Abraham S. Fischler College of Education ETD Archive

4-1-1991

Academic Articulation Among Nursing Programs In Virginia: Practices, Perceptions, And Goals

Ruth H. Glick
Nova Southeastern University

Follow this and additional works at: https://nsuworks.nova.edu/fse_etda

Part of the Education Commons

ACADEMIC ARTICULATION AMONG NURSING PROGRAMS IN VIRGINIA:

PRACTICES, PERCEPTIONS, AND GOALS

by

Ruth H. Glick

A Major Applied Research Project presented in

partial fulfillment of the requirements

for the degree of Doctor of Education

Nova University

April, 1991

ACKNOWLEDGMENTS

ACADEMIC ARTICULATION AMONG NURSING PROGRAMS IN VIRGINIA:

PRACTICES, PERCEPTIONS, AND GOALS

by

Ruth H. Glick

April, 1991

Since there is no state-wide plan for the articulation
of nursing education progra   in Virginia and articulation
practices are largely the prerogative of personnel in
individua. programs, a wide range of articulation policies
and procedures are used in nursing programs throughout the
S⁺ ite.   The impact of recent societal factors such as
changing demographics of student populations, the growing
demand for nurses, and a nursing shortage has motivated
leaders in the nursing profession to seek practical ways to
facilitate the educational preparation of nurses.   Academic
articulation is receiving renewed attention by nursing
educators as one means of facilitating the preparation of
nurses at various educational levels.

The major purpose of this study was to identify the
extent and nature of academic articulation practices in
Virginia.   Since the phenomenon of articulation includes

elements of process, attitude, and goal, the study included
assessment of beliefs and perceptions of nursing education
administrators about articulation and about the current
status of articulation among nursing programs in Virginia.
A secondary purpose of the study was to assess the
perceptions of nursing education administrators in Minnesota
about the advantages and disadvantages of regional
consortium arrangements for nursing education articulation
and to compare the beliefs and perceptions about
articulation held by Minnesota respondents with those held
by Virginia respondents.

Five major questions were posed in the study. Four of
these were directed at Virginia participants and assessed
their perceptions about the nature and extent of
articulation practices currently in use in Virginia nursing
programs, about academic articulation in general, about the
level of satisfaction or dissatisfaction with current
articulation practices in the State, and about what changes
related to articulation needed to occur within one and five
years following the study. Another question assessed the
perceptions of nursing education administrators in Minnesota
about the advantages and disadvantages of regional
consortium arrangements for nursing program articulation in
that state.

Chief administrators at all nursing programs in
Virginia and Minnesota comprised the study population.

Names of these persons were obtained from lists provided by the respective state boards of nursing and from a list supplied by the National League for Nursing. Two questionnaires were developed to collect data for the study, one for Virginia participants and one for Minnesota participants, and were mailed to participants for self administration. Descriptive methods were used to analyze the data.

Less than half of Virginia nursing programs represented in the study had articulation arrangements in effect with other nursing programs. Beginning efforts at regional collaboration for nursing education articulation in Virginia were identified. The majority of Virginia respondents indicated acceptance of the concept of academic articulation and believed it possible to articulate nursing education through the baccalaureate level. High interest for nursing education articulation was evident among Virginia respondents, and the majority of Virginia respondents were amenable to the idea of state-wide planning for nursing education articulation. Virginia respondents indicated a need to have collaborative efforts for articulation underway within one year of the study, and many indicated willingness to be involved in such efforts.

The majority of Minnesota respondents who represented nursing programs participating in regional consortia for articulation believed such arrangements had been beneficial

to their students, programs, and faculty. They reported
that some problems related to articulation had been resolved
by consortium arrangements and that other problems had
evolved. A greater percentage of Minnesota respondents
expressed satisfaction with both the overall status of
nursing education articulation in their state and with
articulation practices used in their own programs than did
Virginia respondents.

Five recommendations were addressed to nursing
education leaders in Virginia as a means of improving
nursing education articulation in Virginia. Recommendations
encouraged on-going attention to articulation issues by the
nursing leadership, consideration of the use of regional
consortia for articulation, the involvement of
representatives from health care institutions in
articulation efforts, and keeping counselors of nursing
students informed of articulation practices.

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont.)

LIST OF TABLES

LIST OF FIGURES

LIST OF FIGURES (Cont.)

Chapter 1

INTRODUCTION

Background and Significance

Articulation and Higher Education

The concept of articulation as used in American higher

education has evolved over time. The term "articulation"

was first used to describe relationships among course

content at a particular grade level and among grade levels

in public elementary and secondary schools. In later years

the term was used to refer to existing relationships and

cooperative endeavors among all sectors of the educational

system for purposes of maximizing the development of

students and of promoting the mobility of students from one

educational sector to another (Meinert, 1977).

Cohen and Brawer (1984:183) state that

> Program articulation refers to the movement of
> students, and, more precisely, the students' academic
> credits from one school to another. . . . The concept
> includes admission, exclusion, readmission, advising,
> counseling, planning, curriculum, and course and credit
> evaluation.

The authors elaborate further that articulation covers

students going from high school to college, from two-year

colleges to four-year colleges, reverse transfer from

universities to junior colleges, transfers within colleges

1

and universities, and people seeking college credit for experiential learning.

Meinert (1977) asserts that articulation can be characterized as process, attitude, and goal. As process, articulation refers to the coordination of policies and procedures by academic personnel to facilitate the smooth transfer of students from one educational sector to another. As attitude, articulation requires a willingness on the part of academic personnel to transcend individual and institutional self-interests in order to focus on the best interests of students. As goal, articulation aims to produce an overall educational system devoid of artificial divisions so that students can maximize their educational development according to their individual needs.

The process and attitude components of articulation are emphasized also by Kintzer (1985:35) who states that

> Articulation should be recognized as a series of processes, transfer being one of them. The total activity--the articulation relationship--is also an attitude. It is people driven.

Kintzer (1985) further states that successful articulation is heavily dependent upon the understanding and support of persons involved. This includes all persons involved in sending and receiving students under articulated arrangements.

Congruent with Bailey's (1976) belief that higher education has remained a faithful mirror of conditions beyond its walls, there have been numerous events, both

inside and outside academe, that have increased the need for articulation among various sectors of the educational system. Among factors that have increased the need for articulation is a society that increasingly has espoused egalitarian beliefs about education. In turn, these beliefs have influenced the development of pluralistic educational institutions designed to meet the educational needs of a variety of students. The proliferation of two-year colleges in the 1950s and 1960s exemplified this phenomenon. Not only did the two-year colleges provide learning experiences for a variety of students, but they also produced a population of students intending to transfer to senior level colleges.

The transfer or collegiate function was an assumed function in the early history of two-year colleges (Cohen and Brawer, 1984). In fact, most two-year colleges continue to offer courses that are designed to transfer to four-year institutions. However, the transferability of courses from two-year to four-year institutions has not been without a long period of struggle. Cohen and Brawer (1984) point out that one of the most prolonged issues in community colleges has been the extent to which their courses have or have not been accepted by universities. Consequently, articulation agreements, policies, and procedures have been used for years to facilitate transfer of students from two-year colleges to senior level institutions.

In the 1970s there was decreased emphasis placed on the college transfer curriculum in two-year colleges and an increased emphasis placed on career programs. Among factors that led to this trend were increased consumerism and the demand on the part of employers and students for relevant courses and programs that met the needs of individuals ar the community. This demand for relevancy frequently translated into education that prepared students for employment (Cohen and Brawer, 1984). This shift in curriculum choice also led to a shift in the type of students that transferred to senior colleges and universities. By the late 1970s, more students were transferring from career programs to four-year institutions than from college transfer programs (Cohen and Brawer, 1984). This trend continued into the next decade (Kintzer and Wattenbarger, 1985; Prager, 1988b).

The acceptance and appreciation for the need for life-long learning in an ever changing and increasingly complex society also has been a factor in creating the need for better articulation procedures among educational institutions. Continued learning within specific career tracks or preparation for second and third careers frequently require that students, especially adult students, move in and out of educational experiences, combining education with work. Impose on this situation a citizenry that is highly mobile and living longer, and the need for

effective transfer methods that recognize prior learning experiences of students becomes even more clear.

Like many other institutions in society, higher education has become more client oriented. Kintzer and Wattenbarger (1985) identify some current trends in the area of articulation and transfer that have resulted from the concerns and demands of students. Students' demands for methods that will provide for smooth movement from one educational level to another have resulted in the official adoption of articulation policies and procedures by institutions and state legislatures. Concerns of students that they receive full credit for traditional courses as well as credit for non-traditional educational experiences have led to the increasing use of testing and other methods for advanced placement of students.

Articulation and Nursing Education

Nursing students, like students in general, have been concerned with the difficulty of moving from one educational level to another. Despite the fact that academic articulation among different types of nursing education programs has received much attention and study for many years, it remains problematic today. Zusy (1986) states that nurses perceive the transition from one level of nursing education to another to be fraught with obstacles.

One of the reasons for articulation remaining a problem in nursing education is the diversity and stratification

that characterize educational programs that prepare nurses for licensure and practice. Unlike many professions that have one or two levels of education for entry into a practice field, nursing has two licensure levels and as many as six different types of pre-licensure educational programs. Programs preparing practical or vocational nurses range in length from about eighteen months to two years and are offered in high schools or two year colleges. Programs preparing registered nurses for licensure include two or three year hospital diploma programs, two year associate degree programs, four or five year baccalaureate programs, masters programs, and even doctoral programs.

Efforts made over the years to reduce the number of different types of preparatory programs in nursing and to bring order into a non-system have had little success. Efforts to move nursing education into the mainstream of higher education have existed since the early 1900s. Concerted efforts were made in 1965, in 1976, and again in 1982 to differentiate two levels of basic nursing practitioners, one prepared at the technical level who would earn an associate degree and one at the professional level, who would earn a baccalaureate degree. However, despite these efforts, over three hundred hospital diploma nursing programs were still in existence in 1980 as well as hundreds of practical/vocational nursing programs (Bullough and Bullough, 1984).

Efforts to define two levels of nursing practice and to organize the educational system for preparing nurses at those levels have evolved into what is called "the entry level issue." The crux of the issue is the differentiation between technical and professional nursing practice and the educational preparation necessary for each level of practice. Some persons believe that the appropriate educational preparation for professional nursing is the baccalaureate degree and that the appropriate educational preparation for technical nursing is the associate degree. Others believe that practical nursing constitutes the technical level of nursing and that registered nurses prepared in diploma, associate degree, and baccalaureate programs are qualified to practice professional nursing.

Another belief held by some persons is that diploma and associate degree nursing programs are pre-professional in nature and that students in these programs begin their socialization to professional identity in these basic programs. Socialization to professional nursing can then be established firmly when students from these programs move into baccalaureate programs (Bowles, Lowry, and Turkeltaub, 1987). Peterson (1983:97) contends that in addition to the challenge of defining and implementing a two level system of practice and education, the nursing profession is confronted with implementing "a reasonable mobility system between levels without creating complete disunity within its ranks."

Another factor compounding the diversity in nursing education is the lack of standardization within programs of the same type. Except for one instance in 1917 when there was an attempt by the National League of Nursing Education, the forerunner of the National League for Nursing (NLN), to improve hospital nursing programs by recommending a standard curriculum, there exists no standard model for specific types of nursing programs (Lysaught, 1970). Associate degree programs because they are frequently a part of a state-wide community college network, and practical nursing programs because they are frequently associated with high schools and/or community colleges tend to have some degree of standardization of curricula, at least within the same state. Baccalaureate nursing programs, by contrast, vary widely, especially in organization and content of their nursing courses.

The diversity of nursing programs and the lack of an organized system whereby the various programs are meshed with each other pose serious problems for nurses who wish to continue their education and to advance in their nursing career. Dustan (1970:35) addressed this problem twenty years ago when she wrote

> The major stumbling block faced by nurse educators, today, and by the students who choose to prepare for a career in nursing, is the lack of direct articulation between the terminal preparatory programs for the preparation of vocational and technical workers and the baccalaureate programs which prepare the professional practitioners of nursing.

Dustan pointed out that there was no natural progression
from one educational level to another in nursing education
except for that between baccalaureate and masters programs.
If graduates of practical, associate degree, and diploma
nursing programs changed their educational goals and decided
to study at the baccalaureate level, they were required to
backtrack to pick up required courses and in some cases to
repeat subject matter, especially nursing courses.

The problem of the lack of an organized system of
nursing education addressed by Dustan in 1970 remains
largely unresolved today. Registered nurses who have
graduated from diploma and associate degree programs still
report difficulty with being required to repeat previous
course work when attempting to continue their education in
non-articulated baccalaureate programs (Fitzpatrick, 1981;
Miller, 1980; Zusy, 1986). Similar problems exist for
licensed practical nurses who wish to enter associate degree
programs (Williams and Gallimore, 1987).

Approaches to Nursing Education
  Articulation in Selected
  States

Nurses who have encountered this situation have
expressed their concerns to nursing educators and, in some
cases, to their state legislators. As a result, several
state boards of higher education, concerned with academic
program efficiency and cost effectiveness, have pressured
nursing faculties to develop articulated programs (Zusy,

1986). Zusy (1986) reports that in states where nursing
education articulation has progressed the most, there has
been involvement of both state boards of higher education
and state legislatures. The most recent example of
involvement of state agencies in nursing education
articulation is in the state of Maryland. Other states in
which state agencies have played a role in nursing
articulation endeavors include Minnesota, North Dakota,
California, Florida, Hawaii, and Arkansas (Zusy, 1986;
Thomas and Thomas, 1987).

In 1980, the Minnesota Higher Education Coordinating
Board (MHECB) in an effort to develop a coordinated system
of nursing education in the state appointed a task force to
develop a plan and recommended that additional funding for
nursing education be contingent upon development of such a
plan (MHECB, 1983). An Articulation Task Force of nurse
educators representing all levels of nursing preparation in
the state was formed and after approximately a year's work
presented the MHECB with a report which included a plan for
nursing education articulation in Minnesota. An assessment
of the changes that had occurred as a result of the
Articulation Task Force's recommendations was conducted in
1983. Institutions that had made the recommended changes
included all the state universities with baccalaureate
programs and a number of other post-secondary institutions.
Furthermore, the assessment showed that nurses had responded

positively to the changes as evidenced by increased nursing enrollments at the institutions where changes had been implemented (MHECB, 1983).

As a result of this assessment, the MHECB concluded that the changes made in the way nursing education was being delivered were "intended to answer the requests of nurses for reasonable means of advancing educationally within the nursing profession" (MHECB, 1983:13). The interest and role of the state seemed to be clearly evident in the following conclusion of the Board:

> Traditionally, nursing education programs were judged solely on how the graduates of these programs performed on the licensure examinations and in practice settings. In the future, nursing education programs will be judged, as well, on how well prepared their graduates are to advance educationally (MHECB, 1983:13).

A state-wide plan for articulating diploma, associate degree, and baccalaureate nursing programs was mandated by the Governor of the state of Maryland in 1985 (Rapson, Perry, Parker, 1990). Concern about the nursing shortage and about the economic, social, and individual opportunity costs of an inefficient non-articulated system of nursing education provided the major impetus for initiating and developing the Maryland plan. The plan has been given credit for increasing enrollments in nursing programs in Maryland, of enlarging the pool of potential graduate students, of preparing more professional nurses, and of contributing added income to schools (Rapson, 1987).

State-wide planning for nursing education has developed
most recently in the state of Colorado. The Colorado model
which is a voluntary state-wide model was implemented in
January, 1991. The model was developed by the Colorado
Council on Nursing Education (CCNE) and involves eight
associate degree, eight baccalaureate degree, and fourteen
practical nursing programs (Falco, 1990).

The Colorado plan will allow the progression of
licensed practical nurses to associate degree nursing
education or of associate degree and diploma nurses to
baccalaureate or higher degree education without testing to
validate previous nursing education. The progression from
one level of nursing education program to another without
testing was made possible by faculty at all schools of
nursing validating the content of all curricula. Individual
student validation of prior nursing knowledge will be
effected by awarding credit for prior learning (CCNE, 1990).

State-wide planning for nursing education articulation
has raised concerns among some nurse educators. There is
evidence that some nurse educators fear that mandated
articulation of nursing education infringes on their
academic freedom and professional autonomy (Stevens, 1981;
Papson, 1987). Others perceive that state-wide planning for
articulation is a threat to the uniqueness of specific
nursing programs (Barfield, Bell, and Turkeltaub, 1987).

While state-wide planning for nursing education
articulation is probably not an academic freedom issue since
academic freedom is primarily concerned with free inquiry,
it may be an autonomy issue, especially one of institutional
autonomy, since it deals with the determination of how a
discipline should be taught. However, reality frequently
requires the restructuring of institutional autonomy to meet
the public interest, especially in situations involving
public institutions (Millet, 1984). In the case of nursing,
this has meant, at least in the minds of some persons, that
nursing education needs to be revamped in order to more
efficiently meet the needs of students who wish to continue
their formal education.

Nursing Education Articulation in Virginia

The state of Virginia is one of many states without a
state-wide plan for nursing education articulation. There
are currently thirty-four nursing programs leading to
registered nurse status in Virginia--sixteen associate
degree, ten baccalaureate, and eight diploma programs.
There are also several upper-division baccalaureate nursing
programs for registered nurses only. In addition, there are
forty-eight practical nursing programs. Academic personnel
in each nursing program decide what will be done in their
own institution regarding articulation procedures.

At least two nursing groups in Virginia have focused
their attention on nursing education articulation in

Virginia over the years. Both the Virginia Nurses Association (VNA) and the Virginia Association of Colleges of Nursing (VACN) have attempted to ease the transfer of students among baccalaureate nursing programs by identifying commonalities and differences in requirements among programs (Cherry, 1987; Brodd, 1988; Huber, 1989). Recently, the VACN published a one-page working paper which addresses the organization's philosophy and perceived role in nursing education articulation matters in Virginia.

The working paper gives as one purpose of VACN, to "provide leadership for statewide planning and coordination for nursing education in Virginia" (VACN, 1990). In addition to statements about members' philosophical beliefs about baccalaureate education and nursing education in Virginia, beliefs about educational mobility for registered nurses are also addressed. The working paper also includes a statement of the organization's intent to assume

> the leadership role for facilitating the development and implementation of new methodologies for the validation of nursing knowledge and the awarding of advanced placement credit (VACN, 1990).

A study group in the Tidewater area of Virginia is currently working on the development of an articulated model for practical and associate degree nursing programs (Sweat, 1989; Wrenn, 1989). This group comprised of representatives from four colleges, two community colleges and two universities, and eight public school divisions is

developing a model that will provide graduates of
participating schools with a smooth pathway into higher
level nursing programs without duplication of instruction
and without the need to validate prior learning by taking
tests. Additional advantages of the model will be to
provide recognition for previous knowledge and skills of
licensed practical nurses and to offer them a faster pathway
to becoming registered nurses (Tidewater Regional Project,
1990). In effect, the model program will provide a separate
curriculum track for licensed practical nurses in the
associate degree nursing programs. This will allow licensed
practical nursing students to progress through the associate
degree nursing program faster than those students in
associate degree nursing programs who do not have previous
formal instruction in nursing.

As demonstrated by previous efforts of the VNA and the
VACN and the current efforts of the Tidewater study group,
nursing education articulation has continued to be of
interest and concern to several nursing groups in Virginia.
Voluntary articulation arrangements have been in effect at
some nursing programs in Virginia for some time. Also, many
nursing programs have had policies and procedures in place
for advanced placement of individual transfer students.
However, information about the extent and nature of such
arrangements, policies, and procedures generally has not
been available. Also not known prior to this study were

the opinions and perceptions about academic articulation
held by nursing education administrators in Virginia. For
example, it was not known whether and to what extent nursing
education administrators viewed articulation as an area of
concern, whether they were satisfied or dissatisfied with
the status of articulation among nursing programs, and
whether they believed changes in articulation practices were
needed.

Research Questions

Framework for Structuring the Research Questions

The overall purpose of this study was to obtain
information about the current status of articulation in
nursing programs in Virginia. Three facets of the
phenomenon of articulation, that is, articulation as
process, attitude, and goal, as delineated by Meinert (1977)
and Kintzer (1985) provided the framework for exploring the
concept as it related to nursing education in Virginia.
These three facets of articulation also were used in framing
the research questions for the study.

Also used to structure the research questions for this
study were major issues surrounding nursing education
articulation that were documented in the literature and the
known characteristics of articulation practices in Virginia
nursing programs. The lack of an organized educational

system for enhancing educational mobility of nursing
students is well documented in the literature (Dunstan,
1970; Lysaught, 1970; Zusy, 1986; Williams and Gallimore,
1987). In Virginia, articulation practices are left to the
discretion of individual nursing programs and therefore are
quite diverse.

Another major issue surrounding nursing education
articulation that influenced the structuring of research
questions for the study was the difference in philosophical
positions held by nursing educators concerning the nature of
educational preparation of nurses. Stevens (1981) discusses
differences in beliefs held by nursing educators about the
purpose and nature of different levels of nursing education
and the implications of this for nursing education
articulation. The long-standing controversy in nursing
education over whether associate degree nursing education
should, or can, articulate with baccalaureate degree nursing
education illustrates the point.

Issues related to the developmen of articulation
arrangements by volunt y efforts versus state-wide p ning
efforts also impacted the structuring c research questi ns
for this study. As indicated in the literature, state-wide
planning for nursing education articulation has become more
common within the past decade. Some nursing educators have
viewed this trend to be threatening to their academic
freedom, professional autonomy, and to the uniqueness of

individual nursing programs (Stevens, 1981; Rapson, 1987;
Barfield, Bell, and Turkletaub, 1987). The results of state-
wide planning efforts for nursing education articulation in
some states have been positive (MHECB, 1983; Zusy, 1986;
Rapson, 1987).

Specific Research Questions

The first question of the study was, "What are the
nature and the extent of articulation practices currently in
use in nursing programs in Virginia?" This question dealt
with articulation as process. Information was sought
concerning specific practices and procedures in effect both
for the articulation of programs and the articulation of
individual students among nursing programs in Virginia.

The second and third questions of the study dealt with
articulation as attitude and were developed to obtain
information about Virginia nursing education administrators'
opinions and beliefs about academic articulation. The
second research question explored the beliefs of nursing
education administrators regarding the merits and importance
of academic articulation in general. It asked, "What are
the beliefs and opinions of nursing education administrators
of nursing programs in Virginia about academic
articulation?"

The third research question was, "What is the level of
satisfaction or dissatisfaction of nursing education

administrators in Virginia with current articulation

practices in the State?" This question also focused on the

opinions and beliefs about academic articulation held by

nursing education administrators but was more specific in

nature. It explored the perceptions of Virginia nursing

education administrators about the effectiveness or

ineffectiveness of articulation procedures used in their own

programs and of the current status of articulation in

nursing education in Virginia.

The fourth research question was, "What are the

advantages and disadvantages of regional consortium

arrangements for nursing education articulation as perceived

by nursing education administrators in a state with such

arrangements?" This question was developed to assess the

perceptions of nursing education administrators from

Minnesota as to how well regional consortium arrangements

have worked for nursing education articulation in their

state. Minnesota respondents also were asked some of the

same questions that Virginia respondents were asked as a

means of contrasting the responses of the two groups.

A final question of the study -, "What changes,

additions, or deletions to current practice are indicated

for academic articulation among nursing programs in

Virginia?" Specific questions that related to this final

research question were posed to nursing education

administrators in Virginia. The findings of the study as a whole also were used to answer this question.

Definitions of Terms

The following terms and definitions were used in this study:

academic articulation - coordinated efforts among two or more academic programs to facilitate the educational mobility of students with minimum repetition of previous learning experiences;

program articulation - coordinated efforts among two or more academic programs to structure their programs to allow students to earn and transfer credit from one program to another with minimum repetition of learning experiences;

individual student articulation - the process by which academic programs accommodate the learning needs of individual students by allowing them to earn credit through such means as transfer of credits, credit by examination, and progression with exemption thereby minimizing repetition of previous learning experiences;

articulation agreements - written cooperative arrangements among or within educational programs for the purpose of facilitating the educational mobility of students from one academic program to another;

articulation practices - policies and procedures used to promote the educational mobility of students from one educational sector to another;

educational mobility - movement of a student from one level to another in a particular field of study; most frequently the movement is vertical, although movement could be lateral; and

nursing education administrators - persons with titles such as program head, director, chairperson, or dean who are responsible for the overall management and direction of a nursing education program.

Limitations

Because the study was concerned with the perceptions of nursing education administrators in Virginia and Minnesota, results of the study may not be generalizeable to nursing programs located elsewhere. Findings of the study were limited to the particular states from which data were obtained. However, results of the study may be of interest to persons concerned with academic articulation in nursing education per se.

Several techniques were used to increase the validity of the survey instruments that were developed for use in this study. However, since validity is a matter of degree, validity of the instruments may not be as high as might be desired. Although the instruments were tested before being

used in this study, they were not tested repeatedly over a
period of time.

The population in the study was limited to nursing
education administrators. Information that was obtained
about academic articulation among nursing programs,
therefore, represented only the viewpoints of these
persons. The opinions and perspectives about academic
articulation held by nursing students, nursing graduates,
nursing faculty, and institutional administrators were not
obtained. The opinions of persons in these latter groups
would no doubt have furnished other dimensions to the
subject under investigation.

Participants in the study were assured that their
responses would be handled confidentially and that names of
respondents would not be associated with their specific
responses. However, complete anonymity was not maintained
due to the nature of the data desired from the study. This
may have influenced the way in which persons responded to
some questions on the survey instruments.

Assumptions

One assumption of this study was that nursing education
administrators represented the group of persons who were
most knowledgeable about articulation practices in nursing
education programs. Therefore, questionnaires were
addressed to the chief education administrator of each

nursing program in the states surveyed. This assumption
seemed to have some verification in that only six nursing
education administrators to whom questionnaires were sent
designated someone else to complete the questionnaire for
their program.

Another assumption of the study was that respondents
would answer items on the questionnaires as frankly and
accurately as possible. This included the assumption that
respondents would be willing to share their personal
opinions and attitudes about academic articulation and to
report accurately those articulation practices in effect at
the nursing program that they represented. Both
questionnaires used in the study provided numerous
opportunities for respondents to elaborate on or to qualify
their responses.

It was also assumed that persons to whom the
questionnaires were sent would receive them. No
questionnaires were returned to the sender as
undeliverable. However, three persons reported that they
had not received the first mailing of the questionnaire.

Chapter 2

REVIEW OF RELATED LITERATURE

Articulation and Higher Education

Academic articulation in the most traditional and
broadest sense is represented by the transfer of students
from one educational institution to another without the need
to repeat previous learning experiences. Kintzer (1973)
found that articulation arrangements were generally well
developed among colleges and universities and high schools
in the 1960s. By contrast, however, little was being done
to coordinate efforts to ease the plight of college students
who wished to transfer from one college to another. Even
though the practice of transferring credits from one
institution to another was in effect from the beginning of
the junior college movement, arrangements were frequently
informal and unstructured. Policies and procedures were
developed for individual institutions, and the fate of
transfer students was dependent upon these individualized
practices (Kintzer and Richardson, 1986).

Kintzer (1973) identified three styles of articulation
agreements being used by educational institutions. These
were (1) formal and legally-based policies, (2) state system
policies, and (3) voluntary agreements among institutions

24

or systems. Policy development for formal or legally-based agreements is based upon statutes and/or regulations. States with such policies usually focus on the completion of a general education core and/or an associate degree. In states that have adopted state systems policies for articulation, a specified state agency is usually given the responsibility and authority for coordinating and enforcing such policies. Voluntary arrangements may vary greatly from institution to institution. In these arrangements, cooperative effort is usually a strength whereas financing, management and communication may be problematic (Kintzer, 1985).

In 1973, Kintzer reported that half of the states used the first two patterns, that is, formal or legally-based and state system policies. In the remainder of the states, agreements were informal and handled on an individual basis. This situation was found to be essentially unchanged in the mid 1980s (Kintzer and Wattenbarger, 1985).

Cohen and Brawer (1984) note that in the mid 1970s, the transfer rate for community college students who had completed career programs exceeded those who had completed traditional transfer or college parallel programs. This trend has been documented by a number of other authorities as well (Lombardi, 1979; Kintzer and Wattenbarger, 1985; Prager, 1988b). Factors that have been identified as contributing to this phenomenon include socioeconomic trends

such as types of jobs that are available at a particular
period of time, changing student demographics, and increased
public financial support for career and vocational
education.

Whereas some critics viewed with concern the trend of
decreasing numbers of community college students pursuing
college transfer study, others viewed the trend of
increasing numbers of occupational transfer students more
optimistically. For example, Cohen and Brawer (1984) point
out that this trend may have intrinsic value in that it may
cultivate concern about career mobility and in turn,
stimulate student interest in continuing their education
beyond the associate degree. Thomas (1988) believes that
trends such as decreasing enrollments tend to help senior-
level institutions see the need for articulation procedures
for career track students. Kintzer (1985) notes that in the
mid 1980s special attention within six states had been given
to vocational-technical credit transfer.

As increasing numbers of career track students have
sought transfer to senior level institutions, they have
confronted a variety of situations and problems. Prager
(1988b:80) states that

> the literature of articulation speaks seldom if ever to
> the larger academic question of what constitutes the
> best kind of education at the baccalaureate level for
> students who come from the community college without
> the liberal arts and science credential.

