Facing the Monster: Responses of North Dakota Higher Education Leaders to the Potential Impact of Declining Public School Enrollment on the State's University System

Jane L. Schulz

Follow this and additional works at: https://commons.und.edu/theses

Part of the Psychology Commons

Recommended Citation
https://commons.und.edu/theses/931

This Dissertation is brought to you for free and open access by the Theses, Dissertations, and Senior Projects at UND Scholarly Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UND Scholarly Commons. For more information, please contact zeinebyousif@library.und.edu.
FACING THE MONSTER:
RESPONSES OF NORTH DAKOTA HIGHER EDUCATION LEADERS
TO THE POTENTIAL IMPACT OF DECLINING PUBLIC SCHOOL ENROLLMENT
ON THE STATE'S UNIVERSITY SYSTEM

by

Jane L. Schulz
Bachelor of Science, Dickinson State College, 1969
Master of Library Science, University of Arizona, 1992

A Dissertation
Submitted to the Graduate Faculty
of the
University of North Dakota
in partial fulfillment of the requirements
for the degree of
Doctor of Education

Grand Forks, North Dakota
May
2000
This dissertation, submitted by Jane L. Schulz in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

This dissertation meets the standard for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

Dean of the Graduate School

Date
<table>
<thead>
<tr>
<th>Title</th>
<th>Facing the Monster: Responses of North Dakota Higher Education Leaders to the Potential Impact of Declining Public School Enrollment on the State’s University System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
<td>Educational Leadership</td>
</tr>
<tr>
<td>Degree</td>
<td>Doctor of Education</td>
</tr>
</tbody>
</table>

In presenting this dissertation in partial fulfillment of the requirements for a graduate degree from the University of North Dakota, I agree that the library of this University shall make it freely available for inspection. I further agree that permission for extensive copying for scholarly purposes may be granted by the professor who supervised my dissertation work or, in his absence, by the chairperson of the department or the dean of the Graduate School. It is understood that any copying or publication or other use of this dissertation or part thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of North Dakota in any scholarly use which may be made of any material in my dissertation.

Signature: Jane L. Schulz

Date: 4-25-2000
# TABLE OF CONTENTS

LIST OF FIGURES ................................................................. vii

ACKNOWLEDGMENTS ......................................................... viii

ABSTRACT ........................................................................... ix

CHAPTER

I. INTRODUCTION ............................................................. 1

- Statement of the Problem .................................................. 6
- Significance of the Study ................................................... 8
- Limitations ..................................................................... 9
- Definitions of Terms ....................................................... 9
- Summary and Overview ................................................. 10

II. REVIEW OF RELATED LITERATURE ............................... 12

- Theories of Organizational Change and Decline .................. 13
  - Lippitt’s Theory of Change .............................................. 14
  - Theus and Billingsley’s Theory of Organizational Decline .... 15
  - Ecological Niche Theory ................................................ 17
  - Types of Organizational Decline ....................................... 18
  - Organizational Adaptation ............................................. 20
  - Response to Organizational Decline ................................. 22
  - Strategies for Adaptation and Change ............................... 25
    - Cameron’s Adaptation Strategies ................................... 27
    - Lindquist’s Change Strategies ......................................... 29
  - Planning in Higher Education ........................................ 30
    - Types of Planning ..................................................... 31
    - The Evolution of Strategic Planning ................................. 32
    - Characteristics and Benefits of Strategic Planning in Higher Education .................................................. 34
  - Problems with Strategic Planning ................................... 37
  - Enrollment Management ............................................... 39
Competition and Marketing ................................................................. 41
Summary ............................................................................................ 46

III. RESEARCH DESIGN ....................................................................... 49
Distinctions of Qualitative Research and Rationale for Use ............. 50
Reliability, Validity, and Generalization ........................................ 52
Selection and Description of Participants ......................................... 54
Interview Protocol ............................................................................ 57
Data Collection ................................................................................. 58
Data Analysis .................................................................................... 61
Issues of Credibility .......................................................................... 63

IV. ANALYSIS OF THE DATA ................................................................. 67
Theme: Change in Higher Education ................................................. 68
Assertion 1: Higher education is undergoing many changes, both statewide and nationwide ......................................................... 68
   Sub-assertion 1a: Higher education is more competitive .......... 69
   Sub-assertion 1b: Different types of students with many kinds of needs are being served in higher education .................... 71
Assertion 2: The student demographics of North Dakota will impact differently on the state’s higher education institutions ...... 72
Assertion 3: To avoid institutional decline, leaders in North Dakota colleges and universities are initiating educational changes ................................................................................................................................. 74
   Sub-assertion 3a: There is ambivalence in regard to increasing use of technology and distance delivery of courses and programs ................................................................. 74
   Sub-assertion 3b: Recruiting and marketing are increasingly important ................................................................. 76
   Sub-assertion 3c: Lifelong learning and workforce training are important educational components ................................. 77
   Sub-assertion 3d: Enrollment management is necessary .......... 79
Theme: Uncertainty and Concern for Higher Education in North Dakota ................................................................................................. 80
Assertion 1: There are varying degrees of concern about the impact of declining school enrollments on higher education .......... 80
Assertion 2: Defined and clarified missions and vision are needed for the institutions and the North Dakota University System ......................................................................................................... 81
Assertion 3: Planning is not always well-defined or understood .... 84
   Sub-assertion 3a: Planning lacks cohesiveness and unity ...... 85
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Themes and codes derived from the data analysis</td>
<td>64</td>
</tr>
<tr>
<td>2. Assertions and sub-assertions derived from the themes and codes</td>
<td>65</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

Achievement rarely, if ever, occurs through one’s efforts alone. Many people contribute to it. I wish to thank those who were instrumental in the attainment of my goals. First, I am grateful to those educational leaders who willingly shared their time, beliefs, perspectives, and candor in the interviews for this study. Without them, there would have been no research.

I am appreciative of my advisory committee, Dr. Sharon Etemad, Dr. Don Lemon, Dr. James Navara, and Dr. Dan Rice for their careful reading and editing of my work and for their valuable suggestions for the improvement of my research. In particular, I am grateful to Dr. Gerald Bass, my advisor, for shepherding me through my doctoral studies and research. He offered valuable insights and bolstered my confidence.

Gratitude is due to friends, colleagues, and co-workers who provided encouragement and support. I am grateful to several special friends who steadfastly supported, listened, and advised. Dr. AnnMarie Kajencki was a willing reader and editor as well as a cheerleader. I am grateful to all.

Most especially, I must thank my family who never wavered in their belief in me and who provided time, resources, strength, and reassurance as I worked toward the realization of my long-held dream.
ABSTRACT

This study was designed to examine the perceptions of leaders of higher education in North Dakota regarding declining public school enrollment and its potential impact on higher education in the state. Educational leaders from three higher education institutions of differing types and other state policymakers were interviewed to determine their responses to the phenomenon of enrollment decline, the impact foreseen on higher education, and the planning activities used or being considered for use in preparation for the possible impact.

Data were gathered from open-ended interviews and through examination of planning documents of institutions and the North Dakota University System. A process of reading and coding the interviews was utilized to analyze the data. Themes and assertions were derived from the analysis of the data.

Three themes emerged from the data analysis and became the focus of the research report: change in higher education, uncertainty and concern about higher education in North Dakota, and meeting the challenges of demographic and enrollment changes. The interview subjects reported that higher education had undergone numerous changes in recent years. Those changes were brought about by the knowledge explosion, increasing use of technology, heightening competition, and the use of distance delivery mechanisms for instruction.
The interview subjects expressed varying degrees of uncertainty and concern about higher education in North Dakota. Their concerns centered on the need for clear institutional and system missions and vision, on planning processes, and on the possible need for downsizing the higher education system. According to the educational leaders, North Dakota and North Dakota higher education are interdependent, thus requiring a close working relationship between higher education leaders and other state leaders.

The phenomenon of declining enrollment presents challenges to leaders in higher education. Leaders will need to develop creative and innovative ways of dealing with the phenomenon and will need to effect appropriate changes for institutions. New student markets must be found which may include more non-traditional students, other lifelong learners, and students from other states. At the same time that the challenges are being met, leaders must also be careful to ensure that the quality and standards of higher education are maintained.
CHAPTER I

INTRODUCTION

If “demographics is destiny,” the destiny of North Dakota appears to be that of continued population decline and population shifts that will impact every segment of society, including business, government, industry, and education. Serious implications exist for higher education institutions in the state as the population ages and the birth rate declines.

The population in North Dakota declined 5.5% from 1930 to 1996 and shifted from rural areas to urban population centers. From 1990 to 1996, the out-migration ratio was 21 per 1,000 residents and, between 1970 and 1990, the median age of the North Dakota population increased from 26 years to 32.4 years. The number of births declined 14 years in succession between 1982 and 1996. Because of the low birth rates and natural decreases (deaths), 35 of North Dakota’s 53 counties are now classified as “frontier” counties, with fewer than six persons per square mile. Between 1962 and 2010, live births are projected to decline from about 16,000 to 7,800, resulting in a substantial decrease in the number of high school graduates. North Dakota’s public school enrollment is projected to decline by 36.1% between 1965 and 2011 and, between 1995 and 2009, the
number of high school graduates may decrease from about 8,500 to about 6,600, a decline of 27% (Department of Public Instruction, 1998).

