoted to understanding adults as learners also increased. Learning theorists sought to identify what adults learn, why they learn and how they learn. In the 1950s studies began to appear which focused on variables affecting adult learning. Prior to systematic study of adult learners, there was widespread belief that adults did not learn well (Kidd, 1959).

Early research studies provided initial evidence that adult learners were significantly different from child learners. In 1928, Thorndike published the results of an extended study dealing with adult intelligence and capacity to learn which indicated that adults learned at a declining rate of approximately 2% a year from age 45 to 70 (Brunner, Kirchner, Newberry, & Wilder, 1959). In the 1950s research appeared to support the contention held by sociologists that adults readily engage in learning endeavors associated with select major social goals such as securing improved

housing (Kidd, 1959). Other early research indicated that older learners put forth more effort and were more accurate than younger learners in completing tasks (Brunner et al., 1959). Another early study revealed that adults varied greatly in the readiness with which they were willing to accept new ideas and practices (Brunner et al., 1959).

Boshier (1971) studied adult learners to identify factors which motivated them to engage in educational endeavors. An Educational Participation Scale (EPS) was administered to 233 randomly selected adult enrollees in a multitude of different courses for continuing education. Analyzed responses to the items on the EPS enabled the investigator to conclude that adult learners are predominantly "growth" or "deficiency" motivated. Adults who are primarily deficiency oriented are attempting to remedy their deficiency, while growth oriented learners are self-actualizing.

McLoughlin (1971) investigated the influence of participation in program planning on learner achievement and attitude. Eighty-nine subjects were randomly assigned to either a control or an experimental group. The experimental and control groups underwent a program planned by the experimental group. An analysis of achievement scores revealed no difference in achievement between the two groups. An analysis of the attitudinal data revealed

statistically significant higher attitudinal scores for the experimental group. McLoughlin concluded that participatory planning by adults had a more positive effect on attitude toward an educational experience than non-participatory planning.

Factors affecting nurses' participation in continuing education were described by Matthews and Schumacher (1979). One hundred and fifty registered nurses employed in two different hospital settings were surveyed to identify factors that they would consider before participating in a continuing education offering. Of the seven choices from which respondents could select, the

relatedness of a topic to one's own job or clinical specialty, personal interest in a particular topic and one's own perceived need for information were the three highest ranked factors selected by all respondents.
(p. 25)

The results of this study imply that hospital continuing education programs should include client-oriented participatory needs assessment in the planning phase.

Curran's (1977) findings supported the imperative for learner participation in program planning. Eight hundred hospital employed registered nurses were studied to ascertain relationships between nurse characteristics and factors related to participation in continuing education. Curran identified statistically significant relationships between type of clinical area in which the nurse was employed and

self-identified learning needs. Head nurses awarded greater importance to educational topics concerning interviewing techniques, budget and finance. Nurses employed in psychiatric clinical areas awarded the greatest importance to courses emphasizing communication techniques and least importance to courses concerning the use of new equipment. Curran concluded that more recognition be given to the finding that learning needs are directly related to the performance expectations of nurses (Curran, 1977).

Clark and Dickinson (1976) surveyed 220 nurses employed within five hospitals to analyze factors related to participation in continuing education. Results of the study revealed that learning orientations and attitudes serve as better predictors of nurse participation in continuing learning activities than certain socioeconomic variables. A positive correlation existed between occupational orientations to learning (motivation to increase work status and prestige) and participation in self-directed learning. A significantly positive correlation existed between initiative scores (related to social position and acceptance by others) and participation in educational offerings. In addition, a positive correlation existed between attitude toward continuing education and total participation in continuing learning activities.

The theme of continuing education is a response to the educational needs of adults as learners. Research findings have been integrated with concepts and insights regarding adult learners to construct an andragogical theory of adult learning. The chief differentiation between andragogical and pedagogical approaches to learning is the learning process. The andragogical model depicts adult learning as a process where the adult educator prepares in advance a set of procedures to help the learners acquire information and skills (Knowles, 1978). In summary, the fundamental philosophy of adult education is participation in program planning, implementation and evaluation by the learner population.

Controversial Issues in Continuing Education

There is widespread agreement that continuing education provides a means whereby nurses can maintain a timely knowledge base for clinical practice. Yet all aspects of continuing education beyond the stage of awareness remain an arena for many controversies. Matthews and Schumacher (1979) have enumerated the following as critical issues pertaining to continuing education:

- . Does accountability demand mandatory continuing education?
- . Can mandatory attendance assure learning with practical application?

- . What should be the content of learning activities?
- . Who designs, finances and implements the learning activities?
- . Has nursing failed to instill within its constituents a role model of self-responsibility for learning?
(p. 2)

Carroll (1971) further identified unresolved issues as being evaluation, coordination and control. In more recent years increased research has been directed at providing evidence on which to base decisions relevant to continuing education.

Participation in continuing education as a condition for relicensure intends to elicit motivation deterring professional obsolescence. Kubat (1975) studied a statewide sample of 65 nurses to identify factors related to obsolescence. She found that 59% of the nurses she sampled had not attended a continuing education activity. However, 58% of the nurses had taken their state board exams more than 10 years prior to the study, and only 11% of the nurses had participated in refresher courses.

Bush and Lewis (1978) surveyed 113 practicing nurses representative of 16 floors from different hospitals in Illinois. Of the nurses, 65% indicated a willingness to involve themselves in continuing education activities, yet only 57 had actually participated; 85% favored voluntary continuing education as opposed to mandatory programs.

The issue of mandatory versus voluntary continuing education remains undecided in the state of Texas. A statewide survey of registered nurses in Texas was conducted in January, 1980, by the Board of Nurse Examiners. Of the total respondents, 53% supported mandatory continuing education for relicensure (Board, 1981).

Opponents of mandatory continuing education maintain that self-directed learning also represents a commitment to continued competence. Flagherly (1975) argued that

a system of voluntary continuing education allows and encourages nurses to assess their own learning needs, to explore available resources for meeting these needs . . . [and thus] accords to each nurse the responsibility for her own continued learning. (p. 20)

This argument is reinforced by Clark and Dickinson's (1976) survey which revealed that nurses participated more in self-directed learning than in other-directed learning. The statewide survey conducted by the Texas Board of Nurse Examiners enumerated the methods by which nurses kept "updated" during the year of 1979 (Board, 1981). Of the nurses, 86% reported reading nursing journals, 33% reported completing self-study units and 61% reported on-the-job training as methods of maintaining a timely nursing practice. A comparison of methods of learning disclosed that nurses invest in self-directed learning to an equal extent as other-directed learning (Board, 1981).

Few studies have explicitly measured the direct effect of continuing education on the practice of nursing. Forni and Overman (1974) attributed this to methodological difficulties of stating precise course objectives and developing appropriate methods for measuring and evaluating outcomes. Opponents of mandatory continuing education argue that competent patient care cannot be guaranteed through legal mandates unless an association between continuing education and continuing competence is substantiated. In Kubat's (1975) study of professional obsolescence, she administered a 25-item test to evaluate nursing competency in a population of nurses where 56% of the nurses employed in nursing had not participated in continuing education. Results indicated that 89% of the nurses missed more than one half of the items.