Prager (1988b) points out further that with the exception of three disciplinary areas, namely, certain areas in allied health, engineering technologies, and business, articulation designs have not been dealt with by the majority of disciplines.

Historically, articulation activities between two and four year colleges have been unstructured and focused on course equivalencies or on negotiated program to program agreements. Major shortcomings of such arrangements for transferring students are loss of college credits and frequently, repetition of previous course work. Structured articulation designs, on the other hand, provide smooth transition for students from one educational level to another (Prager, 1988b).

Prager (1988b) describes three general formats for career program articulation. These include the contract major, the capstone, and the two-plus-two program. Of the three formats, the two-plus-two program is the most commonly addressed in the literature. In the two-plus-two arrangement, students transfer from a two-year program of study to a four-year program in a specialized field within a structured curriculum sequence and without repetition of previous course work (Prager, 1988b). In some cases, a four-year institution may offer only the last two years of the curriculum.

The contract major transfers the associate degree in full as the major. In effect, it reverses the traditional role of baccalaureate study by requiring that students master course work in the major during the first two years of study. It was specifically designed for occupational technological degree transfer students at Southern Illinois University in the 1970s (Prager, 1988b).

The capstone program accepts the two-year degree in full toward attainment of a four-year degree. But, unlike the two-plus-two program, it was primarily designed to address the gap between vocational and liberal arts education. An example of this articulation format exists at Wayne State University (Prager, 1988b).

The Carnegie Commission on Higher Education conducted several studies in the 1970s that related to the need for effective articulation among colleges and universities. In one study, the Commission advocated the development of policies in all states that would facilitate the transfer of students from two-year to four-year institutions (Carnegie Commission, 1970). This was recommended in the belief that students with proven academic ability should be allowed to proceed academically as far as their interests and abilities would allow.

In another study undertaken to examine the vital issues of higher education to the year 2000, the Carnegie Commission on Higher Education (1971) called for a greater

degree of flexibility in higher education with provisions

for more options for persons interested in obtaining a

college education. Options advocated by the Commission

included those to defer college, to stop out to obtain work

experience, and to change directions or career goals while

in college. The Commission encouraged greater accessibility

of higher education to persons throughout their lifetime and

recommended the expansion of opportunities for students to

alternate patterns of study and employment. Further, the

group recommended that opportunities be created for persons

to reenter higher education throughout their active career.

<div align="center">

Articulation and the Professions
and Allied Health

</div>

In a study of education for the professions, Schein

(1972) addressed the need to allow students easier

interruption of their education and easier geographical

movement from one region to another. He advocated the

construction of professional programs of study so that

students could exit and reenter at different levels. He

espoused the use of differentiated degrees that would

recognize students' accomplishments at various levels in a

program of study. According to Schein, this practice would

make it easier for students to reenter at a later time or to

enter a different field.

Alzheimer (1982) in a review of the literature on

allied health education for the period 1972-1982 found

evidence that articulation of allied health programs from
two-year to four-year colleges presented many problems. She
identified two major concerns of educators and state
legislators regarding allied health program articulation.
One was the duplication of resources, time, and money, and a
second was the problem with transferability of credits from
occupational programs. Four-year institutions had
difficulty translating or equating credits of applied
programs completed at the two-year level. In addition to
these concerns, the controversial issue as to whether a two-
year degree is terminal or can be used as a "stepping stone"
to a bachelor's degree was prevalent in the literature
reviewed by Alzheimer (1982).

Articulation and Nursing Education

Several major studies of nursing education have
identified the need for better articulation among nursing
programs. The study of the National Commission on Nursing
and Nursing Education directed by Lysaught (1970) included
twenty-two recommendations for the improvement and
restructuring of nursing education. Recommendations
included career ladder options for nursing students, state-
wide planning for nursing education, and the movement of
nursing education out of hospital settings into the
mainstream of higher education.

A longitudinal study was initiated in 1978 to assess
progress on the recommendations of the 1970 National
Commission on Nursing study (Lysaught, 1981). Findings
indicated that while some progress had been made regarding
the specific recommendations mentioned above, much remained
to be done. About half of the nursing programs in the
sample of the 1970 study had done formal planning of
educational articulation. One out of four states still did
not have master planning committees for nursing education.
While there was a decrease in the number of hospital diploma
programs, there still was no unified effort to make nursing
education an organized, articulated system (Lysaught, 1981).

After publication of statements in support of the
concept of career mobility in 1970 and 1976 (NLN, 1970; NLN,
1976), the NLN proceeded to conduct several studies related
to the open curriculum in nursing. Four distinct models of
open curricula being used in nursing programs were
identified as a result of these NLN studies (Notter and
Robey, 1979). Notter and Robey projected that flexible
curriculum approaches would continue to be needed in the
future if the profession was to move toward two levels of
nursing education, associate degree and baccalaureate
degree, for entry into practice--a goal that had been set by
the American Nurses Association in 1965.

In the early 1980s, another major study of nursing was
conducted by the National Commission on Nursing. The report

published in 1983 supported educational mobility, the use of
the career ladder, and reentry opportunities within the
educational system for nurses. The group also recommended
that accreditation processes should be responsive to these
needs.

Prompted in the late 1970s by a controversy as to
whether further substantial funding was needed for nursing
education under the aegis of the Nurse Training Act
Amendments, a study of nursing and nursing education was
undertaken by the Institute of Medicine (1983). One
recommendation from this study spoke to the need for more
opportunities for educational advancement for licensed
nurses. While it was recognized that the pursuit of
additional education would not necessarily increase the
number of nurses in practice, over time it could provide
scarce specialists, especially nurses prepared at the
graduate level. This study group also made the point that
the attainment of future supply goals in nursing may heavily
depend on the continual up-grading of nurses "whose initial
career objective may have been merely to secure nursing
employment at minimal personal cost" (Institute of Medicine,
1983:8).

Career/Educational Mobility in Nursing

The topic of career or educational mobility has
received considerable attention in the nursing literature.

The terms career mobility and educational mobility
frequently are used synonymously and generally refer to
movement from one educational level to another within the
field of nursing   Mobility is usually perceived as being
upward, but it may also be lateral.

Shane (1983) identifies three eras that characterize
trends associated with educational mobility in nursing. The
first era was from 1909 to the early 1960s. This era began
with the establishment of the first baccalaureate program at
the University of Minnesota and ended when the NLN
established policies regarding how registered nurses should
be handled within university settings. This period was
characterized by diversity in the number and manner in which
credits for previous learning were granted to nurses by
colleges and universities while requiring RNs to complete
only a core of general education courses in order to earn a
bachelors degree.

The second era, from the early 1960s to the early
1970s, was characterized by established nursing schools
utilizing NLN policies to accommodate nurses returning to
school. During this period, the NLN adopted the policy of
the single program in nursing leading to a baccalaureate
degree. This policy was based on the rationale that since
nursing was the major, some upper-division courses in
nursing should be required for all students. Blanket credit
for prior learning in nursing was forbidden (Shane, 1983).

The third era identified by Shane (1983) began in 1972 when the first upper-division nursing programs for RNs only were established. During this period, the NLN endorsed the development and implementation of open curriculum practices. As a result, a variety of nursing education programs were developed to meet the needs of educationally mobile nurses.

In 1975, Lenburg described four types of career mobility models used in nursing schools to accommodate the educational needs of licensed nurses: (1) the licensure-based model; (2) the advanced placement model; (3) the multiple exit-reentry model; and (4) the assessment model. In the licensure-based model, there is acceptance that a certain level of learning has already occurred that should not have to be repeated. Additional learning experiences are provided that will assist the learner to meet requirements for the next credential or degree.

In the advanced placement model, assessment procedures are used to determine the extent of previous learning attained by students. Credits are awarded on the basis of assessment outcomes and applied toward program requirements. Students are program placed according to the nature and number of credits granted. This model is the oldest form of career mobility used in nursing programs (Lenburg, 1975).

In the multiple exit-reentry model, the total program is designed in discrete and sequential segments. Students may choose to complete one or more segments of the curriculum or complete the entire sequence. A specific credential is earned at the completion of designated segments. This model is based on a philosophical position that learning at one level may serve as a foundation for learning at a higher level (Lenburg, 1975).

Of the four career mobility models identified by Lenburg (1975), the assessment model is the most unconventional. It differs from the other three in that it focuses totally on assessment of learning rather than on instruction. Credits are awarded on the basis of the learner's ability to demonstrate attainment of the required knowledge and abilities for a specific credential regardless of where, when, or how such learning was obtained (Lenburg, 1975). This model is exemplified by the New York Regents External Degree Nursing Programs of which there are two, the associate degree and baccalaureate degree programs.

Numerous examples of the multiple exit-reentry career mobility model are documented in the nursing literature. Several provide educational mobility of nursing personnel at five levels, from nurse aide to masters degree levels. One of the earliest such efforts was in the Orange County-Long Beach area of Southern California. Representatives at five community colleges and three universities designed an

educational pathway with multiple entry and exit points that
provided education at nurse aide, licensed vocational nurse,
associate degree, baccalaureate, and masters levels (Cobin,
Traber and Bullough, 1976). A similar program has been
described by Gulledge (1981). In Florida's Region I,
personnel from twelve nursing programs have developed an
articulated educational route from nurse aide to masters
level.

Other multiple exit-reentry articulated models have
been developed to accommodate the educational needs of
nursing students at three or four levels of preparation.
Rosbach (1983) describes a career ladder program at Lower
Columbia College in Longview, Washington that provides
preparation for nurse aides, practical nurses, and
registered nurses. A similar program at New Mexico Junior
College is described by Hafer and Davis (1985). At Seminole
Community College in Florida, a program has been developed
whereby students may enter and exit at various points of a
program that is planned to accommodate the educational
mobility needs of nursing assistants who wish to become
practical nurses and of practical nurses who wish to become
registered nurses (Florida State University, 1981).

Educational mobility programs that accommodate the
needs of licensed practical nursing students and registered
nursing students are frequently based on either the multiple
entry-reentry model or the advanced placement model

described by Lenburg (1975). Wilson (1987) describes a competency-based program developed within the Texas College and University system at Austin that is based upon the multiple exit-reentry model. It accommodates students who wish to prepare at the licensed vocational, associate degree, or baccalaureate degree nursing levels. Jackson and Brown (1989) describe an articulated program developed at Tyler Junior College and the University of Texas at Tyler, which provides a comprehensive course of study for a career as a licensed vocational nurse or a registered nurse at the associate, baccalaureate, or masters level. This program provides multiple educational options to students while offering a fast-track curriculum that facilitates movement to higher levels of study and preparation.

An example of an advanced placement model for career mobility in nursing is described by Hosch (1986). Staff at Mercer County Vocational Technical Center and Bluefield State College in West Virginia collaborated to develop an articulated arrangement whereby LPNs are granted advanced placement in the College's nursing program through transfer of credits for previous learning and by completion of a transition course in nursing. The purpose of the project was to permit LPNs who wished to become RNs to avoid unnecessary repetition of basic nursing courses.

The advanced placement model was used at Kirkwood Community College in Iowa to accommodate students who had

spent some time in a nursing program, in the military as corpsmen, or as medical assistants. Previous knowledge and skills of students were assessed and validated by examinations. Based upon the number of courses successfully challenged by exams, students were placed at appropriate points in the nursing program (Kirkwood Community College, 1976).

<div align="center">

Regional and State-wide Planning for Nursing Education Articulation

</div>

Another approach that has been taken in some states to effect articulation of nursing education programs is through the utilization of regional consortia. In some instances consortia have developed that cross state lines. The states of Minnesota and North Dakota constitute an example of such an arrangement. In the northwest Minnesota and northeast North Dakota regions, a partnership of eight educational institutions exists to provide a four level nursing education program. By consortia arrangements, it is possible for persons to progress smoothly from nursing assistant to practical nurse to associate degree nurse to bachelor's degree nurse in four years of full time study. The typical student, however, exits for employment purposes for at least one year along the way (Agassiz Region Nursing Education Consortium, n.d.).

In 1983, three consortia existed in Minnesota for the articulation of nursing education. These included the

Agassiz Region Education Consortium in northwest Minnesota, the Metro Area Nursing Education Consortium in the Twin Cities area, and the Itasca Nursing Education Consortium in the northeastern region of the State (MHECB, 1983). The feasibility of establishing policies and curricula to enable nurses to progress from one educational level to the next with recognition of their previous nursing knowledge and skills and with minimal loss of time was demonstrated by these consortia arrangements.

Another example of a consortium arrangement for nursing education, developed in direct response to a critical shortage of nursing personnel in New York City during the 1980s, is Project L.I.N.C. (Ladders in Nursing Careers). This project was designed to facilitate the educational advancement of health care workers employed in hospitals and long term care facilities in New York City. It consists of five consortia, one in each New York City borough. Twenty nursing education programs including practical, associate degree, and baccalaureate degree nursing programs, and forty hospitals and long term care facilities are involved in the project (Dixon, 1989; Green, 1989).

Two examples of state-wide planning for nursing education articulation stand out in the recent nursing literature. One is the Maryland plan that was mandated by state government. The other is the Colorado plan which is a state-wide voluntary plan.

In Maryland, state-wide planning for nursing education articulation was expedited by involvement of the governor and the state legislature (Rapson, 1987). The plan originally provided an articulated pathway for students preparing to be registered nurses in twenty-seven nursing programs. The Maryland plan has three options for registered nurses who seek the baccalaureate degree. Option one is characterized by transition courses, option two entails direct transfer of lower-division credits, and option three is characterized by advanced placement exams taken in place of nursing and general education courses (Rapson and Richardson, 1987). The Maryland plan has been expanded recently to facilitate the educational mobility of LPNs to RNs.

The Colorado plan, effective January of 1991, provides for nurses graduating from Colorado schools to progress either from a licensed practical to associate degree nursing program or from an associate degree or diploma nursing program to baccalaureate or higher degree without testing to validate previous learning. The elimination of testing to validate previous learning was made possible by faculty members at all nursing programs in Colorado validating the content of all curricula. This procedure made it possible for higher level institutions to award transfer credit equivalent to about one year of nursing courses in the program students first enter (CCNE, 1990).

Challenges Associated with
Articulation Efforts

One of the themes that appears frequently in the literature about articulation is the need for persons involved in articulation to communicate and collaborate. Prager (1988a:3) comments that it is the opinion of numerous authors that the single best strategy for reducing barriers to effective articulation is "intermural faculty exchange and communication." It is the view of Berger and Ruiz (1988:39) that since articulation and transfer matters affect the curriculum and curriculum is the prerogative of faculty, faculty must be active participants in any serious articulation effort. They point out that faculty, regardless of the many factors that tend to divide them, such as representing diverse institutions and settings, tend to be united by a common respect for their academic discipline and commitment to education. Therefore, efforts at articulation need to capitalize on these concerns and interests of faculty.

King (1988) in describing the Kentucky Allied Health Project, stresses the value of advisory groups and task forces meeting over a period of time in the development of a state-wide articulated system for allied health education. Meetings frequently produce valuable outcomes such as mutual respect for faculty at other institutions. Mutual respect,

in turn, enhances communication which is essential to the
accomplishment of the group's task--curriculum change.

King (1988:69) elaborates on some common barriers to
articulation efforts. She states that "professional elitism
and resistance to change are the strongest barriers" to
articulation efforts. Professional elitism refers to the
belief of faculty members that their program or program
level is the best way to prepare students in a particular
discipline. Professional elitism may be disguised in
reasons that are given for not developing articulation
pathways, for example, that accreditation standards will not
permit it.

With respect to resistance to change as a barrier to
articulation, King (1988:67) describes four levels of
individual readiness for change. At the first level,
persons are openly opposed to the prospect of articulation.
At the second level, persons covertly resist articulation
efforts. A third level is typified by persons who may be
unsure of what position to take but who are willing to
listen. At the fourth level, persons are positive and
willingly take an active part in the change process.

Individual beliefs about the nature of education and
learning are also important in affecting faculty involvement
in articulation efforts. Stevens (1981:703) states that
"the history of articulation in nursing is one of politics
disguised as facts." For over twenty years, various

interest groups within nursing have discussed the pros and
cons of linking educational pathways in nursing. In this on-
going debate, arbitrary decisions about curriculum design
rather than universal theories and practices of education
and outcome evaluation were observed to impact on
articulation efforts in nursing education (Rapson, Perry,
and Parker, 1990).

An important philosophical and political issue that has
affected academic articulation in nursing education is the
controversy over whether associate degree nursing programs
should, or can, articulate with baccalaureate programs
(Stevens, 1981). Some educators view associate degree
nursing programs as different in kind from baccalaureate
programs and therefor, terminal in nature; this group sees
articulation as impossible. Other educators perceive some
commonalities in the two programs and believe that associate
degree programs can serve as a basis for baccalaureate
study; this group sees articulation as possible. Stevens
contends that until there is resolution of this issue among
nurse educators, no universal pattern for articulation is
possible. A similar view is taken by Miller (1980:282) who
states that

> until the associate degree in nursing is accepted as a
> recognized point of articulation within the
> educational mainstream of nursing, the dilemma of
> program articulation and upward mobility for nurses
> will be with us.

Consequently, one of the issues in nursing education has been whether to promote educational opportunities by allowing movement of persons with demonstrated abilities from one level to another within the discipline. Some people argue that such practice would tap new potential for the supply of nurses, decrease educational repetition and provide a clearer career pathway. Others argue that it is more important to prepare nurses at two distinct levels, at the technical and professional levels (New York State Education Department, 1982).

According to Stevens (1981), distinguishable curriculum and program products in nursing education have evolved from each of these differing views of articulation. Products of the proponents of articulation include the career ladder concept, the spiral curriculum, competency-based education, and education by examination. Products of the anti-articulation forces have resulted in the two-plus-two curriculum, the technical-professional dichotomy, and the notion of terminal education.

Waters (1989) indicates that barriers to articulation in nursing have existed since the mid 1960s when the NLN adopted the position that eliminated articulation of any kind between associate degree and baccalaureate degree programs. Although the NLN changed its position in the 1970s and supported the open curriculum concept, Waters states that many barriers to articulation in nursing still

exist. She identifies the following barriers: (1) long-
standing doubtfulness among baccalaureate faculty about the
educational qualifications of students prepared at the
associate degree level; (2) no standardization of
programming; (3) unwillingness of educators to accept that
nursing courses at different levels have both differences
and commonalities; and (4) students' resentment about
duplicating course work. She believes that it is possible
to overcome such barriers through continued study of the
differentiation of content of various nursing curricula,
developing flexible procedures for transfer credit, and
developing partnerships and articulation agreements among
institutions. She also believes that, ultimately, it will
be the unprecedented diversity of the student population
that will compel the nursing profession to a refined and
predictable educational system.

Abbott (1982) states that at least two convictions are
necessary in order to plan educational mobility programs for
nursing students. One is the belief that there are
intrinsic relationships among levels of learning and
performance in the sciences and in nursing. In other words,
that knowledge and skills required for effective practice at
one level of nursing relate to the knowledge and skills that
are required for effective practice at other levels. A
second belief is that it is possible to identify, define,

demonstrate, and assess objectively these related elements
of knowledge and skills.

In 1986 the National Commission on Nursing
Implementation Project (NCNIP), an endeavor to determine
agreement among nurses and to activate that agreement at
local, state, and national levels, was implemented.
Twocritical understandings identified by the NCNIP that had
direct implications for nursing education were that

> 1. Nurses will need education programs that are
> different from the education programs of today.
> 2. The demand for nurses will outstrip the supply
> well into the 1990s (DeBack, 1989:51).

DeBack (1989) goes on to point out that career mobility has
been a key concept in the restructuring of nursing education
programs in an effort to meet the demand for nurses, both in
terms of adequate numbers and in preparation of nurses with
the types of skills needed to function in a rapidly changing
health care delivery arena. Some innovative methods being
used in the restructuring of nursing education programs to
meet the above demands noted by DeBack (1989) include the
use of bridge courses and mobility tracks designed for the
needs of specific student populations, the use of portfolio
assessment for advanced placement, and the use of time- and
space-free formats. She also emphasizes that old paradigms
of education are being laid aside in preference for new
ones.

Summary

A review of the literature related to academic articulation, both from the perspectives of higher education and nursing education, provided direction for the design of this study. The writings of Meinert (1977), Cohen and Brawer (1984), and Kintzer (1985) as discussed in Chapter One of this study provided elements of the definition and characteristics of academic articulation that were used in structuring a framework for this study. A review of the historical trends, events, and studies surrounding academic articulation in higher education, described by such authors as Kintzer (1973 and 1985), Cohen and Brawer (1984), and Prager (1988b), and in nursing education, described by Lysaught (1970 and 1981), Lenburg (1975), Notter and Robey (1979), and Shane (1983), provided a perspective for identifying unresolved issues related to articulation. Additional articulation issues were identified from the documentation of many individuals and groups who described current practices and challenges associated with academic articulation. These issues were used to structure the research questions and questionnaire items for this study. Finally, findings in the literature were used as a basis for comparing the results obtained in this study.

Chapter 3

PROCEDURES AND METHODOLOGY

The general approach used to examine the phenomenon of articulation among nursing programs in Virginia and Minnesota was survey research. The major tool for gathering information for the study was the self-administered, mailed questionnaire. Two different questionnaires were developed, one to be sent to nursing education administrators in Virginia and one to be sent to a similar population in Minnesota.

Prior to development of the questionnaires, two methods were used to identify variables for the study. First, the literature on higher education and nursing education was reviewed and pertinent facts, opinions, and issues about academic articulation were identified from research studies and articles published about academic articulation. Second, personal or telephone interviews were conducted with one or more nursing education administrators from each of four types of nursing education programs in Virginia (practical, diploma, associate degree, and baccalaureate). The purpose of these interviews was to identify aspects of academic articulation that were of importance and concern to nursing educators in Virginia.

Several key representatives of nursing education in Minnesota were also contacted by telephone prior to the development of the questionnaire to be used with nursing education administrators in that state. Persons contacted included a representative of the Minnesota Board of Nursing, a representative of the Minnesota Higher Education Coordinating Board, and a member of the Minnesota Nurses Association education committee who also was a dean of a baccalaureate nursing program. The purpose of these contacts was to obtain information about the general status of nursing education articulation in Minnesota, about requirements of the Minnesota Board of Nursing for articulation among nursing education programs, and about the feasibility of conducting a survey about nursing education articulation in Minnesota.

Using variables identified from the literature and from interviews with nursing education administrators along with the major research questions that had been identified for the study, a plan was developed for each questionnaire. The plan included the specific information needed to provide answers to each major research question of the study, sample items for each major research question, and the form of final data desired for specific items on the questionnaire. The plan was sent to a Nova University research associate for evaluation and approval.

Principles of formulating questions and of developing
written questionnaires proposed by Baumgartner and Heberlein
(1984), Sudman and Bradburn (1985), and Dillman (1978) were
used as guidelines in developing the questionnaires.
Building upon the sample items that had been drafted for the
plans for the questionnaires, additional items were
developed in sufficient kind and number to provide
information necessary to answer each research question of
the study. Items were then sequenced, and a format for each
questionnaire was drafted. Drafts of the two questionnaires
were then forwarded to a Nova Un. _rsity research associate
for evaluation. Modifications to the drafts were made based
upon the research associate's comments and suggestions.

Next, the drafts of the questionnaires were given to a
panel of si.. experts who were knowledgeable about nursing
education articulation and who were representative of the
intended survey population. The panel evaluated individual
questionnaire items for content and clarity of language and
the overall questionnaire for ease of use. Revisions were
made accordingly. A copy of the final version of the
questionnaire sent to Virginia study participants is
provided in Appendix A and of the questionnaire sent to
Minnesota study participants in Appendix B.

Questionnaires were then pilot tested. For the
Virginia questionnaire, the names of two programs from each

of four types of nursing programs in Virginia
(baccalaureate, associate degree, diploma, and practical
nursing) were randomly selected for the pilot study.
Nursing education administrators for all eight programs
selected were contacted by telephone to get their consent
before sending the questionnaire to them. A cover letter
accompanied the questionnaire explaining the purpose of the
study and what was being requested of the participant.

A similar procedure was used to pilot test the
questionnaire developed for nursing education administrators
in Minnesota. Six programs, two baccalaureate, two
associate degree, and two practical nursing programs were
randomly selected to participate in the pilot test.
However, post cards rather than telephone calls were used to
obtain the consent of persons who were selected for the
pilot test.

Following the return of the questionnaires in the pilot
test, responses to all items on the questionnaires were
inspected and studied for problem areas. Several editorial
changes were made on the Virginia questionnaire. Only a
change in wording was necessary within the Minnesota
questionnaire. Instead of using the terms "state-wide plan"
to refer to the situation of nursing education articulation
in Minnesota, the terms "regional consortium arrangement"
were substituted to more accurately characterize the nature
of nursing education articulation in Minnesota.

Two cover letters were developed, one to accompany the questionnaire developed for Virginia nursing education administrators, and one to accompany the questionnaire designed for nursing education administrators in Minnesota. As proposed by Dillman (1978), the cover letter included statements about the purpose of the study, the importance of the study to participants, promise of confidentiality, an incentive and reward for participating, a deadline for returning the questionnaires, and a thank you. A copy of each cover letter is provided with the respective questionnaire in Appendixes A and B.

Mailings, which consisted of a questionnaire, a cover letter, and a self-addressed, stamped envelope for returning the questionnaire, were prepared. Using official lists of nursing programs issued by the Virginia and Minnesota Boards of Nursing, a mailing was sent to the nursing education administrator in charge of each nursing program in the two states with the exception of those persons that had participated in the pilot test. The State Approved Schools of Nursing RN, 1987 published by the NLN was used to obtain information about baccalaureate completion programs that were not included in the lists from the boards of nursing of the two states. Eighty questionnaires were mailed to nursing education administrators in Virginia and forty-six were mailed to nursing education administrators in Minnesota.

Approximately one week after the deadline given in the cover letter for returning the questionnaires, post card reminders were sent to persons from whom questionnaires had not been received. A second post card reminder was sent about two weeks after the first post card reminder. Finally, about two weeks following the second post card reminder, telephone calls were made to six nursing education administrators in Virginia requesting the return of the completed questionnaire in order to obtain the targeted eighty percent return rate.

Two methods were used in compiling data from the questionnaires. Responses to items on the questionnaires where a checklist format had been used were compiled on work sheets that followed the questionnaire format but that provided additional space for recording the number of responses to each item. Responses to open-ended questions were keyed verbatim into a personal computer and then printed.

Descriptive statistical methods were used to analyze data generated by the questionnaires. Frequency distributions showing numbers and percentages of responses were prepared. Measures of central tendency (mean and mode) also were calculated as was the range.

Responses to open-ended questions were examined for similarities and differences. Recurring themes were identified and responses were categorized and reported

according to these themes. Responses that did not fit the identified themes were reported separately or in a category designated "other."

For some items on the questionnaires, an aggregate response representing all respondents was reported, and then the responses of study participants representing specific types of nursing programs (practical, diploma, associate and baccalaureate degree) were reported. This procedure allowed the responses of nursing education administrators from different types of nursing programs to be compared. Analyzing the data in this manner was considered to be important since many of the issues and concerns related to nursing education articulation are thought to stem from the different views about articulation held by nursing educators from different types of programs.

PRESENTATION OF RESULTS

Of eighty-eight questionnaires sent to nursing education administrators in Virginia, seventy-three were returned. This represented an overall return rate of eighty-three percent for the Virginia population. For the different types of nursing programs represented in the study, the return rate was eighty percent for practical nursing programs, one hundred percent for diploma nursing programs, eighty-eight percent for associate degree programs and eighty percent for baccalaureate degree programs. Sixty-eight of Virginia respondents held the chief administrative position in the nursing program that they represented. Five respondents were designees of their respective chief administrator. Since only editorial changes were made to the Virginia questionnaire as a result of the pilot test, the responses of eight participants in the pilot test were included and reported in the study results.

Fifty-seven (seventy-eight percent) of Virginia respondents represented nursing programs in public institutions, and sixteen (twenty-two percent) represented nursing programs in private institutions. Thirty-two

(forty-four percent) of the nursing programs represented
were NLN accredited. Forty-one programs (fifty-six percent)
did not have NLN accreditation; thirty-three of these were
practical nursing programs.

Of fifty-two questionnaires sent to nursing education
administrators in Minnesota, forty-four were returned. This
represented an overall return rate of eighty-five percent.
The return rate for specific types of nursing programs in
Minnesota was eighty-one percent for practical nursing
programs, ninety-two percent for associate degree programs,
and eighty-six percent for baccalaureate degree programs.
Since only minor wording changes were made to the Minnesota
questionnaire as a result of the pilot test, the responses
of participants in the pilot test were included and reported
in the study results. Six persons participated in the pilot
test for the Minnesota questionnaire.

The first major question of this study was, "What are
the nature and extent of articulation practices currently in
use in nursing programs in Virginia?" Items one through
sixteen on the Virginia questionnaire were designed to
answer this question. Items one through ten were related to
procedures being used in nursing programs in Virginia to
effect program articulation. Items eleven through sixteen
of the same questionnaire were designed to assess methods
and procedures being used to evaluate individual students
for transfer from one nursing program to another.

When respondents were asked if their programs currently
have program articulation agreements with one or more other
nursing programs, forty-eight percent (thirty-five) answered
in the affirmative, and fifty-one percent (thirty-seven)
answered in the negative. One respondent did not reply to
this question. By program types, nine baccalaureate
programs, nine associate degree programs, three diploma
programs, and fourteen practical nursing programs had
current articulation agreements with one or more other
nursing programs. Table 1 contains data for the number of
articulation agreements by program type reported by
thirty-five respondents having articulation agreements in
place. A list of Virginia nursing programs having
articulation agreements and the programs with which
agreements are held is contained in Appendix C.