Tom Decker, finance director for the North Dakota Department of Public Instruction, called the declining numbers in public school enrollment “pretty scary. The decline of births in North Dakota is just like a plane falling out of the sky. It’s just plummeted” (cited in Gardner, 1997, p. 1A). The decline in birth rates coupled with out-migration has caused the proportion of persons under age 18 to decline from 37% of the population in 1970 to 26% in 1996 (MacDonald, 1998).

It is important to recognize the tremendous differences in population trends by states and regions (Adelman, 1999; Hughes, Frances, & Lombardo, 1991; Levine, 1990; Trow, 1988; Western Interstate Commission for Higher Education [WICHE] and The College Board, 1998). The variability of state population trends is affected considerably by economic forces and by the number of people moving from one state to another seeking job opportunities. Thus, a state’s population growth or decline is affected by interstate migration. States in which economic downturn or reduced job opportunities are present are vulnerable to out-migration (Hughes et al., 1991). Such factors then affect the available pool of high school graduates who are anticipating enrollment in a state’s institutions of higher education.

“The future of college enrollment lies with a younger generation” (Dortch, 1997, p. 4) and in North Dakota the number of people in the younger generation is dwindling rapidly. Much of the country is expected to experience substantial college enrollment increases (Macunovich, 1997; Zúñiga, 1997). However, educational leaders in a handful

Southern and western states will experience the greatest increases in college enrollment (Zúñiga, 1997). States such as Florida, Utah, California, Texas, Nevada, and Arizona will have major increases in college attendance, primarily because of the high proportion of people aged 18 to 24 in their population (Dortch, 1997). As one example, leaders in Utah anticipated an increase in full-time enrollment of 50% between 1997 and 2007 (Dortch, 1997). Florida policymakers are anticipating tremendous enrollment increases because of the growing high-school population; it has been estimated that 210,000 to 310,000 more students will want to enroll in Florida colleges by 2010 (Healy, 1997). Expectations are that Nevada will double its number of high school graduates between 1995-1996 and 2011-2012 (WICHE, 1998).

The forecasting of such college enrollment numbers is a complicated activity because of the varying methods of forecasting plus the number and variety of trends that can impact on enrollment (Healy, 1997; Kerr, 1990; Macunovich, 1997; Mingle, 1981; Zúñiga, 1997). Many “doomsayers” in the early 1980s predicted a downturn in higher education enrollments because of the baby bust that followed the baby boom years. Crossland (1980a; 1980b) predicted the decline in headcount enrollment to be about 15%
from 1981 to 1995, primarily because of the birth rate decline. Another baby bust prediction called for a decline of up to 50% in the number of high school graduates by 1994 (Macunovich, 1997).

However, a corresponding decline in college enrollment never materialized (Trow, 1988). The number of students graduating from high school increased, eventually peaking in the United States at 3.1 million in the late 1970s and, even though it started to decline in 1977 (WICHE, 1998), college enrollments began again to increase, leading many experts to wonder what happened to the predicted enrollment crisis (Kerr, 1990). Leaders in higher education began to develop new student markets which resulted in increased enrollments by students over the age of 24 and increased numbers of students from minority and other previously underrepresented populations. These new markets plus an increase in the high school graduation rate helped to offset predicted declines in traditional student populations (Cohen, 1998; Zúñiga, 1997).

Historically, real or potential enrollment decline has always been a concern in higher education. In the early days of American higher education, colleges often faced serious financial difficulties and struggled for existence (Rudolph, 1990). There was no systematized method of financial support for early American colleges which depended heavily on the beneficence of wealthy citizens and the exploitation of underpaid faculty (Rudolph, 1990). “The endless multiplication of colleges without regard to the nature of the collegiate market” (Rudolph, 1990, p. 199) resulted in increased competition for students, and colleges regularly offered reduced or free tuition to entice students to enroll. This state of affairs could not long be sustained and, eventually, “over seven hundred
colleges died in the United States before 1860" (Rudolph, 1990, p. 219). It was not until after 1870 that enrollments began to increase with enrollment drops occurring only during World War I, a few of the depression years, World War II, and the Korean War (Veysey, 1965). The G.I. Bill of Rights, however, and high birth rates after 1945 boosted college enrollments dramatically. The years between 1955 and 1974 were American higher education's most prosperous (Johnson, 1991), and Nathan Pusey, president of Harvard, stated that those years were "American higher education's most fortunate period" (cited by Keller, 1983, p. 8). Continued demand for higher education was assumed during the 1950s and 1960s, and a predicted decline in birth rates was not widely acknowledged until early in the 1970s when declining numbers of students in the elementary grades forced concern (Kerr & Gade, 1986). The predictions for declines in college and university enrollment, however, were not borne out.

The roller coaster ride of college enrollments in the last 40 years created a need for careful planning by leaders in higher education. The response to predicted declines in enrollment in the 1980s was to increase the enrollment of non-traditional and underrepresented populations, such as women, minorities, older, part-time, disabled, and international students. Growth in these student populations is expected to continue (Lissner & Taylor, 1996) and colleges will grow to be more diverse in the future (Welsh, 1998), changing the definition of "college student" (Edmondson, 1997). "A 'generation of variance,' wherein non-traditional students ... of today become the traditional/majority students of tomorrow, soon will dominate the student population of higher education" (Moss, 1995, p. 19).
According to Arthur Levine (1990), demographic projections make us consider the future. "They trot out the most likely tomorrows and enable us to respond in a number of ways: We can simply wait for a new day to dawn. We can hope that serendipity will intervene. Or we can take action to shape the future in a manner more to our liking" (Levine, 1990, p. 28). The course of action that North Dakota educational leaders will choose remains to be seen.

Statement of the Problem

As noted earlier, an increase in the number of high school graduates will not be felt equally across the country, and, in fact, a decrease of high school graduates in some states, North Dakota among them, is expected. Like those in other states, North Dakota colleges and universities have benefitted from increased numbers of older and non-traditional students. However, a solid base of traditional-aged students appears to be critical to many educational institutions across the country, not just in North Dakota. In a sparsely populated, homogeneous state that is experiencing population shifts and changes it may be difficult to continue to attract non-traditional and/or minority students.

North Dakota college and university officials are faced with a reduction of a critical pool of applicants, students from ages 18 to 24 years, which forms the base of admissions to the state's higher education institutions. Recent enrollment data revealed that the number of students aged 18-24 enrolled in the state's public higher education institutions numbered 26,578 while the number of students over the age of 24 numbered 7,652 (North Dakota University System, 1999). These data clearly suggest that
traditional-aged students are a vitally important part of higher education enrollment in North Dakota. Although the full impact of the decline in high school graduates will not be felt at the higher education levels for a few years, this reduction presents challenges to college and university administrators. They will have to respond to the phenomenon and develop plans to prevent or mitigate the possible negative effects on their institutions caused by the potential loss of college students in this age range. The reduction also should prompt North Dakota educational leaders to ask the question: What new student populations can North Dakota institutions now count on or seek to make up for the loss of traditional-aged students?

The purpose of this study was to identify the perceptions of selected college and university officials about the declining public school enrollment and subsequent decline in the number of high school graduates in North Dakota. In addition, the study identified planning efforts, methods, and/or strategies contemplated or employed by higher education leaders to address the impact of declining numbers of high school graduates in the state. The following research questions were used to guide the study:

1. What are the perceptions of higher education leaders, college and university administrators, and other officials in North Dakota to the declining public school enrollment and declining number of high school graduates in the state?

2. What is the perceived impact that the declining number of high school graduates may have on higher education in North Dakota, generally, and, specifically, for the institutions involved in the study?
3. What planning processes, methods, techniques, and/or strategies have administrators considered, used, or planned to employ to address the possible loss of students in higher education institutions in North Dakota?

Significance of the Study

College and university administrators and faculty members who are in positions of leadership are responsible for addressing the issues related to recruitment, admissions, enrollment, and student populations on their campuses. This study may be helpful in presenting information and perspectives that would assist in such decision-making. Learning about the planning processes that some institutional leaders are employing may prove useful for others who will be serving in similar planning capacities. In addition, North Dakota University System (NDUS) officials and State Board of Higher Education members may find the study valuable in determining their own roles and responsibilities in addressing issues regarding the declining number of high school graduates in North Dakota.

The findings may also be of value to legislative leaders, government officials, and other policy makers as they make decisions regarding higher education policy, funding, and other related issues. The study may be of use to leaders of educational institutions and government agencies in other states that are or will be confronting similar enrollment concerns.
Limitations

This study was focused on the perceived impact of the declining pool of traditional-aged college applicants in North Dakota. Data collection was limited to interviews with selected educational leaders in three publicly supported educational institutions of different types, including a doctoral degree-granting institution, a four-year regional university (formerly a regional state college), and a two-year community college. Interviews were conducted with educational leaders on each campus, NDUS officials, and State Board of Higher Education members. Interviews with the participants were guided by an interview protocol (Appendix B). It was assumed that the subjects' responses were fair and honest representations of the subjects' perceptions and beliefs.

Definitions of Terms

Distance education refers to educational courses and/or programs offered to students by distance delivery methods such as interactive video, correspondence courses, video courses, online courses, and other media.

Enrollment management refers to “the overall management of enrollment, including all of the key variables associated with enrollment success” (Ingersoll, 1988, p. 269).

Enrollment management plan is a total plan for how an institution will meet its enrollment goals (Ingersoll, 1988).

Non-traditional aged students are those students over the age of 24.
North Dakota University System (NDUS) is the administrative and governing agency that oversees the functions of the state’s public colleges and universities. The University System institutions include two doctoral-degree granting universities, four regional four-year universities (formerly regional state colleges), including one branch campus, and four two-year colleges.