In 1975, del Bueno studied the effect of continuing education on on-the-job behavior. One hundred nurses from 10 different hospitals were divided into five experimental and five control groups consisting of 10 members per group. Continuing education treatment was applied to each experimental group using the same sequence of events. The education program consisted of 10 hours of pharmacology review with specific objectives outlined. Using a non-participant observer to collect data, attainment of the objectives was

measured in the clinical setting. The hypothesis that participants would have an increased ability to question doctors' orders was supported. The second course objective, increasing nurses' medication information giving behaviors, was not accomplished in clinical practice.

Other studies have been conducted to describe nurses' perceptions of continuing education which may affect participation in educational activities. Kubat (1975) noted that most nurses were willing to invest only small amounts of money for continuing education. Furthermore, Curran (1977) found that older nurses participated more in self-directed learning while younger nurses were more active in other-directed learning activities. Finally, Bush and Lewis (1978) found that 65% of nurses they surveyed were willing to participate in continuing education activities whether or not recognition points were awarded.

In summary, controversial issues related to continuing education persist. This is evidenced by the existence of state to state variations in relicensure requirements. Furthermore, variables exist which affect the degree to which nurses participate or fail to participate in continuing education activities.

Mechanisms for Delivery of Continuing Education

Achieving the goals of continuing education is a formidable task and involves aspects of program planning, implementation and evaluation. Following a learning needs assessment, methods for efficient and effective learning are planned. The providers must submit course material to approval agencies if accreditation of the course is sought. Evaluation of the results is essential for program modification and projection of effects on patient care (Collart, 1976).

Need determination is the initial step in planning an educational endeavor. The ANA has set forth guidelines which call for documentation of the need for an educational offering before planning proceeds (American Nurses' Association, 1975b). Collart (1976) enumerated observation, listening, interviews, advisory committees, skill inventories, peer review and surveys as a means to conduct a learning needs analysis.

The next step after need identification is priority setting. Which learning needs must be met immediately and which needs are less serious? Some needs may not be met through educational agencies. At this stage it is determined whether or not an educational offering will duplicate other efforts. Finally, the potential for improving patient

care is considered when prioritizing educational offerings (Collart, 1976).

Program planning begins once objectives have been stated. The learning objective is the statement of a new performance level to be attained following an educational endeavor. Decisions on how to implement and structure educational programs are based on the nature of the task and situational variables (Collart, 1976). The American Nurses' Association recommends that "programs for nurses be developed under the direction of nurses skilled in designing educational experiences" (cited by Collart, 1976, p. 17).

A national system for the accreditation of continuing education in nursing was formed by the American Nurses' Association in 1975. Accreditation of continuing education offerings is a process "by which an agency or organization evaluates and recognizes an institution or program of study as meeting certain predetermined criteria or standards" (Donahoo, 1976, p. 18). The ANA system is headed by a National Accreditation Board which monitors five Regional Accreditation Committees and a National Review Committee. The Regional Accreditation Committees accredit universities and colleges, national specialty nurses organizations, federal nursing services and state boards of nursing. These

organizations in turn can conduct their own continuing education programs as well as approve educational offerings provided by their constituents or other sponsors. The National Review Committee is responsible for accrediting programs which prepare nurses for expanded roles. Colleges and universities have the option of seeking accreditation through the National League for Nursing (NLN). In May, 1978, the NLN issued a statement reaffirming that "the continuing education program in an institution seeking NLN accreditation would be reviewed as an integral part of the accreditation process" (Hutchinson, 1980, p. 62).

Teaching strategies, techniques of teaching, learning resources and devices which extend the effectiveness of the teaching method have proliferated in the past decade. The educational telephone network is being used more with the advent of telecommunication equipment. Conference presentations can be transmitted to any location through portable communication units. Television, computer assisted instruction, films, slides, tapes and a preponderance of software are utilized at increasing rates. Simulation experiences, contract learning, gaming and group process exercises are increasingly selected as approaches to promote learning (Cooper, 1980; Davis, 1978; Parker & Baird, 1977).

Evaluation of continuing education is the phase where attainment of the objectives is measured. The American

Nurses' Association defines evaluation as "a systematic and continuous process of ascertaining and appraising the effectiveness of an endeavor" (American Nurses' Association, 1976b, p. 9). The ANA (1976) has set forth criteria for evaluation of the individual learner, a single educational offering and a total program. The evaluative data are collected, summarized and a judgment of worth is made weighing the results against objective criteria. The information gained through the evaluation process is reviewed when planning future programs.

Summary

This review of the literature indicates that interest in continuing education has grown rapidly and will continue to grow. The early beginnings shortly after the organization of formal nursing education provided clues to the interest in continuing education which followed. The impetus which led to an increased emphasis in continuing education arose from a rapid proliferation of new knowledge, social changes in the clientele population, changes in the health care system, changes in nursing and recognition that continuing education could provide an avenue for learning. Coincidental with a period characterized by increased demands for learning was a changed philosophy toward adult education which arose from empirical research favoring adult

education and governmental financial support. As the concept of continuing education gained widespread recognition, several controversial issues emerged. As it became more evident that controversial or otherwise continuing education was here to stay, mechanisms for implementation were refined.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The study was descriptive and nonexperimental in design. A sample of nurses licensed in the inclusive counties was surveyed and given an opportunity to express their perceived continuing educational needs. The results were analyzed to identify trends toward a consensus in learning needs.

Setting

The study was conducted in a large region of a southwest state. The data collection tool, a questionnaire, was mailed to the homes of the selected participants for private completion.

Population and Sample

The total population for the survey consisted of all those nurses listed in the Roster of Registered Professional Nurses by the Board of Nurse Examiners for the State of Texas, April 1, 1980--March 31, 1981 who resided within the bounds of Harris County and adjacent counties. The population size from which the sample was drawn was 18,500. A systematic random sampling technique was

implemented to obtain a total sample size of 200. The sample used in data analysis consisted of 81 individuals who completed and returned the questionnaire within a four-week period of time.

Protection of Human Rights

In accordance with the policies of Texas Woman's University, approval to conduct the study was obtained from the University's Human Research Review Committee prior to data collection (Appendix A). A letter which introduced the researcher and explained the study accompanied each questionnaire mailed (Appendix B). The letter stated that return of the questionnaire indicated the individual's informed consent to act as a participant in the study. A statement was made which instructed the subject not to sign his name. Each subject was informed that the enclosed return envelope was numbered and corresponded to a code number assigned to all subjects in the study. The cover letter explained that the purpose of the coding procedure was to assure that no individual would be mailed a second questionnaire should by chance their name be selected again if additional questionnaires were mailed. As a questionnaire was returned, the envelope number was recorded to omit the subject's assigned number from the population

listing. The envelope was then discarded. Questionnaires remained unmarked and anonymous.

Instrument

The instrument employed in this study was a continuing education needs assessment (CENA) survey tool for registered nurses. The tool was developed by Wright (1979), a director of continuing education at a major state university, for use in a statewide university sponsored needs assessment survey conducted in 1979. The questionnaire items were constructed by Wright based upon judgmental evaluation of questions that would obtain the information needed by the university. Prior to its use, the tool was tested for usability by a pilot survey conducted at the university. Approximately 12 faculty members representative of many clinical specialty areas self-administered the questionnaire. No changes in the questionnaire were deemed necessary following the pretest (Wright, 1979).