The number of different nursing programs with which a
single nursing program held current articulation agreements
ranged from one to five. Of thirty-seven respondents who
indicated that their programs did not have current
articulation agreements, twelve stated that there are plans
underway to establish such agreements within the next year.
An additional two respondents stated that there was a
possibility that their programs would establish articulation
agreements within the next year.

Respondents from programs that had articulation
agreements in effect were asked to characterize the nature

Table 1

Types and Numbers of Virginia Nursing Programs Reporting
Articulation Agreements and the Types and Numbers
of Programs with Which Such Agreements Are Held

Type & Number of Programs Having Agreements		BACC	AD	DIP	PN	Totals
Baccalaureate	9	0	19	2	0	21
Associate Degree	9	8	0	0	15+ *	23+ *
Diploma	3	3	0	0	0	3
Practical	14	0	16	1	0	17
Totals:	35	11	35	3	15+ *	64+ *

Type & Number of Programs with
Which Agreements Are Held

* One respondent reported having articulation agreements
with "varied" practical nursing programs.

of those arrangements by choosing from a checklist of

statements describing different types of articulation

arrangements. Responses to this item are illustrated in

Table 2. Since some programs had more than one type of

arrangement, the total responses exceed thirty-five, the

number of programs that reported having articulation

agreements in effect.

Of thirty-five respondents who reported having

articulation arrangements in effect in their programs, over

half (fifty-four percent) reported using articulation
arrangements that provided credit for previously completed
general education courses but required testing to validate
or to earn credit for previously completed nursing courses.
Forty-six percent reported having articulation arrangements
in effect whereby two or more nursing programs were
structured so that graduates from one program entered
another program with advanced standing without further
testing or repetition of previous courses. Twenty-six
percent of respondents reported that they used an
articulation arrangement whereby some credit was granted for
both previously completed nursing and non-nursing courses,
and students could "test out" of additional courses. One
respondent reported use of an articulation arrangement where
structuring of two or more programs provided for admission
of students to more than one program at a time, and students
were assured admission to a second program upon successful
completion of a first program.

Of the thirty-five programs that had program
articulation agreements in effect, respondents in eleven
programs reported that they belonged to a consortium of
three or more programs that were working together in a
common venture for nursing education articulation.
Geographically, one consortium group was identified in the

Table 2

Types of Articulation Arrangements in Effect at
Thirty-five Nursing Programs in Virginia

Type of Articulation Arrangement	Frequency	Percent
Graduates from one nursing program may receive credit for previously completed general education courses but must take tests to validate or to earn credit for previous nursing courses when entering another nursing program	19	54.2
Two or more nursing programs are structured so that graduates from one program enter another program with advanced standing without further testing or repetition of previous courses	16	45.7
Graduates from one nursing program receive some credit for previously completed general education and nursing courses and may "test out" of additional courses when entering another nursing program	9	25.7
Structuring of two or more nursing programs so that students are admitted to more than one program at a time (joint or dual admission), and students are assured admission to a second program pending satisfactory completion of a first	1	2.8

Tidewater area, one in the Northern Virginia area, and one

in the Shenandoah Valley area of the State. A total of

fifteen nursing programs were identified as participating in one of these cooperative groups.

Only three respondents identified a specific articulation model that was used in setting up program articulation arrangements for their programs. The Sonoma Beach, California model was used at one school. The Maryland state model was examined by respondents at two programs.

The procedures and activities used in establishing program articulation agreements by the thirty-five programs having them in effect are contained in Table 3. Respondents were asked to select from a list all procedures or activities that were used to establish articulation agreements for their programs. Fifty percent or more of the respondents indicated they used all but two of the procedures on the list.

When establishing program articulation agreements with other nursing programs, about eighty-three percent of responderts indicated they had done analyses of course objectives of participating programs. About eighty-three percent reported reviewing pre-requisite courses required by participating programs. Seventy-four percent had done analyses of program objectives of programs with which articulation arrangements were in effect. About sixty-three percent indicated they had analyzed unit objectives, reviewed philosophies, and studied exit competencies of

Table 3

Procedures or Activities Used by Virginia Respondents
in Establishing Program Articulation Agreements
With Other Nursing Programs

Procedure/Activity	Frequency	Percent
Analysis of course objectives of participating programs	29	82.8
Review of pre-requisites required by participating programs	29	82.8
Analysis of program objectives of participating programs	26	74.2
Analysis of unit objectives of participating programs	22	62.8
Review of philosophies of participating programs	22	62.8
Study of exit competencies of graduates	22	62.8
Study of psychomotor skills of students	20	57.1
Use of transition or bridge courses	20	57.1
Study of communication skills required of students	10	28.5
Study of leadership skills required of students	6	17.1

graduates of participating programs. Fifty-seven percent

had studied the psychomotor skills of students at

participating programs, and the same percentage were using

transition or bridge courses to cover differences in

curriculum content among participating programs. About twenty-eight percent reported studying communication skills required of students, and seventeen percent had studied leadership skills required of students in participating programs.

Respondents were asked to identify the approximate time it had taken to establish the articulation agreements in effect at their nursing programs. Respondents chose from a checklist composed of six month intervals, ranging from an interval of one to six months to an interval of nineteen to twenty-four months. The responses ranged from the one to six months interval to six years. The mode fell within the seven to twelve months interval.

Table 4 includes the responses of study participants when asked to identify from a list of procedures those that were used in their nursing programs to evaluate individual students for transfer or advanced placement. Of seventy-three respondents, seventy-four percent indicated that they transferred comparable credits for nursing courses from other institutions, and fifty-nine percent indicated that they transferred comparable credits for non-nursing courses from other institutions. Forty-nine percent used teacher made challenge exams in nursing courses for advanced placement, whereas twenty-five percent indicated they used teacher made challenge exams for advanced placement in non-nursing courses. Standardized exams in nursing were used

in thirty-four percent of programs represented in the study,

and standardized exams in non-nursing subjects were used in

Table 4

Procedures Used in Nursing Programs in Virginia to Evaluate
Individual Students for Transfer or Advanced Placement

Procedure	Programs Using: Number	Percent
Transfer of comparable credits from other institutions for nursing courses	54	73.9
Transfer of comparable credits from other institutions for non-nursing courses	43	58.9
Challenge exams in nursing	36	49.3
Standardized exams in nursing	25	34.2
Personal portfolio evaluation for advanced placement in nursing courses	21	28.7
Standardized exams in non-nursing courses	20	27.3
Challenge exams in non-nursing courses	18	24.6
Bridge/transition courses in nursing	15	20.5
Personal portfolio evaluation for advanced placement in non-nursing courses	11	15.0
Separate track for licensed students	9	12.3
Bridge/transition courses in non-nursing courses	0	---

twenty-seven percent. Personal portfolio evaluation for advanced placement in nursing courses was used in twenty-nine percent of programs, and in fifteen percent, portfolio evaluation was being used for advanced placement in non-nursing courses. The use of bridge or transition courses in nursing for the advanced placement of individual students was reported by twenty percent of respondents, and no one reported using bridge or transition courses in non-nursing courses for advanced placement of individual students. In twelve percent of programs, a separate curriculum track for licensed nursing students was being used.

When respondents were asked to state the maximum number of credits or hours that an individual student could receive or earn in their programs by specific articulation methods, a wide range of responses resulted. For the method of direct transfer of credits or hours, responses ranged from zero to unlimited hours for nursing courses and from eight semester hours to unlimited hours for non-nursing courses. For all other methods that were provided on a list, responses ranged from zero hours to no maximum or unlimited hours. These methods included challenge exams for nursing and non-nursing, standardized exams for nursing and non-nursing, and clinical performance exams.

Respondents were asked to give the total number of hours that a student could be granted by direct transfer, by

examinations, or by other articulation methods that counted
toward the total number of hours required for graduation.
Respondents from baccalaureate programs gave numbers of
semester hours ranging from sixty to one hundred three.
Respondents from associate degree programs gave numbers of
semester hours that ranged from forty to sixty plus. One
respondent representing an associate degree program stated
that eighty percent of the hours needed for graduation could
be earned by these methods. For diploma programs, one
respondent stated that students could receive credit for the
first two years of the program by these methods. Another
respondent stated that hours attained by these methods were
not limited, and other respondents gave hours that ranged
from forty-seven to eighty-three semester hours.
Respondents representing practical nursing programs did not
identify specific numbers of hours that could be granted to
individuals by these methods, but responses ranged from zero
to unlimited clock hours. One respondent from a practical
nursing program stated that up to nine months of course work
could be granted to students by these methods.

Table 5 provides information about the names of
standardized tests that respondents identified that are used
for purposes of advanced placement of students in Virginia
nursing programs. Of tests that are directly related to
nursing, the NLN Mobility Profile tests were used in twenty
programs (twenty-seven percent). NLN Achievement Tests were

reported being used in nineteen programs (twenty-six percent), and American College Testing Proficiency Examination Program (ACT PEP) exams were used in six programs (eight percent).

Of standardized tests related to non-nursing content, respondents from twenty-one programs (twenty-nine percent) reported using the College-Level Examination Program (CLEP). ACT PEP exams were used in six programs (eight percent). NLN Achievement Tests in non-nursing content were used in four programs (five percent).

Table 5

Standardized Exams Used in Nursing Programs in Virginia
for Advanced Placement of Students

Exam	Programs Using: Number	Percent
Nursing:		
NLN Mobility Profile	20	27.3
NLN Achievement	19	26.0
ACT PEP	6	8.2
Non-nursing:		
CLEP	21	28.7
ACT PEP	6	8.2
NLN Achievement	4	5.4

The responses of nursing education administ   n

asked what procedures were used in their programs to a

or validate clinical skills of students who seek advanced

placement in their programs are depicted in Table 6. Of the
clinical assessment procedures listed on the questionnaire,
thirty-one respondents (forty-two percent) indicated they
used clinical performance exams administered in a laboratory
setting. Twenty-seven respondents (thirty-seven percent)
indicated they observed and assessed clinical performance of
students as part of a clinical course. Twenty-two
respondents (thirty percent) selected clinical performance
exam in an actual clinical setting as the method used in

Table 6

Procedures Used in Nursing Programs in Virginia to Assess
or Validate Clinical Skills of Students for
Advanced Placement

Procedure	Programs Using:	
	Number	Percent
Clinical performance exam in a laboratory setting	31	42.4
Observation and assessment of clinical performance in a clinical course	27	36.9
Clinical performance exam in an actual clinical setting	22	30.1
Performance on written or media presented clinical simulations	11	15.0
Self assessment tool	2	1.3
No clinical performance assessment/validation done	19	26.0

their programs. Eleven respondents (fifteen percent) indicated that students' clinical skills were evaluated for advanced placement by written or media-presented clinical simulations. In two programs, a self-assessment tool was used. Nineteen respondents (twenty-six percent) indicated that methods to assess clinical skills for advanced placement of students were not used in their programs.

The second major question addressed in this study was "What are the beliefs and opinions of nursing education administrators of nursing programs in Virginia about academic articulation?" There were eighteen separate items on the questionnaire that dealt with the perceptions that Virginia respondents had about various aspects of academic articulation. These ranged in nature from respondents' overall philosophical position on academic articulation, opinions about voluntary and state-wide planning for articulation and the possibility of articulating specific levels of nursing education programs.

When asked to select from a list of benefits that students derived from program articulation arrangements in effect at their programs, twenty-nine of the thirty-five respondents (eighty-three percent) who reported having program articulation arrangements at their programs identified "reduced time to complete the program." "Reduced need to repeat courses" received the next highest response

rate with twenty-eight respondents (eighty percent) choosing
it. "Reduced financial cost" was chosen by twenty-six
respondents (seventy-four percent), and fourteen (forty
percent) chose "reduced need to take tests to validate
previous learning." These responses are contained in Table
7.

Table 7

Benefits to Students of Program Articulation Arrangements
in Effect at Nursing Programs in Virginia As Perceived
by Thirty-five Nursing Education Administrators

Perceived Student Benefits	Frequency	Percent
Reduced time to complete a program	29	82.8
Reduced need to repeat courses	28	80.0
Reduced financial cost	26	74.2
Reduced need to take tests to validate previous learning	14	40.0

Table 8 contains the responses of Virginia respondents
when asked to select from a list of seven positions the one
position that most closely characterized their own personal
position concerning academic articulation in general. All
except one respondent chose a position of acceptance of the
concept of academic articulation. Fifty-one percent
(thirty-seven) selected the option, "accept the general

Table 8

Personal Positions of Virginia Nursing Education
Administrators About the General Concept of
Academic Articulation

Position	Number	Percent
Accept the general concept of academic articulation	37	50.7
Accept the general concept of academic articulation but have definite beliefs about how it should and should not be practiced	25	34.2
Accept the general concept of academic articulation but have some reservations about its use	7	9.6
Oppose the general concept of academic articulation	0	---
Oppose academic articulation because it may interfere with the quality of education	0	---
Oppose academic articulation because it may interfere with the uniqueness of educational programs/institutions	1	1.4
Oppose academic articulation because it interferes with academic freedom and autonomy	0	---
Other	1	1.4
No answer	2	2.7
Totals:	73	100.0

concept of academic articulation." Another thirty-four

percent (twenty-five) chose "accept the general concept of

academic articulation but have definite beliefs about how it

should and should not be practiced." The option "accept the
general concept of academic articulation but have some
reservations about its use," was chosen by ten percent
(seven) of respondents. One respondent offered a position
of "accept the concept of _integration_ of knowledge acquired
from many sources." The respondent who selected a negative
position chose "oppose academic articulation because it may
interfere with the uniqueness of educational programs or
institutions." Two persons did not respond to this item.

Items eighteen through twenty-three on the Virginia
questionnaire elicited the opinions of nursing education
administrators as to whether it is possible to articulate
specific types of nursing education programs with other
selected types of programs. For the question asking if it
is possible to articulate nurse aide education with
practical nursing education, sixty-three percent (forty-six)
responded "yes," fifteen percent (eleven) responded "no,"
and twenty-two percent (sixteen) responded "not sure."
Responses to this item are illustrated in Figure 1.

When respondents were asked if they thought it possible
to articulate practical nursing education with associate
degree nursing education, ninety-four percent (sixty-nine)
responded "yes," three percent (two) responded "no," and
three percent (two) responded "not sure." These responses
are illustrated in Figure 2.

15% No

22% Not Sure

63% Yes
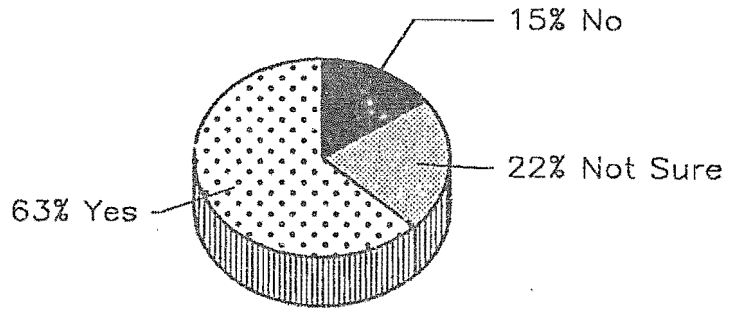
Figure 1

Opinions of Virginia Respondents As to Whether
Nurse Aide Education Can Be Articulated
with Practical Nursing Education

3% No

3% Not Sure

94% Yes
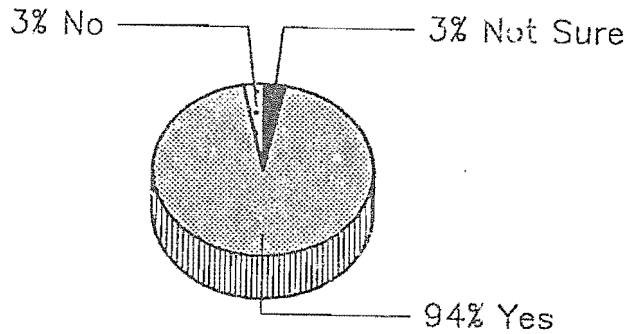
Figure 2

Opinions of Virginia Respondents As to Whether
Practical Nursing Education Can Be Articulated
with Associate Degree Nursing Education

To the question, "Do you believe it is possible to articulate practical nursing education with diploma nursing education?," eighty percent of respondents (fifty-eight) answered "yes." Twelve percent (nine) were "not sure," and eight percent (six) answered "no." Figure 3 illustrates the responses to this question.
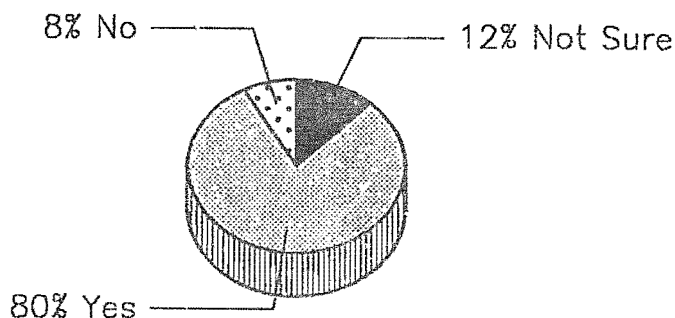
Figure 3

Opinions of Virginia Respondents As to Whether
Practical Nursing Education Can Be Articulated
with Diploma Nursing Education

Respondents were asked if they believed it possible to articulate practical nursing education with baccalaureate nursing education. Sixty-eight percent (forty-nine) replied "yes," sixteen percent (twelve) replied "no," and fifteen percent (eleven) replied "not sure." One respondent did not answer this item. These responses are shown in Figure 4.

To the question, "Do you believe it possible to
articulate diploma nursing education with baccalaureate
nursing education?," there was one hundred percent agreement
among respondents. All seventy-three answered in the
affirmative. The same response, all seventy-three answering
in the affirmative, was given to the question asking if it
is possible to articulate associate degree nursing education
with baccalaureate nursing education.
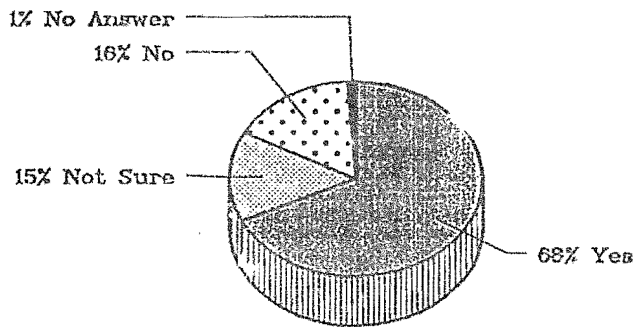
Figure 4

Opinions of Virginia Respondents As to Whether
Practical Nursing Education Can Be Articulated
with Baccalaureate Nursing Education

From a list of possible benefits resulting from
effective articulation practices among nursing education
programs, only one possible benefit that was listed failed
to be chosen by fifty percent or more of the respondents.
This was the benefit of "increased financial income for
nursing programs" which was chosen by thirty-seven percent

(twenty-seven) of respondents. One respondent indicated
that none of the listed items were perceived as benefits of
effective articulation practices. The benefit that was
chosen by the highest number of respondents, eighty-two
percent (sixty), was "increased student enrollments."
"Increased collaboration among nursing educators and
institutions" was selected by the next highest number of
respondents, seventy-five percent (fifty-five). "Increased
positive image of the nursing profession" was perceived to
be a benefit of effective articulation practices among
nursing education programs by seventy-four percent
(fifty-four) of respondents. Seventy-one percent of
respondents (fifty-two) chose "increased pool of nurses for
employment." Two benefits were chosen by sixty-six percent
(forty-eight) of respondents. These were "increased numbers
of better prepared nurses" and "increased efficiency related
to economic, social, and opportunity costs." Fifty-two
percent (thirty-eight) selected "increased pool of potential
graduate students" as a perceived benefit of articulation
practices. These responses are contained in Table 9.

In an attempt to compare respondents' views on the
degree of helpfulness to students of voluntary articulation
arrangements and articulation arrangements developed by
state-wide planning, respondents were asked to rate several
specific characteristics of each of the two types of
articulation arrangements on a rating scale of one to five.

Number one represented "not helpful," and number five
represented "helpful" on the continuum. The mean was
calculated for respondents' ratings of each characteristic.

The characteristic of voluntary articulation
arrangements that received the highest rating, a mean value
of 3.37, was "control and decision making for articulation

Table 9

Benefits of Effective Articulation Practices Among
Nursing Education Programs As Perceived by
Virginia Respondents

Perceived Benefit	Percent	Frequency
Increased student enrollments	82.1	60
Increased collaboration among nursing educators and institutions	75.3	55
Increased positive image of the nursing profession	73.9	54
Increased pool of nurses for employment	71.2	52
Increased numbers of better prepared nurses	65.7	48
Increased efficiency related to economic, social, & opportunity costs	65.7	48
Increased pool of potential graduate students	52.0	38
Increased financial income for nursing programs	36.9	27
None of the above	1.3	1

are retained by the participating programs." For the characteristic, "a wide range of diverse articulation practices in use in nursing programs throughout a particular state," the mean rating was 3.02. The statement that "arrangements are planned primarily to meet the specific educational needs of students enrolled only in participating programs" received a mean rating of 2.80.

Mean values for the ratings of respondents from each type of nursing education program represented in the study population were computed for these three characteristics of voluntary articulation arrangements. For the characteristic of "control and decision making for articulation are retained by the participating programs," the mean value of ratings given by respondents from baccalaureate programs was 4.5, of respondents from associate degree programs 3.64, of respondents from diploma programs 3.5, and of respondents from practical nursing programs 2.89. For the characteristic of "a wide range of diverse articulation practices in use in nursing programs +' oughout a state," the mean value for respondents from bacc--laureate programs was 3.50, for respondents from associate degree programs 3.07, for respondents from diploma programs 4.00, and for respondents froi practical nursing programs 2.65. For the characteristic of "arrangements are planned primarily to meet the specific educational needs of students enrolled only in participating programs," the mean value for ratings

given by respondents from baccalaureate programs was 2.78,
by respondents from associate degree programs 3.00, by
respondents from diploma programs 2.28, and by respondents
from practical nursing programs 2.68. Table 10 contains
these results.

Table 10

Virginia Respondents' Perceptions About the Extent of
Helpfulness to Students of Voluntary Articulation
Arrangements Along Individual Nursing Programs

Characteristic	Mean Values on a Rating Scale of 1-5 *				
	All	BACC	AD	DIP	PN
Control & decision making for articulation are retained by the participating programs	3.37	4.50	3.64	3.50	2.89
A wide range of diverse articulation practices in use in nursing programs throughout a state	3.02	3.50	3.07	4.00	2.65
Arrangements are planned primarily to meet the specific educational needs of students enrolled only in participating programs	2.80	2.78	3.00	2.28	2.68

* Number one on the scale represented "not helpful"; number
five on the scale represented "helpful."

Respondents were asked to rate four characteristics of
articulation arrangements developed by state-wide planning

using the same rating scale. Data illustrating these
responses are contained in Table 11. The characteristic
receiving the highest rating, a mean value of 4.15, was
"articulation practices in nursing programs throughout a
state tend to be similar." The characteristic receiving the
next highest rating, a mean value of 3.98, was "arrangements
are planned to meet the educational needs of students at
different program levels rather than the educational needs
of students at specific institutions." A mean value of 3.97
was the rating of the characteristic, "standardized core
courses are usually specified for some levels of
curricula." The characteristic that received the lowest
rating, a mean value of 3.19, was "control and decision
making for articulation are centralized in a coordinating
body or agency."

For the above item, mean values were also calculated
for the responses of nursing education administrators from
each of the four types of nursing programs represented in
the study. For the characteristic of "articulation
practices in nursing programs throughout a state tend to be
similar," ratings of representatives from baccalaureate
programs, associate degree programs, diploma programs, and
practical nursing programs respectively were 3.41, 3.71,
4.25, and 4.52. Mean value ratings for the characteristic
of "arrangements are planned to meet the educational needs
of students at different program levels rather than the

educational needs of students at specific institutions" were

3.58 for respondents from baccalaureate programs, 4.46 for

respondents from associate degree programs, 1.00 for

respondents from diploma programs, and 4.21 for respondents

from practical nursing programs.

Table 11

Virginia Respondents' Perceptions About the Extent of
Helpfulness to Students of Articulation Arrangements
Developed by State-wide Planning

Characteristic	Mean Values on a Rating Scale of 1-5 *				
	All	BACC	AD	DIP	PN
Articulation practices in programs throughout a state tend to be similar	4.15	3.41	3.71	4.25	4.52
Arrangements are planned to meet the educational needs of students at different levels rather than the educational needs of students at specific institutions	3.98	3.58	4.46	4.00	4.21
Standardized core courses are usually specified for some levels of curricula	3.97	2.91	3.69	4.62	4.26
Control & decision making for articulation are centralized in a coordinating body or agency	3.19	1.66	3.00	2.87	3.81

* Number one on the scale represented "not helpful"; number
five on the scale represented "helpful."

For the characteristic, "standardized core courses are usually specified for some levels of curricula," the mean value of ratings given by baccalaureate program representatives was 2.91, by associate degree program representatives, 3.69, by diploma program representatives, 4.62, and by practical nursing representatives, 4.26. The fourth characteristic of articulation arrangements developed by state-wide planning was "control and decision making for articulation are centralized in a coordinating body or agency." The ratings of this characteristic received a mean value of 1.66 by respondents from baccalaureate programs, 3.00 by respondents from associate degree programs, 2.87 by respondents from diploma programs, and 3.81 by respondents from practical nursing programs.

Virginia respondents were asked the question, "In your opinion, how important is it that nursing education administrators in Virginia be concerned with nursing education articulation at this time?" Respondents selected from six options that ranged from "very important" to "very unimportant." Of seventy-two respondents who answered this question, eighty-two percent (fifty-nine) indicated that it was "very important." Another fourteen percent (ten) indicated that the topic was "important." Four percent (three) indicated that it was "fairly important." There were no responses for the "fairly unimportant," "unimportant," and "very unimportant" options. One person did

did not give an opinion on this item. Responses to this item on the questionnaire are illustrated in Figure 5.

4% Fairly Important ———————— 14% Important

82% Very Important ————————
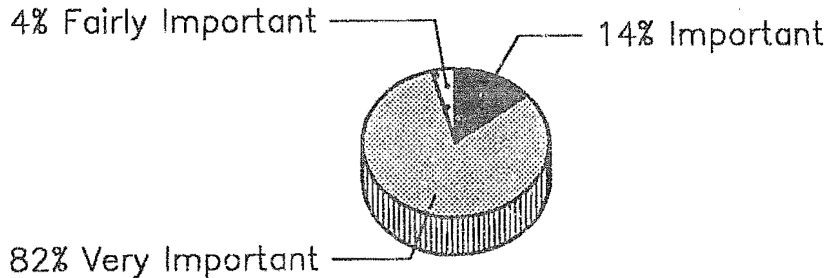
Figure 5

Opinions of Virginia Respondents About
the Importance of Nursing
Education Articulation

A third major question of this study was, "What is the level of satisfaction or dissatisfaction of nursing education administrators in Virginia with current articulation practices in the State?" Respondents were first asked to rate their knowledge level about nursing articulation practices in baccalaureate, associate degree, diploma, and practical nursing programs throughout Virginia. A Likert-type scale with numbers ranging from one to five was used for this assessment. Number one on the scale represented a low level of knowledge, and number five represented a high level of knowledge. The mean was

calculated for respondents' ratings of their knowledge level for articulation practices in each type of nursing program.

For knowledge about articulation practices in baccalaureate nursing programs, ratings of respondents from baccalaureate programs had the highest mean value, 4.25. Ratings of respondents from associate degree programs had the next highest mean value on this item with 4.00. The mean value of the ratings of respondents from diploma programs was 3.87, and the mean value of the ratings of respondents from practical nursing programs was 2.51.

For knowledge about articulation practices in associate degree nursing programs, the ratings of respondents from associate degree programs was 4.35. The next highest mean value was represented by respondents from baccalaureate programs and was 3.40. The ratings of respondents from practical nursing programs had a mean value of 3.00, and the ratings of respondents from diploma programs had a mean value of 2.25.

For knowledge level about articulation practices in diploma nursing programs, the ratings of representatives from diploma programs had the highest mean value, 4.50. The mean value of the ratings of baccalaureate representatives was next highest with a value of 2.58. The ratings of representatives from practical nursing programs had a mean value on this item of 2.32, and those of representatives of associate degree programs had a mean value of 2.00.

For knowledge about articulation practices used in practical nursing programs in Virginia, the ratings of respondents from practical nursing programs had a mean value of 3.46. The ratings of respondents from associate degree programs had a mean value of 3.00. A mean value of 2.12 represented the ratings of respondents from diploma programs on this item, and a mean value of 2.10 represented the ratings of respondents from baccalaureate programs. Table 12 contains data that represent respondents' ratings of their knowledge level about articulation practices at the four different types of nursing programs in Virginia.

Table 12

Virginia Respondents' Ratings of Personal Knowledge
About Nursing Articulation Practices at Four Types
of Nursing Programs in Virginia

Program Affiliation of Respondents	Knowledge of Articulation Practices			
	BACC	ADN	DIP	PN
	Mean Value on a rating scale of 1-5 *			
Baccalaureate	4.25	4.00	3.87	2.51
Associate Degree	3.40	4.35	2.25	3.00
Diploma	2.58	2.00	4.50	2.32
Practical	2.10	3.00	2.12	3.46

* Number one on the scale represented low knowledge level; number five on the scale represented high knowledge level.