State Board of Higher Education (SBHE) is the governing board of the NDUS. The Board consists of seven members selected from the electorate of North Dakota and appointed by the governor. In addition, a college student serves on the board and a faculty member from the Council of College Faculties serves as a faculty representative.

Traditional-aged students are students from 18 to 24 years of age.

Summary and Overview

Educational leaders are forced to deal with a decreasing number of high school graduates in North Dakota and, thus, a smaller pool of traditional-aged applicants for admission to higher education institutions. The purpose of this study was to identify the perceptions of selected educational leaders to this demographic forecast and what they perceive to be the impact of that decline on institutions of higher education in North Dakota and, specifically, on their institutions. The purpose was also to identify planning strategies and methods that educational leaders may employ in addressing the declining pool of traditional-aged applicants.

The study was limited to three institutions in North Dakota and involved interviews with leaders of selected institutions and state policymakers. The findings may
be useful to a variety of persons including government leaders, educational leaders, and NDUS officials.

The second chapter of this study is used to provide a summary of findings from a review of pertinent literature. Chapter III contains a description of the research design, including the population and sample, interview protocol, and data collection and analysis. A report of the results of data analysis is provided in the fourth chapter and Chapter V contains a summary, conclusions, recommendations, and a commentary.
CHAPTER II

REVIEW OF RELATED LITERATURE

Chapter I of this study provided an introduction to the anticipated changes in public school enrollment and high school graduation rates in North Dakota that have the potential to affect higher education institutions in the state. The purpose of Chapter II is to present a review of the literature and other research related to the effects such enrollment decline may have on colleges and universities and the variety of strategies and adaptations that may be used to respond to the demographic changes.

The first section of the chapter is a review of organizational change theories and organizational decline theories. The second segment contains information on types of organizational decline. The third part is a review of adaptation approaches to change and possible decline. The fourth section is used to examine organizational response to decline, and the fifth contains information on adaptation and change strategies for responding to decline. The sixth portion of Chapter II contains a review of planning models, with particular emphasis on strategic planning. The seventh part of the chapter addresses the use of enrollment management and the final section is focused on marketing and competition in higher education.
It is oxymoronic to say that change is a constant; nevertheless, the one thing that can be counted on in life is change. As the Greek philosopher Heraclitus stated, "Nothing endures but change" (as cited by Bartlett, 1982, p. 62). Clearly, an historical look at higher education in the United States shows a constant pattern of change, from the foundings of the earliest colleges and universities to the multiplicity of higher education institutions that exist today. In addition, there have been numerous changes in higher education financing and budgeting, in size, in services to students, in curriculum, in faculty, in governance structures, and in the students themselves (Barker & Smith, 1997).

A corollary to the fact that change is ongoing is the perception that change occurs more rapidly all the time. Over a quarter century ago, Laing (1967) noted, "We live in a moment of history where change is so speeded up that we begin to see the present only when it is already disappearing" (p. 11). A review of the history of American higher education shows that, for many years, there was a relatively steady and reasonable pace of change. The advent of the information age, however, dramatically increased the rate of change (Lippitt, 1982).

Those two truths, that change is a constant and that it is occurring more and more rapidly, challenge everyone in all walks of life (Schuster, Smith, Corak, & Yamada, 1994). The constancy and rapidity of change require continual responses to change, including ongoing planning, effective information gathering, and astute decision making. Schuster et al. (1994) noted that those in higher education, in particular, must be poised
and prepared for change, not just for the survival of institutions but for the more critical responsibility of educating those who will become future decision makers and leaders.

“Today’s academic institutions must nurture a climate of change on campus to cope with changes beyond the campus” (Penney, 1996, p. 20).

**Lippitt’s Theory of Change**

Lippitt (1982) described two types of change: unplanned and planned. Unplanned change was defined as that which occurs to all systems through the process of maturation, accidents, loss of resources, and similar occurrences. The system tries to regain its homeostasis, or equilibrium, by adjusting in some way to the change. Planned change, on the other hand, is that which is involved in a renewal process. It was seen by Lippitt as a conscious and deliberate attempt to improve a system through organized effort. Planned change, wrote Lippitt (1982, p. 52), “involves inventing a future, and creating conditions and resources for realizing that future.”

Change may occur through transmission, which is primarily evolutionary or without conscious direction or design (Lippitt, 1982). Change may also occur by transformation when organizations and the people in them attempt to change through mindful decision and action. Lippitt differentiated two types of transformative change. The first type of transformative change is homeostatic, involving a response by a system or organization to achieve a new balance. This type of transformative change is essentially a reactive response resulting in adjustment or adaptation to change. The second type of transformative change was described by Lippett as that which involves a more active role in planning change and moving a system in a new direction.
Theus and Billingsley's Theory of Organizational Decline

Of the organizational life cycle theories, which are most likely to trace organizational development through their life histories, few address issues of decline. One organizational model that does deal with the possibility of organizational decline was posited by Theus and Billingsley (1992). They based their contingency model on evolutionary theory and the belief that perpetuation activities are chosen in response to organizational uncertainty. "The primary requirement of organizations is to deal with turbulence in the environment and the primary capability of organizations resides in the organization's ability to reduce uncertainty" (Theus & Billingsley, 1992, p. 4).

The need for information was seen by Theus and Billingsley (1992) to be critical as administrators assess the type and severity of environmental turbulence and determine appropriate change processes. The possible outcomes of the turbulence and the applied change strategies, according to the authors, are maintenance, adaptation, transformation, or death.

Theus and Billingsley (1992) identified the variables in their model as (1) the organization's environment, particularly the external environment; (2) the organization's design or structure; (3) the perpetuation activities (strategies for reducing uncertainty); and (4) the change outcomes. It is critical to understand an organization's environment, an environment which both provides resources and imposes restraints on the organization. The organization's structure provides a framework for the processes of the organization, which include power, leadership, decision-making, and communication. The perpetuation activities, such as policies, rule-making, hierarchy, and delegation, are those strategies
that reduce uncertainty in an organization. The use of resources is another perpetuation activity that helps to define organizations in their environments.

Theus and Billingsley (1992) wrote that “continuous and fine-grained fluctuations” (p. 14) lead either to maintenance, or relative stability, of the organization or to adaptation. Conversely, “extreme, discontinuous, rapid, coarse-grained, and unanticipated fluctuations” (p. 14) lead either to transformation or death. The distinctions among the types of fluctuation are important. Continuous fluctuations are consistent with past experience, and discontinuous fluctuations vary from past experience. In addition, fluctuations may be fine-grained (of short duration or common) or coarse-grained, which include a change of long duration or changes in the organizational niche.

Theus and Billingsley suggested that maintenance is the outcome for which organizations most often strive. Maintenance occurs when there is little environmental turbulence and information is available to reduce uncertainty. One thing for which maintenance organizations must beware is the possibility of entropy leading to “obsolescence of organizational form” (Theus & Billingsley, 1992, p. 17). Static conditions can prevent the organization from unconsciously adapting to variations in the environment.

Adaptation in the Theus and Billingsley model is the outcome that most organizations achieve even though they may seek maintenance. They reported that some degree of uncertainty is usually present in an organization, and that most organizations react to uncertainty by using available information to adapt gradually to changing conditions. In general, the organization is relatively stable, but leaders in adaptive
organizations will recognize changes in perceptions, will process new information, and will adapt gradually.

Transformation occurs when turbulent conditions are present and there are sufficient resources and information to deal with the challenges. Transformation usually occurs quickly and results in reorganization. The organizational change is so dramatic that the organization is recognized as something entirely new. The focus is on achieving a competitive advantage or recapturing a lost or empty niche in a market.

Theus and Billingsley (1992) suggested that the death, or collapse, of an organization occurs when change fails or when it is deliberately chosen by the organization’s members. Uncertainty and turbulence are great, and the information to deal with those conditions is not available.

**Ecological Niche Theory**

The theory of ecological niches has its basis in the field of biology and was refined for use in organizational ecology by Zammuto (1984). A niche was defined by Zammuto and Cameron (1985) as “the environmental habitat of a population of organisms” (p. 226). Niche change, either in size or shape of the niche, therefore, leads to organizational change. The size of the niche refers to the amount of resources an organization has; the shape of the niche refers to the organization’s activities. A single large organization may fill a niche or a niche may be filled by several smaller organizations. The carrying capacity, therefore, is defined as the “level of population performance that the niche will support” (Zammuto, 1984, p. 12). Carrying capacity represents the size of the niche.
A change in the size of a niche could reduce demand for an organization’s services. A decline in the number of college students, for example, would affect niche size. If the population characteristics of the niche change, however, niche shape also is affected. The shape of a niche is represented by the types of activities supported by an organization. A greater number of international students or older students represent changes in population characteristics and, therefore, a change in the shape of a niche (Johnson, 1991).

The population ecology theory was “viewed as such a powerful and pervasive force that it selects those organizational forms (or adaptations) that are to persist and other organizational forms die out” (Cameron, 1984, p. 125), much like biological selection or survival of the fittest.

Types of Organizational Decline

Zammuto and Cameron (1985) identified four different types of environmental decline in their research. The Zammuto and Cameron typology considered organizations in terms of change in niche configuration and continuity of change.