For the purpose of this study, and with the permission of the developer, modifications in the instrument were made (Appendix B). Twelve items which exceeded the scope of this study were deleted. These questions made reference to factors influencing the individual's decision to attend continuing education courses, preferential learning approaches and the individual's evaluation of past

continuing education experiences. Other questionnaire modifications included condensing two questions into one, further enumeration of topic areas for continuing education, further enumeration of organizations for membership and combination or separation of categories within questions. In addition, for purposes of uniformity, the subjects were asked to identify their education need as "little or no need," "moderate need" or "great need" as opposed to a degree of "importance" selection in the original questionnaire.

Questions 1 through 10 pertained to demographic data which were collected to tally the membership among subgroup categories and to differentiate the continuing education needs among nurses in the different subgroups. The subgroup categories described included: employment status of currently licensed registered nurses, field of employment, employment position, area of practice, basic educational background, length of practice in nursing, time lapse since employed in nursing and affiliation with professional organizations.

Questions 11 through 15 dealt directly with continuing education. Prior to posing the questions, a definition of continuing education was presented to clarify the distinction from other modalities of learning. Question 11 concerned the individual's participation in continuing

education activities. Question 12 requested that the individual self-evaluate the result of his/her participation in continuing education. Question 13 was a multi-subject query into the self-identified continuing educational need for 26 different topic areas. The subjects were instructed to express their learning need for each topic as: little or no need, moderate need, or great need. Questions 14 and 15 were opinion-seeking in nature. The subjects were asked to express their feelings toward mandatory continuing education as a condition for relicensure. In closing, the subjects were invited to share any other ideas related to continuing education.

Data Collection

The data collection process began once approval to conduct the study had been granted by the Human Research Review Committee at Texas Woman's University. Each individual selected through the sampling procedure was assigned a number. This same number was transcribed on the return envelope to be mailed by that subject. The coding system was incorporated into the data collection process to assure that duplication of data would not occur should a second mailing be conducted. The mailing packet sent to the homes of all subjects included a cover letter, a questionnaire, and a self-addressed coded return envelope (Appendix B).

The introductory letter identified the researcher and briefly explained the study being conducted. The letter explained the purpose of the coding system and measures that would be taken to protect anonymity. The subjects were informed that the return of the questionnaire indicated informed consent to act as a participant in the study.

All questionnaires were mailed simultaneously. Sixty of the questionnaires were returned within 14 days of the mailing date. However, questionnaires continued to be returned for four weeks after the mailing date. A total of 97 questionnaires were returned and all were reviewed for usefulness in the study; 81 were used for data analysis.

As the questionnaires were received, the code number on the envelope was recorded and reserved for possible later use. The envelope was then discarded, and the completed questionnaire was subjected to analysis.

Treatment of Data

The research data were analyzed by both descriptive statistics and statistical tests of significance. All returned questionnaires were subjected to analysis provided at least 75% of the questionnaire was completed. Omissions in data were reported as "no response."

The demographic data were analyzed using descriptive statistical techniques. Membership in the subgroup

populations were tallied, and frequencies and percentages were calculated. A statistical table summarizes the findings for each subgroup population in Chapter 4.

The self-identified continuing education needs data were tabulated and frequencies and percentages were calculated. These data were analyzed for a trend toward a consensus in education preferences using a one-way chi-square statistical test of significance.

The self-identified educational preferences among nurses in different specialty areas of practice, with different employment positions, with different educational backgrounds and with different lengths of practice were tallied and frequencies and percentages were calculated. Each of the four subgroups were subjected to analysis using a two-way chi-square test of significance to identify significant trends toward educational preferences among the group members.

Summary

This chapter included the process by which data were collected and analyzed to form conclusions in response to the research questions. The investigation was nonexperimental and descriptive in design. The population under study consisted of 18,500 registered nurses who resided within a large geographic area of a southwestern state. A

systematic random sampling technique was used to obtain a sample size of 200 nurses.

The instrument used was a continuing education needs assessment questionnaire designed and tested previously by a director of continuing education at a state university. The questionnaire was mailed simultaneously to all 200 subjects. Ninety-seven (49%) of the questionnaires were returned within four weeks of the mailing date.

Of the 97 returned questionnaires, 81 were usable for data analysis. Demographic data were tabulated and summarized in frequencies and percentages. Continuing education preferences as reported by the respondents were summarized in frequencies and percentages and then subjected to a one-way chi-square test of significance. Continuing education preferences among nurses in four subgroup categories were summarized in frequencies and percentages and then subjected to a two-way chi-square test of significance.

CHAPTER 4

ANALYSIS OF DATA

Results of a continuing education needs assessment must be analyzed to identify trends in self-assessed learning needs. This chapter describes the characteristics of the sample studied and the findings of the study. Continuing education needs of the sample are summarized and significant trends between variables are reported.

Description of Sample

The total population under study included all nurses listed in the Roster of Registered Professional Nurses by the Board of Nurse Examiners for the State of Texas, April 1, 1980-March 31, 1981, who resided within the boundaries of Harris County and adjacent counties at the time of this study ($N =$ approximately 18,500). A systematic random sampling technique was used to obtain a sample of 200 nurses. Questionnaires were simultaneously mailed to the 200 selected nurses. A total of 97 (49%) were returned to the investigator. Eight of the questionnaires were returned undeliverable, seven respondents no longer resided within the geographic area under study, and one returned questionnaire was discarded due to lack of completeness.

Therefore, 81 questionnaires (41%) were used for data analysis.

Data were collected to describe the population being surveyed and to answer research question number one: What are the subgroup populations among the nurses being surveyed as based upon the following variables: specialty area of practice, type of employment setting, position held, educational preparation, organizational memberships, length of nursing practice, and time lapse since practiced nursing. Additional descriptive data were collected on the variables of sex, age, and present employment status. Three (3%) of the nurses were male, while 78 (97%) were female. The largest number, 32 (39.5%) nurses, were within the 25-34 year old range, and the majority of the nurses, 52 (64.2%) were employed full time in nursing. These findings are summarized in Table 1.