Two items on the Virginia questionnaire dealt with the degree of satisfaction or dissatisfaction with current nursing education articulation practices. The first asked respondents to select one of six options ranging from "very satisfied" to "very dissatisfied" to describe their feelings about the current status of nursing education articulation in Virginia. Only one person indicated being "very satisfied" with the current status. Eleven percent of respondents indicated they were "satisfied." Thirty-two percent of respondents chose the option of "somewhat satisfied." Twenty-one percent of respondents chose "somewhat dissatisfied," twenty-three percent chose "dissatisfied," and twelve percent chose "very dissatisfied." Figure 6 illustrates the responses to this item on the questionnaire.

When respondents were asked how satisfied they were with articulation practices now used in their own nursing programs, six percent indicated they were "very satisfied." Another twenty-three percent indicated they were "satisfied," and thirty-three percent indicated they were "somewhat satisfied." The "somewhat dissatisfied" option was chosen by nineteen percent of respondents. Thirteen percent indicated they were "dissatisfied," and six percent indicated they were "very dissatisfied" with articulation practices used in their own nursing education programs. These responses are illustrated in Figure 7.

11% Satisfied
1% Very Satisfied
12% Very Dissatisfied

32% Somewhat Satisfied

23% Dissatisfied

21% Somewhat Dissatisfied
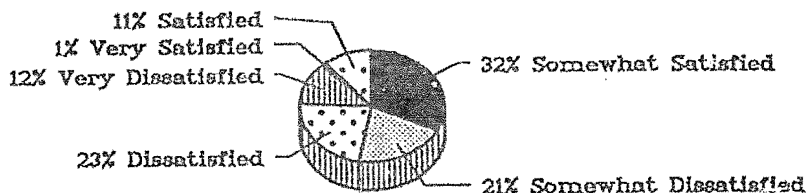
Figure 6

The Degree of Satisfaction or Dissatisfaction
of Virginia Respondents with the Current
Status of Nursing Education
Articulation in Virginia

6% Very Dissatisfied
13% Dissatisfied

6% Very Satisfied

23% Satisfied

19% Somewhat Dissatisfied

33% Somewhat Satisfied
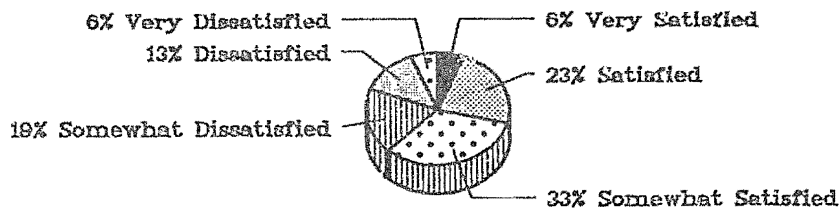
Figure 7

Degree of Satisfaction or Dissatisfaction of Virginia
Respondents with Articulation Practices Used
in Their Own Nursing Programs

Respondents were asked to rank order five barriers
confronting nursing students who wish to transfer to or to
seek educational mobility at other nursing programs in
Virginia. A "one" represented the most significant barrier,
and a "five" represented the least significant barrier.

Respondents were able to add additional barriers not on the list if they wished. Mean values were calculated for respondents' ranks of each barrier identified. Data pertaining to this item are contained in Table 13.

The barrier that was ranked most significant by respondents was "lack of knowledge among persons counseling students about existing articulation arrangements among nursing programs," which received a mean value of 2.64. "Limited number of credit hours that may be transferred to other programs" was ranked next with a mean value of 2.67. "Differences in articulation practices among nursing programs" was ranked next with a mean value of 2.90. "Students' lack of knowledge about existing articulation arrangements and transfer opportunities" received a mean value of 3.19, and ranked last was "negative perceptions of students relative to taking exams to validate previous learning," with a mean value of 3.27.

Seven respondents gave additional barriers. Two respondents each offered an additional barrier and ranked it number one, most significant. These were "differences of opinions regarding appropriate means of facilitating career mcbility" and "local institutions of higher learning's resistance to articulation." Other barriers identified by respondents which were not ranked included "lack of BS programs determining what the needs of RN students are," "cost of proficiency examinations," "educators' bias toward

Table 13

Perceptions of Virginia Respondents Concerning Barriers
Faced by Nursing Students Wishing to Transfe· to
Other Nursing Programs in Virginia

Barrier	Mean Rank Order *
Lack of knowledge among persons counseling students about articulation arrangements among nursing programs	2.64
Limited number of credit hours that may be transferred to other programs	2.67
Differences in articulation practices among nursing programs	2.90
Students' lack of knowledge about existing articulation arrangements and transfer opportunities	3.19
Negative perceptions of students relative to taking exams to validate previous learning	3.27
Other: Seven other barriers were identified.	

* Respondents rank ordered items from one to five, with one
being most significant, and five being least significant.

PN program articulation," "unwillingness of nursing programs

to institute reasonable practices to make educational

mobility feasible (turf protection)," and "lack of

availability."

The opinions of respondents were elicited about

restraining forces currently operating to impede effective

articulation among nursing programs in Virginia.

Respondents were given a list of nine possible restraining

forces and were asked to rank order the items with number
one being most significant and number nine being least
significant. Table 14 contains the mean rank order values
for the responses on this item.

The restraining force ranked as most significant, with
a mean value of 3.52, was "differences in philosophical
positions among nurse educators about the nature of
educational preparation of students." Next most
significant, with a mean value of 4.30, was "desire of nurse
educators to preserve their own program's identity, mission,
goals, and practices." Ranked next as a restraining force
with a mean value of 4.41 was "political process and
compromise necessary to arrive at decisions acceptable to
all parties involved." "Lack of a working network of
communication and collaboration for nurse educators from
different types of programs" was ranked next most
significant with a mean value of 4.89. Next, with a mean
value of 4.96, was "overt and covert resistance to change
among nursing educators." "Challenges associated with
validating previous knowledge and skills of prospective
students" ranked next with a mean value of 5.23. Next was
"costs in terms of money, energy, and time necessary to
develop articulation plans," with a mean value of 5.33.
With a mean value of 5.34, "lack of mutual respect among
faculty from different educational sectors," was ranked next
to last. And last, with a mean value of 6.46, was "concern

Table 14

Perceptions of Virginia Respondents About Restraining
Forces That Are Impeding Articulation Among
Nursing Programs in Virginia

Restraining Force	Mean Rank Order *
Differences in philosophical positions among nurse educators about the nature of educational preparation of students	3.52
Desire of nurse educators to preserve their own program's identity, mission, goals, and practices	4.30
Political process & compromise necessary to arrive at decisions acceptable to all parties involved	4.41
Lack of a working network of communication & collaboration for nurse educators from different types of programs	4.89
Overt & covert resistance to change among nursing educators	4.96
Challenges associated with validating previous knowledge & skills of prospective students	5.23
Costs in terms of money, energy, & time necessary to develop articulation plans	5.33
Lack of mutual respect among faculty from different educational sectors	5.34
Concern about the impact that articulation practices might have on accreditation status of programs	6.46

* Respondents rank ordered items from one to nine with one
   being most significant and nine being least significant.

about the impact that articulation practices might have on the accreditation status of programs."

Three respondents each identified an additional restraining force impeding effective articulation among nursing programs in Virginia. "Different requirements by the larger institutions within which nursing programs are located" was ranked number one by one person. Other restraining forces that were identified but were not ranked included "lack of unity in the nursing profession" and "variety of differences in general education requirements of each program."

Respondents were asked to rank order a list of six facilitating forces that they perceived to be currently operating for the development of effective articulation among nursing education programs in Virginia. Items were ranked from one to six with number one being most significant and number six being least significant. The mean was calculated for the rank given by respondents for each of the facilitating forces listed and are contained in Table 15.

Respondents perceived "the nursing shortage" to be the most significant facilitating force operating for the development of articulation among nursing programs. This factor had a mean rank order value of 2.36. Next important was "the degree of interest and concern among nurse educators for better articulation" with a mean rank order

93

Table 15

Perceptions of Virginia Respondents About Facilitating
Forces Operating for the Development of Articulation
Among Nursing Education Programs in Virginia

Facilitating Force	Mean Rank Order *
The nursing shortage	2.36
The Degree of interest & concern among nursing educators for better articulation	2.87
Changing demographics of students & the needs of non-traditional students	3.31
Fragility of student enrollments in nursing programs	3.46
Public concern with economic, social, & personal opportunity costs of failure to articulate programs	4.49
The entry-level issue	4.60

* Respondents were asked to rank order items from one to six
with one being most significant and six being least
significant.

value of 2.87. "Changing demographics of students and the
needs of non-traditional students" was ranked next with a
mean value of 3.31. Following this was "fragility of
student enrollments in nursing programs" with a mean value
of 3.46. "Public concern with economic, social, and
personal opportunity costs of failure to articulate
programs" received a mean rank order value of 4.49. The

facilitating force viewed as least significant was "the entry-level issue" which received a mean value of 4.60.

Two respondents each offered an additional facilitating force. One gave "public loss of respect for nursing education's failure to validate those within its own rank" and ranked it number five in significance. Another respondent offered "trial programs in operation," with no ranking, as a facilitating force operating for the development of articulation among nursing programs in Virginia.

As nursing education administrators, respondents were asked to rank order a list of five possible concerns regarding the implementation of program articulation. A ranking of one represented the greatest degree of concern, and a ranking of five represented the least degree of concern for items on the list. The mean value for the ranks given by respondents for each item were calculated and are contained in Table 16.

The item that received the highest degree of concern among respondents, with a mean rank order value of 1.88, was "the changes required at all levels of nursing education due to variance among programs." The item ranked as next significant was "interference with policies and procedures of individual nursing programs" which received a mean rank order value of 2.53. "Infringement on academic freedom and autonomy" was ranked next with a mean value of 3.05. Ranked

Table 16

Concerns of Virginia Nursing Education Administrators
Regarding the Implementation of Program Articulation

Concern	Mean Rank Order Value *
Changes required at all levels of nursing education due to variance among programs	1.88
Interference with policies & procedures of individual nursing programs	2.53
Infringement on academic freedom and autonomy	3.05
Loss of uniqueness of individual programs	3.14
Encouragement of students to get basic education at practical, diploma, or associate degree programs.	3.90

* Respondents were asked to rank order the items listed from
one to five with one being of most concern and five being of
least concern.

next was "loss of uniqueness of individual programs" with a

mean value of 3.14. Ranked last was "encouragement of

students to get their basic education at practical, diploma,

or associate degree programs" with a mean value of 3.90.

Two persons stated that they did not perceive any of the

factors listed to be of concern to them.

When respondents were asked how amenable they were to

the idea of state-wide planning for nursing education

articulation in Virginia, forty-six of seventy-two persons

(sixty-four percent) who responded to this question

indicated they were "very amenable." Another seventeen
(twenty-three percent) responded that they were "somewhat
amenable." Two persons (three percent) indicated they were
"neutral," and the same number indicated they were "somewhat
against." Five persons (seven percent) indicated they were
"very much against" the idea of state-wide planning for
nursing education articulation in Virginia.

The responses of representatives from each of the four
types of nursing education programs represented in the study
were also calculated for this question. The "very amenable"
response was chosen by nine respondents (seventy-five
percent) from baccalaureate programs. Eight respondents
(fifty-seven percent) from associate degree programs, six
respondents (seventy-five percent) from diploma programs,
and twenty-three respondents (sixty-one percent) from
practical nursing programs also chose "very amenable."

The "somewhat amenable" response was chosen by one
person from a baccalaureate program representing eight
percent of that sub-population. Two persons, or fourteen
percent of respondents from associate degree programs,
indicated they were "somewhat amenable" to state-wide
planning. One person from a diploma program, representing
twelve and one half percent of that sub-population also
chose the "somewhat amenable" position. "Somewhat amenable"
was chosen by thirteen persons from practical nursing

programs which represented thirty-four percent of that
sub-population.

The "neutral" position was chosen by one person from an
associate degree program, representing seven percent of that
group, and one person from a diploma program, representing
twelve and one half percent of diploma nursing education
administrators. Two persons, or five percent, from
practical nursing programs indicated they were "somewhat
against" state-wide planning for nursing education
articulation in Virginia. The "very much against" position
was chosen by two persons from baccalaureate programs,
representing seventeen percent of that group, and three
persons from associate degree programs representing
twenty-one percent of that group. Data related to the
amenability of respondents to state-wide planning for
nursing education articulation in Virginia are illustrated
in Figure 8.

The fourth major question of this study was, "What are
the advantages and disadvantages of regional consortium
arrangements for nursing education articulation as perceived
by nursing education administrators in a state with such
arrangements?" The primary purpose of the questionnaire
that was developed and sent to nursing education
administrators in Minnesota was to obtain answers to this
question. Some of the questions on the questionnaire sent
to Minnesota participants were identical or similar to
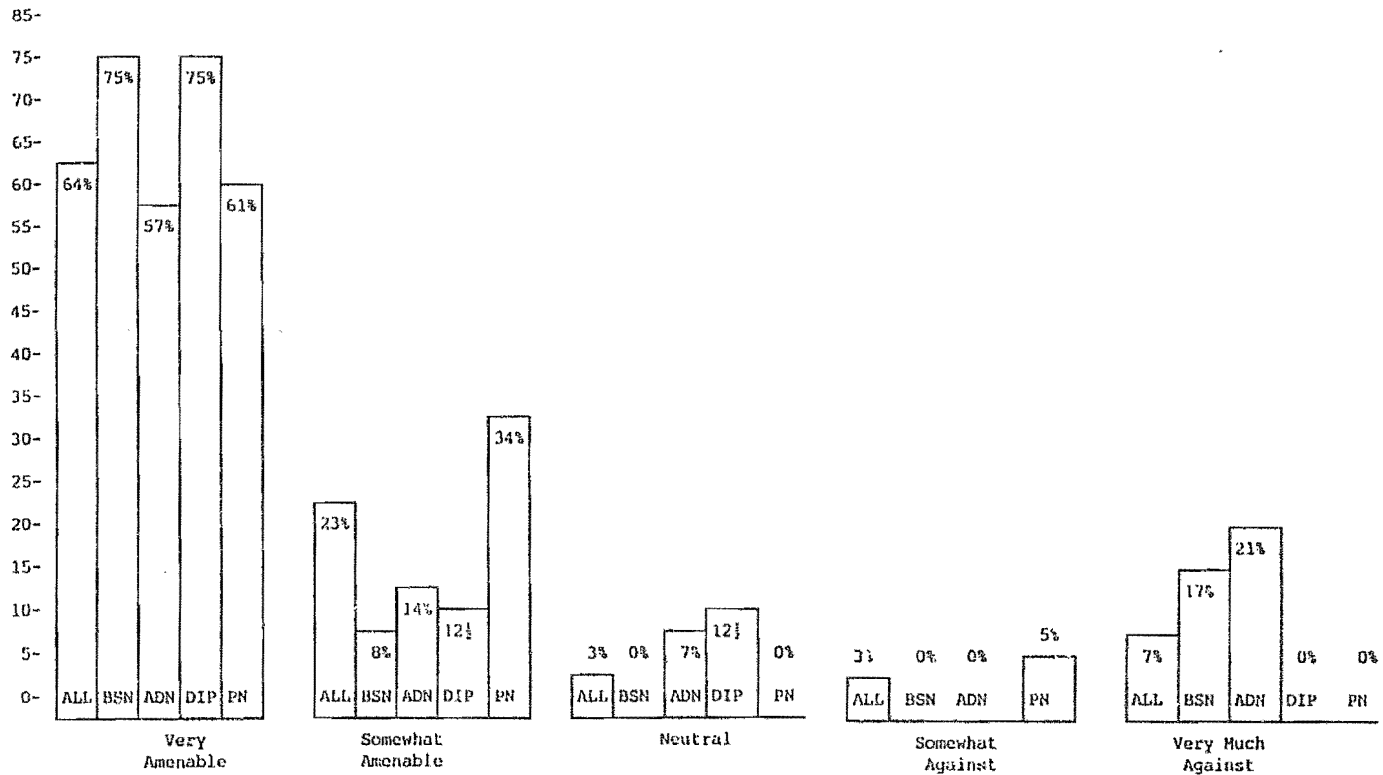
Figure 8

Amenability of Virginia Respondents to State-wide
Planning for Nursing Education
Articulation in Virginia

questions on the questionnaire sent to Virginia
participants. These items served a secondary purpose, that
is, to compare the responses of Minnesota respondents and
Virginia respondents to similar questions.

Of the forty-four respondents in the Minnesota aspect
of the study, twenty-three, or fifty-two percent, reported
that their nursing program was a participant in a regional
consortium for nursing education articulation. Twenty-one,
or forty-eight percent, indicated that their program was not
a participant in such a consortium. Of the twenty-three
programs in Minnesota that participated in consortium
arrangements for articulation, five were baccalaureate
programs, six were associate degree programs, and twelve
were practical nursing programs. Minnesota no longer has
diploma nursing programs.

Respondents from nursing programs participating in
regional consortia in Minnesota were asked to indicate the
extent to which the regional consortium arrangement had
resolved problems related to articulation that had been
experienced prior to its implementation. Respondents chose
from a checklist with three options: "to a great extent,"
"to some extent," and "to a limited extent." It was the
opinion of forty-eight percent (eleven) of respondents that
problems had been resolved to a great extent." Thirty-four
percent (eight) replied. "to some extent," and seventeen
percent (four) replied, "to a limited extent."

Respondents from programs that participated in consortia were asked to identify the most significant problem related to articulation that had been resolved by the regional consortium arrangement of which their program was a participant. Individual responses to this question were inspected for similarities and differences and then categorized according to common themes. Three major categories of responses evolved. These were "student transfer and awarding of credit," "educational mobility of students," and "communication and collaboration among nursing programs."

The resolution of problems related to transfer and awarding of credit were reported by nine respondents. Seven respondents indicated that awarding of credit to transfer students from program participants in consortia had been facilitated. Two respondents stated that the elimination of re-testing of graduates from consortium programs upon transfer was a significant problem that had been resolved.

The category of "educational mobility of students" included responses of five respondents. All responses addressed the improvement in mobilization of students from one program level to another. This included the movement of students from licensed practical nursing programs to associate degree nursing programs and from associate degree nursing programs to baccalaureate degree nursing programs.

The category of "communication and collaboration among programs" included three responses. One indicated that there had been dialogue among member programs. Another stated that the level of trust among faculty members of member programs had increased, and a third stated that faculty from each level of nursing education had been involved in planning and implementation of articulation arrangements.

When nursing education administrators from programs participating in consortium arrangements in Minnesota were asked if new problems related to articulation had developed as a result of implementing regional consortium arrangements for nursing education, eleven (forty-eight percent) replied "yes," seven (thirty percent) replied "no," and five (twenty-two percent) replied "not sure." Respondents who answered "yes" to this question were requested to identity one problem that had developed in their program as a result of the regional consortium arrangement for nursing education articulation.

Most of the new problems identified by respondents pertained to curriculum matters. Maintaining curricula that had been originally developed and accepted by participating programs was identified by six of the eleven respondents who stated that new problems had arisen. The desire or decision by faculty from programs at one level of nursing education to change requirements for their programs had the potential

for affecting programs from other program levels in the consortium. Requiring additional general education requirements at the associate and baccalaureate degree levels was specifically identified by several respondents as an example of this problem.

Respondents who represented programs participating in consortia were asked if there had been major benefits of the regional consortium arrangements for nursing education articulation for their students, their nursing programs, and their faculty. If respondents answered in the affirmative, they were requested to list one major benefit that had occurred in their nursing program for the respective category (students, nursing program, faculty). Benefits identified by individual respondents were examined for similarities and differences and then were categorized according to common themes. Table 17 contains a summary of the benefits identified by respondents whose nursing programs were participants in regional consortia.

Ninety-one percent of respondents (twenty-one) indicated that there had been major benefits for students as a result of their nursing program participating in regional consortium arrangements. Nine percent (two) indicated there had not been benefits for students. Individual responses were categorized into four groups. These were "ease of transfer of credits," "ease of educational and career mobility," "time savings," and "other."

Table 17

Benefits of Regional Consortium Arrangements for Academic
Articulation for Students, Programs, and Faculty As
Perceived by Minnesota Respondents from Nursing
Programs Belonging to Consortia

Benefit	Frequency
For Students:	
Ease of Transfer of Credits	8
Ease of Educational/Career Mobility	7
Time Savings	4
Other	2
For Programs:	
Increased Enrollments	6
Easier Recruitment	5
Inter-program Collaboration	5
Curriculum Matters	4
Other	4
For Faculty:	
Interaction with Nursing Educators	7
Teaching Satisfaction	3
Other	3

A benefit identified by eight respondents related to
the smooth transfer of credits from one program to another
within the consortium. "To articulate without a hitch" was
the comment of one respondent. Almost as many respondents,
seven persons, identified as a benefit to students, improved
and easier educational and career mobility. One respondent
stated that students could progress from the nursing
assistant level to practical nursing, to associate degree

nursing, to baccalaureate degree nursing levels without repeating or testing out of nursing courses. Another respondent pointed out that students are not "dead ended," but that future educational opportunity is always an option. Another benefit identified was that graduates from one level could be employed and continue their education at the next level. One respondent observed that students who experienced success at one level were more likely to continue their nursing education at advanced levels; therefore, this was a positive factor in retaining nursing students and in decreasing the shortage in nursing.

Four respondents believed that the regional consortium arrangement in which their programs participated benefited students with a savings in time. One respondent stated that a student could complete requirements as a licensed practical nurse, an associate degree nurse, and a baccalaureate degree nurse in four years. A respondent from an associate degree program stated that associate degree nursing graduates could complete requirements for a bachelor's degree in two additional years. Other benefits to students that respondents identified included cost savings and removal of hear-say and stories of inequitable treatment.

When respondents were asked if there had been benefits for their nursing programs as a result of participating in regional consortia for nursing education articulation,

ninety-one percent (twenty-one) responded "yes," and nine percent (two) responded "no." The major benefits to nursing programs identified by the respondents representing programs that belonged to a consortium were categorized according to similarities. The five categories that emerged were "increased enrollments," "easier recruitment," "inter-program collaboration," "curriculum," and "other" (Table 17).

Six respondents attributed increased enrollments in their programs as a result of participating in a consortium arrangement. Five persons stated that it had been easier to recruit students into their programs. In the category of inter-program collaboration, five respondents identified such benefits as team efforts in planning and development of the curriculum, sharing of ideas and resources, and better relationships among colleagues from participating programs. Consensus about educational aims and feelings of confidence from knowing that similar content was being taught at programs of the same level of nursing education in the consortium were other benefits to nursing programs that were identified by respondents.

Four respondents identified benefits to their nursing programs that related to curriculum matters. These included the development of a special track for licensed practical nurses, making revisions to the curriculum, and changing to a quarter system in line with other colleges and

universities within the consortium. Better understanding of curricula at other program levels was identified by one respondent. Four additional responses, categorized as "other," were identified by respondents as being of benefit to nursing programs as a result of participating in a consortium for nursing education articulation. These included (1) smooth transfer of credits, (2) student satisfaction, (3) four-year institutions being forced to examine their policies in order to receive state funds, and (4) increased visibility of competition for students.

In addition to benefits to their students and their nursing programs that had resulted from their program's participating in a consortium for articulation, respondents were asked to identify benefits for their faculty. Fifty-seven percent (thirteen) indicated that there had been benefits to faculty, thirty-nine percent (nine) indicated they were not sure that faculty had benefited, and four percent (one) indicated there had not been benefits for faculty. Respondents' individual responses were categorized into three groups. These were "interaction among nursing educators," "teaching satisfaction," and "other" (Table 17).

Benefits derived from interacting with other educators were identified by seven respondents. Opportunity to interact and dialogue with educators from all levels of nursing education was one benefit identified. Sharing,

including sharing of ideas, of philosophies of nursing, and
of diverse approaches and methods was viewed as beneficial
to faculty by several respondents. Valuing each type of
nursing education program was a benefit identified by one
respondent.

Benefits to faculty that related to teaching
satisfaction were identified by three respondents. These
included working with highly motivated students, receiving a
"high" as students progress and succeed, and being able to
teach nursing courses and focus on nursing rather than on
non-nursing courses. Other benefits to faculty that were
identified included (1) increased enrollments that equal
increased faculty positions, (2) impetus for keeping the
curriculum up-dated and relevant, and (3) increased
competition for students among nursing programs.

Respondents from programs that participated in regional
consortia for nursing education articulation were asked if
there had been major disadvantages of the regional
consortium arrangement for nursing students, nursing
programs, and faculty at their programs. If respondents
answered in the affirmative, they were requested to list one
major disadvantage that had occurred in their nursing
program for the respective category (students, nursing
program, faculty). Disadvantages identified by respondents
were examined for similarities and differences and were
categorized according to common themes. Table 18 contains a

summary of the disadvantages identified by respondents whose
nursing programs were participants in regional consortia.

Forty-eight percent (eleven) of respondents indicated
there had been no disadvantages for their students.
Twenty-two percent (five) replied that they were not sure if
there had been disadvantages for students. Thirty percent
(seven) indicated that there had been disadvantages for
students.

Of respondents who thought there had been disadvantages
for students, two stated that time saved by students was
minimal. One respondent stated that limited enrollment at
associate degree programs prevented some practical nursing
graduates from continuing their education at the next higher
program level. Heavy course loads and less clinical time
were identified by another respondent as being
disadvantageous to students. Another respondent stated that
students did not receive comparable credits in the associate
degree programs. Another stated that the articulation plan
had failed to include diploma program graduates and that,
although all diploma programs had closed, graduates from
these programs were still seeking admission to baccalaureate
programs.

Fifty-five percent of respondents (twelve) believed
there had not been disadvantages for their programs as a
result of participating in regional consortia. Thirty-six
percent (eight) believed there had been disadvantages

Table 18

Disadvantages of Regional Consortium Arrangements for
Academic Articulation to Students, Programs, and
Faculty as Perceived by Minnesota Respondents
From Programs Belonging to Consortia

Disadvantage	Frequency
For Students:	
Limited savings of time	2
Limited enrollment at associate degree programs	1
Lack of transfer of comparable credits	1
Heavy course loads & less clinical time	1
Exclusion of diploma nurses from articulation plan	1
For Nursing Programs:	
Curriculum issues	4
Misleading advertising	1
For Faculty:	
Increased time & work load	4
Decreased faculty autonomy	2
Other	3

for their nursing programs. Nine percent (two) were not
sure if there had been disadvantages for their programs.

Most of the comments made by respondents about
disadvantages to their nursing programs were related to
curriculum issues. Three respondents commented that the
process of changing the curriculum was more complicated and
moved slowly since it now required the cooperative effort of
persons in all programs in the consortium. One respondent

stated that the curriculum contained a great deal of information that was compressed into a short time period. One respondent mentioned that the regional consortium arrangement for nursing education articulation had jeopardized program accreditation status because of an emphasis on program articulation rather than on individual assessment of prior learning. Another respondent believed it to be "false advertising" to lead students to believe they could become a licensed practical nurse in one year and a registered nurse in one more year when, in reality, it takes most students three years.

When respondents were asked if there had been major disadvantages of the regional consortium arrangement for faculty, fifty percent (eleven) of those responding replied "no," thirty-six percent (eight) said "yes," and fourteen percent (three) were "not sure." Of those responding "yes," four commented on the increased time and effort needed for meetings and planning. Two persons commented about faculty being less autonomous and not being able to make independent decisions that affected the curriculum. Several expressed frustrations such as trying to fit extra content into an already "tight" curriculum, working with transfer students who were not as well prepared as traditional students, and the frustration of making very different demands on students.

Minnesota respondents were asked to respond to fifteen questions that were also included on the questionnaire sent to Virginia respondents. Two of these questions attempted to compare respondents' views on the degree of helpfulness to students of voluntary articulation arrangements among individual nursing programs versus articulation arrangements developed by state-wide planning. Respondents were asked to rate several specific characteristics of each type of articulation arrangement on a rating scale of one to five, with number one representing "not helpful," and number five representing "helpful" on a continuum.

Table 19 contains the perceptions of Minnesota respondents about the extent of helpfulness of voluntary articulation arrangements made with individual nursing programs. The characteristic of voluntary arrangements for articulation receiving the highest mean value rating by Minnesota respondents, 3.78 on a five point scale, was "control and decision making for articulation are retained by the participating program." This characteristic also was rated highest by representatives of each of the three types of nursing education programs. The mean value for responses of respondents from baccalaureate programs was 3.83, of respondents from associate degree programs, 3.90, and of respondents from practical nursing programs, 3.70.

The characteristic of voluntary arrangements for articulation receiving the next highest rating by all

Table 19

Perceptions of Minnesota Respondents About the Extent of
Helpfulness to Students of Voluntary Articulation
Arrangements Among Individual Nursing Programs

Characteristic	Mean value on a rating scale of 1-5 *			
	All	BACC	ADN	PN
Control & decision making for articulation are retained by participating programs	3.78	3.83	3.90	3.70
Arrangements are planned primarily to meet specific educational needs of students enrolled only in participating programs	2.97	2.83	2.20	3.30
A wide range of diverse articulation practices in use in nursing programs throughout a particular state	2.95	2.91	2.40	3.25

* Number one on the scale represented "not helpful," and
number five on the scale represented "helpful."