The first type of decline is erosion, which occurs when an organization experiences a continuous decrease in the size of its niche. The organization may continue providing services in much the same form as before, but the level of performance undergoes a continuous decline (Zammuto, 1984). An example of erosion is a gradual decline in the number of school enrollments.
A discontinuous decrease in niche size results in contraction, perhaps brought about by a sudden drop in demand for a product or by a sudden reduction in resources. The types of performance remain the same, but the level of performance decreases as it does in erosion. An abrupt budget reduction at a college or university would result in this kind of decline.

Zammuto and Cameron (1985) suggested that dissolution occurs when the shape of a niche undergoes a continuous shift and one niche gradually evolves into another. This type of decline usually happens over time. A shift of student interest in courses or fields of study is an example of dissolution. Liberal arts enrollment may have decreased, for instance, as students became more interested in professional areas of study.

Collapse represents a discontinuous shift in niche shape. It occurs after dramatic decline and results in a niche eventually being abolished. Technology, for example, may bring about the dissolution of certain courses of study or program areas that previously relied on manual training.

These four types of decline were found to have different effects on different types of institutions. The generalist institution, such as a university, has a wide scope of activity and broader domains, while specialist institutions, such as a liberal arts college, are narrowly focused with smaller domains. Zammuto and Cameron (1985) pointed out that specialist organizations have the advantage over generalist organizations during times of stability because they use resources more efficiently. However, during times of change, a generalist organization with its wide range of activities and diversity is more competitive than the specialist organization.
Since adaptation is the most common outcome of uncertainty (Theus & Billingsley, 1992), it is important to explore further the value of adaptation to higher education institutions and the ways that adaptation occurs. In this portion of the chapter, the work of Cameron is reviewed as it concerns approaches to adaptation.

Cameron (1984) wrote that organizational adaptation “refers to modifications and alterations in the organization or its components in order to adjust to changes in the external environment” (p. 123) with the purpose of restoring equilibrium. Adaptation was described as a process that could be either reactive or proactive. Cameron noted that adaptation does not mean just waiting for change. The emphasis “is definitely on responding to some discontinuity or lack of fit that arises between the organization and its environment” (Cameron, 1984, p. 123).

Cameron described adaptation from two perspectives: approaches with little managerial influence and those that depend on substantial managerial influences. One approach that assumes little or no managerial influence is the population ecology approach, which focuses on changes in environmental niches. Organizations adapt as the size and shape of their ecological niches respond to the external environment. The other approach in the category of limited managerial influence is the life cycles approach in which an organization progresses through sequential stages of development. Cameron and Whetten (cited in Cameron, 1984) identified four stages: the creativity stage, in which an ecological niche is formed; the collective stage, which is marked by cohesion and
commitment; the formalization stage, in which procedures are institutionalized and flexibility has lessened; and the final stage, that of elaboration, during which adaptability accelerate and domain expansion occurs. While managers are not heavily involved in this approach to adaptation, Cameron suggested that they can speed up, slow down, or even stop the process.

There are two approaches in which managerial influences are of primary importance (Cameron, 1984). The first is the strategic choice approach in which managers choose strategies that can dramatically affect the environment and cause success or failure. Common types of strategies include domain strategies. “An organization’s domain is defined by the range of its products, customers, and services” (Zammuto, 1984, p. 83). Zammuto and Cameron (1985) defined domain as that “part of the population’s niche in which each organization operates” (p. 227). Domain strategies are of two types, domain defense strategies and domain offense strategies. Domain defense strategies maintain the organization’s legitimacy. Domain offense strategies are characterized by expansion into new markets and products adjacent to the existing domain, and domain creation strategies are those in which new domains are created for new opportunities (Zammuto, 1984).

The second type of adaptation approach in which managerial influences are of primary importance is the symbolic action approach. This approach, according to Cameron (1984), focuses on change in symbols, stories, and interpretations. “The organization is glued together mainly by the presence of common interpretations of events, common symbols, common stories or legends” (Cameron, 1984, p. 130). The
meanings that people ascribe to events are more important than the events themselves. A manager or administrator can create or perpetuate the meanings by interpreting history, using rituals and ceremonies, using time or measurement to indicate what is important, redesigning physical space, or by introducing doubt into an organization.

Increasingly, the external environment is a tremendous influence on organizations. “Organizations are more frequently being required to be good at adaptation in order to survive” (Cameron, 1984, p. 132). Cameron wrote that the need to adapt is due to the exponential knowledge explosion, the complexity of the environment, and more turbulence in the environment, all of which necessitate faster decision making. Cameron argued that these four approaches to adaptation (population ecology, life cycles, strategic choice, and symbolic action) will be required to operate simultaneously in a higher education environment that is profoundly affected by the external environment.

Response to Organizational Decline

Because of demographic shifts, enrollment decline is a real possibility in colleges and universities, threatening serious changes in those institutions—changes that could lead ultimately to fiscal problems, retrenchment, deterioration, or failure. It is difficult for many leaders in higher education to consider the possibility that decline may occur in their institutions. Growth, after all, is the American way.

The entire history of the United States has been one of progress and development. It is inconceivable for most Americans to believe that growth may not always be the norm. Because of this uniquely American perspective on growth, many administrators in
higher education are not prepared to “cope with or manage effectively conditions of 
decline” (Cameron, 1983, p. 359). Intellectually and psychologically, they have difficulty 
dealing with decline rather than with ongoing growth. Cameron described three reasons 
why administrators find the management of decline to be so difficult.

First, Cameron suggested that most administrators are experienced in responding 
to growth. The history of higher education is generally one of growing enrollments and 
sufficient financial resources. Administrators have developed a set of skills to manage 
growth but not to manage decline. “They will try to solve the problems of scarcity using 
the tools proven effective in solving the problems of abundance” (Whetten, 1981, pp. 84-85). Second, growth is seen as an indicator of effectiveness. Administrators are evaluated 
on their ability to “produce more, obtain a larger budget, or expand their organizations” 
(Cameron, 1983, p. 360). Finally, organizational theory is based on the assumption that 
growth will continue. Decline is largely ignored as a possibility or is treated as an 
“unsuccessful aberration from the normal course of events” (Cameron, 1983, p. 361).

The growth mindset that administrators possess leads them to consider responding 
conservatively rather than innovatively when faced with decline because they consider 
decline to be an issue regarding resource allocation or problems with efficiency. These 
coping patterns are, according to Cameron (1983), less effective in addressing decline 
than are more innovative approaches.

Cameron (1983) identified six reasons why administrators make the choice of 
efficiency over effectiveness in responding to decline. One is that it is easier to measure 
efficiency in a college or university than it is to measure effectiveness. Thus, efficiency
receives the focus of attention. Second, administrators under stress from dealing with
decline are inclined to become conservative and self-protective. Third, it is human nature
to do things as one has done them in the past. As a result, administrators tend to use the
same strategies during times of decline as they did during times of growth, failing to
recognize that the two conditions require different responses. Whetten (1981) noted that
administrators recognize that making a wrong decision in a crisis can exact a high
penalty. Administrators, therefore, reduce risk taking and innovative strategies.

The fourth reason for choosing efficiency is that colleges and universities are
loosely coupled organizations (Cameron, 1983). Loosely coupled organizations make
conflict and resistance probable, and consensus difficult to achieve (Weick, 1976).
Taking the conservative approach to decline is, consequently, the easiest course of action.
Fifth, the most creative and innovative people are often the first to leave a struggling
organization. They are able to get jobs elsewhere and, since their innovative spirit is often
not highly regarded at an institution experiencing problems, they move on. The result is
an institution in which the least able and most conservative members are left to manage it.
Key to an organization’s survival during environmental change is internal variety. Loss of
the best people reduces variety and the organization becomes “innovation anemic”

Lastly, innovation itself may be considered a cause for the decline (Cameron,
1983). New and innovative programs and processes initiated during good times may
come to be considered as financial liabilities and are frequently eliminated during bad
times. The loss of innovative programs, in particular, means that a college or university
may be left with “only those departments teaching subjects that are least attractive to contemporary students seeking marketable credentials” (Whetten, 1981, p. 89), thus exacerbating enrollment decline. Unfortunately, even though the tendency to conservatism is understandable, it is often the approach that is most counterproductive to the college or university undergoing decline. One of the difficulties with rapid and complex change is that there are few precedents to follow in coping with it. As a result, creativity is essential for those who are in decision making capacities (Lippitt, 1982).

Discussions of decline were prevalent in the educational literature during the late 1970s and early 1980s, when concerns for enrollment decreases and the resulting financial difficulties were widely predicted and anticipated (Cameron & Chaffee, 1983). While many of the enrollment decreases did not occur at that time, the present reality is that leaders of certain colleges and universities will not have the luxury of being able to count on continued and constant growth. Some states and some institutions will, at various times, encounter conditions of decline; in fact, it is normal for organizations to go through times of both growth and decline (Zammuto, 1984, p. 4). It has, therefore, become necessary for organizational leaders to understand and accept decline as a part of the environment. A response to decline is required if organizations are to handle such conditions (Cameron, 1983; Cameron & Chaffee, 1983).

Strategies for Adaptation and Change

When environmental conditions occur that result, or could result, in decline, those in organizations must respond. Strategies and plans must be formulated and initiated
(Cameron, 1983; Cameron & Chaffee, 1983). As Keller (1983, p. 27) stated, "American higher education has entered a new era that requires better planning, strategic decision making, and more directed change." In this section, three concepts of adaptation strategies are reviewed.