Responses to further questions regarding employment are summarized in Tables 2, 3, 4, 5, and 6. Forty-six (69.7%) nurses reported hospitals as their field of employment (Table 2), of which 37 (45.7%) reported that they were staff nurses (Table 3). Eleven (13.6%) employed nurses identified medical nursing as their area of practice, while 12 (14.8%) identified their area of practice as other than one listed on the questionnaire (Table 4). These other

Table 1

Frequency and Percentage of Age Group Categories and
Employment Status as Reported by 81 Registered Nurses

Variable	Frequency	Percentage
<u>Age Group</u>		
Under 25 years	3	3.8
25-34	32	39.5
35-44	22	27.2
45-54	13	16.0
55-64	10	12.3
65 years or over	<u>1</u>	<u>1.2</u>
Total	81	100.0
<u>Employment Status</u>		
Not Employed	13	16.1
Employed (non nursing)	1	1.2
Employed Part Time Nursing	15	18.5
Employed Full Time Nursing	<u>52</u>	<u>64.2</u>
Total	81	100.0

Table 2

Frequency and Percentage of Fields of Employment as
Reported by 81 Registered Nurses

Field of Employment	Frequency	Percentage
Hospital	46	69.7
Nursing Education	3	4.5
Community Agency	4	6.1
Doctor's Office	0	0.0
School Nurse	4	6.1
Occupational Health	3	4.5
Nursing Home	0	0.0
Other	6	9.1
No Response	<u>15</u>	<u>---</u>
Total	81	100.0

Table 3

Frequency and Percentage of Employment Position as
Reported by 81 Registered Nurses

Employment Position	Frequency	Percentage
Staff Nurse	37	56.1
Head Nurse/Assistant	7	10.6
Supervisor	3	4.5
Director of Nurses/Assistant	6	9.1
Inservice Education	1	1.5
Nursing Education	2	3.0
Clinical Nurse Specialist/ Consultant	3	4.6
Other	7	10.6
No Response	<u>15</u>	<u>---</u>
Total	81	100.0

Table 4

Frequency and Percentage of Area of Practice as
Reported by 81 Registered Nurses

Area of Practice	Frequency	Percentage
Medical Nursing	11	16.8
Surgical Nursing	8	12.1
Pediatrics	5	7.6
Maternal/Newborn	6	9.1
Psychiatric	3	4.5
Clinical Care	8	12.1
OR/Recovery Room	3	4.5
Community Health	9	13.6
Geriatric	1	1.5
Other	12	18.2
No Response	<u>15</u>	<u>---</u>
Total	81	100.0

areas included: nursing research, nurse anesthetist, orthopedic nursing, primary prevention, and emergency room nursing. Twenty-four (34.3%) nurses reported an employment span in nursing of over 16 years (Table 5). Five (41.7%) nonemployed subjects had practiced nursing within two years prior to the survey (Table 6).

Data were collected on the subject's basic educational preparation and professional activities outside of employment. The largest number, 36 (44.5%), of the nurses received their basic educational preparation in diploma schools, while the fewest number, 15 (18.5%), were graduates of associate degree programs. Thirty (37%) of the respondents were graduates of baccalaureate degree programs. Analysis of the data indicated that 49 (60.5%) subjects reported membership status in no professional organization (Table 7). Thirty-five (43.2%) subjects reported that they had participated in continuing education activities outside the agency of employment within 12 months prior to the survey, of which 14 (17.2%) reported great improvement and 26 (32%) reported somewhat improvement in their nursing performance as a result of the activity (Table 8).

Table 5

Frequency and Percentage of Lengths of Employment as
Reported by 81 Registered Nurses

Length of Employment	Frequency	Percentage
Less than One Year	0	0.0
1-3 Years	6	8.6
4-6 Years	8	11.4
7-10 Years	21	30.0
11-15 Years	11	15.7
Over 16 Years	24	34.3
No Response	<u>11</u>	<u>---</u>
Total	81	100.0

Table 6

Frequency and Percentage of Time Lapse Since Employment
as Reported by 81 Registered Nurses

Time Lapse	Frequency	Percentage
Never	0	0.0
Less than 2 Years	5	41.7
2-5 Years	1	8.3
6-10 Years	4	33.3
11-15 Years	2	16.7
Greater than 16 Years	<u>0</u>	<u>---</u>
Total	12	100.0

Table 7

Frequency and Percentage of Membership Status in
Professional Organizations as Reported
by 81 Registered Nurses

Organizational Membership	Frequency	Percentage
American Nurses' Association	3	3.7
National League for Nursing	0	0.0
Texas Nursing Association	3	3.7
National Honor Society for Nurses	0	0.0
Other Professional Organiza- tions	10	12.3
More Than One Other Profes- sional Organization	16	19.8
None	<u>49</u>	<u>60.5</u>
Total	81	100.0

Table 8

Frequency and Percentage of Continuing Education within
Previous 12 Months and Resulting Improvement in Nursing
Performance as Reported by 81 Registered Nurses

Variable	Frequency	Percentage
<u>Continuing Education Participation</u>		
Yes	35	43.2
No	<u>46</u>	<u>56.8</u>
Total	81	100.0
<u>Improvement</u>		
Great	14	17.2
Somewhat	26	32.0
Very Little	11	13.5
None at All	4	4.9
Does Not Apply	<u>26</u>	<u>32.4</u>
Total	81	100.0

Findings

Research Question Two

The second research question concerned trends toward a consensus for continuing educational preferences among the nurses in the population under survey. These trends were identified by using a one-way chi-square statistical technique to analyze responses to each of the 26 topic areas. Statistically significant differences in needs emerged for 17 of the 26 different topic areas. Only seven of these topic areas were significant continuing education needs in that a large number of subjects indicated moderate or great need for the topic. The remaining statistically significant findings revealed that a large number of subjects indicated little or no need for certain topics. The topic areas for which a moderate or great continuing education need were identified are summarized in Table 9. The continuing education need for each of the seven topics was more frequently expressed as a moderate need rather than a great need. Ranking responses to the seven topics which were expressed as a great need revealed that legal aspects was the topic most frequently (22 or 30.1%) identified as a great need. The second most frequently identified great need was cancer nursing (14 or 19.4%), followed by political, social, and professional trends (13 or 17.8%), nursing management (12 or

Table 9

Frequency and Percentage of Topic Areas Identified as
Continuing Education Needs by 81 Registered Nurses

Topic Areas	Needs								
	Little or No		Moderate		Great		No Response		
	#	%	#	%	#	%	#	%	
Physical Assessment	26	35.1	37	50.0	11	14.9	7	81	100.0
Teaching/Learning	32	44.4	33	45.8	7	9.8	9	81	100.0
Nursing Management	27	36.5	35	47.3	12	16.2	7	81	100.0
Legal Aspects	12	16.4	39	53.4	22	30.1	8	81	100.0
Community Health	23	37.1	28	45.2	11	17.7	19	81	100.0
Cancer Nursing	31	43.1	27	37.5	14	19.4	9	81	100.0
Political/Social/ Professional Trends	31	42.5	29	39.7	13	17.8	8	81	100.0

16.2%), Community health (11 or 17.7%), physical assessment (11 or 14.9%), and teaching/learning (7 or 9.7%).