Minnesota respondents was "arrangements are planned

primarily to meet the specific educational needs of students

enrolled only in participating programs." The mean value

for this characteristic was 2.97 by all respondents. The

mean value for responses of baccalaureate representatives

was 2.83, of associate degree representatives, 2.20, and for

practical nursing representatives, 3.30.

The characteristic of voluntary arrangements for
articulation receiving the next highest rating by all
Minnesota respondents was "a wide range of diverse
articulation practices in use in nursing programs throughout
a particular state" which received a mean value of 2.95 on a
five point scale. The mean value of respondents from
baccalaureate programs for this characteristic was 2.91, of
respondents from associate degree programs, 2.40, and for
respondents from practical nursing programs, 3.25.

Minnesota respondents, like Virginia respondents, were
asked to rate four characteristics of articulation
arrangements developed by state-wide planning using the same
rating scale used to rate characteristics of voluntary
arrangements for articulation. The responses to this item
on the questionnaire are summarized in Table 20. The
characteristic of articulation arrangements developed by
state-wide planning that was rated highest by all Minnesota
respondents was "articulation practices in nursing programs
throughout a state tend to be similar," which received a
mean value rating of 4.26. The mean value of this
characteristic for representatives of baccalaureate programs
was 3.75; for representatives of associate degree programs,
4.50; and for representatives of practical nursing programs,
4.45.

The characteristic of articulation arrangements
developed by state-wide planning that received the next

highest rating by all Minnesota respondents was "arrangements are planned to meet the educational needs of students at different program levels rather than the educational needs of students at specific institutions." The mean value rating for all respondents for this characteristic was 4.14. The mean value rating for respondents from baccalaureate programs was 3.54; for respondents from associate degree programs, 4.40; and for respondents from practical nursing programs, 4.35.

The characteristic of "standardized core courses are usually specified for some levels of curricula" received a mean value of 4.00 for all Minnesota respondents. The mean value rating for this characteristic by representatives of baccalaureate programs was 3.50. The mean value ratings of respondents from associate degree programs and practical nursing programs were 3.70 and 4.35 respectively.

The fourth characteristic of articulation arrangements developed by state-wide planning that respondents were asked to rate was "control and decision making for articulation are centralized in a coordinating body or agency." The mean value rating for the responses of all Minnesota participants for this characteristic was 3.00. The mean value for responses of representatives from baccalaureate programs was 2.36; for responses of representatives from associate degree programs, 3.30; and for responses of representatives from practical nursing programs, 3.20.

Table 20

Perceptions of Minnesota Respondents About the Extent of
Helpfulness to Students of Articulation Arrangements
Developed by State-wide Planning

Characteristic	Mean value on a rating scale of 1-5 *			
	All	BACC	ADN	PN
Articulation practices in nursing programs throughout a state tend to be similar	4.26	3.75	4.50	4.45
Arrangements are planned to meet educational needs of students at different program levels rather than educational needs of students at specific institutions	4.14	3.54	4.40	4.35
Standardized core courses are usually specified for some levels of curricula	4.00	3.50	3.70	4.35
Control & decision making for articulation are centralized in a coordinating body/agency	3.00	2.36	3.30	3.20

* Number one on the scale represented "not helpful"; number
five on the scale represented "helpful."

Minnesota respondents, as Virginia respondents, were
asked to rate their knowledge about nursing articulation
practices in three types of nursing education programs in
Minnesota. These programs were baccalaureate, associate
degree, and practical nursing programs. A Likert-type scale

with numbers ranging from one to five was used. Number one
on the scale represented low knowledge level, and number
five on the scale represented high knowledge level. Mean
values were calculated for responses of all respondents and
for responses given by representatives from each type of
nursing program.

For knowledge about articulation practices in
baccalaureate nursing programs, the mean value rating for
responses of all participants was 3.65. Of the responses of
representatives from specific program types, baccalaureate
respondents had the highest mean value rating, 4.66. The
next highest mean value rating, 3.45, represented the
responses of representatives from associate degree
programs. The mean value rating for responses of
representatives from practical nursing programs was 3.19.

For knowledge level about articulation practices in
associate degree nursing programs, the mean value rating for
all Minnesota respondents was 4.02. The responses of
associate degree program representatives had a mean value of
4.36. The mean value rating of baccalaureate program
representatives was next highest, 4.0. The mean value
rating of practical nursing program representatives was
3.85.

For knowledge about articulation practices used in
practical nursing programs, the mean value rating for the

responses of all Minnesota respondents was 3.86. The
responses of practical nursing program representatives had
the highest mean rating, 4.42. The mean value rating of the
responses of associate degree nursing program
representatives was next highest, 3.45, followed by a mean
value rating of 3.18 for the responses of representatives of
baccalaureate nursing programs.

Minnesota respondents were asked the question, "How
important is it that nursing education administrators in
Minnesota be concerned with nursing education articulation
at this time?" Respondents selected from six options
ranging from "very important" to "very unimportant." Eighty
percent of respondents indicated that it was "very
important" that nursing education administrators be
concerned with nursing education articulation at this time.
Fourteen percent thought it was "important." Four percent
thought it was "somewhat important," and two percent thought
it was "very unimportant." Figure 9 illustrates Minnesota
respondents' views on this question.

From a list of six options ranging from "very
satisfied" to "very dissatisfied," respondents from
Minnesota were asked to rate their satisfaction with the
overall, current status of nursing education articulation in
Minnesota. None indicated they were "very satisfied" or
"very dissatisfied." Twenty-two percent indicated they were
"satisfied," and forty percent indicated they were "somewhat

4% Somewhat Important —— �⎤ —— 2% Very Unimportant
14% Important ——

80% Very Important
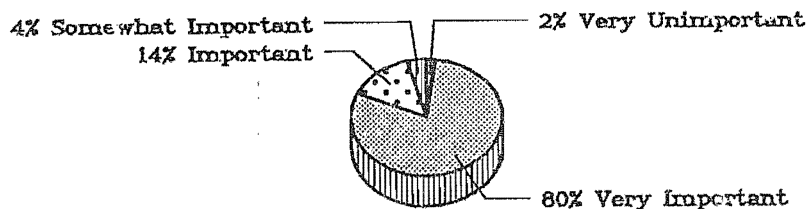
Figure 9

Opinions of Minnesota Respondents About
the Importance of Nursing
Education Articulation

satisfied." Fourteen percent indicated they were "somewhat

dissatisfied," and twenty-four percent indicated they were

"dissatisfied" with the overall, current status of nursing

education articulation in Minnesota. Figure 10 illustrates

respondents' opinions concerning this question.

Minnesota respondents were also asked how satisfied

they were with articulation practices now used in the

nursing program at their own institutions. Twenty-nine

percent indicated they were "satisfied," and twenty-six

percent indicated they were "very satisfied." Twenty-six

percent indicated they were "somewhat satisfied" with

current articulation practices in the nursing program they

represented. Ten percent indicated they were

"dissatisfied," seven percent indicated they were "somewhat

22% Satisfied

40% Somewhat Satisfied

24% Dissatisfied

14% Somewhat Dissatisfied
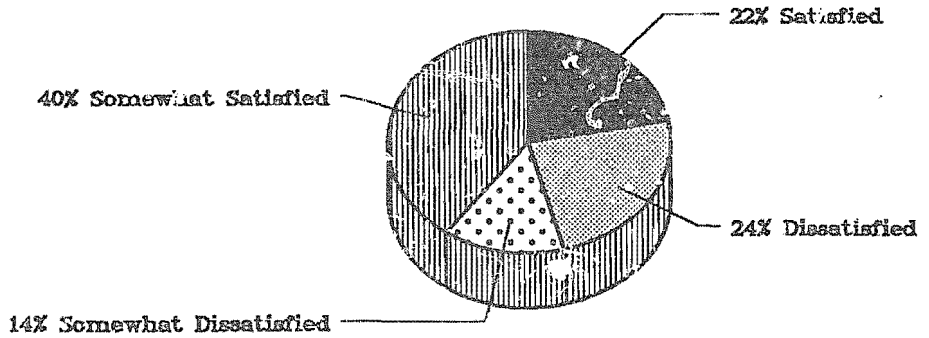
Figure 10

The Degree of Satisfaction or Dissatisfaction
of Minnesota Respondents with the Current
Status of Nursing Education
Articulation in Minnesota

2% Very Dissatisfied

10% Dissatisfied

26% Very Satisfied

7% Somewhat Dissatisfied

26% Somewhat Satisfied
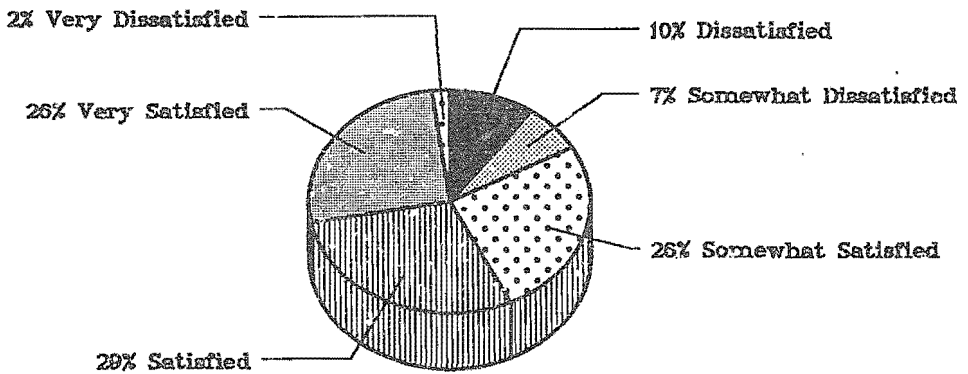
29% Satisfied

Figure 11

The Degree of Satisfaction or Dissatisfaction
of Minnesota Respondents with Articulation
Practices Used in Their Own
Nursing Programs

dissatisfied," and two percent were "very dissatisfied."
Responses to this question are illustrated in Figure 11.

From a list of seven positions about academic
articulation, Minnesota respondents were asked to identify
the one position that most closely characterized their own
personal position about academic articulation in general.
Fifty-seven percent (twenty-five) selected the position that
stated, "accept the general concept of academic
articulation." Thirty-two percent (fourteen) selected the
position which stated, "accept the general concept of
academic articulation but have definite beliefs about how it
should and should not be practiced." Nine percent (four) of
respondents selected the option, "accept the general concept
of academic articulation but have some reservations about
its use." One other person, representing two percent of the
Minnesota respondents, stated that "articulation may be okay
but should not be the only avenue for transfer of credit."
Responses of Minnesota respondents on this question are
contained in Table 21.

Six items on the questionnaire sent to Minnesota
nursing education administrators, like the questionnaire
sent to the similar population in Virginia, were concerned
with respondents' opinions as to whether it is possible to
articulate specific types of nursing education programs with
other selected types of programs. For the item that asked
respondents whether it is possible to articulate nurse

Table 21

Personal Positions of Minnesota Nursing Education
Administrators About the General Concept of
Academic Articulation

Position	Frequency	Percent
Accept the general concept of academic articulation	25	57
Accept the general concept of academic articulation but have definite beliefs about how it should & should not be practiced	14	32
Accept the general concept of academic articulation but have some reservations about its use	4	9
Oppose the general concept of academic articulation	0	--
Oppose academic articulation because it may interfere with the quality of education	0	--
Oppose academic articulation because it may interfere with the uniqueness of educational programs/institutions	0	--
Oppose academic articulation because it interferes with academic freedom & autonomy		--
Other	1	2
Totals:	44	100

aide education with practical nursing education, eighty-two

percent (thirty-six) of respondents replied "yes." Nine

percent each (four) replied "no" and "not sure." Responses

of Minnesota respondents to this question are illustrated in

Figure 12.

9% Not Sure

9% No

82% Yes
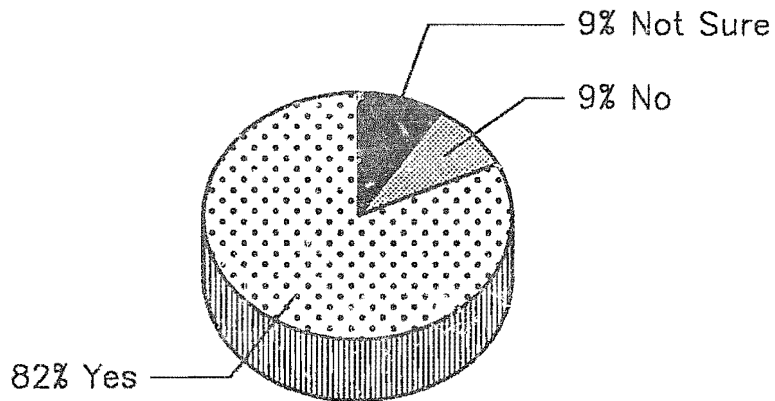
Figure 12

Opinions of Minnesota Respondents As to
Whether Nurse Aide Education Can Be
Articulated with Practical
Nursing Education

Minnesota respondents were asked whether they believed

it possible to articulate practical nursing education with

associate degree nursing education. Ninety-three percent

(forty-one) answered "yes," five percent (two) answered

"no," and two percent (one) answered "not sure." These

responses are illustrated in Figure 13.
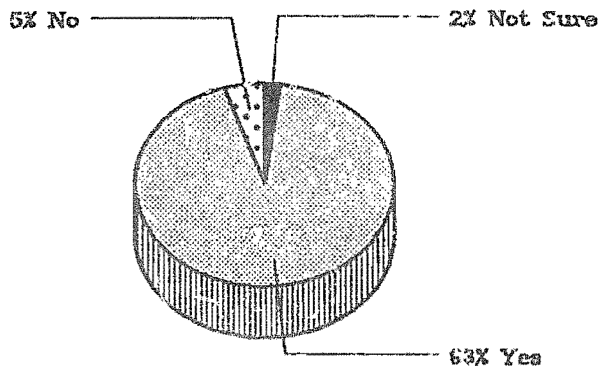
Figure 13

Opinions of Minnesota Respondents As to
Whether Practical Nursing Education
Can Be Articulated with Associate
Degree Nursing Education

Minnesota respondents were asked their opinion about
whether it is possible to articulate practical nursing
education with diploma nursing education. Of forty-two
respondents who answered this question, forty-five percent
(nineteen) replied "yes," forty-three percent (eighteen)
replied "not sure," and twelve percent (five) replied "no."
These responses are illustrated in Figure 14.

Nursing education administrators in Minnesota were
asked whether they believed it possible to articulate
practical nursing education with baccalaureate nursing
education. In response, fifty-seven percent (twenty-five)
replied "yes," sixteen percent (seven) replied "no," and

12% No

43% Not Sure

45% Yes
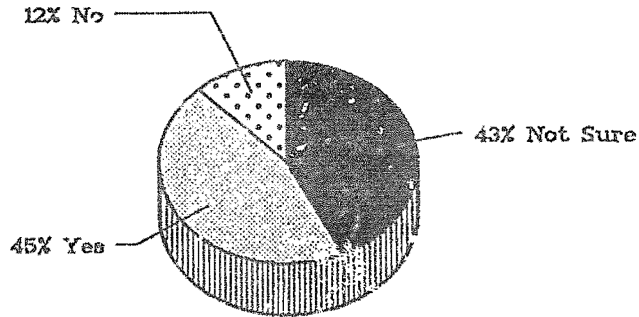
Figure 14

Opinions of Minnesota Respondents As to
Whether Practical Nursing Education
Can Be Articulated with Diploma
Nursing Education

twenty-seven percent (twelve) replied "not sure." These

responses are illustrated in Figure 15.

16% No

27% Not Sure

57% Yes
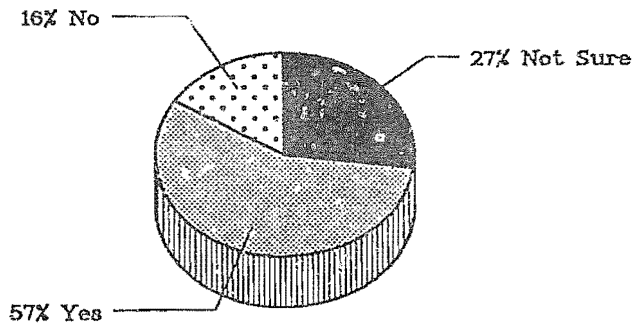
Figure 15

Opinions of Minnesota Respondents As to
Whether Practical Nursing Education Can
Be Articulated with Baccalaureate
Nursing Education

In response to the question whether it is possible to
articulate diploma nursing education with baccalaureate
nursing education, eighty-nine percent (thirty-nine) of
Minnesota respondents replied "yes." Nine percent (four) of
respondents replied "not sure," and two percent (one)
replied "no." These responses are illustrated in Figure 16.

2% No ———————————— 9% Not Sure

89% Yes ——
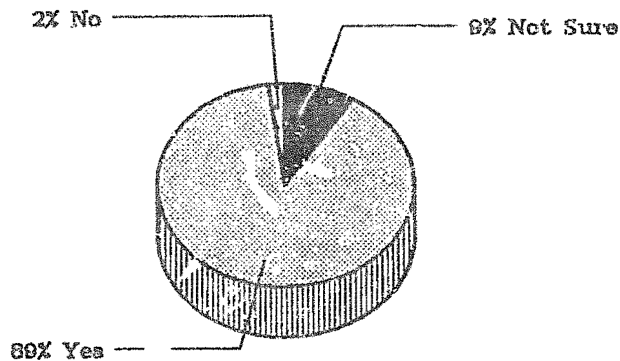
Figure 16

Opinions of Minnesota Respondents As to
Whether Diploma Nursing Education
Can Be Articulated with
Baccalaureate Nursing
Education

To the question, "Do you believe it is possible to
articulate associate degree nursing education with
baccalaureate nursing education?," there was a unanimous
response. One hundred percent of those responding to this
question, or forty-four persons, replied "yes."

Table 22 contains the responses of Minnesota respondents when asked to identify possible benefits resulting from effective articulation practices among nursing programs. All except one of the possible benefits listed were selected by sixty-four percent or more of Minnesota respondents. The exception was the possible benefit of "increased financial income for nursing programs" which was perceived to be a benefit by about twenty-two percent (sixteen) of the respondents. The possible benefit that was chosen by the highest number of Minnesota respondents was "increased numbers of better prepared nurses" which was chosen by about eighty-two percent (thirty-six). The next most frequently chosen possible benefit was "increased collaboration among nursing educators and institutions," chosen by about seventy-three percent (thirty-two) of respondents.

Two possible benefits, "increased efficiency related to economic, social, and opportunity costs" and "improved positive image of the nursing profession" were each chosen by seventy percent (thirty-one) of respondents. "Increased student enrollments" was chosen by about sixty-six percent (twenty-nine) of respondents. About sixty-four percent (twenty-eight) of respondents chose the possible benefits of "increased pool of nurses for employment" and "increased pool of potential graduate students." Two respondents identified an additional potential benefit of effective

Table 22

Benefits of Effective Articulation Practices Among
Nursing Education Programs As Perceived by
Minnesota Respondents

Benefit	Percent	Frequency
Increased numbers of better prepared nurses	81.8	36
Increased collaboration among nursing educators and institutions	72.7	32
Increased efficiency related to economic, social, and opportunity costs	70.4	31
Increased positive image of the nursing profession	70.4	31
Increased student enrollments	65.9	29
Increased pool of nurses for employment	63.6	28
Increased pool of potential graduate students	63.6	28
Increased financial income for nursing programs	21.9	16
Other	4.5	2

articulation practices among nursing . One person

stated as a benefit, "opportunity for st advance as

time and money permit." A second person state

beneficial, "increased awareness of all levels of the sing

education . . . and to the contribution of each level to the

health/nursing team so we can utilize each level
efficiently."

Another question that was asked of both Virginia and
Minnesota study participants was "As a nursing education
administrator, which of the following are concerns of yours
regarding the implementation of program articulation?"
Respondents were asked to rank order a list of five possible
concerns with number one representing the item of most
concern and number five representing the item of least
concern. The mean was calculated for the ranks given each
item by respondents; these appear in Table 23.

The item viewed with most concern by Minnesota
respondents, with a mean rank order value of 2.05, was "the
changes required at all levels of nursing education due to
variance among programs." The item ranked with next highest
concern was "interference with policies and procedures of
individual programs" which received a mean rank order value
of 2.94. Ranked next, with a mean rank order value of 3.10,
was "encouragement of students to get basic education at
practical diploma or associate degree programs." "Loss of
uniqueness of individual programs" was of next highest
concern of Minnesota respondents with a mean rank order
value of 3.13. The item of least concern by Minnesota
respondents, with a mean rank order value of 3.32, was
"infringement on academic freedom and autonomy." Three
persons each offered concerns that were not listed and

Table 23

Concerns of Minnesota Nursing Education Administrators
Regarding the Implementation of Program Articulation

Concern	Mean Rank Order Value *
The changes required at all levels of nursing education due to variance among programs	2.05
Interference with policies & procedures of individual programs	2.94
Encouragement of students to get basic education at practical, diploma, or associate degree programs	3.10
Loss of uniqueness of individual programs	3.13
Infringement on academic freedom & autonomy	3.32

* Respondents were asked to rank order the items listed from one to five with number one being of most concern and number five being of least concern.

ranked them of highest concern. One person offered "loss of sight of the different goals of each level of education" as of highest concern. Two others identified a lack of funding for planning and implementation as of highest concern. Four respondents from Minnesota indicated that none of the possible concerns about implementing program articulation that were listed on the questionnaire were of concern to them.

A final major question of this study was, "What changes, additions, or deletions to current practice are indicated for academic articulation among nursing education programs in Virginia?" In an attempt to answer this question in part, nursing education administrators in Virginia were asked to state what actions needed to be taken in relation to nursing education articulation in Virginia within the next year and within the next five years. Respondents also were asked to identify the persons, agencies, and institutions that should be involved in the actions recommended. When responses to these open-ended questions were examined, actions that respondents felt should be taken within the next year fell into eight categories. These categories are contained in Table 24.

The responses of eighteen nursing education administrators from Virginia were related to the need for discussion and collaboration about articulation. Eight persons believed that curriculum evaluation and planning for articulation should be done within the next year. Seven comments were made concerning the need to develop models for articulation. Six persons believed that a state-wide assessment of current articulation practices needed to be done within the next year. Four persons thought that a state-wide plan for articulation should be developed within the next year. The comments of three persons indicated that creative and innovative processes for articulation needed to

Table 24

Opinions of Virginia Respondents About What Actions
Related to Articulation Need to Be Taken Within
the Next Year in Virginia

Action/Area of Action	Number of Comments
Discussion & collaboration about articulation	18
Curriculum evaluation & planning for articulation	8
Develop models for articulation	7
State wide assessment of current articulation practices	6
Develop a state wide plan for articulation	4
Develop creative & innovative processes for articulation	3
Information & education about articulation	3
Other	10
Total:	59

be developed within the next year. Another three persons'
comments were related to the need for information and
education about articulation. An additional ten respondents
each identified an action different from the above
categories.

When respondents were asked what persons, agencies, or
institutions should be involved in the actions they had

suggested, leaders (faculty, administrators, and
representatives) from each type of nursing program received
the highest number of responses with thirty-seven. Various
state agencies identified by respondents as needing to be
involved with articulation matters included the Virginia
Board of Nursing (sixteen), State Board of Education and the
Department of Education (thirteen), the four organizations
representing Virginia nursing education programs (eleven),
other nursing organizations (nine), and the State Council of
Higher Education (eight). Other persons mentioned included
employers, students, and all levels of practicing nurses.

Table 25 contains a summary of responses when Virginia
respondents were asked what actions needed to be taken
regarding nursing education articulation in Virginia within
the next five years. The actions identified by eighteen
respondents were related to having a plan or model for
articulation in place. The comments of ten persons were
concerned with curriculum matters. Three comments related
to the need for study of curricula, and seven comments
related to having standard or core curricula state-wide that
would enable students to transfer easily from one program to
another. Seven persons identified the need for continued
communication and dialogue among representatives of nursing
programs in the next five years. Two persons stated that
pilot programs should be in operation, and another two

Table 25

Opinions of Virginia Respondents About What Actions
Related to Articulation Need to Be Taken Within
the Next Five Years in Virginia

Action/Area of Action	Number of Comments
Have an articulation plan or model in place	18
Continued study & collaboration on curriculum matters	10
Continued communication & dialogue among representatives of nursing programs	7
Have a pilot project in operation	2
Have articulation agreements in operation	2
Total:	39

persons stated that articulation agreements should be
implemented within the next five years.

In response to the question, "In what specific
articulation activities would you be willing to be involved
within the next year to improve nursing education
articulation in Virginia?," thirty-five persons named
specific activities that they would be willing to pursue.
Eleven persons stated that they were already involved in
such activities. Six others stated they either would not be
available or were not sure of their availability to engage
in articulation activities.

Chapter 5

INTERPRETATION, CONCLUSIONS, AND RECOMMENDATIONS

Interpretation of Results

The major purpose of this study was to obtain
information about the current status of academic
articulation among nursing programs in Virginia. Three
dimensions of the phenomenon of academic articulation
provided the framework for the five research questions
included in the study. These dimensions were articulation
as process, attitude, and goal.

The first research question dealt with articulation as
process and asked, "What are the nature and extent of
articulation practices currently in use in nursing programs
in Virginia?" As to the extent that articulation practices
are being used in Virginia nursing programs, the findings
indicated that less than half of nursing programs
represented in the study, thirty-five out of seventy-three,
had articulation agreements in effect with one or more other
nursing programs. At twelve additional nursing programs
plans were underway to establish articulation agreements
within a year. If such plans are brought to fruition, over
half of the total number of nursing programs in Virginia,

forty-seven of eighty-eight, would have program articulation arrangements in place within the near future.

Over half of the total number of articulation agreements reported being in effect were with associate degree programs (Table 1). This is not surprising since associate degree programs represent the midpoint of the educational mobility track for nurses who begin their education at the practical nursing level and continue to higher levels of education. Also, since many associate degree nurses eventually seek the baccalaureate degree, it is common for associate degree and baccalaureate degree programs to have arrangements that facilitate the educational mobility of graduates of associate degree programs through baccalaureate programs.

The most common type of articulation arrangement in effect in Virginia nursing programs was one where students from another nursing program were granted credit for previously completed general education courses but were required to take tests to validate or earn credit for previous nursing courses (Table 2). This type of agreement is similar to the advanced placement career mobility model as described by Lenburg (1975). It is also the oldest format for providing career mobility in nursing education (Lenburg, 1975).

The second most common type of articulation arrangement reported by Virginia respondents was the structuring of two

or more nursing programs so that graduates from one program enter another program with advanced standing without further testing or repetition of previous courses. Forty-six percent of respondents who represented programs having articulation arrangements in effect reported using this type of arrangement in their programs (Table 2). This type of articulation arrangement is unlike any of the nursing career mobility models identified by Lenburg in 1975. Of the formats for career program articulation described by Prager (1988), the above arrangement probably most closely resembles the two-plus-two program format where students complete specified requirements and course work within an overall structured curriculum sequence that is planned and provided by more than one program or institution. The Tidewater (Virginia) regional articulation model (1990) will exemplify this type of articulation format. Many nursing educators view this format as true academic articulation in that students are not required to repeat courses or to take tests to validate previous knowledge or skills.

Three distinct groups of three or more nursing programs in different regions of Virginia were identified as engaged in collaborative efforts for articulation. In the northern Virginia area, two baccalaureate degree programs, one associate degree program and one practical nursing program were reported to be working together to provide educational mobility for their students. Another group consisting of

four practical nursing programs and one associate degree program was located in the Shenandoah Valley area. A third group was located in the Tidewater area of the State and represented two baccalaureate degree programs, three associate degree programs, and eight practical nursing programs. The latter group had received state funding to establish an articulation model that could be used elsewhere (Tidewater Regional Project, 1990).

Procedures and activities used in Virginia nursing programs to establish program articulation with other nursing programs were similar to those reported in the literature for that purpose (MHECB, 1982; Shane, 1983; Zusy, 1986; Rapson, 1987; Colorado Council, 1990). These included reviews of pre-requisite courses and analyses of objectives (program, course, and unit objectives) used in particular programs participating in articulation agreements. Other procedures commonly used in developing program articulation arrangements that were reported by Virginia respondents included review of program philosophies, of required psychomotor skills, of exit competencies of graduates, and the use of transition courses to bridge the gaps in curricula of participating programs (Table 3).

Procedures used in Virginia nursing programs to evaluate individual students for transfer or advanced placement included traditional and non-traditional procedures (Table 4). Direct transfer of comparable credits

from other institutions was the procedure used most
frequently to facilitate transfer or advanced placement of
individual students. Almost three-fourths of respondents
reported that students were granted credit for previous
nursing courses completed at other nursing programs. In
fifty-nine percent of programs, students were granted credit
for non-nursing courses taken at other institutions. It is
somewhat surprising that Virginia respondents reported
granting credit for nursing courses completed at other
programs more frequently than granting credit for non-
nursing courses taken at other programs since,
traditionally, students in nursing have been required to
validate previously taken nursing courses by testing.

Testing to validate prior learning as a method of
evaluating individual students for transfer or advanced
placement in nursing programs was reported by Virginia
respondents. Of testing methods identified, challenge exams
in nursing were reported in use at almost half the nursing
programs represented in the study. The next most frequently
used testing method was standardized exams in nursing. Of
standardized exams in nursing, NLN Mobility Profile and NLN
achievement exams were used most frequently. CLEP exams
were the most widely used standardized exams for advanced
placement of students in non-nursing courses (Table 5).