Strategy is used in an organization to deal with changing environments, according to Chaffee (1985) who described three models of adaptation strategy. The linear strategy "connotes the methodical, directed, sequential action involved in planning" that helps to achieve the goals of an organization (Chaffee, 1985, p. 90). Managers have the authority to change the organization and do so through a rational process of decision making that will achieve the organization’s goals and objectives (Bean, 1990; Chaffee, 1985).

Adaptive strategy attempts to align the external environment with internal conditions. The environment is constantly monitored, and adaptation occurs and overlaps. Adaptive strategy is less centralized and is focused extensively on the environment to determine action. Chaffee wrote that the adaptive strategy relies on an evolutionary, biological model and is less concerned about goals than is the linear model. “Rather than assuming that the organization must deal with the environment, the adaptive model assumes that the organization must change with the environment” (Chaffee, 1985, p. 92). The environment and the organization are more open to each other.

Chaffee’s third model is the interpretive strategy, based on a social contract theory in which reality is constructed through social interactions and understanding the perceptions of others. Individuals in an organization cooperate to help both themselves and the organization. The strategy depends heavily on metaphors, symbols, and rituals to
develop an institutional culture that achieves legitimacy in the external environment. Interpretive strategies boost institutional self-confidence and enhance self-image.

In summary, organizational leaders using the linear strategy plan how to deal with competitors to achieve goals. In adaptive strategy, the organization changes, either in a proactive way or in a reactive way, to align itself with consumer needs and wants. In interpretive strategy, the leaders of an organization convey the meaning of the organization in order to motivate stakeholders in favor of the organization (Chaffee, 1985). These diverse strategies provide ways of viewing an organization's problems, understanding their complexity, and affording options for dealing with those problems.

**Cameron’s Adaptation Strategies**

Cameron (1983) wrote that “principles of effective strategic management are not limited by organizational type as much as by the nature of the external environment encountered by the organization” (p. 371). Cameron identified factors that help in diagnosing the external environment and in selecting the appropriate adaptive strategies to be used.

One factor that needs to be considered is the lead time, or the amount of warning time an organization has before decline is experienced (Cameron, 1983). The ability to pinpoint the causes of the decline is important as is the degree of consensus among outside groups regarding the forces inherent in the decline. Conservative strategies are encouraged when consensus among outside groups is contrary to the organization’s goals. An organization with flexibility in choosing domain choice and more political slack will choose less conservative strategies. More conservative strategies are employed, however,
when the lead time is short. The severity, duration, and source of the threat are also important. A severe threat expected to last a long time will result in the employment of conservative strategies. The less close the source of the threat is to the organization, the less pressure there will be to use conservative strategies in dealing with conditions of decline.

Cameron (1983) identified internal factors that affect ways to deal with decline as: economic slack, previous experiences of the administrators, the distribution of resources, the resource dependence of subunits of the organization, and the size and complexity of the organization. Whetten (1981) suggested that an organization is more apt to adopt conservative strategies rather than more innovative ones when the organization has less economic slack, when its administrators have limited experience in dealing with decline, when there is an equal distribution of resources among units, when administrators are primarily viewed as resource acquirers, when there is an absence of strategic competence, and when the organization is large in size. The tendency toward conservatism and efficiency is understandable, according to Cameron (1983), but is opposite that prescribed by organizational theory, which recommends flexibility, innovation, and proactivity. “Empirical evidence suggest that these strategies under conditions of decline lead to effective adaptation whereas conservatism may lead to stagnation and possible demise” (Cameron, 1983, p. 376). The strategies, plans, and decisions that leaders of higher education institutions make are critical in all institutions but are most especially necessary for those facing the specter of decline.
Colleges and universities responding to change must have leaders who understand how people change, for as people change so will organizations. Change is often feared by people who are unsure of its consequences. Issues of power, need, loyalty, and personal relationships surface during times of change. Even when people recognize a need for change, they are often reluctant to embrace it (Winstead, 1982).

**Lindquist’s Change Strategies**

Lindquist (1997) identified four strategies that can be used to promote change: rational planning, social interaction, human problem-solving, and political action. Rational planning is built on reason and evidence, largely based on research and new knowledge. Lindquist theorized that, as rational beings, humans will change because it is the logical thing to do. Social interaction strategies, through which new ideas are connected, depend on the contacts people have with one another. For example, persuasion and the influence of others can promote change. Human problem solving attempts to understand the psychological sources of resistance and reduce those obstacles to change. Lastly, the political approach uses political power and coalitions to initiate change. The four change strategies need to be combined to be effective. According to Lindquist, there must be linkage among those strategies; each alone is not enough. This view was shared by Guskin (1996) who wrote that a change strategy must be used that deals with developing, presenting, and discussing information based on theory, research, and generally accepted evidence; that focuses on opinion leaders and social networks by which people are influenced; that deals honestly with people’s fears and anxieties; and that builds coalitions around people’s interests, and utilizes the institution’s leadership and governance structures. (p. 33)
“Effective strategy making is a precondition for solving problems and making decisions in a timely and exemplary manner” (Taylor & Koch, 1996, p. 83). A strategy puts “your own intelligence, foresight, and will in charge instead of outside forces and disordered concerns” (Keller, 1983, p. 75). Developing strategies that are effective depends on planning.

Planning in Higher Education

A rapidly changing environment has heightened the need for planning. The complexity of the world, technological applications, globalization and competition, and reduced lead time for decision making all necessitate the need for future planning. “As the environment of higher education has become more uncertain, effective planning has become increasingly important” (Phelan, Kirkland, & Freed, 1991, p. 2). Hobbs (1979) noted that planning at all times is important, but in times of uncertainty, it is even more critical.

A changing environment has increasingly demanded a proactive response that turns threats into opportunities (Schuster et al., 1994). While colleges and universities have often eschewed long-range planning in the past, increased demands for accountability and financial constraints have made administrators realize the importance of planning for the future. Schuster et al. found that higher education leaders recognize the changes that are swirling around their institutions—changes that require either adaptation or the proactive decision to enact changes themselves. Keller (1995) implied that adapting to change and/or planning for change make(s) great demands on higher
education institutions and their leaders who will be called to “entrepreneurial
management of the social, economic, and educational transformation of society and
academe” (p. 59).

Types of Planning

Simerly (1998) identified four types of planning: turnaround emergency planning, contemplative/philosophical planning, futuristic scenario planning, and strategic long-range planning. Turnaround emergency planning is used in emergency situations or in times of crisis when leaders of an organization quickly need to devise a plan that will turn the organization around and ensure its survival. Philosophical planning is characterized by contemplation of the past, present, and future of the organization. It often occurs in a retreat setting and can generate useful brainstorming ideas. Philosophical planning usually does not involve a method for achieving change. In futuristic scenario planning, the future is the focus of attention. Scenarios or visions are considered that may be helpful to pursue. This type of planning was seen by Simerly as very general and often resulting in uncertainty about outcomes. Strategic planning, according to Simerly (1998), is oriented to action and accountability. A future scenario is envisioned and generalized goals are generated. Objectives and action plans then are developed, and periodic updates on progress are conducted. Strategic planning emphasizes designing a plan, implementing the plan, monitoring and modifying the plan, and assessing its results.

There are numerous models of planning, but strategic planning is most often regarded as the approach having the best application to higher education. Strategic planning was defined as “the process of developing and maintaining a strategic fit
between the organization and its changing marketing opportunities” (Kotler & Murphy, 1981, p. 471).

“Planning means designing a desired future and identifying ways to bring it about” (Steiner, 1979, p. 14). Steiner defined strategic planning from four points of view. First, strategic planning deals with the future through the identification of opportunities and threats. Second, strategic planning is a process that requires setting goals and then making plans and initiating strategies to achieve those goals. It is a systematic process of deciding what to do, how to do it, who will do it, and what to do with the results. Third, strategic planning is a way of life or a philosophy. It is, or should be, an ongoing process. People engaged in planning must believe in it and do their best for it. Finally, planning is a structure that links strategic plans, medium-range plans, and budgets and operating plans. In this way, “strategies are translated into current decisions” (Steiner, 1979, p. 15).

**The Evolution of Strategic Planning**

Barker and Smith (1997) examined a number of different approaches to strategic planning as they developed their model for use with higher education institutions. One of the strategic planning models that the authors described is an early systems approach, General Systems Theory, in which an organization is viewed as a whole with subsystems that interact with the organization’s external environment. Kast and Rosenzweig (1985) proposed a general system model with five subsystems, which included goals and values, knowledge and techniques (technical subsystem), interaction among individuals (psychosocial subsystem), task differentiation and coordination (structural subsystem), and the organization, goals, plans, and process of management (managerial subsystem).
Cleland and King (1983) developed a model based on establishing goals, gathering information, making assumptions, establishing objectives, and developing plans. Their model includes a “hierarchy of planning levels” (p. 36). In the hierarchy the strategic plan encompasses broad general goals. “Other goals and their supporting plans are more definitive and have a shorter range” (Barker & Smith, 1997, p. 292). Plans are developed at each level of the organization, thus forming a system of plans in which each, in turn, supports a higher level of plans and provides direction to a lower level of plans.

Keller’s (1983) model was focused both on the environment and on the organization and was divided into three external areas and three internal areas. The external areas focus on environmental trends, market preferences and directions, and the competitive situation. The internal areas are concerned with the traditions, values, and aspirations of the institution; its strengths and weaknesses; and its leadership.