Research Question Three

The third research question posed by this study was: Are there any trends toward a consensus for continuing educational preferences among nurses in different specialty areas of practice? Cross comparisons using a two-way chi-square statistical analysis ($p \leq .05$) revealed significantly different frequencies among nurses in different specialty areas of practice and the need for topics dealing with primary nursing and cancer nursing (Table 10). Respondents as a whole expressed little or no need (41 or 66.1%) for topics dealing with primary nursing, however, the majority of nurses (4 or 66.1%) in maternal/newborn specialties expressed a great need for primary nursing topics. In addition, one geriatric nurse (100%) expressed a moderate need for topics related to primary nursing. No trends in educational preferences for topics dealing with primary nursing or cancer nursing emerged among recovery room/operating room nurses since educational need was equally expressed as little or none (1 or 33.3%), moderate (1 or 33.3%), or great (1 or 33.3%) for both course topics. Respondents as a whole did not report a great need for cancer related topics; only 12 (19.7%) did. However,

Table 10 (Continued)

Topic	Needs						Total	
	Little or No		Moderate		Great			
	#	%	#	%	#	%	#	%
<u>Cancer Nursing (Continued)</u>								
Psychiatric	2	66.7	0	0.0	1	33.3	3	100.0
Critical Care	2	28.6	4	57.1	1	14.3	7	100.0
OR/Recovery Room	1	33.3	1	33.3	1	33.4	3	100.0
Community Health	6	66.7	3	33.3	0	0.0	9	100.0
Geriatrics	0	0.0	0	0.0	1	100.0	1	100.0
Other	7	70.0	3	30.0	0	0.0	10	100.0
No Response							20	---
Totals	28	45.9	21	34.4	12	19.7	61	100.0

cancer nursing was a moderate educational need for the majority of medical nurses (7 or 70%) and critical care nurses (4 or 57.1%). In addition, one (100%) geriatric nurse specialist reported a great need for topics related to cancer nursing. Surgical nurses expressed the greatest need (6 or 85.5%) for cancer related topics. No other statistically significant findings emerged.

Research Question Four

The fourth research question posed by this study was: Are there any trends toward a consensus for continuing educational preferences among nurses holding different positions within their employment? A two-way chi-square analysis revealed statistically significant frequencies among nurses in different employment positions and their continuing education need for topics dealing with evaluation of nursing care (Table 11). Nurses in staff positions (18 or 51.4%), head nurse/assistant head nurse positions (6 or 85.7%), and director of nurses/assistant (5 or 83.3%) had significantly less need for topics dealing with evaluation of nursing care than those in other positions. The majority of supervisors (2 or 66.7%), inservice educators (1 or 100%), and clinical specialists (2 or 66.7%) had significantly more need for evaluative nursing topics. The greatest need for evaluative nursing topics was expressed

Table 11

Frequency and Percentage by Nurses' Employment Positions of Statistically Significant Self-Identified Needs for Various Continuing Education Topics as Reported by 81 Registered Nurses

Topic	Needs						Total	
	Little or No		Moderate		Great			
	#	%	#	%	#	%	#	%
<u>Evaluation of Nursing Care</u>								
Staff	18	51.4	9	25.7	8	22.9	35	100.0
Head/Assistant	6	85.7	1	14.3	0	0.0	7	100.0
Supervisor	1	33.3	2	66.7	0	0.0	3	100.0
Director/Assistant	5	83.3	1	16.7	0	0.0	6	100.0
Inservice Education	0	0.0	1	100.0	0	0.0	1	100.0
Nursing Education	0	0.0	0	0.0	2	100.0	2	100.0
Clinical Specialist	1	33.3	2	66.7	0	0.0	3	100.0
Other	2	50.0	0	0.0	2	50.0	4	100.0
No Response	—	—	—	—	—	—	20	---
Totals	33	54.1	16	26.2	11	19.7	61	100.0

by nursing educators (2 or 100%). No other significant trends were identified among nurses holding different positions within employment and continuing education need for the remaining 25 topics.

Research Question Five

The fifth research question posed by this study was: Are there any trends toward a consensus for continuing education preferences among nurses with different educational backgrounds? Two-way chi-square analysis revealed significant frequencies among nurses with different educational backgrounds and their need for topics dealing with nursing management, political, social and professional trends, evaluation of nursing care, and surgical nursing. These findings are summarized in Table 12. The largest number of nurses, 16 (61.5%), who identified a moderate need for managerial topics were baccalaureate graduates. The largest number of nurses, eight (53.3%), who identified a great need for managerial topics were graduates of associate degree programs. Associate degree graduates were also the largest group of nurses, six (40%), to report a great need for topics dealing with political, social, and professional trends. The majority of diploma graduates, 18 (58%), reported a moderate need for trend related educational topics. A large number, 10 (38.5%), of baccalaureate

Table 12

Frequency and Percentage by Nurses' Educational Backgrounds of Statistically Significant Self-Identified Needs for Various Continuing Education Topics as Reported by 81 Registered Nurses

Topic	Needs					
	Little or No		Moderate		Great	
	#	%	#	%	#	%
<u>Nursing Management</u>						
Diploma	15	46.9	14	43.8	3	9.3
Associate	3	20.0	4	26.7	8	53.3
Baccalaureate	9	34.6	16	61.5	1	3.9
No Response	—	—	—	—	—	—
Totals	27	36.5	34	47.3	12	16.2
					8	—
					—	---
					73	100.0
<u>Political/Social/Professional Trends</u>						
Diploma	11	35.5	18	58.0	2	6.5
Associate	8	53.3	1	6.7	6	40.0
Baccalaureate	12	46.2	10	38.5	4	15.3
No Response	—	—	—	—	—	—
Totals	31	42.5	29	39.7	12	17.8
					9	---
					—	---
					72	100.0

Table 12 (Continued)

Topic	Needs						Total	
	Little or No		Moderate		Great		No Response	
	#	%	#	%	#	%	#	%
<u>Evaluation of Nursing Care</u>								
Diploma	23	74.2	5	16.1	3	9.7	31	100.0
Associate	8	53.3	2	13.3	5	33.4	15	100.0
Baccalaureate	10	40.0	10	40.0	5	20.0	25	100.0
No Response	—	—	—	—	—	—	—	—
Totals	41	56.9	17	25.0	13	18.1	71	100.0
<u>Surgical Nursing</u>								
Diploma	25	80.6	4	12.9	2	6.5	31	100.0
Associate	8	53.3	4	26.7	3	20.0	15	100.0
Baccalaureate	10	40.0	12	48.0	3	12.0	25	100.0
No Response	—	—	—	—	—	—	—	—
Totals	43	61.1	20	27.8	8	11.1	71	100.0

graduates also reported a moderate need for trend related topics. Evaluation of nursing care was reported to be a moderate educational need by 10 (38.5%) baccalaureate graduates. The majority of diploma graduates, 23 (74.2%), and associate degree graduates, 8 (53.3%), did not express a need for evaluative topics. Surgical nursing topics were reported to be a moderate educational need by the largest percentage, 12 (48%), of the baccalaureate graduates. None of the other graduates expressed a significant need for topics dealing with surgical nursing.