Perhaps the most surprising finding related to
procedures used in Virginia nursing programs for the

evaluation of individual students for transfer or advanced
placement was the frequency of use of personal portfolio
review. This method was reported being in use at
twenty-nine percent of nursing programs for advanced
placement in nursing courses and at fifteen percent of
nursing programs for advanced placement in non-nursing
courses (Table 4). It is interesting to compare these
findings with the results reported by Staples (1990) in her
descriptive survey of nursing education programs in Maine.
Staples found that seventeen percent of nursing programs in
Maine reported granting credit for life experiences via
portfolio presentations.

The methods reported by Virginia respondents to assess
or validate clinical skills of students were varied (Table
6). The laboratory setting was the most frequently used
site for assessing clinical skills of transfer students
followed by a clinical course and an actual clinical setting
in that order. Written or media presented clinical
simulations as an evaluation method was used less
frequently. In over a fourth of programs represented in the
study, no assessment of clinical skills was conducted.

Validation of clinical skills of students seeking
advanced placement has been one of the major challenges
confronting nursing educators in providing educational
mobility of students from one nursing program level to
another. Procedures have been expensive to implement since

direct observation by faculty of skills performance by
students has been a traditional method used to validate
skills. Findings of this study indicate that methods using
direct observation of students' skills performance are still
being used with greater frequency in Virginia nursing
programs than less traditional methods that may be less
costly such as written or media presented clinical
simulations. This may explain in part the reason for so
many respondents reporting that validation of clinical
skills is not done in their programs. Another factor that
may partly explain why over a fourth of respondents reported
not using validation procedures in their programs is the
relative proportion of study respondents who represented
practical nursing programs (fifty-six percent). Educators
in practical nursing programs probably would have less
demand for skills validation procedures than would
representatives of other levels of nursing programs.

The second major question of this study was related to
articulation as attitude: "What are the beliefs and
opinions of nursing education administrators of nursing
programs in Virginia about academic articulation?" When
Virginia respondents were asked to express their opinions
about the importance of academic articulation as a topic of
concern among nursing education administrators in the State,
all respondents except one, who did not express a view,
ascribed some degree of importance to the topic (Figure 5).

This finding indicates that Virginia respondents believe that academic articulation is an important issue for their group.

Virginia respondents who represented nursing programs with articulation agreements in effect believed that program articulation arrangements were definitely beneficial to students. The benefits of reduced time to complete a program, reduced need to repeat courses, and reduced financial costs were benefits to students identified by about seventy-four percent or more of respondents. In contrast, only forty percent viewed a reduced need to take tests to validate prior learning as a benefit of articulation arrangements to students. This may indicate that the majority of nursing education administrators see the need for testing to validate prior learning regardless of, or in conjunction with, program articulation agreements (Table 7).

When asked to identify their personal position about the general concept of academic articulation, ninety-five percent of Virginia respondents indicated they accepted the concept. Over half the respondents accepted the concept without qualification. Over a third accepted the concept but had definite beliefs as to how it should and should not be practiced, and another ten percent accepted the concept but had some reservations about its use. Only three percent indicated they were opposed to the concept (Table 8). These

findings indicate that, in general, Virginia nursing education administrators who participated in this study have accepted the general concept of academic articulation.

The responses of Virginia nursing education administrators when asked if it was possible to articulate various types or levels of nursing education seemed to be consistent with their overall acceptance of the general concept of articulation. For each question asking if a specific type of nursing education could be articulated with another specific type, the majority of respondents indicated they thought articulation was possible (Figures 1-4). One hundred percent of Virginia respondents agreed that it is possible to articulate associated degree and diploma nursing education with baccalaureate degree nursing education.

Sixty-three percent of Virginia respondents thought it possible to articulate nurse aide education with practical nursing education, and sixty-seven percent believed it possible to articulate practical nursing education with baccalaureate nursing education. Traditionally, the articulation of nurse aide with practical nursing education and practical nursing with baccalaureate nursing education have been less common. These findings related to the personal beliefs of Virginia respondents about articulation are interesting in light of the historical debate in nursing education as to whether it is possible to link various segments of nursing education (Stevens, 1981; Miller, 1980;

N.Y. State Education Department, 1982; Rapson, Perry &
Parker, 1990). It appears that the majority of Virginia
respondents have resolved this issue in their own minds and
believe that articulation of undergraduate nursing education
at all levels is possible.

The majority of Virginia respondents whether they
represented programs with articulation arrangements in
effect or not believed that effective articulation practices
among nursing education programs had specific benefits. The
benefits that were identified by fifty-two percent or more
of respondents were increased student enrollments; increased
collaboration among nursing educators; increased positive
image of the nursing profession; increased pool of nurses
for employment; increased number of better prepared nurses;
increased efficiency related to economic, social, and
opportunity costs; and increased pool of potential graduate
students. Viewed as a benefit by less than a majority of
Virginia respondents (thirty-seven percent) was increased
financial income for nursing programs. One respondent did
not view as beneficial any of the possible benefits of
articulation practices listed on the questionnaire (Table
9).

An attempt was made to identify and contrast the
opinions of Virginia respondents about the helpfulness to
students of voluntary articulation arrangements and of
articulation arrangements developed by state-wide planning.

When respondents were asked to rate three characteristics of articulation arrangements developed by voluntary arrangements as to their helpfulness to students, the characteristic viewed as most beneficial was "control and decision making for articulation are retained by participating programs." Receiving the next highest mean rating by all Virginia respondents was the characteristic of "a wide range of diverse articulation practices in use throughout a state." In third place was "arrangements are planned primarily to meet specific educational needs of students enrolled only in participating programs" (Table 10). The mean ratings of respondents from baccalaureate, associate degree, and practical nursing programs also followed this pattern. Respondents from diploma programs rated highest the characteristic of "a wide range of diverse articulation practices in use in nursing programs throughout a state" and the characteristic of "control and decision making for articulation retained by participating programs" second highest.

The mean values resulting from Virginia respondents' ratings of the helpfulness to students of four characteristics of articulation arrangements developed by state-wide planning did not vary greatly (Table 11). The characteristic that was the exception and which appeared to have a distinct rank was "control and decision making for articulation are centralized in a coordinating body or

agency." This characteristic received the lowest mean rating by all respondents in general and by respondents from all four types of nursing education programs. This seems to indicate that respondents viewed this characteristic of state-wide planning for nursing education articulation least helpful to students. The lack of distinct differences in the mean ratings of the other characteristics for articulation arrangements developed by state-wide planning may have been due to how the term "state-wide planning" was perceived by respondents. No attempt was made in the study to specifically define the terms "state-wide planning." Therefore, to some respondents the term may have been viewed negatively as in a context of mandatory state-wide planning. To others, the term may have been viewed positively as in a context of an effort of coordination and collaboration.

It is interesting to compare the ratings of the characteristic of "control and decision making for articulation" as described for voluntary and for state-wide arrangements for articulation. When described as being retained by participating programs as in voluntary arrangements, the characteristic was rated as being most helpful to students and when described as being centralized in a coordinating body or agency as in a state-wide plan for articulation, it was rated least helpful to students. This probably indicates a strong feeling on the part of Virginia

respondents that control and decision making for articulation should rest with participating programs and not with a central body or agency.

Like the second major question of this study, the third major question addressed articulation as attitude. The third question asked, "What is the level of satisfaction or dissatisfaction of nursing education administrators in Virginia with current articulation practices in the State?" Respondents were first asked to rate their personal knowledge level of articulation practices throughout Virginia in the four types of nursing education programs represented in the study. Without exception, respondents rated highest their personal knowledge of articulation practices used in the type of program that they represented. Respondents' ratings of their knowledge of articulation practices used in other types of programs in Virginia tended to be higher for those types of programs that would be expected to have articulation arrangements with the type of program represented by respondents. For example, knowledge ratings of representatives of baccalaureate programs were higher for articulation practices used in associate degree and diploma programs than for practices used in practical nursing programs (Table 12).

More Virginia respondents appeared to be dissatisfied than satisfied with the current status of nursing education

articulation in Virginia. The portion of respondents who
expressed some degree of dissatisfaction was fifty-six
percent as compared to forty-four percent who expressed some
degree of satisfaction (Figure 6). Only twelve percent
indicated they were "very satisfied" or "satisfied," whereas
almost three times as many, thirty-five percent, indicated
they were "very dissatisfied" or "dissatisfied" with the
current status of nursing education articulation in
Virginia.

Virginia respondents seemed to be more satisfied with
articulation practices used in their own nursing programs
than with the current overall status of nursing education
articulation in Virginia. Sixty-two percent expressed some
degree of satisfaction with program articulation practices
at their own program, whereas forty-four percent expressed
some degree of satisfaction with the current status of
nursing education articulation in Virginia. Thirty-eight
percent of respondents expressed some degree of
dissatisfaction with articulation practices used in their
own programs, whereas fifty-six percent expressed some
degree of dissatisfaction with the current status of nursing
education in Virginia (Figures 6 & 7).

It was the opinion of Virginia respondents that of five
possible barriers faced by nursing students wishing to
transfer to other nursing programs in Virginia, a lack of
knowledge among persons counseling students about

articulation arrangements in effect among nursing programs was the most significant (Table 13). It is understandable how such a lack of knowledge on the part of counselors could lead to problems for students who desire to transfer to another program. For example, students might be totally unaware of existing articulation agreements in effect among nursing programs, or they might lack information as to any course or other requirements that may need to be met before transfer to another program is possible. There was no attempt to identify the specific type of counselor for this item on the questionnaire. Therefore, considering the nature of the respondents, counselors could have been interpreted as including academic and non-academic counselors in high schools and in nursing programs.

Viewed as slightly less significant to a lack of knowledge on the part of counselors with reference to nursing education articulation arrangements among nursing programs as a barrier was the barrier of the limited number of credit hours that could be transferred to other programs. This is not a surprising finding since it is common practice at educational institutions to restrict the number of credits that may be transferred from one program to another. This is especially true if no formal articulation arrangements are in effect among specific programs.

When respondents were asked to rank order nine possible restraining forces that they thought to be impeding articulation among nursing programs in Virginia, the one ranked most significant was "differences in philosophical positions among nurse educators about the nature of educational preparation of students" (Table 14). Whereas the response on this item seems to imply that respondents perceive nursing education articulation in Virginia as being impeded by a difference in philosophical beliefs about the nature of educational preparation of nursing students, it does not seem to be congruent with the responses of study participants on several other items on the questionnaire. For example, the vast majority of Virginia respondents indicated that they accept the general concept of articulation (Table 8).

The majority of respondents also indicated that it is possible to articulate nursing education programs of various types (Figures 1-4). If so many of the respondents accept the concept of articulation and believe it is possible to articulate a variety of nursing education programs, why do they perceive that nursing education articulation in Virginia is being impeded by differences in philosophical positions about the nature of educational preparation of students? Is it possible that respondents have accepted the concept of academic articulation for themselves but perceive other nurse educators not to have accepted the concept?

It is interesting to note that of the possible restraining forces offered for rank ordering by Virginia respondents, the one ranked as least significant was "concern about the impact that articulation practices might have on accreditation status of programs." Apparently Virginia respondents do not fear that articulation arrangements will jeopardize approval and accreditation statuses of nursing programs. This may be due to respondents' knowledge of the positions currently being taken by organizations and agencies such as the NLN and the Virginia Board of Nursing which are generally supportive of such efforts at this time.

Virginia respondents perceived the nursing shortage as the most significant facilitating force operating for the development of articulation among nursing education programs in Virginia (Table 15). This seems to suggest that Virginia respondents perceive articulation as a relevant mechanism for preparing more nurses for the work force. Also, it seems to indicate that Virginia respondents are in agreement with those who believe that students should be allowed and encouraged to move from one level to another within the discipline (N.Y. State Education Department, 1982).

Perceived by Virginia respondents as least significant as a facilitating force for the development of articulation was the entry level issue (Table 15). By ranking the entry-level issue as least significant as a facilitating

force for articulation, Virginia respondents appear to
reject that issue as a major impetus for articulation.
Their ranking the entry level issue last may also reflect
the extent of their commitment to the entry level issue,
especially in the current situation where demand exceeds the
supply of nurses.

The major concern of Virginia respondents regarding the
implementation of program articulation was the changes that
are required at all levels of nursing education due to
variance in programs (Table 16). This finding is probably
not surprising considering that nursing education
administrators are in a position to understand that
articulation endeavors entail much time and effort on the
part of ll personnel concerned. As described by King
(1988), the changes required in effecting articulation
procedures can be real deterrents to successful articulation
efforts. Of least concern to Virginia respondents about the
implementation of program articulation was the encouragement
of students to get their basic education at practical,
diploma, or associate degree programs. Again, this seems to
indicate that Virginia respondents accept the concept of
educational mobility within nursing and that they do not
believe that nurses should all be prepared at two levels
(the entry-level issue).

The majority of nursing education administrators in
Virginia indicated they were amenable to the idea of

state-wide planning for nursing education articulation in Virginia. Eighty-seven percent indicated they were either very amenable (sixty-four percent) or somewhat amenable (twenty-three percent) to state-wide planning for articulation in contrast to ten percent who indicated they were somewhat against (three percent) or very much against (seven percent) (Figure 8). The largest percentage of respondents who were either very amenable or somewhat amenable to state-wide planning were from practical nursing programs. This group was followed in expression of support of state-wide planning by respondents from diploma, baccalaureate, and associate degree programs in that order.

According to percentages, respondents from associate degree programs represented the group indicating the greatest expression of being against state-wide planning for nursing education articulation; twenty-one percent indicated they were very much against state-wide planning for articulation. Respondents from baccalaureate programs had the next highest percentage of negative responses concerning state-wide planning for articulation with seventeen percent being very much against such action. Five percent of respondents from practical nursing programs indicated they were somewhat against state-wide planning for articulation.

Study participants were not asked to explain why they were amenable or against state-wide planning for nursing education in Virginia. Therefore, it is not known why

respondents support or do not support state-wide planning efforts for articulation. From data included in Table 1, it is apparent that the number of existing articulation arrangements among nursing programs in Virginia is highest for associate degree programs. Since respondents representing associate degree programs reported having the highest numbers of voluntary arrangements in effect, it is possible that respondents from associate degree programs feel they would have the most to lose by state-wide planning for articulation.

The fourth major question of this study was, "What are the advantages and disadvantages of regional consortium arrangements for nursing education articulation as perceived by nursing education administrators in a state with such arrangements?" The responses of forty-four nursing education administrators from Minnesota to six items on the Minnesota questionnaire were used to answer this question. It was the opinion of all Minnesota respondents who represented programs that participated in consortium arrangements for articulation that such arrangements had resolved, to some extent, problems related to articulation that had existed prior to implementation of such arrangements. Problems of articulation identified by Minnesota respondents that had been resolved to some extent by the implementation of regional consortium arrangements included problems related to student transfer and awarding

of credit, educational mobility of students, and
communication and collaboration among nursing programs.

Forty-eight percent of Minnesota respondents believed
that new problems had developed as a result of the
implementation of regional consortium arrangements.
Problems associated with curriculum matters were named most
frequently as the type of problems that had resulted from
the implementation of regional consortium arrangements for
articulation. Maintaining curricula that had been agreed
upon and accepted by participating programs and the
implications of curriculum changes for all program
participants in a regional consortium were identified
specifically. These problems are not surprising considering
that effective articulation involves total cooperation of
all persons involved. As emphasized by Kintzer (1985:35),
articulation is "people driven," and its success depends
upon the support given it by all parties involved.

The majority of Minnesota respondents who represented
programs that participated in regional consortium
arrangements for nursing education articulation believed
that such arrangements were beneficial to students, nursing
programs, and faculty. Benefits to students most frequently
identified were in the areas of ease of transfer of credits
and ease of educational/career mobility. Benefits to
nursing programs identified most frequently were increased
enrollments, easier recruitment, inter-program collaboration

and curriculum matters. Interaction with other nursing educators was identified most frequently as a benefit for faculty (Table 17).

Minnesota respondents who represented programs participating in regional consortium arrangements for nursing education articulation were also asked if there had been disadvantages for students, nursing programs, and faculty as a result of participating in such arrangements. Less than a third of respondents in this group indicated there had been disadvantages for students, and the specific disadvantages identified by respondents were varied. Limited savings of time for students was the only disadvantage identified by more than one person (Table 18).

Of the thirty-six percent of Minnesota respondents who indicated there had been disadvantages for their nursing programs as a result of participating in regional consortium arrangements, half identified curriculum issues as a disadvantage for their nursing programs. Of the thirty-six percent of Minnesota respondents who believed there had been disadvantages for faculty as a result of participating in regional consortia, half identified increased time and work load as a disadvantage for faculty.

In an attempt to compare the beliefs and opinions about various aspects of academic articulation held by Virginia and Minnesota respondents, several identical items were included on the questionnaire sent to both groups. Two of

these items concerned the views of respondents about the
benefits to students of voluntary articulation arrangements
and articulation arrangements developed by state-wide
planning. The responses of Virginia respondents on these
two items are contained in Tables 10 and 11. Responses of
Minnesota respondents on these items are contained in Tables
19 and 20.

When comparing the perceptions of Virginia and
Minnesota respondents as to the helpfulness to students of
voluntary articulation arrangements (Tables 10 and 19), the
characteristic receiving the highest mean rating by both
groups was retention of control and decision making for
articulation by participating programs. On the other two
characteristics of voluntary articulation arrangements
presented to respondents for rating, respondents from
Virginia and Minnesota differed in their responses.
Virginia respondents viewed the availability of diverse
articulation practices throughout a state as being more
helpful to students than the characteristic of arrangements
being planned primarily to meet specific educational needs
of students enrolled in participating programs. Minnesota
respondents ranked these two characteristics opposite to
Virginia respondents.

Different results were noted when Virginia and
Minnesota participants were compared on their opinions
regarding the helpfulness to students of articulation

arrangements developed by state-wide planning. The ordering

of the mean ratings for all four characteristics of

articulation arrangements by state-wide planning offered on

the questionnaires was the same for participants in both

groups (Tables 11 and 20). This indicates agreement among

Virginia and Minnesota respondents in their perceptions

about the helpfulness to students of four characteristics of

articulation arrangements developed by state-wide planning.

Virginia and Minnesota respondents were also alike in

their ratings of personal knowledge of articulation

practices used in nursing programs throughout their state.

Like Virginia respondents, Minnesota respondents rated

highest their personal knowledge of articulation practices

used in the type of program that they represented. Also

like Virginia respondents, Minnesota respondents' ratings of

their knowledge level about articulation practices at other

types of programs in Minnesota tended to be higher for the

type of programs for which articulation arrangements would

be expected to occur with program types represented by

respondents.

Respondents from both Minnesota and Virginia were asked

how important they thought it was that nursing education

administrators in their state be concerned with nursing

education articulation at the time of the study. The

responses of both groups to this question were similar as

demonstrated by comparing Figures 5 and 9. Some degree of

importance, ranging from very important to fairly important, was attributed to articulation as a concern for nursing education administrators by one hundred percent of Virginia respondents and by ninety-eight percent of Minnesots respondents. These results indicate that nursing education articulation was viewed as an area of concern for nursing education administrators by both Virginia and Minnesota respondents.

Figures 6 and 10 summarize the responses of study participants when asked to rate their satisfaction with the overall, current status of nursing education articulation in their respective states. In comparing the responses of participants from the two states, it appears that Minnesota respondents are more satisfied than Virginia respondents with the current status of nursing education articulation in their state. Sixty-two percent of Minnesota respondents indicated some degree of satisfaction with the current situation regarding nursing education articulation in Minnesota, whereas forty-four percent of Virginia respondents expressed some degree of satisfaction with the current status of nursing education articulation in Virginia.

All study participants were asked how satisfied they were with articulation practices used in their own nursing programs. In comparing the responses of Virginia and Minnesota respondents to this question, it appears that

Minnesota respondents are more satisfied than Virginia
respondents with articulation practices in the nursing
programs that they represent (Figures 7 and 11). Eighty-one
percent of Minnesota respondents expressed some degree of
satisfaction with articulation practices used in their own
programs, whereas sixty-two percent of Virginia respondents
expressed some degree of satisfaction with similar practices
in their own programs.

Virginia and Minnesota respondents appear to have
similar views about acceptance of the general concept of
academic articulation (Tables 8 and 21). Over ninety
percent of respondents from both states indicated acceptance
of the general concept of academic articulation. Over fifty
percent of respondents from both states indicated acceptance
without qualification of the concept. In addition, over
forty percent of respondents from both states indicated
acceptance of the concept with some qualification.

Study participants from Virginia and Minnesota were
asked their opinions as to whether it is possible to
articulate certain levels of nursing education with other
specific levels of nursing education. A comparison of
responses of Virginia and Minnesota respondents to these
questions revealed that Virginia and Minnesota respondents
share similar views about the articulation of certain levels
of nursing education. For other levels of nursing

education, Virginia and Minnesota respondents have differing
views.

Respondents from Virginia and Minnesota were in
complete agreement with respect to their beliefs about the
articulation of associate degree with baccalaureate degree
nursing education. There was a unanimous positive response
from both Virginia and Minnesota study participants that it
is possible for these two levels of nursing education to be
articulated. This response seems to be especially
significant in view of the historical debate in the nursing
literature regarding the issue as to whether these two
levels of nursing education can be articulated (Alzheimer,
1982; Miller, 1980; Stevens, 1981). Miller's (1980) belief
that the dilemma of program articulation and upward mobility
of nurses cannot be resolved until the associate degree in
nursing is a recognized point of articulation is
particularly relevant. It appears that Virginia and
Minnesota nursing education administrators who participated
in this study have accepted the associate degree as a
definite point for articulation with baccalaureate nursing
education.

Respondents from Virginia and Minnesota had similar
views about the articulation of practical nursing and
associate degree nursing education. Figures 2 and 13
illustrate the views of Virginia and Minnesota respondents
respectively on this question. Ninety-four percent of

Virginia respondents and ninety-three percent of Minnesota respondents believed it possible to articulate practical nursing and associate degree nursing education.

The opinions of Virginia respondents differed from those of Minnesota respondents with respect to the articulation of practical nursing with baccalaureate nursing education. A greater percentage of Virginia respondents (sixty-eight percent) than Minnesota respondents (fifty-seven percent) believed it possible to articulate practical nursing with baccalaureate nursing education (Figures 4 and 15). On the other hand, a greater percentage of Minnesota respondents (eighty-two percent) than Virginia respondents (sixty-three percent) believed it possible to articulate nurse aide education with practical nursing education (Figures 1 and 12).

Virginia and Minnesota respondents also varied in their opinions regarding the articulation of diploma nursing education with other specific nursing program levels. It should be noted that there are no diploma nursing programs remaining in Minnesota. This factor may have influenced the responses of Minnesota participants. While eighty percent of Virginia respondents believed it possible to articulate practical nursing with diploma nursing education, only forty-five percent of Minnesota respondents believed this was possible (Figures 3 and 14). As to whether it is possible to articulate diploma nursing education with

baccalaureate nursing education, one hundred percent of Virginia respondents believed it possible, whereas eighty-nine percent of Minnesota respondents believed it possible.

Respondents from Virginia and Minnesota were asked to select from a list of eight possible benefits of effective articulation practices those that they perceived to be beneficial. In comparing the responses of Virginia respondents (Table 9) with Minnesota respondents (Table 22) on this item, there were few similarities in the responses of the two groups. However, there was one exception. The percentage of respondents selecting "increased financial income for nursing programs" as a possible benefit of effective articulation practices was lowest for both groups of respondents. Evidently, both groups do not see nursing programs benefiting financially from articulation practices.

There sere some similarities of responses between Virginia and Minnesota study participants on the item that asked respondents to rank order a list of five possible concerns regarding the implementation of program articulation (Tables 16 and 23). Of most concern to both groups was "changes required at all levels of nursing education due to variance among programs." Minnesota respondents were more concerned than were Virginia respondents with the suggestion that program articulation encouraged students to get their basic education at

practical, diploma, or associate degree levels; Minnesota respondents ranked it of third highest concern while Virginia respondents ranked it fifth, or of least concern. The possible concern of "loss of uniqueness of individual programs" was ranked of fourth highest concern by both groups. "Infringement on academic freedom and autonomy" was of higher concern to Virginia respondents than to Minnesota respondents; it was ranked of third highest concern by Virginia respondents and as of least concern to Minnesota respondents.

A major concern of respondents from Virginia and Minnesota relative to the implementation of program articulation pertained to the changes that are required in all programs that are a part of articulation efforts. This finding seems to confirm King's (1988) view that the challenges associated with the changes essential to effecting program articulation can be a strong barrier to articulation efforts. Her admonition to include principles and theory of change as a part of any planning effort for articulation would seem to be especially pertinent.

The fifth major question of this study dealt with articulation as goal: "What changes, additions, or deletions to current practices are indicated for academic articulation among nursing education programs in Virginia?" In an attempt to answer this question in part, Virginia respondents were asked to respond to three open-ended

questions. They were asked to state what actions needed to be taken in relation to nursing education articulation in Virginia within the next year and within the next five years of the study. In addition, they were asked to identify specific activities related to articulation that they would be willing to be involved in within the next year.

The opinions expressed by Virginia respondents about what actions needed to be taken within one year following the study clearly imply that respondents desire articulation efforts to progress forward (Table 24). Whereas a few respondents believed there was still a need for information and education about articulation, most of those responding believed that discussion, collaboration, and planning for articulation were needed. Some respondents saw the need to have models for articulation under development, and some believed that a state-wide plan for articulation should be in the process of being developed. Respondents believed that in addition to representatives from each type of nursing education program, representatives from the Virginia Board of Nursing, State Board of Education, Department of Education, the four organizations for nursing education in Virginia, other nursing organizations, and the State Council of Higher Education for Virginia should be involved in the planning for articulation. Almost half of the respondents who stated their opinion about what actions needed to be taken concerning nursing education articulation

in Virginia five years after this study indicated that an articulation plan or model should be in place. Other respondents called for continued study and collaboration about curriculum matters and communication and dialogue among nursing program representatives (Table 25).

Conclusions

The following conclusions were drawn based upon the findings of this study and the interpretations of those findings. Each major question addressed in the study is stated below and is followed by the specific conclusions related to each question.

1. "What are the nature and extent of articulation practices currently in use in nursing programs in Virginia?" Conclusions:

a. Less than half of Virginia nursing programs represented in this study (thirty-five of seventy-three) were reported to have articulation arrangements in effect with one or more other nursing programs.

b. Over half of articulation arrangements reported in effect in Virginia involved associate degree nursing programs.

c. The most common type of program articulation arrangement reported in effect by Virginia respondents required testing of students to validate previous course work in nursing, and the second most common type reported

involved structuring of programs so that further testing and repetition of courses were not necessary.

d. Three distinct regional efforts for program articulation involving three or more individual nursing programs were reported by Virginia respondents.

e. Procedures and activities used by Virginia respondents to establish program articulation arrangements with other nursing programs were similar to those reported in the literature.

f. Procedures used in Virginia nursing programs to evaluate individual students for transfer or advanced placement included both traditional and non-traditional methods.

2. "What are the beliefs and opinions of nursing education administrators in Virginia about academic articulation?" Conclusions:

a. The vast majority of Virginia nursing education administrators participating in this study indicated acceptance of the concept of academic articulation.

b. Virginia nursing education administrators who participated in this study believed that the topic of academic articulation is an important concern for their group.

c. Virginia respondents perceived program articulation arrangements to have specific benefits for students, nursing programs, and faculty.

d. The majority of Virginia respondents believed that it is possible to articulate all levels of nursing education from nurse aide education through baccalaureate education.

e. Virginia respondents believed that control and decision making for program articulation should remain with programs participating in such efforts.

3. "What is the level of satisfaction or dissatisfaction of nursing education administrators in Virginia with current articulation practices in the State?"

Conclusions:

a. More Virginia respondents expressed some degree of dissatisfaction than those who expressed some degree of satisfaction with the current status of nursing education articulation in Virginia.

b. More Virginia respondents expressed some degree of satisfaction with articulation practices used in programs they represented than with the overall status of nursing education articulation in the State.

c. Of nine possible restraining forces operating to impede articulation efforts among nursing programs in Virginia, Virginia respondents perceived differences in philosophical positions held by nurse educators about the nature of educational preparation of students as most significant and a concern about the impact of articulation on the accreditation status of programs as least significant.

d. Of six possible facilitating forces operating for the development of articulation among nursing programs in Virginia, Virginia respondents perceived the nursing shortage as most significant and the entry-level issue as least significant.

e. Of five possible concerns regarding the implementation of program articulation, Virginia respondents expressed most concern with the changes required at all levels of nursing education due to variance of programs and least concern for the possibility that program articulation encourages students to get basic education at practical, diploma, or associate degree levels.

f. The majority of Virginia nursing education administrators who participated in this study indicated that they were amenable to the idea of state-wide planning for nursing education articulation in Virginia.

4. "What are the advantages and disadvantages of regional consortium arrangements for nursing education articulation as perceived by nursing education administrators in a state with such arrangements?"