Barker and Smith (1997) proposed a new model that fits somewhere between Keller’s model and that of Cleland and King. The Barker and Smith model contains elements critical to strategic planning including the mission statement, internal strengths and weaknesses, external threats and opportunities, and evaluation. Assessment is, in the authors’ view, critical to the planning process and is often lacking in other planning models. Assessment leads institutional leaders to reexamine their goals’ continued appropriateness as the external climate and the internal resources change.

One of the most important similarities in various models of strategic planning is the involvement of the chief executive in planning (Steiner, 1979). The chief executive must have a clear understanding of what strategic planning is all about and must be able
Characteristics and Benefits of Strategic Planning in Higher Education

Response to the many changes affecting higher education has been hampered by a lack of strategic planning, which is essential in preparing for the future (Keane, 1985; Toll, 1982). Leaders in most institutions planned from year to year, failed to evaluate the internal and external environments, and ignored the relationship between the allocation of resources and goals (Phelan et al., 1991). They tended not to be guided by a mission statement and evaluated effectiveness on the basis of expenditures. Because of those deficiencies, Phelan et al. concluded that strategic planning can help higher education become more competitive in today's world.

Strategic planning processes or models identify and include the essential elements that make planning successful. These include developing performance indicators, assessing the internal and external environments, identifying strengths and weaknesses, perceiving opportunities and threats, developing a mission, establishing goals, determining strategies, implementing strategies, and monitoring the effect of the implementation (Dolence, Rowley, & Lujan, 1997; Shirley, 1988; Simerly, 1998).

Shirley (1988) enumerated five benefits of strategic planning including the communication of a strategic vision, an increase in external support, increased certainty
in the lives of the institutional members, improved allocation of resources, and an improvement in the institutional image. Keller (1983) identified six features of strategic planning that were found to make it superior to other types of planning processes or models. The first feature is that the institution's leaders are active in planning for the competitive advantage and seizing opportunities. Second, strategic planning focuses on the external environment and continuously adapts to it. Third, academic strategists realize the competitive nature of higher education which is especially prevalent during times of scarcity. Fourth, strategic planning is action oriented and concentrates on making decisions. Fifth, strategy depends on participation of the people of an organization and sixth, strategic planning puts institutional survival above anything else.

Strategic planning was said to be especially beneficial in helping leaders of an institution clarify its mission, link budgeting and planning, and increase consensus and support (Phelan et al., 1991). “The promise of strategic planning is that it helps organizations better understand themselves and the world of which they are a part. It does this by examining who and what the organization is, and by identifying what the organizations’ capabilities and limitations are” (Dolence et al., 1997, p. xi).

One of the most important aspects of strategic planning is the defining of an institution's mission (Paris, 1997; Rowley, Lujan, & Dolence, 1997; Shirley, 1988; Steeples, 1988). An institution which does not have a defined mission is apt to have one imposed on it, often by external forces (Martin, 1985). The mission should include the purpose of the institution, its constituencies and service area, its special characteristics, and its major emphases (Rowley et al., 1997; Shirley, 1988). Since it is essential to ask
why the institution exists, a good mission statement communicates the character and the
direction of the institution (Martin, 1985). A mission statement creates a vision of the
institution’s role in higher education and in the larger society (Schmidtlein, 1990).

When mission is conceived as a set of strategic decisions
governing the relationship of a college or university to its
environment, and as a consensually developed set of strategic
criteria grounded in the culture and traditions of a particular
institution, then mission is central to the implementation of a
successful planning ... process. (Dill, 1997, p. 188)

Defining an institution’s unique mission and characteristics is challenging since
“the current mix of institutions of higher education does not provide a profile of much
that can be called unique” (Rowley et al., 1997, p. 47). The number and sameness of most
colleges and universities means that finding a niche that is unusual and marketable is not
an easy task. The lack of a unique niche, however, may signal to higher education boards
and other state policymakers that some institutions are irrelevant. When colleges and
universities can be distinguished by specific areas or niches, their leaders likely have
taken charge of their destinies and reduced the sameness that characterizes many higher
education institutions (Rowley et al., 1997).

Assessing the external environment for opportunities and threats is critically
important in developing an understanding of the positive and negative aspects of that
environment (Dolence et al., 1997). Leaders of a college or university must be keenly
aware of the world beyond its campus boundaries (Penney, 1996; Schuster et al., 1994;
Toll, 1982). Economics, politics, demographics, legal concerns, and social conditions
were cited among the aspects to consider in building such awareness.
According to Phelan et al., (1991), strengths and weaknesses in the internal environment of a college or university must be considered in the planning process. Strengths are the advantages an institution has in comparison to competitors and to needs in the internal environment. Weaknesses are those limitations in the internal environment that constrain performance. Strengths and weaknesses in a college or university include such items as financial resources, personnel, facilities, programs, and image.

Problems with Strategic Planning

While the cited benefits of strategic planning are varied and numerous, there are problems and potential pitfalls as well. The planning process can be difficult because it prompts change, which is often resisted by people on a college campus (Harvey, 1998).

It is impossible to predict how a planning process will play itself out, to understand in advance how a complex organization and all its constituent parts will behave when subjected to the stresses of a decision-making process that most find challenging and many find threatening. (Harvey, 1998, pp. 3-4)

Strategic planning shakes up people and organizations and “demands imagination, innovation, and risk taking” (Harvey, 1998, p. 4). Because strategic planning requires a great deal of time, effort, and resources from an organization, it should be carefully considered before administrators embark on the process.

If strategic planning is undertaken, leaders must be able to anticipate and attempt to avoid the problems. For example, closure on issues sometimes does not occur, resulting in a loss of credibility. As Gilmore and Lozier (1987) noted, it is easy to focus too much on analysis and data gathering with the result that planning can become too bureaucratic and mechanistic. Mintzberg (1994), also, points to the tendency of planners
to continually perfect their plans through an analytical process rather than to act. Analysis is not synthesis, according to Mintzberg, who expressed concern about the “disassociation of thinking from acting” (p. 285). Guskin (1996) found that analysis often became a way to avoid making difficult decisions and initiating change. To counter that, campuswide participation is essential, and external constituents need to be informed of the progress. Finally, the institution’s leaders must be willing to take risks and follow through with implementation. “Planning is practiced too often as a form of control as opposed to a means for promoting creative thinking” (Gilmore & Lozier, 1987, p. 13). Mintzberg (1994) envisioned the strategic process as one of learning and connecting thinking to action. Forming a strategy is a dynamic process which combines analysis, intuition, and learning. Planners, therefore, must be actively involved; without commitment planning will be unsuccessful (Mintzberg, 1994).

In summary, planning for change or planning to change requires the use of specific planning processes and philosophies. One of the most useful methods for making decisions that will take an institution into the future is that of strategic planning. Once the strategic planning process is started, every department in a college or university will identify strategies or plans that can help the overall goals of the institution. In the case of a potential loss of a segment of the student population, those strategies may include enrollment management plans, the need for marketing to different types of students, improvements in recruiting and retention efforts, and developing alternative course delivery mechanisms.
Enrollment Management

“The need to manage college enrollment from the point of initial contact through graduation has become increasingly apparent” (Penn, 1999, p. 15) and is now a “fundamental policy in postsecondary institutions” (Dixon, 1995, p. 7). The term enrollment management began to be used in the mid-1970s and was defined by Dixon (1995) as the concept of “finding, enrolling, and retaining enough of the kinds of students an institution wants” (p. 5). Prior to the mid-1970s, leaders in higher education typically had ignored the enrollment process. However, Dixon found that education leaders had come to recognize that shifting demographics, curriculum changes, and a variety of programs and services affect and influence enrollment. As a result, enrollment management needs to be integrally linked to every unit of a college campus (Dolence, Miyahara, Grajeda, & Rapp, 1987; Penn, 1999).

“Enrollment management is strategic and therefore active rather than passive” (Dolence et al., 1987, p. 56). It is also not an easy or a quick fix. According to Dolence et al., enrollment management includes four cornerstones: institutional commitment, strategic planning, integration, and evaluation. Institutional commitment must be present for enrollment management to work. It is not the responsibility of a single campus office but must have the support of top management and of those in other units of the college or university. The enrollment management plan should feed into or be a part of the institutional strategic plan. Integrating institutional goals with student needs will involve a team effort on the part of the diverse units of the college or university. Evaluation must
be a part of the enrollment management plan and should be developed when the strategy is formulated. Tracking and monitoring implementation of the plan is important to determine if goals are being met and the results should be distributed to other campus units.

Penn (1999) recognized that, as changes occurred, enrollment management in institutions of higher education gradually shifted from a focus on recruiting a large freshman class to make up for attrition of upper level students to a greater interest in retaining students to graduation. The environment, teaching quality, faculty/student interactions, and other college resources are important factors in a student’s satisfaction with his or her college choice and college experience. Efforts thus were made to more closely match students with institutions so students would continue after the first year. “Low attrition/high selection is seen as a key indicator of institutional success” (Penn, 1999, p. 2).

For the economist, enrollment will be determined by the intersection of measured supply and demand curves. For the demographer, enrollments are related to numbers of people and where they are located. For the higher education administrator, enrollment is determined by the combined effects of many manageable and unmanageable factors, categories that are roughly, though not completely, equivalent to supply and demand. (Brinkman & McIntyre, 1997, p. 67)

Brinkman and McIntyre further identified unmanageable factors as those outside the institution which are usually associated with demand. These include demographic factors such as ages, location, educational experience, ethnic composition, and the total number of people in an area. Unmanageable economic factors include income and unemployment
rates. Other unmanageable factors include the activities of competitors, public policy decisions, and social and cultural factors.