Research Question Six

The sixth research question posed in this study was: Are there any trends toward a consensus for continuing education preferences among nurses with different lengths of practice? Statistically significant frequencies emerged among nurses with different lengths of practice and their need for topics dealing with primary nursing and medical nursing (Table 13). Nurses who had been in practice for shorter lengths of time identified a greater need for the topic primary nursing. Four nurses (66.7%) in practice one to three years identified a great need for the topic. Two nurses (25%) in practice four to six years reported a moderate need for courses in primary nursing, while two nurses (25%) reported a great need. The need for courses

Table 13

Frequency and Percentage by Nurses' Employment Levels of Statistically Significant Self-Identified Needs for Various Continuing Education Topics as Reported by 81 Registered Nurses

Topic	Needs									
	Little or No		Moderate		Great		No Response		Total	
	#	%	#	%	#	%	#	%		
<u>Primary Nursing</u>										
Less than 1 Year	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
1-3 Years	2	33.3	0	0.0	4	66.7			6	100.0
4-6 Years	4	50.0	2	25.0	2	25.0			8	100.0
7-10 Years	14	73.7	3	15.8	2	10.5			21	100.0
11-15 Years	6	66.7	3	33.3	0	0.0			11	100.0
Greater than 16 Years	17	70.8	4	16.7	3	12.5			24	100.0
No Response									15	---
Totals	43	65.2	12	18.2	11	16.6			66	100.0
<u>Medical Nursing</u>										
Less than 1 Year	0	0.0	0	0.0	0	0.0			0	0.0
1-3 Years	0	0.0	6	100.0	0	0.0			6	100.0
4-6 Years	3	37.5	3	37.5	2	25.0			8	100.0
7-10 Years	11	57.9	7	36.8	1	5.3			19	100.0
11-15 Years	7	77.8	1	11.1	1	11.1			9	100.0
Greater than 16 Years	13	54.2	10	41.6	1	4.2			24	100.0
No Response									15	---
Totals	34	51.5	27	40.9	5	7.6			66	100.0

in primary nursing continued to decline as years in practice increased. Nurses with shorter lengths of practice also reported the greatest need for topics in medical nursing. Six (100%) nurses in practice one to three years expressed a moderate need for topics in medical nursing, however none expressed a great need. Three nurses (37.5%) in practice four to six years expressed a moderate need for medical nursing topics while two nurses (25%) expressed a great need. The need for courses in medical nursing declined as years in practice increased until the length of practice reached greater than 16 years. Ten nurses (41.6%) in practice longer than 16 years reported a moderate need for medical nursing topics, however, only one nurse (4.2%) reported a great need.

The final questions posed to the subjects requested their opinion regarding mandatory continuing education in the state of Texas and suggestions for improvement of continuing education offerings. The most frequently occurring response was "agree" with continuing education as a condition for relicensure. The median point of the responses was midway between "agree" and "uncertain" opinions. Suggestions to improve continuing education included that employers provide financial reimbursement for attendance and that time scheduling of courses be more flexible.

Summary of Findings

The sample of 81 nurses included subjects who differed on all variables which made up the subgroup populations. The most commonly indicated area of practice was one other than those listed on the questionnaire. The second most commonly indicated area was medical nursing. The greater percentage of subjects, 46 (69.7%), were employed by hospitals. Almost half, 37 (56.1%), of the subjects classified themselves as staff nurses. Near equal numbers of nurses were diploma graduates, 36 (44.5%), or baccalaureate graduates, 30 (37%). The largest group of nurses, 32 (39.5%), fell within the 25-34 year old range. The largest group of nurses, 21 (30%), reported an employment span in nursing of 7 to 10 years. The majority of the subjects, 49 (60.5%), did not report membership in any professional organization. Finally, almost half (41.7%) of the unemployed nurses had been employed within two years prior to the study.

Subjects were asked to express their continuing education preference for each of 26 different topic areas. Statistically significant continuing education needs emerged for 7 of the 26 topic areas. These areas include physical assessment, nursing management, political, social or professional trends, legal aspects, community health nursing, cancer nursing, and teaching/learning topics.

Cross comparisons were made between expressed continuing educational needs and four variables under study. Comparisons revealed statistically significant differences between nurses in different specialty areas of practice and the need for topics dealing with primary nursing and cancer nursing. Statistically significant frequencies emerged among nurses holding different positions within their employment and continuing educational needs for topics dealing with evaluation of nursing care. Significant frequencies were identified between nurses with different educational backgrounds and their need for topics dealing with nursing management, political, social or professional trends, evaluation of nursing care, and surgical nursing. In addition, significant differences were identified between nurses with different lengths of practice and their continuing education need for topics dealing with primary nursing and medical nursing.

In conclusion, subjects were asked to express their opinion regarding mandatory continuing education and to offer any suggestions regarding continuing education. The most frequent response was "agree" with legal mandates. Ideas related to continuing education included employer financial reimbursement and flexible time offerings.

CHAPTER 5

SUMMARY OF STUDY

A learning needs assessment is essential to planning continuing education if relevant, democratically conceived programs are to be offered. One mechanism for assessment of learning needs is the survey method, utilizing an assessment tool. The purpose of this study was to assess the continuing education needs of nurses who resided within the bounds of several counties surrounding a densely populated medical community. In addition, cross comparisons were made between continuing education needs of nurses from selected subgroup categories to identify trends in learning preferences. This chapter includes a summary of the study and a discussion of the findings. From this, conclusions are drawn, implications are determined, and recommendations for future study are made.

Summary

The investigation was descriptive and nonexperimental in design. A sample of 200 nurses who resided within a large region of a southwestern state was drawn from a population of approximately 18,500 nurses. Questionnaires were mailed simultaneously to each nurse in the sample.

An explanatory letter and return envelope were included in each questionnaire packet.

The instrument employed in the study was Wright's (1979) Continuing Education Needs Assessment (CENA) survey tool. Questions 1 through 10 pertained to demographic data which were used to describe the subgroup categories. The demographic data included employment status, field of employment, employment position, area of practice, basic educational background, length of practice in nursing, age, sex, time lapse since employed in nursing and affiliation with professional organizations.

Questions 11 through 15 concerned the individuals' participation in continuing education, educational preferences, outcomes of educational activities, and opinion about mandatory continuing education. Question 13 was a multi-subject query into the self-identified continuing educational need for 26 different topic areas. Educational need was expressed as little or no need, moderate need, or great need. Responses to each item were tabulated and frequencies analyzed using a one-way chi-square statistical test of significance. Statistically significant needs for 7 of the 26 topic areas emerged.

Cross comparisons were made between the expressed need for each of the topic areas and nurses in different

specialty areas of practice, with different lengths of practice with different educational backgrounds and holding different positions within their employment. A two-way chi-square statistical test of significance was used to make the cross comparisons. The level of significance was set at $p \leq .05$. Statistically significant differences in need for several of the topics emerged when comparisons were made with each of the four variables under study.

Discussion of Findings

Continuing education needs assessments have been done in the past (Curran, 1977; Edelstein & Bunnell, 1978; Thomas & Heick, 1972; Winters, Lum, & Faustino, 1977). In all of the above studies, subjects were asked to identify their continuing educational needs from varying lists of topics. Subjects who participated in the present study were asked to express their learning need for 26 topic areas, as little or no need, moderate need, or great need. In previous studies, subjects identified topics that were learning needs or they ranked their need from a list of topics.

Seven topic areas were identified as significant continuing education needs for nurses who participated in this study. These findings can be compared to those of previous research. Thomas and Heick (1972) found that nurses in Iowa ranked legislative topics seventh out of

31 topics needed for continued learning. Legal aspects ranked fifth out of 10 as a learning need among nurses in Hawaii (Winters et al., 1977). In comparison, nurses surveyed in this study reported their greatest need to be topics concerning legal aspects. This greater need for legal aspects may be the result of state differences in laws affecting nursing or due to the fact that this study is more current and therefore reflects more recent interest in legal issues.