Conclusions:

a. All Minnesota respondents who represented nursing programs that participated in regional consortium arrangements for articulation believed that such arrangements had resolved to some extent articulation

problems that had existed prior to the implementation of such arrangements.

   b.   Categories of problems reported by Minnesota respondents as having been resolve! to some extent by regional consortium arrangements were problems associated with student transfer and awarding of credit, educational mobility of students, and communication and collaboration among nursing programs.

   c.   Forty-eight percent of Minnesota respondents representing nursing programs that participated in regional consortia for articulation believed that new problems had resulted from implementing such arrangements.

   d.   Of new problems that were reported to have resulted from the implementation of regional consortia efforts for nursing education articulation in Minnesota, problems concerning curriculum matters were reported most frequently.

   e.   The majority of Minnesota respondents who represented programs that participated in regional consortium arrangements for nursing education articulation believed that such arrangements had provided definite benefits to students, nursing programs, and faculty. A lesser proportion of the same group believed that such arrangements presented disadvantages to students, nursing programs, and faculty.

5.   "What changes, additions, or deletions to current

practices are indicated for academic articulation among

nursing education programs in Virginia?"

Conclusions:

     a.   The responses of Virginia participants to questions

as to what actions related to nursing education articulation

needed to be taken in Virginia within one and five years of

this study indicated that participants want articulation

efforts to progress forward.

     b.   Virginia respondents believed that within one year

following this study, discussion, collaboration and

planning for nursing education articulation should be

underway; some believed that models for articulation should

be under development while others believed that a state-wide

plan for articulation should be in the process of

development.

     c.   Virginia respondents believed that in five years

following this study, articulation plans or models should be

in place, that there be continued study and collaboration

about curriculum matters, and that there be continued

communication and dialogue among nursing education program

representatives.

     Several additional conclusions were reached as a result

of comparing the responses of Virginia and Minnesota study

participants on similar questionnaire items.   These included

the following:

a. At the time of this study, it was the opinion of all respondents from Virginia and ninety-eight percent of respondents from Minnesota that nursing education administrators should be concerned with nursing education articulation matters.

b. A larger percentage of respondents from Minnesota indicated a degree of satisfaction with both the overall, current status of nursing education articulation in their state and with articulation practices used in their own programs than did Virginia respondents.

c. Study participants from Virginia and Minnesota believed unanimously that it is possible to articulate associate degree and baccalaureate degree nursing education.

d. Virginia and Minnesota respondents appeared to have similar views about acceptance of the general concept of academic articulation with over ninety percent of both groups indicating acceptance of the concept.

Recommendations for the Improvement of Practice, Including Strategies for Diffusion, Implementation, and Improvement

As a result of the findings and conclusions drawn from this study, five recommendations were offered. The first recommendation was that individuals and groups that provide leadership in nursing education in Virginia continue to address the issues related to nursing education

articulation. Results of this study indicate that there was
a high level of interest about academic articulation among
nursing education administrators in Virginia at the time of
this study. Additionally, nursing education administrators
represented in this study clearly indicated a need to
improve the status of nursing education articulation state
wide. Over a third also expressed a need to improve
articulation methods used in their own nursing programs.

To assist with the implementation of the above
recommendation, a summary of major findings, conclusions,
and recommendations resulting from this study will be sent
to all nursing education administrators who participated in
and requested feedback from this study. The same
information will be sent to representatives of key nursing
groups in Virginia such as the appropriate representatives
of four councils for the four types of nursing education
programs in Virginia, the Virginia Nurses Association, the
Virginia League for Nursing, the Virginia Board of Nursing,
and the State Council of Higher Education for Virginia. The
provision of such information should be instrumental in
maintaining a high level of interest for nursing education
articulation and for the need to improve articulation
practices among nursing education programs in Virginia.

A second recommendation offered was that nursing
education administrators and faculty in Virginia consider

using regional consortium arrangements as a framework for
program articulation. Beginning efforts in this direction
already are underway in the State. The use of regional
consortia for articulation would seem to be compatible with
the philosophical position expressed by the majority of
Virginia respondents in this study, that is, that control
and decision making for articulation should remain with
nursing education programs rather than with a coordinating
body or agency. In addition, responses of nursing education
administrators from Minnesota in this study indicate that
efforts in articulating nursing education in Minnesota using
regional consortia have largely been successful. Although
it is recognized that no two states are alike, both Virginia
and Minnesota have both urban and rural areas, and regional
consortia in effect in Minnesota are organized in both urban
and rural areas.

Another reason for recommending the use of a regional
consortium approach to nursing education articulation in
Virginia was the concern expressed by Virginia nursing
education administrators about the changes required at all
levels of nursing education in order to effect program
articulation. By working with a specific group of nursing
programs in a limited geographic area. the challenges
involved with the differences among individual programs
would be less demanding and more manageable than if efforts
were made to accommodate the differences in all nursing

programs throughout the State. In addition, costs incurred
by a regional effort for articulation would likely be lower
for individual nursing programs than for a larger, state-
wide effort for articulation.

To assist in the implementation of the second
recommendation of this study, nursing education
administrators who participated in this study and
representatives of nursing groups that provide leadership in
nursing education will be provided with information gained
from this study about regional efforts already underway in
Virginia. The opinions of Minnesota respondents as to the
advantages and disadvantages of regional consortium efforts
in that state will also be shared with study participants
from Virginia and with representatives of nursing leadership
groups in Virginia.

A third recommendation of this study was that plans or
models for articulation such as the one recently developed
through the Tidewater Articulation Project be publicized and
shared with others who are interested in developing similar
plans in their regions. Such information could be shared
through the councils representing the four types of nursing
education programs in Virginia and by other nursing
organizations. Persons who participated in such projects
should be encouraged to serve as consultants to other groups
wishing to develop similar plans. Mention of the Tidewater

Articulation Project will be included in the summary of
findings from this study that will be shared with study
participants.

A fourth recommendation was that information regarding
articulation policies and procedures in effect at nursing
programs in Virginia be communicated to persons who counsel
nursing students. Virginia respondents believed the lack of
such information to be the most significant barrier faced by
nursing students wishing to transfer to other nursing
programs. Keeping counselors informed about the nature and
practices of their programs has long been a challenge to
nursing education administrators and faculty. Results of
this study indicate that it remains an on-going challenge,
and faculties need to develop specific strategies to keep
counselors informed about articulation policies, procedures,
and arrangements in effect at their programs.

A fifth recommendation offered as a result of this
study was that Virginia nursing education administrators
actively involve representatives from health care
institutions and agencies in articulation efforts based upon
the premise that effective program articulation can help to
alleviate the nursing shortage. Virginia respondents in
this study believed that the most significant facilitating
force for nursing education articulation in Virginia is the
current nursing shortage. The literature strongly supports
articulation practices as a practical way to increase the

numbers of better qualified nursing personnel (Institute of Medicine, 1983; Dixon, 1989; Green, 1989; Warner and Grohman, 1990; W.K. Kellogg Foundation, 1989). Since the nursing shortage is a shared concern with health care agencies and institutions, regional endeavors for articulation should include representatives from these entities.

Representatives of health care institutions should be approached about sharing the financial costs of articulation efforts. Although the present economic downturn will no doubt increase the challenges associated with obtaining financial support from both public and private sectors, the nursing shortage is projected to continue well into the future. Financial contributions to such efforts should be promoted as an investment for an adequate supply of nurses in the future. Collaborative efforts among various educational and health care institutions such as those demonstrated by Project L.I.N.C. in New York City (Dixon, 1989; Green,1989) should be explored. Linkages such as these are expected to become more common in the future (Moccia, 1989). Advisory groups associated with nursing programs and/or special task forces could be used to plan and facilitate such collaborative efforts.

BIBLIOGRAPHY

Abbott, Frank C. His'er Education Votes Yes for Mobility
     Through Professional Programs. ERIC ED 223 858, 1982.

Agassiz Region Nursing Education Consortium. Four Level
     Nursing Education Program: a consortium approach.
     n.d.

Alzheimer, Veronica C. Allied Health Program Articulation
     from Two-Year Colleges to Four-Year Colleges. ERIC ED
     225 522, 1982.

American Nurses' Association. Education for Nursing
     Practice in the Context of the 1980s. Kansas City,
     Missouri: American Nurses' Association, 1983.

Bailey, Stephen K. "Higher Education American Style." In A
     Nation of Learners. Washington, D.C.: U.S. Government
     Printing Office, 1976.

Baker, Constance M. "Maximizing Mailed Questionnaire
     Responses." Image: The Journal of Nursing
     Scholarship, 17:118-121. Fall, 1985.

Barfield, Elizabeth J., Ruth W. Bell, and Madeline
     Turkeltaub. "The Validation Process." In
     Collaboration for Articulation: RN to BSN. Ed. Mary
     Fry Rapson. New York: National League for Nursing,
     1987.

Barham, Virginia Z. "The Crossroads: Liberal Education
     Versus Technical Education." In Focus on Educational
     Mobility in Nursing. Chicago: American Hospital
     Association, 1984.

Baumgartner, Robert M., and Thomas A. Heberlein. "Recent
     Research on Mailed Questionnaire Response Rates." In
     Making Effective Use of Mailed Questionnaires. Ed.
     Daniel C. Lockhart. San Francisco: Jossey-Bass Inc.,
     Publishers, 1984.

Berger, Renee, and Aida M. Ortiz Ruiz. "The Crucial Role of
     Faculty in Transfer Articulation." In Enhancing
     Articulation and Transfer. Ed. Carolyn Prager. San
     Francisco: Jossey-Bass Inc., 1988.

Best, John W. Research in Education. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1981.

Betz, Cecily Lynn. Realities and Possibilities. ERIC ED 212 334, 1981.

Blatchley, Mary E., and Eleanor Stephan. "RN Students in Generic Programs: What Do We Do with Them?" Journal of Nursing Education, 24:306-308. September, 1985.

Bowles, Joyce G., Lois Lowry, and Madeline Turkeltaub. "Background and Trends Related to Nursing Articulation in the United States." In Collaboration for Articulation: RN to BSN. Ed. Mary Fry Rapson. New York: National League for Nursing, 1987.

Brodd, Donna. Personal Interview. Richmond, Virginia, December 8, 1988.

Brown, Elsa L. "The Economics of Change: Associate Degree Education Today and Tomorrow." Nursing & Health Care, 8:147-150. March, 1987.

Bullough, Bonnie. "You Can't Get There from Here: Articulation in Nursing Education." Journal of Nursing Education, 11:4-10. November, 1972.

Bullough, Vern L., and Bonnie Bullough. History, Trends and Politics of Nursing. Norwalk, Connecticut: Appleton-Century-Crofts, 1984.

Carnegie Commission on Higher Education. Less Time, More Options. New York: McGraw-Hill Book Company, 1971.

Carnegie Commission on Higher Education. The Open-Door College. New York: McGraw-Hill Book Company, 1970.

Cavenar, Mary G. Current Issues Related to AD Nursing: Their Impact on Directors, Faculty and Students. ERIC ED 226 663, 1982.

Cherry, Brenda S. "Education Mobility Opportunities for Registered Nurses in Virginia." Virginia Nurse. 55:6-9. Winter, 1987.

Cobin, Joan, Wilma Traber, and Bonnie Bullough. "A Five-Level Articulated Program." Nursing Outlook, 24:309-313. May, 1976.

Cohen, Arthur M., and Florence B. Brawer. The American
    Community College. San Francisco: Jossey-Bass,
    1984.

Colorado Council on Nursing Education. The Colorado Nursing
    Articulation Model. Denver: Colorado Council on
    Nursing Education, 1990.

Commonwealth of Virginia. The Case for Change. Richmond:
    Commission on The University of The 21st Century, n.d.

Creasia, Joan L. "Reducing the Barriers to RN Educational
    Mobility." Nurse Educator, 14:29-32. July/August,
    1989.

DeBack, Vivien. "Nursing Education". In Nursing's Vital
    Signs. Shaping the Profession for the 1990s. Battle
    Creek, Michigan: W.K. Kellogg Foundation, 1989.

Dillman, Don A. Mail and Telephone Surveys: The Total
    Design Method. New York: John Wiley & Sons, 1978.

Dixon, Alma Yearwood. "Project L.I.N.C. An Innovative Model
    of Educational Mobility." Nursing & Health Care,
    10:397-402. September, 1989.

Donaho, Barbara A. "Detours to Educational Mobility: A
    National Perspective." In Focus on Educational
    Mobility in Nursing. Chicago: American Hospital
    Association, 1984.

Durrett, Nancy. Telephone Interview. Richmond, Virginia,
    January 31, 1989.

Dustan, Laura C. 'Needed: Articulation Between Nursing
    Education Programs and Institutions of Higher
    Learning." Nursing Outlook, 18:34-37. December, 1970.

Falco, Joyce L. Letter to author. 24 August, 1990.

Fitzpatrick, Sister M. Fenton Joseph. The Problem of
    Nursing Education: Articulation. ERIC ED 211 157,
    1931.

Florida State University, Tallahassee. Catalogue of
    Innovative Development: Innovative Programs in
    Vocational Education. ERIC ED 206 821, 1981.

Forni, Patricia R. "Changing Needs of Society and the
    Response of Nursing Education." Journal of Nursing
    Education, 25:258-260. June, 1986.

Fralic, Maryann F. "Issues Surrounding RN/BSN Education: A View From Nursing Service." Journal of Professional Nursing. 5:64,113. November, 1989.

Governor's Committee on Nursing. Nursing in Virginia. Richmond, Virginia: State Council of Higher Education for Virginia, 1969.

Green, Barbara A. "New York Project Link, Aides to LPNs to RNs." Journal of Practical Nursing, 39:35. June, 1939.

Gulledge, Earl N. Health Education Consortium. Articulated Nursing Education Program. ERIC ED 230 686, 1981.

Hafer, Nalene, and Steve Davis. Development of a Career Mobility Program in Nursing. ERIC ED 262 830, 1985.

Haase, Patricia. Pathways to Practice. Atlanta: Southern Regional Education Board, 1982.

Hosch, India. Educational Progression of LPNs to RN Programs Project Report. ERIC ED 274 786, 1986.

Huber, Vida S. Telephone Interview. Harrisonburg, Virginia, July 13, 1989.

Huber, Vida S. Letter to author. 3 September, 1990.

Institute of Medicine. Nursing and Nursing Education: Public Policies and Private Actions. Washington, D.C.: National Academy Press, 1983.

Isaac, Stephen, and William B. Michael. Handbook in Research and Evaluation. San Diego, California: EdITS Publishers, 1984.

Jackson, Marie, and Norman D. Brown. The Sears-Roebuck Foundation Partnership Development Fund Keep America Working Project to Develop An Articulated Nursing Education Program: Final Project Report. ERIC ED 311 996, 1989.

Katsorelos, Cynia. Telephone Interview. Richmond, Virginia, May 10, 1989.

Kelly, Lucie Y. "Open Curriculum: What and Why." American Journal of Nursing, 74:2232-2238. December, 1974.

Kelly, Lucie Y. "The Impact of Social Trends and Legislative Action on Open Curriculum Practices in Nursing." In Open Learning and Career Mobility in Nursing. Ed. Carrie Lenburg. St. Louis: The C.V. Mosby Co., 1975.

Kentucky State Council on Higher Education. Report of 1981 Nursing Education Program Survey. Kentucky Nursing Education Project. ERIC ED 226 673, 1982.

King, Elizabeth C. "Winning Together: Negotiating Transfer Agreements in Allied Health." In Enhancing Articulation and Transfer. Ed. Carolyn Prager. San Francisco: Jossey-Bass Inc., 1988.

Kinsinger, Robert E. "Where in Health Are Community Colleges?" Community and Junior College Journal, 49:15-21. May, 1979.

Kintzer, Frederick C. Middleman in Higher Education: Improving Articulation Among High Schools, Community Colleges and Senior Institutions. San Francisco: Jossey-Bass, 1973.

Kintzer, Frederick C. "Statewide Articulation and Transfer." Community and Junior College Journal, 55:35. May/June, 1985.

Kintzer, Frederick C., and James L. Wattenbarger. The Articulation/Transfer Phenomenon: Patterns and Directions. Washington, D.C.: American Association of Community and Junior Colleges, 1985.

Kintzer, Frederick C., and Richard C. Richardson. "The Articulation/Transfer Phenomenon." Community, Technical, and Junior College Journal, 56:17-21. February/March, 1986.

Kirkwood Community College, Cedar Rapids, Iowa. Advanced Placement Nursing. ERIC ED 124 798, 1976.

Lenburg, Carrie B., ed. Open Learning and Career Mobility in Nursing. St. Louis: The C. V. Mosby Company, 1975.

Lockhart, Daniel C. Making Effective Use of Mailed Questionnaires. San Francisco: Jossey-Bass Inc., 1984.

Lombardi, J.A. The Decline of Transfer Education. ERIC ED 179 273, 1979.

Long, Thomas J., John H. Convey, and Adele R. Chwalek. Completing Dissertations in the Behavioral Sciences and Education. San Francisco: Jossey-Bass, 1985.

Lynn, Mary R. "Determination and Qualification of Content Validity." Nursing Research, 35:382-385. November/December, 1986.

Lysaught, Jerome P. Action in Affirmation: Toward An Unambiguous Profession of Nursing. New York: McGraw-Hill Book Company, 1981

Lysaught, Jerome P. An Abstract for Action. New York: McGraw-Hill Book Company, 1970.

Maryland State Board for Community Colleges, Annapolis, Maryland. Maryland Community Colleges 1987 Program Evaluations. ERIC ED 295 699, 1988.

McKillip, Jack. "Applying Attitude Theories to the Return of Mailed Questionnaires." In Making Effective Use of Mailed Questionnaires. Ed. Daniel C. Lockhart. San Francisco: Jossey-Bass Inc., 1984.

Meinert, Charles W. "Articulation: United States." In The International Encyclopedia of Higher Education. Ed. Asa S. Knowles. San Francisco: Jossey-Bass, 1 7.

Miller, Marilee A. "Program Articulation in Nursing." College & University, 55:276-282. Spring, 1980.

Millet, John D. Conflict in Higher Education. San Francisco: Jossey-Bass, 1984.

Minnesota Higher Education Coordinating Board. A Progress Report on the Implementation of Articulated Nursing Education in Minnesota. St. Paul: Minnesota Higher Education Coordinating Board, 1983.

Minnesota Higher Education Coordinating Board. Review and Recommendations on the Articulation of Nursing Education in Minnesota. St. Paul: Minnesota Higher Education Coordinating Board, 1982.

Moccia, Particia. "1989: Shaping a Human Agenda for the Nineties." Nursing & Health Care, 10:15-17. January, 1989.

Moore, Barbara Ann. "Articulation in Nursing Education."
    Ph.D. dissertation, University of Washington, 1977.

Morrisey, Kevin L. "The Nursing Crunch Is On." Nursing &
    Health Care, 8:198. March, 1987.

National Commission on Nursing. Summary Report and
    Recommendations. Chicago: The Hospital Research and
    Educational Trust, 1983.

National League for Nursing. Position Statement on Awarding
    Credit for Previous Nursing Knowledge and Competency.
    New York: National League for Nursing, 1987.

National League for Nursing. Position Statement on
    Educational Mobility. New York: National League for
    Nursing, 1982.

National League for Nursing. State Approved Schools of
    Nursing R.N. 1987. New York: National League for
    Nursing, 1987.

National League for Nursing. The Open Curriculum in Nursing
    Education, 1970. New York: National League for
    Nursing, 1970.

National League for Nursing. The Open Curriculum in Nursing
    Education, 1976. New York: National League for
    Nursing, 1976.

Nelson, Beverly J. "The Articulation and Educational Trend
    for Associate and Baccalaureate Nursing Degrees."
    Doctoral dissertation, Iowa State University, 1981.

New York State Education Department Office of the
    Professions. Educational Mobility in Nursing--LPN to
    RN. ERIC ED 223 858, 1982.

Notter, Lucille E., and Marguerite Robey. The Open
    Curriculum in Nursing Education. New York: National
    League for Nursing, 1979.

Peterson, Carol J. Willts. "Overview of Issues in Nursing
    Education." In The Nursing Profession A Time to
    Speak. Ed. Norma L. Chaska. New York: McGraw-Hill
    Book Company, 1983.

Prager, Carolyn, ed. Enhancing Articulation and Transfer.
    San Francisco: Jossey-Bass Inc., 1988a.

Prager, Carolyn. "The Other Transfer Degree." In Enhancing
    Articulation and Transfer. Ed. Carolyn Prager. San
    Francisco: Jossey-Bass Inc., 1988b.

Primm, Peggy L. "Defining and Differentiating ADN and BSN
    Competencies." Issues, 7:1-7. Number 1, 1986.

Rapson, Mary Fry. Collaboration for Articulation: RN to
    BSN. New York: National League for Nursing, 1987.

Rapson, Mary Fry, Lesley A. Perry, and Barbara Parker. "The
    Relationship between Selected Educational Outcomes of
    Senior RN-to-BSN Students and Their Choice of Advanced
    Placement Options Available in the Maryland Nursing
    Articulation Model." Journal of Professional Nursing,
    6:113-120. March-April, 1990.

Rapson, Mary Fry, and Loretta M. Richardson. "Role of the
    Governor's Task Force in Developing the Model." In
    Collaboration for Articulation RN to BSN. Ed. Mary Fry
    Rapson. New York: National League for Nursing, 1987.

Rivera, Rosalind T. "Open Curriculum in Maryland Associate
    Degree Nursing Programs." Ed.D. dissertation,
    University of Southern California, 1982.

Rosbach, Ellen M. Development of Curriculum Content for a
    Unique Career Ladder Multi-Entry/Multi-Exit Nursing
    Program. ERIC ED 248 343, 1983.

Rosettie, Gail. Evaluating Cuirriculum to Foster Allocation
    of Credit for Prior Achievement. ERIC ED 223 858,
    1982.

Schein, Edgar H. Professional Education. New York: McGraw-
    Hill Book Company, 1972.

Seidl, Ann H. "The New Non-Traditional Student in
    Nursing." Journal of Nursing Education, 29:13-19.
    January, 1990.

Shane, Donea L. Returning to School. A Guide for Nurses.
    Englewood Cliffs, New Jersey: Prentice-Hall, Inc.,
    1983.

Spink, Linda. "ADN to BSN: Recommendations for the
    Articulation of Nursing Education in Southeastern
    Massachusetts." Ph.D. dissertation, Boston College,
    1984.

Staples, Priscilla Charlotte. Educational Mobility: A descriptive survey of nursing education in Maine. Dissertation Abstracts International. 50:4456-B. April, 1990.

Stevens, Barbara J. "Program Articulation: What It Is and What It Is Not." Nursing Outlook, 29:700-706. December, 1981.

Sudman, Seymour, and Norman M. Bradburn. Asking Questions. San Francisco: Jossey-Bass, 1985.

Sudman, Seymour, and Norman M. Bradburn. "Improving Mailed Questionnaire Design." In Making Effective Use of Mailed Questionnaires. Ed. Daniel C. Lockhart. San Francisco: Jossey-Bass Inc., 1984.

Sweat, Gwendolyn. Telephone Interview. Norfolk, Virginia, July 13, 1989.

Taira, Frances Snow. "A Comparison of the Perceptions of Community College and Baccalaureate Nursing Faculty Relative to Articulation in Nursing Education." Ed.D. dissertation, Northern Illinois University, 1980.

Thomas, Gary. "Transfer Relationships Between Two-Year and Four-Year Technological Programs." In Enhancing Articulation and Transfer. Ed. Carolyn Prager. San Francisco: Jossey-Bass Inc., 1988.

Thomas, Kenneth T. "Impact of Arkansas Act 88 on Statewide Nursing Education." Ed.D. dissertation, University of Arkansas, 1985.

Thomas, K. Jackson, and H. Kathy Thomas. "Articulation of Credits: Continuing Education for Career Ladder Upward Mobility in Nursing." Journal of Continuing Education in Nursing, 19:103-103. May/June, 1988.

Thomas, K. Jackson, and H. Kathy Thomas. "Legislated Articulation of Credits: Initial Impact of Mandated Career Upward Mobility in Arkansas Nursing Programs." Journal of Nursing Education, 26:78-81. February, 1987.

Tidewater Regional Project Task Force for Articulation and Coordination of Nursing Education. "April 1990 Update." Photocopy, n.d.

U.S. Department of Health, Education, and Welfare. A Nation
     of Learners. Washington, D.C.: U.S. Government
     Printing Office, 1976.

Virginia Association of Colleges of Nursing. "Working
     Paper." March, 1990.

Virginia Nurses' Association Task Force on Education.
     "Final Report on Nursing Education in Virginia," 1984.

Warner, Barbara J., and Joyce Grohman. "13 Ways to Ease the
     Nursing Shortage." ADvancing CLINICAL CARE, 5:28.
     Nov/Dec, 1990.

Waters, Verle. Transforming Articulation Barriers in
     Nursing. ERIC ED 307 919, 1989.

Williams, Clara, and Karen Gallimore. "Educational Mobility
     in Nursing: LPN to RN." Nurse Educator, 12:18-21.
     July/August, 1987.

Wilson, Janie Menchaca, Doris Pierce, and Anna S. Leach.
     Competency Based Nursing Career Ladder Model. ERIC ED
     285 016, 1987.

W.K. Kellogg Foundation. Nursing's Vital Signs. Shaping
     the Profession for the 1990s. Battle Creek, Michigan:
     W.K. Kellogg Foundation, 1989.

Woodbury, Jr., Kenneth B. "Articulation and Dual
     Admissions." In Enhancing Articulation and Transfer.
     Ed. Carolyn Prager. San Francisco: Josser-Bass Inc.,
     1988.

Wrenn, Ann. Telephone Interview. Emporia, Virginia, May
     10, 1989.

Zusy, Mary Lloyd. "RN to BSN: Fitting the Pieces
     Together." American Journal of Nursing, 86:394-397.
     April, 1986.

APPENDIX A

COVER LETTER AND QUESTIONNAIRE SENT TO VIRGINIA

PARTICIPANTS

3613 Perthshire Lane
Colonial Heights, VA 23834
March 23, 1990

[1]
[2]
[3]
[4]
[5]
[6]   [7]

Dear [8]:

For my doctoral research in Higher Education, I am conducting a
study on academic articulation among nursing programs in Virginia and
Minnesota. Major purposes of the Virginia study are to identify
current articulation practices in nursing programs in Virginia and to
identify the perceptions held by nursing education administrators
about articulation practices, including the degree of satisfaction or
dissatisfaction with the current status of nursing education
articulation in Virginia. The Minnesota aspect of my investigation
involves a survey of nursing education administrators in Minnesota to
identify their perceptions of nursing education articulation in their
state.

I am hopeful that the results of my study will provide
documentation of current nursing education articulation practices in
Virginia nursing programs. Other information resulting from the
study should be useful to nursing educators and others who are
interested in the current and future status of nursing education
articulation in Virginia.

I will appreciate your completing the enclosed questionnaire and
returning it in the enclosed self-addressed, stamped envelope by
April 16, 1990. The questionnaire should take about thirty minutes
to complete. All information provided by respondents will be handled
confidentially. Names of respondents will not be associated with
their specific responses. However, in order to document articulation
practices now in effect throughout the State, names of nursing
programs may be used in reporting the study results.

As a token of my appreciation for your participation in this
study, you may indicate on the last page of the questionnaire whether
you wish to receive a summary of the findings of the study. In
addition, for each questionnaire returned to me. a contribution will
be made to the Virginia League for Nursing scholarship fund which, as
you know, is a source of financial assistance for Virginia nursing
students.

Thank you for your assistance!

Sincerely,

Ruth H. Glick RN, MS, EdS

ACADEMIC ARTICULATION: NURSING PROGRAMS IN VIRGINIA
QUESTIONNAIRE

3/90

```
┌─────────────────────────┐
│  Quest. #  _____     │
│     Type  _____      │
└─────────────────────────┘
```

DIRECTIONS: Circle the one number that corresponds to the option
that best represents your response to the question.   Specific
directions will be given when more than one number may be circled.
Space is provided for a written response when selecting the "Other
(specify)" option.

SECTION I.   The questions in this section relate to articulation
practices at your nursing program.   Part A. deals with program
articulation practices, and Part B. deals with individual student
articulation practices.

A.   Program Articulation

For purposes of this study, program articulation is defined as
"coordinated efforts among two or more academic programs to structure
their programs so that students may earn and transfer credit from one
program to another with minimum repetition of learning experiences".

1.   According to the above definition, does your nursing program
     currently have program articulation agreements with one or more
     other nursing programs?

                                                      Yes . . . 1
                                                      No . . . 2

          (If "no", please skip to question number 10;
               if "yes", go to question number 2.)

2.   With how many different nursing programs does your nursing
     program have articulation agreements?   _____

     Please give name of institution & type of program (PN, ADN, DIP,
     BS Generic, BS Completion) for each agreement:

     _____   _____
     Name of Institution   Type of Program

     _____   _____
     Name of Institution   Type of Program

     _____   _____
     Name of Institution   Type of Program

     _____   _____
     Name of Institution   Type of Program

     _____   _____
     Name of Institution   Type of Program

     _____   _____
     Name of Institution   Type of Program

     (Attach a separate page if more space is needed.)

3. Of the following types of articulation arrangements, which most closely characterize(s) the arrangement(s) in effect at your program? (Circle as many numbers as apply.)

Two or more nursing programs are structured so that graduates from one program enter another program with advanced standing without further testing or repetition of previous courses . . 1

An arrangement whereby graduates from one nursing program may receive credit for previously completed general education courses but must take tests to validate or to earn credit for previous nursing courses when entering another nursing program 2

An arrangement whereby graduates from one nursing program receive some credit for previously completed general education and nursing courses and may "test out" of additional courses when entering another nursing program 3

The structuring of two or more nursing programs so that students are admitted to more than one program at a time (joint or dual admission), and students are assured admission to a second program pending satisfactory completion of a first program . . 4

Other (specify) _____
_____ 5

4. Is your nursing program a member of a consortium or a cooperative arrangement whereby <u>three or more</u> institutions are working <u>together</u> in a common venture for nursing education articulation?