Manageable factors are those that an institution can control, such as pricing (tuition, fees, residence hall costs, financial aid), marketing efforts, admissions policies, and registration and enrollment procedures (Brinkman & McIntyre, 1997). Other manageable factors include instructional quality, the curriculum, and the climate of the campus.

To the extent possible, an enrollment management plan provides for attempts to exert some degree of control over manageable factors and tries to factor in methods of response to unmanageable factors (Bean, 1990). It is extremely important, therefore, that all units of an institution be involved with the enrollment management plan. Bean (1990) noted that enrollment management activities take place throughout an institution and they are not isolated from but are interdependent with other areas of the institution. Enrollment management also should be part of the overall strategic plan of the college or university, since its purpose is to determine the size and nature of the student body (Hossler & Bean, 1990). “In affecting the student body, enrollment management shapes the character, quality, and effectiveness of the institution” (Bean, 1990, p. 32).

Competition and Marketing

For most of their collective histories, U.S. colleges and universities have existed in a relatively non-competitive environment. Increasingly, however, today’s institutions compete for faculty, students, and resources (Bell, Thompson, & Manning, 1988;
Christenson, 1982; Keller, 1983). Technological change, a global environment, workplace changes, demographic changes, corporate universities, and new instructional delivery mechanisms have made competition a reality in the educational marketplace (Bell et al., 1988; Blustain, Goldstein, & Lozier, 1998). "Colleges and universities are being assaulted from several directions, with new competitors, new technologies, and new approaches to education" (Blustain et al., 1998, p. 19). They have had to enter an era familiar to business—one of fierce competition (Phelan et al., 1991). "A continuation of the explosive growth of distance education and, for institutions that do not engage in partnerships with other institutions or industry, significantly increased competition for students" was seen as a future scenario for higher education (Albright, 1999, p. 97).

Peterson and Dill (1997) identified a number of forces that produce and shape competition in an industry. One is the entry of new organizations into an industry (for-profit postsecondary institutions, for example). Other forces include the bargaining power of supporters (students, for instance) and customers (employers or funding sources) and the threat of substitute services. Peterson and Dill found that, increasingly, technical innovation heightens competition among the institutions in an industry. All of these factors were found to lead to an increased degree of rivalry, often intense, among institutions in an industry.

One of the fears of intense competition is that it may lead to hucksterism and misleading marketing practices (Wright, 1995). In contrast, good marketing means knowing one's institution, being aware of its image, and matching that knowledge with appropriate marketing activities.
Non-traditional students and non-traditional instructional delivery systems, such as online courses and interactive video courses, provide new opportunities to colleges and universities. However, those opportunities exist for every college. Geographic boundaries no longer limit market share. Corporations and online delivery open the door to everyone in the educational marketplace (Blustain et al., 1998).

Colleges and universities can respond to the competitive environment by product differentiation and/or product/market concentration (Bell et al., 1988). As an example, Bell et al. cited the need for lifelong learning and workforce training which will open up opportunities for colleges to offer new courses and programs of study to an older, non-traditional market of students. The increase in the proportion of such non-traditional students has been in evidence since the 1980s, but increasing pressure to create a competitive work force has caused a paradigm shift in higher education, from being a provider of educational experiences for the young to a provider of lifelong learning to adults of all ages (Hughes et al., 1991). Offering different products to a different market segment can afford a college or university a competitive edge.

This new competitive environment must lead administrators to a greater understanding of why people seek a college education, so that they can effectively market their institutions. Higher education has changed from a seller’s market to a buyer’s market, and administrators now must consider the competition, look for new students, and market effectively (Edmondson, 1987; Keane, 1985). Steeples (1988) maintained that there is a close relationship between strategic planning and an era of competition for students. The search for a niche or uniqueness was viewed as a search for a market
advantage (Hughes et al., 1991; Layzell, 1997). That perspective encompasses the idea of matching service to demand. "Strategic planning is fundamentally a means of applying marketing concepts to higher education" (Steeples, 1988, p. 103).

Liu (1998) described two schools of thought about marketing in higher education. One school of thought advocates the development of market plans by using a product/market model in which academic programs are viewed as the product of higher education. This perspective is focused on meeting and anticipating the needs of students in a competitive environment and views students as customers. The second school of thought asserts that students are a part of the process, not just a product. Education is viewed as a service rather than a product.

While both business enterprises and higher education institutions encompass large, complex organizations, Liu (1998) cautioned that there are fundamental differences that must be recognized before developing marketing strategies in higher education. For example, maximizing profit should not be the end for higher education. Focusing too much on accountability negates the many cultural and educational values that higher education inculcates. Many outcomes of higher education are not discernible for years. Liu suggested that another difference was that the choice of a college or university affects a person for a lifetime. College is an investment, not just a product to be consumed. In addition, customer satisfaction is not sufficient to gauge success. Students are both product and customer and, thus, cannot be relied upon to be the sole judge of all of their educational needs. Colleges and universities market a complex package that includes
programs, philosophies, staff, learning experiences, and social offerings rather than a simple consumer product.

Because of these differences, Liu (1998) argued for a mix of competencies in a strategic marketing management plan that is integrated into a college or university strategic plan. Analytical competencies involve marketing research and marketing information. Liu referred to humanistic competencies in regard to the internal culture of the institution. The integrative competencies of marketing involve accessing marketing strategies of other institutions to help to determine services, market targets, and related issues to “position” the institution in the marketplace.

Bingham (1996) devised a marketing plan with five components: research analysis, resource analysis, enrollment analysis, retention analysis, and market audit analysis. His plan was focused on collecting and analyzing data to improve marketing and planning, developing effective cost-marketing ratios, improving retention, analyzing the yield of applicants to enrollees, and measuring the results of the plan. Bingham’s plan allows for the orderly movement from one marketing stage to another and allows institutional leaders to exert some control over both internal and external conditions.

Marketing in higher education has become an accepted and necessary activity, particularly in a fast-changing world (Kotler & Andreasen, 1987). In previous times, public or nonprofit organizations depended on the generosity of wealthy patrons, on people’s willingness to share, or on the support of the government. However, public institutions were described as moving into a competitive stage in which they must increasingly generate internal revenue through marketing and management techniques.
Leaders of nonprofit and public institutions must have a “clear perception of the unique environment in which they operate” (Kotler & Andreasen, 1987, p. 29). They need also to recognize that customers (students) are being asked to exchange something of value for something beneficial that the college or university provides. Kotler and Andreasen (1987) suggested that the student is being asked to make sacrifices and to incur a cost in return for the benefits. The costs may be economic, may entail changing ideas or values, may involve a change in behavior, or may require a sacrifice of time and energy. In exchange for those costs, the student receives economic, social, and/or psychological benefits. Unique to public institutions and nonprofit organizations is the exchange that involves nonmonetary costs for social and psychological benefits.

One of the fears that personnel in colleges and universities have about marketing is that, in the attempt to be customer-driven, standards and integrity may be sacrificed or diminished. Kotler and Andreasen (1987) viewed marketing as supporting an organization’s goals. Marketing was described as a means to a goal and a tool to help the organization do what it wants. Therefore, marketing was described as a variable that is under the control of management. Used properly, they suggested, it can help colleges and universities succeed in a competitive environment without relinquishing the ideals and values of higher education.

Summary

Chapter II has been used to present a review of literature pertinent to the research study. Chapter II was focused on theories of organizational change and decline. Change
may be planned or unplanned, and it may result in an institution transforming itself as it adjusts to changing conditions. According to Theus and Billingsley’s theory, an institution will either maintain itself as it is, adapt to change, transform into a new type of institution, or collapse. When institutional niches change, an institution’s viability is threatened unless steps are taken to move into new niches.

A portion of the chapter was used to describe types of decline, such as erosion, contraction, dissolution, and collapse, that organizations may experience. The chapter also continued information on adaptation approaches to change and decline. Adaptation can be either proactive or reactive. Cameron identified four different types of approaches: population ecology, life cycles, strategic choice, and symbolic action. The approaches vary according to the amount of managerial influence used.

Educational administrators long were accustomed to growth in their institutions and find it difficult to address the potential for decline. As a result, administrators tend to choose conservative approaches and focus on issues of efficiency. Innovation is seen as risky and is, therefore, often ignored as a way to address decline.

Institutional leaders may employ a variety of strategies in the adaptation process. Chaffee proposed three models of strategy: linear, adaptive, and interpretive. Linear strategies plan how to deal with competitors. Using adaptive strategies, the organization changes to conform more closely with consumer needs. In interpretive strategy, the institution’s leaders attempt to convey the organization’s meaning to stakeholders in order to gain their support.
Cameron identified several factors that help organizations to adapt to change, such as lead time, pinpointing causes of decline, the experience of the administrators, economics, size, and understanding the nature of change. Lindquist identified rational planning, social interaction, human problem-solving, and political strategies that can help people adjust to change in their organizations.

Planning in higher education and planning models were addressed. Strategic planning, especially, was portrayed as having value for higher education. The characteristics of strategic planning, its advantages and disadvantages, were reviewed. Strategic planning is especially helpful in defining mission and assessing external threats as well as internal strengths and weaknesses.

The literature regarding enrollment management explores the need to manage enrollment in colleges and universities so as to enroll the number and types of students desired. Enrollment management must be aligned with the strategic plan of the institution and must be linked to every college unit in order to be optimally effective.