Topics dealing with nursing management were identified as educational needs of nurses in previous studies as well as this study. Hawaii nurses ranked topics related to management as their second continuing education preference (Winters et al., 1977). Nurses employed by the institutions affiliated with an eastern university selected leadership as the second most preferred learning topic (Edelstein & Bunnell, 1978). In comparison, nurses surveyed in this study also expressed a significant need for nursing management related topics. These findings do not parallel those of a survey conducted in Iowa where practicing nurses ranked management-related topics 28th out of 29 in continuing education needs (Thomas & Heick, 1973). This dramatic difference in need may be the result of more recent interest in the topic since Thomas and Heick's study was conducted several years prior to the other studies.

Nurses surveyed in this study expressed continuing education needs for topics pertaining to political, social and professional trends. Topics dealing with nursing trends may remain continuing education needs due to the timely nature of the content. In comparison, Thomas and Heick's (1973) study revealed that nurses most frequently ranked topics dealing with nursing trends as their greatest continuing education need.

Topics dealing with teaching/learning were identified as educational needs of nurses in previous studies as well as this study. Thomas and Heick (1973) found that nurses ranked teaching/learning courses as a high priority continuing education topic. In contrast, nurses in Hawaii did not list teaching learning topics among their 10 most preferred continuing education topics.

Topics dealing with physical assessment, cancer nursing and community health were identified as continuing educational needs of nurses. Curran (1977) also found that physical assessment was a continuing education need of nurses. Other research findings regarding the continuing educational need for topics pertaining to cancer nursing and community health were not found in the literature.

Cross comparisons between continuing educational needs and other selected variables have also been done by other researchers (Curran, 1977; Winters et al., 1977). Curran

(1977) found that learning needs closely correlated with the job activities of the nurses. Results of this study reveal that the type of clinical area in which subjects practiced significantly influenced the learning needs for topics dealing with primary nursing and cancer nursing. The largest percentage of nurses, with the exception of maternal/newborn nurses, expressed little or no need for topics dealing with primary nursing. Cancer-related topics were more applicable to medical nurses whose specialty area encompassed a broader spectrum of topics. The majority of nurses in maternal/newborn, pediatrics, psychiatric and community health expressed little need for cancer-related topics. The health problems with which nurses working in these areas concern themselves are less likely to be cancer related as opposed to the health problems with which medical nurses concern themselves. Cross comparisons between nurses in different specialty areas of practice and continuing education need for topics concerning primary nursing or cancer nursing were not found in the literature.

Significant differences in educational needs among nurses employed in different positions were identified in this study. A need for topics dealing with evaluation of nursing care was expressed by nurses in clinical specialist, supervisory, and educational positions. These groups are

frequently charged with the responsibility of setting, enforcing, and evaluating standards of care. Staff nurses may not feel sufficiently involved in this aspect of care or that their responsibilities only include following standards as determined by others. Cross comparisons between nurses holding different positions within their employment and continuing education needs were not found in the literature. In the current study nurses with various educational backgrounds differed significantly in expressed needs for topics dealing with management, nursing trends, evaluation of nursing care, and surgical nursing. Results of this study indicate that more baccalaureate graduates have a moderate continuing education need for managerial topics than any other group, while more associate degree graduates have a greater need for managerial topics than any other group. In contrast, Winters et al. (1977) found that baccalaureate graduates had the greatest need for continuing education topics dealing with nursing management.

Differences in continuing education needs among nurses with various educational backgrounds may stem from the philosophies of the programs which govern the emphasis of learning in the particular school. Little emphasis may be placed on evaluative and managerial topics in associate degree programs due to time limitations. The significant

difference in need for surgical nursing may reflect a stronger clinical focus in diploma programs than in other programs. The extreme variation in need for nursing trends among associate degree graduates suggests that differences in educational programs exist. Additionally, cross comparisons between nurses with different educational backgrounds and the need for continuing education topics concerning nursing trends, evaluation of nursing care and surgical nursing were not found in the literature.

Significant differences in educational needs among nurses with different lengths of practice were identified. The need for medical nursing topics was highest for nurses with the least experience and lowest for nurses with the most experience. These findings suggest that experience plays a role in the need for medical nursing topics. The need for primary nursing was lower among nurses with longer lengths of practice. This also suggests that experience plays a role in what learners identify as a need. Other cross comparisons between nurses having different lengths of practice and the need for continuing education topics concerning medical nursing or primary nursing were not found in the literature.

The response to the question regarding mandatory continuing education was compared to the findings of a

recent statewide survey (Board of Nurse Examiners, 1981). A slight majority (53%) of nurses in Texas favor mandatory continuing education. The most frequently occurring response among nurses in the area under study was "agree" with legislative enforcement.

Conclusions and Implications

Based upon the findings of this research, the following conclusions have been drawn regarding the continuing educational needs of nurses in the area under study:

1. Nurses have a great need for continuing education in seven topic areas: physical assessment, teaching/learning, nursing management, legal aspects, and political/social/professional trends.
2. Nurses in maternal/newborn and geriatric specialty areas of practice have a continuing education need for topics dealing with primary nursing.
3. Nurses in medical, surgical and critical care specialty areas of practice have a continuing education need for topics dealing with cancer nursing.
4. Nurses holding supervisor positions, inservice education positions, nursing education positions and clinical specialist positions within employment have a

continuing education need for topics dealing with evaluation of nursing care.

5. Nurses from associate, baccalaureate and diploma basic educational programs have a continuing education need for topics dealing with nursing management with associate degree nurses having the greatest need.
6. Nurses from diploma and baccalaureate degree programs have a continuing education need for topics dealing with political/social/professional trends.
7. Nurses from baccalaureate degree programs have a continuing education need for topics dealing with evaluation of nursing care.
8. Nurses from baccalaureate degree programs have a continuing education need for topics dealing with surgical nursing.
9. Nurses with shorter lengths of practice have a continuing education need for topics dealing with primary nursing.
10. Nurses with shorter lengths of practice have a continuing education need for topics dealing with medical nursing.

The following implications have been extrapolated from the conclusions of this study:

1. Continuing education providers need to set priorities when planning educational offerings to include the seven topic areas identified as learning needs by this study.
2. Continuing education providers serving nurses in different specialty areas of practice, with different educational backgrounds, with different lengths of practice and nurses holding different positions within their employment need to plan educational offerings which take into consideration differences in educational needs for these subgroup populations as identified by this study.
3. Providers of continuing education need to periodically resurvey the population served to identify changes in learning needs and to avoid presentations for which learning motivation does not exist.

Recommendations for Further Study

In order to augment the findings of this study, it is recommended that further research be conducted which includes:

1. Continuing education needs assessments for other geographic areas to determine if location affects needs.

2. A second needs assessment survey with the same population to determine if needs change over time and to identify factors which parallel these changes such as professional trends.