No . . . 1
Yes . . . 2
(If "yes", please give name of consortium and/or names of nursing programs involved.)

_____
_____

5. Was a specific articulation model (for example, the Orange County Beach Project in California or the University of Iowa plan) used in the development of the program articulation arrangement(s) in effect at your program?

No 1
Don't know . . . 2
Yes 3
(If "yes", please give name or source of model.)

_____
_____

6. Which of the following procedures or activities were used in establishing the program articulation agreement(s) in effect at your program? (Circle the number for as many as apply.)

Review of philosophies of participating programs 1

Review of knowledge base of students (pre-requisites)
    required by participating programs 2

Analysis of program objectives of participating programs . . . 3

Analysis of course objectives of participating programs . . . 4

Analysis of unit objectives of participating programs 5

Study of communication skills required of students 6

Study of leadership skills required of students 7

Study of psycho-motor skills of students 8

Study of exit competencies of graduates 9

Use of transition or bridge course(s) to cover differences in
    and/or depth of coverage of curriculum content between or
    among programs involved 10

Other (specify) _____

_____11

7. What was the approximate length of time taken (from initial planning to implementation) to establish the program articulation agreement(s) now in effect at your program? If more than one agreement is in effect, approximate the average length of time for all agreements.

                                    1-6 months 1
                                    7-12 months 2
                                    13-18 months 3
                                    19-24 months 4
                                    other (specify)_____ 5

8. Approximately how many of your current students (nursing majors) are covered by the program articulation arrangements(s) now in effect at your program? _____

9. What specific benefits do <u>students</u> derive from the program articulation arrangement(s) now in effect at your nursing program? (Circle all numbers that apply.)

Reduced time to complete a program 1

Reduced financial cost 2

Reduced need to repeat courses 3

Reduced need to take tests to validate previous learning . . . 4

Other (specify) _____ 5

10. If your program has not established articulation agreements with other nursing programs, are plans underway to establish such arrangements with one or more other nursing programs within the next year?

                              No 1
                              Yes 2
                              NA 3

B. <u>Individual Student Articulation</u>

The next several questions pertain to practices used in your program for handling transfer credit and advanced placement for individual nursing students seeking admission to your nursing program who would not be covered by a program articulation agreement.

11. What activities are carried out when evaluating <u>nursing courses</u> taken at other institutions for transfer to your program? (Circle all numbers that apply.)

Comparison of course descriptions 1

Comparison of course content 2

Comparison of course requirements and assignments 3

Comparison of textbooks used 4

Accreditation status of programs at which courses
    were taken 5

Other (specify) _____ 6

Don't accept direct transfer credits for nursing 7

12. Describe the extent to which the following practices are used in your program when evaluating individual students for transfer or advanced placement. (Circle one number for each item.)

	not used & not planned	planned but not used	used
Transfer of comparable credits from other institutions for non-nursing courses	1	2	3
Transfer of comparable credits from other institutions for nursing courses	1	2	3
Challenge exams (teacher-made) in non-nursing courses for advanced placement	1	2	3
Challenge exams (teacher-made) in nursing courses for advanced placement	1	2	3
Standardized exams in non-nursing courses for advanced placement . .	1	2	3
Standardized exams in nursing for advanced placement	1	2	3
Personal portfolio evaluation for advanced placement in non-nursing courses	1	2	3
Personal portfolio evaluation for advanced placement in nursing courses	1	2	3
Bridge/transition courses, non-nursing	1	2	3
Bridge/transition courses, nursing .	1	2	3
Separate track for licensed students	1	2	3

13. Please specify the maximum number of credits or hours that a student may receive/earn in your program by the following methods.

Direct transfer, non-nursing . . _____

Direct transfer, nursing . . . . _____

Challenge exams, non-nursing . . _____

Challenge exams, nursing . . . . _____

Standardized exams, non-nursing . _____

Standardized exams, nursing . . . _____

Clinical performance exams . . . _____

Other (specify)_____

14. What is the total number of hours that a student may be granted by direct transfer, by examinations, or by other articulation methods that count toward the total number of hours required for graduation? _____

Please indicate if these are semester ____, quarter ____, or clock ____ hours.

15. Which of the following standardized exams are used in your program to assess students' previous knowledge for purposes of advanced placement? (Choose as many as apply.)

NLN Nursing Mobility Profile Tests . . 1

NLN Nursing Achievement Tests 2

NLN Achievement Tests, Non-nursing . . 3

ACT PEP, Nursing 4

ACT PEP, Non-nursing 5

New York State College Proficiency
Exams, Nursing 6

CLEP, Non-nursing 7

Other (specify) _____ 8

None of the above 9

16. What procedures are used in your program to assess or validate clinical skills of students who seek advanced placement? (Circle a number for all that apply.)

    Clinical performance exam in an actual clinical setting . . 1

    Clinical performance exam in a laboratory setting 2

    Observation and assessment of clinical performance in a clinical course 3

    Performance on written or media-presented clinical simulations 4

    Other (specify) _____ 5

    Do not use clinical performance assessment/validation procedures 6

SECTION II. The next group of questions pertains to your beliefs and opinions as a nursing educator about academic articulation in general. Please be as candid as possible; your name will not be associated with any of your responses.

17. Of the following positions concerning academic articulation in general, which <u>one</u> most closely characterizes your personal position?

    Accept the general concept of academic articulation 1

    Accept the general concept of academic articulation but have definite beliefs about how it should & should not be practiced 2

    Accept the general concept of academic articulation but have some reservations about its use 3

    Oppose the general concept of academic articulation 4

    Oppose academic articulation because it may interfere with the quality of education 5

    Oppose academic articulation because it may interfere with the uniqueness of educational programs/institutions . . 6

    Oppose academic articulation because it interferes with academic freedom and autonomy 7

    Other opinion (specify) _____
_____. . 8

18. In your opinion, is it possible to articulate nurse aide
     education with practical nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

19. In your opinion, is it possible to articulate practical nursing
     education with associate degree nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

20. Do you believe it is possible to articulate practical nursing
     education with diploma nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

21. Do you believe it is possible to articulate practical
     nursing education with baccalaureate nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

22. Do you believe it is possible to articulate diploma nursing
     education with baccalaureate nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

23. Do you believe it is possible to articulate associate degree
     nursing education with baccalaureate nursing education?

                                        Yes 1
                                        No 2
                                        Not sure 3

24. Which of the following do you perceive to be a benefit of effective articulation practices among nursing education programs? (Circle a number for as many as apply.)

Increased student enrollments 1

Increased pool of nurses for employment 2

Increased numbers of better prepared nurses 3

Increased pool of potential graduate students 4

Increased financial income for nursing programs 5

Increased collaboration among nursing educators & institutions 6

Increased efficiency related to economic, social, and opportunity costs 7

Increased positive image of the nursing profession 8

None of the above 9

Other (specify) _____ 10

Articulation arrangements may be developed in a variety of ways. Two common ways are by voluntary agreements among individual programs or institutions and by state-wide planning. Your opinion regarding the advantages and disadvantages for students of each of these methods is elicited below.

25. For each of the following characteristics of voluntary articulation arrangements among individual nursing programs, indicate the extent to which you see each as helpful or not helpful to students who seek to advance to higher levels of nursing education.

	not helpful			helpful	
A wide range of diverse articulation practices in use in nursing programs throughout a particular state	1	2	3	4	5
Arrangements are planned primarily to meet the specific educational needs of students enrolled only in participating programs	1	2	3	4	5
Control & decision making for articulation are retained by the participating programs	1	2	3	4	5

(CONTINUED ON BACK OF PAGE)

26. For each of the following characteristics of articulation arrangements developed by <u>state-wide planning</u>, please indicate the extent to which you see each as helpful or not helpful to students who seek to advance to higher levels of nursing education.

	<u>not helpful</u>			<u>helpful</u>	
Articulation practices in nursing programs throughout a state tend to be similar	1	2	3	4	5
Arrangements are planned to meet the educational needs of students at different program levels rather than the educational needs of students at specific institutions	1	2	3	4	5
Standardized core courses are usually specified for some levels of curricula	1	2	3	4	5
Control & decision making for articulation are centralized in a coordinating body or agency	1	2	3	4	5

27. Please rate your knowledge level about nursing articulation practices in the following types of programs throughout Virginia.

	<u>Low</u>				<u>High</u>
Baccalaureate . . .	1	2	3	4	5
Associate degree .	1	2	3	4	5
Diploma	1	2	3	4	5
Practical	1	2	3	4	5

28. In your opinion, how important is it that nursing education administrators in Virginia be concerned with nursing education articulation at this time?

Very important 1
Important 2
Fairly important . . . 3
Fairly unimportant . . 4
Unimportant 5
Very unimportant . . . 6

SECTION III. The questions in this section relate to your level of satisfaction or dissatisfaction with the current status of academic articulation among nursing programs in Virginia.

29. How satisfied are you with the overall, current status of nursing education articulation in Virginia?

Very satisfied 1
Satisfied 2
Somewhat satisfied 3
Somewhat dissatisfied 4
Dissatisfied 5
Very dissatisfied 6

30. How satisfied are you with articulation practices now used in the nursing program at your own institution?

Very satisfied 1
Satisfied 2
Somewhat satisfied 3
Somewhat dissatisfied . . . 4
Dissatisfied 5
Very dissatisfied 6

31. What do you perceive to be major barriers for nursing students who wish to transfer to or to seek educational mobility at other nursing programs in Virginia?

(Rank order your selections by placing a "1" in the blank to the right of the item you consider to be the most significant barrier, a "2" in the blank beside the next most significant barrier, and so forth.)

Rank Order:

Differences in articulation practices among
nursing programs . . . . _____

Students' lack of knowledge about existing articulation
arrangements & transfer opportunities . . . . _____

Lack of knowledge among persons counseling students
about existing articulation arrangements
among nursing programs . . . . _____

Negative perceptions of students relative to taking
exams to validate previous learning . . . . _____

Limited number of credit hours that may be transferred
to other programs . . . . _____

Other (specify) _____ _____

32. Which of the following do you perceive to be <u>restraining</u> forces currently operating to impede effective articulation among nursing education programs in Virginia?

(Rank order your selections by placing a "1" in the blank to the right of the force you consider to be most significant, a "2" in the blank to the right of the force you consider to be next most significant, and so forth.)

Rank Order:

Costs in terms of money, energy, and time necessary to develop articulation plans . . . . _____

Political process & compromise necessary to arrive at decisions acceptable to all parties involved . . . . _____

Challenges associated with validating previous knowledge and skills of prospective students . . . . _____

Lack of a working network of communication and collaboration for nurse educators from different types of programs . . . . _____

Differences in philosophical positions among nurse educators about the nature of educational preparation of students . . . . _____

Lack of mutual respect among faculty from different educational sectors . . . . _____

Overt and covert resistance to change among nursing educators . . . . _____

Concern about the impact that articulation practices might have on accreditation status of programs . . . . . . _____

Desire of nurse educators to preserve their own program's identity, mission, goals, and practices . . . . _____

Other (specify)_____ _____

33. Which of the following do you perceive to be <u>facilitating</u> forces currently operating for the development of effective articulation among nursing education programs in Virginia?

(Rank order your selections by following the same instructions in the preceding question.)

Rank Order:

The degree of interest & concern among nurse
  educators for better articulation . . . . _____

Fragility of student enrollments in nursing programs . . _____

The nursing shortage . . . . _____

Changing demographics of students & the needs of
  non-traditional students . . . . _____

The entry-level issue . . . . _____

Public concern with economic, social, and personal
  opportunity costs of failure to articulate programs . _____

Other (specify) _____ _____

34. As a nursing education administrator, which of the following are concerns of yours regarding the implementation of <u>program</u> articulation?

(Rank order your selections with a "1" being of most concern, a "2" being of next most concern, and so forth.)

Rank order:

Interference with policies & procedures of
  individual nursing programs . . . . _____

The changes required at all levels of nursing
  education due to variance among programs . . . . _____

Loss of uniqueness of individual programs . . . . _____

Infringement on academic freedom & autonomy . . . . . . _____

Encouragement of students to get basic education at
  practical, diploma or associate degree programs . . . _____

Other (specify) _____ _____

35. How amenable are you to the idea of state-wide planning for nursing education articulation in Virginia?

>   Very amenable 1
>   Somewhat amenable 2
>   Neutral 3
>   Somewhat against 4
>   Very much against 5

36. In your opinion, what actions need to be taken in relation to nursing education articulation in Virginia . . .

a. within the next year?

    Action:

    Persons, agencies, institutions that should be involved:

b. within the next five years?

    Action:

    Persons, agencies, institutions that should be involved:

37. In what specific articulation activities would you be willing to be involved within the next year to improve nursing education articulation in Virg

SECTION IV. The remainder of the questions are related to characteristics of your nursing program.

38. Please classify your nursing program by type.

Baccalaureate, generic 1
Baccalaureate, upper-division only . 2
Associate degree 3
Diploma 4
Practical 5

39. Please classify your program with respect to financial support.

Public 1
Private 2

40. Is your program currently accredited by NLN?

Yes 1
No 2

41. As the respondent to this questionnaire, please indicate your status from the following:

Program head, director, chairman, or dean for nursing . . . 1

Designee of program head, director, chairman, or dean for nursing (Please give your title.) _____ 2

ADDITIONAL COMMENTS: Please use this space and the back of this page to clarify your responses to specific items of the questionnai e or to comment about other areas related to articulation not included in this survey.

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

If you wish to receive a summary of the findings of this survey, please supply your name and address below.

_____   _____
Name   Institution

_____   _____ _____ _____
Address   City   State   Zip

APPENDIX B

COVER LETTER AND QUESTIONNAIRE SENT TO

MINNESOTA PARTICIPANTS

3613 Perthshire Lane
Colonial Heights, VA 23834
March 23, 1990

{1}
{2}
{3}
{4}
{5}
{6}   {7}

Dear {8}:

     For my doctoral research in Higher Education, I am conducting a
study on academic articulation among nursing programs in Virginia and
Minnesota. Major purposes of the Virginia study are to identify
current articulation practices now in effect in nursing programs in
Virginia, to assess the perceptions held by nursing education
administrators in Virginia about articulation in general and about
the current status of nursing education articulation in Virginia.
The purpose of the Minnesota aspect of the study is to identify the
perceptions held by nursing education administrators in Minnesota
about nursing education articulation in Minnesota and nursing
education articulation in general.

     A brief questionnaire, which should take about fifteen minutes
to complete, is enclosed. I will appreciate your completing it and
returning it in the enclosed self-addressed, stamped envelope by
April 16, 1990. All responses on the questionnaire will be handled
confidentially. Responses will not be associated with the names of
respondents or to the nursing programs that they represent.

     Thank you for assisting with the study of this important topic
of articulation within the context of nursing education! As a small
token of my appreciation for your participation in this survey, you
may indicate whether you wish to receive a summary of the findings of
the survey on the last page of the questionnaire. In addition, for
each questionnaire returned to me, a contribution will be made to the
scholarship fund to be developed by the Nursing Outreach Task Force
of the Minnesota State University System to assist RNs to continue
their nursing education.

                         Sincerely,

                         Ruth H. Glick, RN, MS

ACADEMIC ARTICULATION: NURSING PROGRAMS IN MINNESOTA
QUESTIONNAIRE

3/90

DIRECTIONS: Circle the one number corresponding to the option that
best represents your response to the question.   Specific directions
will be given when more than one number may be circled.   Space is
provided for written responses when selecting the "Other (specify)"
option.

SECTION I.   The questions in this section of the survey are intended
to elicit your perceptions as a nursing education administrator about
nursing education articulation in Minnesota.

1.   Is your nursing program a participant in a regional consortium
     for nursing education articulation?

                                          Yes . . .   1
                                          No . . .   2

          If "no", please skip to question number 7.
          If "yes", please proceed to question number 2.

2.   In your opinion, to what extent has the regional consortium
     arrangement for nursing education articulation resolved problems
     related to articulation experienced prior to its implementation?

                    To a great extent 1
                    To some extent 2
                    To a limited extent 3

3.   In your opinion, what is the most significant problem related
     to articulation that has been resolved by the regional consortium
     arrangement of which your program is a participant?   (Please be
     as brief & concise as possible.)

4. Have new problems related to articulation developed as a result
   of implementing the regional consortium arrangement for nursing
   education?

$$\begin{array}{ll} \text{No} & 1 \\ \text{Not sure} & 2 \\ \text{Yes} & 3 \end{array}$$

(If "yes", please describe one problem that has
developed in your program as a result of the plan.)

5. Have there been major benefits of the regional consortium
   arrangement for nursing education articulation for:

   a. students?

   $$\begin{array}{ll} \text{No} & 1 \\ \text{Not sure} & 2 \\ \text{Yes} & 3 \end{array}$$

   (If "yes", list one major benefit for students.)

   b. nursing programs?

   $$\begin{array}{ll} \text{No} & 1 \\ \text{Not sure} & 2 \\ \text{Yes} & 3 \end{array}$$

   (If "yes", list one major benefit for programs.)

   c. faculty?

   $$\begin{array}{ll} \text{No} & 1 \\ \text{Not sure} & 2 \\ \text{Yes} & 3 \end{array}$$

   (If "yes", list one major benefit for faculty.)

6. Have there been major <u>disadvantages</u> of the regional consortium arrangement for nursing education articulation for:

    a. <u>students?</u> . . . . No 1
                                             Not sure 2
                                             Yes 3
        (If "yes", list one major disadvantage for students.)

    b. <u>nursing programs?</u> . . . . . . No 1
                                             Not sure 2
                                             Yes 3
        (If "yes", list one major disadvantage for programs.)

    c. <u>faculty?</u> . . . . No 1
                                             Not sure 2
                                             Yes 3
        (If "yes", list one major disadvantage for faculty.)

SECTION II. The questions in this section pertain to your perceptions about several general aspects of academic articulation. For purposes of this study, program articulation is defined as "coordinated efforts among two or more academic programs to structure their programs so that students may earn and transfer credit from one program to another with minimum repetition of learning experiences".

7. Of the following positions concerning academic articulation in general, which one most closely characterizes your personal position?

Accept the general concept of academic articulation 1

Accept the general concept of academic articulation but have definite beliefs about how it should and should not be practiced 2

Accept the general concept of academic articulation but have some reservations about its use 3

Oppose the general concept of academic articulation 4

Oppose academic articulation because it may interfere with the quality of education 5

Oppose academic articulation because it may interfere with the uniqueness of educational programs/institutions . 6

Oppose academic articulation because it interferes with academic freedom and autonomy 7

Other opinion (specify) _____
_____ . 8

8. In your opinion, is it possible to articulate nurse aide education with practical nursing education?
Yes 1
No 2
Not sure 3

9. In your opinion, is it possible to articulate practical nursing education with associate degree nursing education?
Yes 1
No 2
Not sure 3

10. Do you believe it is possible to articulate practical nursing
    education with diploma nursing education?

    Yes 1
    No 2
    Not sure 3

11. Do you believe it is possible to articulate practical nursing
    education with baccalaureate nursing education?

    Yes 1
    No 2
    Not sure 3

12. Do you believe it is possible to articulate diploma nursing
    education with baccalaureate nursing education?

    Yes 1
    No 2
    Not sure 3

13. Do you believe it is possible to articulate associate degree
    nursing education with baccalaureate nursing education?

    Yes 1
    No 2
    Not sure 3

14. Which of the following do you perceive to be a benefit of
    effective articulation practices among nursing education
    programs?

    Increased student enrollments 1

    Increased pool of nurses for employment 2

    Increased numbers of better prepared nurses 3

    Increased pool of potential graduate students 4

    Increased financial income for nursing programs 5

    Increased collaboration among nursing educators and
        institutions 6

    Increased efficiency related to economic, social, and
        opportunity costs 7

    Increased positive image of the nursing profession 8

    None of the above 9

    Other (specify) _____ 10

(CONTINUED ON BACK OF PAGE)

15. As a nursing education administrator, which of the following are
concerns of yours regarding the implementation of _program_
articulation?

(Rank order your selections with a "1" being of most concern, a
"2" being of next most concern, and so forth.)

Rank order:

Interference with policies and procedures of
   individual programs . . . .   _____

The changes required at all levels of nursing
   education due to variance among programs . .   _____

Loss of uniqueness of individual programs . . .   _____

Infringement on academic freedom & autonomy . .   _____

Encouragement of students to get basic education
   at practical, diploma or associate degree
   programs . . . .   _____

Other (specify) _____

_____

Academic articulation arrangements may be developed in a variety of
ways. Two common ways are by voluntary agreements among individual
programs or institutions and by state-wide planning. Your opinion
regarding the advantages and disadvantages for students of each of
these methods is elicited below.

16. For each of the following characteristics of voluntary
articulation arrangements among individual nursing programs,
indicate the extent to which you see each as helpful or not
helpful to students who seek to advance to higher levels of
nursing education. (Circle one number for each characteristic.)

	not helpful			helpful	
A wide range of diverse articulation practices in use in nursing programs throughout a particular state	1	2	3	4	5
Arrangements are planned primarily to meet the specific educational needs of students enrolled only in participating programs	1	2	3	4	5
Control & decision making for articulation are retained by the participating programs . . .	1	2	3	4	5

17. For each of the following characteristics of articulation arrangements developed by state-wide planning, please indicate the extent to which you see each as helpful or not helpful to students who seek to advance to higher levels of nursing education. (Circle one number for each characteristic.)

	not helpful			helpful	
Articulation practices in nursing programs throughout a state tend to be similar	1	2	3	4	5
Arrangements are planned to meet the educational needs of students at different program levels rather than the educational needs of students at specific institutions	1	2	3	4	5
Standardized core courses are usually specified for some levels of curricula	1	2	3	4	5
Control & decision making for articulation are centralized in a coordinating body/agency . . .	1	2	3	4	5

18. Please rate your knowledge level about nursing articulation practices in the following types of programs throughout Minnesota.

	Low				High
Baccalaureate	1	2	3	4	5
Associate degree	1	2	3	4	5
Practical	1	2	3	4	5

19. In your opinion, how important is it that nursing education administrators in Minnesota be concerned with nursing education articulation at this time?

Very important 1
Important 2
Somewhat important . . 3
Somewhat unimportant . 4
Unimportant 5
Very unimportant . . . 6

20. How satisfied are you with the overall, current status of nursing education articulation in Minnesota?

Very satisfied 1
Satisfied 2
Somewhat satisfied . . 3
Somewhat dissatisfied . 4
Dissatisfied 5
Very dissatisfied . . . 6

21. How satisfied are you with articulation practices now used in the nursing program at your own institution?

Very satisfied 1
Satisfied 2
Somewhat satisfied . . 3
Somewhat dissatisfied . 4
Dissatisfied 5
Very dissatisfied . . . 6

SECTION III. The remainder of the questions pertain to information about your nursing program.

22. Please classify your nursing program by type.

Baccalaureate, generic 1
Baccalaureate, upper division only . 2
Associate degree 3
Practical 4

23. Please classify your nursing program with respect to financial support.

Public 1
Private 2

24. Is your program currently accredited by NLN?

Yes 1
No 2

25. As the respondent to this questionnaire, please indicate your status from the following:

Program head, director, chairman, dean for nursing 1

Designee of program head, director, chairman, dean for nursing (Please state your title.)_____ 2

ADDITIONAL COMMENTS: Please use this space to clarify your responses on specific items of the questionnaire or to comment about other areas related to articulation not included in this survey.

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

If you wish to receive a summary of the findings of this survey, please supply your name and address below.

_____   _____
Name   Institution

_____   _____   _____
Address   City   State   Zip

APPENDIX C

VIRGINIA NURSING PROGRAMS REPORTED TO HAVE ARTICULATION
AGREEMENTS WITH OTHER NURSING PROGRAMS

VIRGINIA NURSING PROGRAMS REPORTED TO HAVE ARTICULATION
AGREEMENTS WITH OTHER NURSING PROGRAMS

The Virginia nursing programs listed on the left were reported by respondents as having articulation agreements with one or more other nursing programs. The name(s) and type(s) of program(s) with which agreements were reported are listed to the right of each program.

Diploma Programs

Louise Obici	Norfolk State University (BSN)
Riverside Hospital	Christopher Newport College (BSN)
Sentara Norfolk General Hospital	Old Dominion University (BSN)

Associate Degree Programs

Germanna Community College	Fredericksburg Area Schools (PN)
John Tyler Community College	Medical College of Va./Va. Commonwealth University (BSN)
J. Sargeant Reynolds Community College	Medical College of Va./Va. Commonwealth University (BSN) Richmond Technical Center (PN) Henrico Co. Voc. Center (PN)
Norfolk State University	New Horizons Tech. Center (PN) Norfolk City Schools (PN) Louise Obici/Suffolk (PN) Norfolk State University (BSN)
Northern Virginia Community College	George Mason University (BSN) Fairfax Co. Schools (PN) Arlington Co. Schools (PN) Prince William Co. Schools (PN) Loudoun Co. Schools (PN) Alexandria City Schools (PN)
Piedmont Va. Community College	University of Virginia (MS) Medical College of Va./Va. Commonwealth University (BSN)

Shenandoah College	Dowell J. Howard Voc. School (PN)
Thomas Nelson Community College	Hampton University (BSN) Norfolk State University (BSN) New Horizons Tech. Center (PN)
Virginia Western Community College	Radford University (BSN) varied PN programs

Baccalaureate Programs

Christopher Newport College	Riverside Hospital (DIP)
Eastern Mennonite College	Blue Ridge Community College (ADN) Peidmont Community College (ADN) Hesston (KN) College (ADN)
Hampton University	Thomas Nelson Community College (ADN) Tidewater Community College (ADN) Paul D. Camp Community College (ADN)
Norfolk State University	Thomas Nelson Community College (ADN) Tidewater Community College (ADN) Norfolk State University (ADN) Louise Obici Memorial Hosp. (DIP)
Radford University	Virginia Western Community College (ADN)
Shenandoah College	Hagerstown (MD) Junior College (ADN) Alleghany (MD) Community College (ADN)
Virginia Commonwealth Univeristy	J.Sargeant Reynolds Community College (ADN) John Tyler Community College (ADN) Piedmont Va. Community College (ADN)
Virginia State University *	John Tyler Community College (ADN) J. Sargeant Reynolds Community College (ADN)
University of Virginia	Piedmont Va. Community College (ADN) Germanna Community College (ADN)

Practical Nursing Programs

Central School   Norfolk State University (ADN)

Chesapeake Technical   Norfolk State University (ADN)
  Center   Thomas Nelson Community College
                                  (ADN)

Chesterfield Co. Schools   Southside Regional Medical Center
                                  (DIP)
                                John Tyler Community College
                                  (ADN)

Dowell J. Howard   Shenandoah College (ADN)

Fairfax Co. Schools   Northern Virginia Community
                                  College (ADN)

Fredericksburg Area   Germanna Community College (ADN)
  Schools

Henrico Co./St. Mary's   J. Sargeant Reynolds Community
  Hospital   College (ADN)

Loudoun Co. Schools   Northern Virginia Community
                                  College (ADN)

Massanutten Voc. Tech.   Blue Ridge Community College
  Center   (ADN)

New Horizons Tech. Center   Thomas Nelson Community College
                                  (ADN)
                                Norfolk State University (ADN)

Richmond City Schools   J. Sargeant Reynolds Community
                                  College (ADN)

Southside Va. Community   J. Sargeant Reynolds Community
  College   College (ADN)

Stonewall Jackson   Dabney S. Lancaster Community
  Hospital   College (ADN)

Suffolk Public Schools   Norfolk State University (ADN)

* program now closed

BIOGRAPHICAL SKETCH OF STUDENT

Ruth H. Glick is a registered nurse wi.h more than thirty years experience in nursing. She has held positions as staff nurse, assistant head nurse, director of nursing, faculty member in diploma, associate degree and baccalaureate degree nursing programs. She also has extensive experience in continuing education for nurses having developed and coordinated a program for nursing continuing education for registered and practical nurses. She holds a B.S.N. from Eastern Mennonite College, a M.S.N. from Boston University, and an Ed.S. in Adult Education from George Washington University. She currently holds the position of nurse aide education programs coordinator for the Virginia Board of Nursing.

As a student in the Programs for Higher Education at Nova University, I do (✓) do not ( ) give permission to Nova University to distribute copies of this Major Applied Research Project on request from interested parties. It is my understanding that Nova University will not charge for this dissemination other than to cover the costs of duplicating, handling, and mailing of the materials.

_____   _____
March 4, 1991   Ruth H. Glick
(date)   (student signature)

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by Ruth H. Glick. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

_____   _____
3/22/91   Ronald A. Newell
(date)   Ronald A. Newell, Ed.D.
                                           MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

_____   _____
April 2, 1991   Philip L. Woolf
(date)   Philip L. Woolf, Ed.D.
                                           Local Committee Member

This Major Applied Research Project was submitted to the Central Staff of the Programs for Higher Education of Nova University and is acceptable as partial fulfillment of the requirements for the degree of Doctor of Education.

_____   _____
April 10, 1991   Peter K. Mills
(date)   Peter K. Mills, Ed.D.
                                           Central Staff Committee Member

Revised 9/90