APPENDIX A

APPROVAL FORM

TEXAS WOMAN'S UNIVERSITY
HOUSTON CAMPUS
HUMAN RESEARCH REVIEW COMMITTEE
REPORT

STUDENT'S NAME Rachel Vasquez Gonzales

PROPOSAL TITLE An Assessment of Continuing Education Needs

of Nurses

COMMENTS: _____

DATE: Feb 16, 1981

[Signature]
~~Disapprove~~ Approve

[Signature]
~~Disapprove~~ Approve

Geneva R Johnson
~~Disapprove~~ Approve

[Signature]
~~Disapprove~~ Approve

James W Robertson
approve

APPENDIX B

QUESTIONNAIRE PACKET

14503 Lorne Drive
Houston, TX 77049
February 23, 1981

Dear Nurse Colleague:

I am a graduate nursing student at Texas Woman's University conducting a continuing education needs assessment for my thesis. I would appreciate your participation in this endeavor so that providers of continuing education programs will have data needed to plan relevant learning experiences. Please complete the enclosed questionnaire and return it to me in the enclosed self-addressed envelope within 10 days of receipt.

1. All information will be compiled with anonymity; therefore it is requested that no names appear on the questionnaire.

2. The enclosed envelope is assigned a number which corresponds to a number assigned to you. The purpose is to assure that you will not receive a second questionnaire to complete should a second mailing be necessary to increase the number of responses received. As your returned questionnaire is received, the envelope number will be recorded. The envelope will then be discarded. The questionnaire will remain unmarked and anonymous.

3. RETURN OF THE QUESTIONNAIRE WILL CONSTITUTE YOUR INFORMED CONSENT TO ACT AS A SUBJECT IN THIS SURVEY.

4. No medical service or compensation is provided to subjects by the University as a result of injury from participation in research.

Thank you for your time and cooperation. It is through your responses that educators will gain direction in planning for the learning needs of nurses. If you have any questions, please write to me at the above address.

Sincerely,



Rachel V. Gonzales, R.N.
Graduate Student
Texas Woman's University

CONTINUING EDUCATION NEEDS ASSESSMENT
SURVEY OF REGISTERED NURSES

Directions: Please check one answer for each of the following questions.
If your answer is not listed, write in your response below the question.

1. Your age is:
 - ☐ A. Under 25 years
 - ☐ B. 25-34 years
 - ☐ C. 35-44 years
 - ☐ D. 45-54 years
 - ☐ E. 55-64 years
 - ☐ F. 65 years or over
2. Sex:
 - ☐ A. Female
 - ☐ B. Male
3. What is your present employment status?
 - ☐ A. Not employed
 - ☐ B. Employed but not in nursing
 - ☐ C. Employed part-time as a nurse
 - ☐ D. Employed full-time as a nurse
4. What is your field of employment?
 - ☐ A. Hospital in-patient/out-patient
 - ☐ B. Nursing education
 - ☐ C. Community agency
 - ☐ D. Doctor's office
 - ☐ E. School nurse
 - ☐ F. Occupational health
 - ☐ G. Nursing home
 - ☐ H. Other (specify)
5. What is your present position?
 - ☐ A. Staff nurse
 - ☐ B. Head nurse or assistant
 - ☐ C. Supervisor
 - ☐ D. Director of nurses or assistant
 - ☐ E. In-service education
 - ☐ F. Nursing education
 - ☐ G. Clinical specialist/consultant
 - ☐ H. Other (specify)
6. What area of practice most applies to your present employment
(check only one)?
 - ☐ A. Medical nursing
 - ☐ B. Surgical nursing
 - ☐ C. Pediatrics
 - ☐ D. Maternal/newborn
 - ☐ E. Psychiatric
 - ☐ F. Critical care
 - ☐ G. OR or recovery room
 - ☐ H. Community health
 - ☐ I. Geriatric
 - ☐ J. Other (specify)

7. In what type of program did you receive your basic nursing education?

- ☐ A. Diploma program
- ☐ B. Associate degree program
- ☐ C. Baccalaureate degree program

8. How long have you been employed in nursing? If not presently employed in nursing, skip to Question #9.

- ☐ A. Less than one year
- ☐ B. 1-3 years
- ☐ C. 4-6 years
- ☐ D. 7-10 years
- ☐ E. 11-15 years
- ☐ F. Over 16 years

9. If not presently employed in nursing, how long ago were you employed in a nursing position?

- ☐ A. Never
- ☐ B. Less than 2 years
- ☐ C. 2-5 years
- ☐ D. 6-10 years
- ☐ E. 11-15 years
- ☐ F. Greater than 16 years

10. Are you a member of (check as many as applicable)?

- ☐ A. American Nurse's Association
- ☐ B. National League for Nursing
- ☐ C. Texas Nursing Association
- ☐ D. National Honor Society for Nurses
- ☐ E. Other professional organizations (list)

1.
2.

The following questions deal directly with continuing education, which means "planned professional education beyond the basic nursing program, including both credit and non-credit courses."

11. Did you enroll in any continuing education activities (credit or non-credit) during the past 12 months (outside of your agency if employed)? ☐ A. Yes ☐ B. No

12. In your opinion, to what extent has there been improvement of your nursing performance as a result of the learning opportunities?

- ☐ A. Greatly
- ☐ B. Somewhat
- ☐ C. Very little
- ☐ D. None at all
- ☐ E. Not applicable

13. For each of the following general topics, please check the one answer which best indicates your self-identified need.

General Topic	1	2	3
	Little or no need	Moderate need	Great need
A. Physical assessment	_____	_____	_____
B. Teaching-learning process	_____	_____	_____
C. Interviewing/counseling skills	_____	_____	_____
D. Research process	_____	_____	_____
E. Nursing management	_____	_____	_____
F. Political-social-professional trends	_____	_____	_____
G. Legal aspects of nursing	_____	_____	_____
H. Primary nursing	_____	_____	_____
I. Evaluation of nursing care	_____	_____	_____
J. Dealing with conflict/stress	_____	_____	_____
K. Basic sciences	_____	_____	_____
L. Psychiatric nursing	_____	_____	_____
M. Maternal/newborn nursing	_____	_____	_____
N. Pediatrics	_____	_____	_____
O. Medical nursing	_____	_____	_____
P. Surgical nursing	_____	_____	_____
Q. Geriatrics	_____	_____	_____
R. Cancer nursing	_____	_____	_____
S. Rehabilitation	_____	_____	_____
T. Critical care nursing	_____	_____	_____
U. Emergency nursing	_____	_____	_____
V. Cardiovascular nursing	_____	_____	_____
W. Community health nursing	_____	_____	_____
X. Other clinical area:	_____	_____	_____
1. _____	_____	_____	_____
Y. Other general topics	_____	_____	_____
1. _____	_____	_____	_____
2. _____	_____	_____	_____

14. Several states in the U.S. have passed legislation requiring proof of continuing education as a condition for relicensure to practice nursing. How strongly would you approve or disapprove of a mandatory continuing education requirement for nurses in Texas?
- _____ A. Strongly approve
- _____ B. Approve
- _____ C. Uncertain
- _____ D. Disapprove
- _____ E. Strongly disapprove
15. Finally, if you have any other ideas relating to continuing education in nursing, please share.

Thank you for your cooperation and professional contribution.

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