Chapter II also included information on issues related to competition and marketing in higher education. Greater competition among the nation’s colleges and universities exists due to technological changes, the increasingly global community, other changes in the workplace, and new instructional delivery systems. The competition has increased the need for leaders in higher education institutions to market more intensely and to develop marketing plans.
CHAPTER III

RESEARCH DESIGN

This chapter presents a description of the research design for the study. The chapter is organized into the following sections: the rationale for using qualitative research and the distinctions of qualitative research; a review of issues related to reliability, validity, and generalization; a description of the participants; a description of the interview protocol; and explanation of the data collection procedures, the data analysis, and credibility issues related to this study.

The purpose of this study was to discover and describe the perceptions of higher education leaders regarding the anticipated decline in the number of high school graduates in North Dakota and the possible reduction in college and university enrollments that may result. The study was focused on how the participants make meaning of the potential loss of students for their individual higher education institutions and for North Dakota higher education in general. It was focused also on the examination of institutional and North Dakota University System (NDUS) planning documents as they relate to enrollment issues. The following broad questions were used to guide the study:

1. What are the perceptions of higher education leaders, college and university administrators, and other officials in North Dakota to the declining public school
enrollment and declining number of high school graduates in the state?

2. What is the perceived impact that the declining number of high school graduates may have on higher education in North Dakota, generally, and specifically for the institutions involved in the study?

3. What planning processes, methods, techniques, and/or strategies have administrators considered, used, or plan to employ to address the possible loss of students in higher education institutions in North Dakota?

Distinctions of Qualitative Research and Rationale for Use

There are a number of techniques that could be used to ascertain the response of higher education officials to declining enrollment. A very obvious one is to use a survey or questionnaire to gauge reactions, impacts, and possible ways of mitigating negative effects. However, by its nature, a questionnaire is limiting. Qualitative research using open-ended and relatively unstructured questioning provides a better opportunity to obtain the wide-ranging and various responses of the participants.

Creswell (1998) defined qualitative research as an “inquiry process of understanding based on a distinct methodological tradition of inquiry that explores a social or human problem. The researcher builds a complete, holistic picture, analyzes words, [and] reports detailed views of informants” (p. 255). Qualitative methods were described as being well suited to research conducted in the social sciences, psychology, anthropology, and education fields in which it is important to discover the viewpoints of those who are participating in an event. Maykut and Morehouse (1994) stated that
“qualitative researchers look to understanding a situation as it is constructed by the participants” and “attempt to capture what people say and do, that is, the products of how people interpret the world” (p. 18). The qualitative researcher, therefore, discovers patterns that emerge after interviews, observations, and analysis (Maykut & Morehouse, 1994).

Qualitative research methods are supported by an interpretivist paradigm, unlike the positivist paradigm of quantitative research. As such, qualitative research portrays “a world in which reality is socially constructed, complex, and everchanging” (Glesne & Peshkin, 1992, p. 6). The intent is to understand how the research subjects construct the reality and truth of the world around them (Delamont, 1992; LeCompte & Preissle, 1993). Because of the complexity of dealing with the perceptions of human beings, qualitative research is evolutionary, emergent, and open (Glesne & Peshkin, 1992). Context, complexity, and contradictions are necessarily a part of the qualitative process as the researcher attempts to comprehend and interpret the participants’ perspectives.

Creswell (1998) identified the following characteristics of qualitative research:

- the researcher is a key instrument of data collection,
- data are collected as words or pictures,
- the research is focused on participants’ perspectives and meanings, and
- the analysis of the data is inductive, with attention to particulars.

This study was focused on the perceptions, beliefs, and meanings of the educational leaders interviewed. As such, qualitative methods were used appropriately to determine how the participants viewed their worlds. This interview study is
phenomenological in that it describes the meanings of lived experiences about a concept or phenomenon (Creswell, 1998), in this case, the declining numbers of North Dakota public school students and high school graduates and the potential impact of that decline on higher education. Phenomenology is concerned with the subjects' perspectives on their world, describes them in detailed content, and attempts to explain the essential meanings of their experiences and perspectives (Kvale, 1996). The qualitative interview was chosen as the dominant method for this study because it, like no other type of research method, provides for the depth of understanding of peoples' experiences and the meanings they ascribe to them, which is the "root of in-depth interviewing" (Seidman, 1998, p. 3).

Reliability, Validity and Generalization

An issue for qualitative researchers is how to manage the concepts of reliability, validity, and generalization or, as Kvale (1996) called them, the "scientific holy trinity" (p. 229). In qualitative research, those concepts do not have the same meanings as in quantitative research and need to be reconceptualized or redefined to be relevant (Kvale, 1996). Making the qualitative approach to validity analogous to quantitative approaches "may distort the very features of qualitative design that contribute something special to the human sciences. The risk in such an analog is rigidity, dogmatism, and the stifling of creativity" (LeCompte & Preissle, 1993, p. 330). Therefore, "understanding is a more fundamental concept for qualitative research than validity" (Maxwell, 1992, p. 281). As Wolcott (1994) stated, "I try to understand, rather than to convince" (p. 369).
Trustworthiness and verification are better terms to describe a qualitative study. To ensure trustworthiness of the data in this study, in-depth interviews were conducted with the participants in order to provide detailed descriptions of their views and understandings of the topic. “The purpose of interviewing, then, is to allow us to enter into the other person’s perspective. Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit” (Patton, 1990, p. 278). Interviews with numerous participants resulted in general themes of understanding which added to the trustworthiness of the data.

Generalizability in qualitative research is dependent primarily on the context of a situation (Kvale, 1996), and the generalizability of one context to another is often left to the reader or receiver of the information to decide. Most people generalize spontaneously, deciding from their own experience whether and how new knowledge will apply to other circumstances and situations. Qualitative research studies can “teach readers to envisage possibilities, to expand and enrich the repertoire of social constructions” (Kvale, 1996, p. 233). Just as stories of one life may illuminate many other lives, qualitative studies can serve to enlighten others who seek connections from such studies to their own situations. Qualitative methods allow a researcher “to see a world in a grain of sand” (Blake, 1961, p. 118).

Questions that guided the research with respect to verification and trustworthiness were suggested by Creswell (1998) and are as follow.

1. Was the researcher careful not to influence the contents of the subjects’ descriptions so that they were not an accurate reflection of their actual experience?
2. Is the transcription accurate and does it convey the meaning of the interviews?

3. In the analysis of the transcriptions, were alternative conclusions identified that could have been derived from the data?

4. Can the researcher go from the general description to the transcripts and account for specific contents and connections?

5. Is the description specific to a situation or setting, or does it hold generally for the experience in other situations?

As noted, “there are no straightforward tests for reliability and validity” in qualitative research (Patton, 1990, p. 372). A researcher can only do one’s best using his or her “full intellect to fairly represent the data and communicate what the data reveal” (Patton, 1990, p. 372).

Selection and Description of Participants

For this study, it was important to interview educational leaders from a variety of higher education institutions in the state so as to acquire a more complete look at the impact of enrollment issues on different types of institutions as seen from the perspective of the interviewees. Institutional types included a doctoral degree-granting university, a four-year regional university (formerly a state teachers college), and a two-year community college. People in similar positions in each institution were interviewed to provide continuity and comparability. The positions included were: president of the institution, chief academic officer, student services or student affairs officer, admissions director, faculty senate president, and student services coordinator. These are general
titles that describe the position or responsibility; specific position titles varied from institution to institution, but the position responsibilities were comparable.

In addition to the educational leaders on three campuses, two officials from the NDUS and two members of the North Dakota State Board of Higher Education (SBHE) were interviewed for their perceptions of the issue from a statewide perspective.

The choice of the institutions and the educational leaders was based on the desire to get a broad perspective regarding the phenomenon. Each of the three types of institutions is common in the university system and was chosen to ensure that broad perspective. The possibility existed that people from various institutions and entities would have differing viewpoints and perspectives that were pertinent to the study. Capturing the contrasting opinions was vital to the study, especially for determining common themes, but also for identifying unique and disparate perspectives. It was important to learn not only what perceptions the participants held in common but also to discover areas of dissimilarity.

The educational leaders were chosen because of their leadership positions and their involvement and/or concern with enrollment issues. It was necessary that people with leadership capabilities and positions be chosen as it was assumed that the issue of demographics and its impact on enrollment was one that would require leadership at the present time and into the future. The assumption that leadership was a critical component of the study led to the choices of specific individuals at the institutions, from the SBHE and from the NDUS.
A sufficient number of interview subjects needed to be chosen and those participants had to reflect a wide range of the population (Seidman, 1998). As Seidman (1998) stated, it is necessary “to sample purposely the widest variation of sites and people with the limits of the study” (p. 46). It was essential that the number of participants ultimately selected would provide the variety of perspectives from the institutions and other entities. Adding more people from additional institutions was not seen as a necessity. It was necessary that each type of institution be included in the study and that, at each institution, leaders be chosen who had concerns and responsibility for enrollment and demographic issues. These positions were the same, or as similar as possible, in each college or university. To add more people and still keep the study equally represented would have meant the addition of three more corresponding institutions and participants. Consistent with the literature on qualitative research, a decision was made by the researcher that such expansion would make the study considerably more difficult to complete and probably would not have yielded greater relevance to the results. Seidman’s (1998) admonition to have enough participants so as to reflect a range of participants and sites was met, as was his criterion to interview enough people so that the researcher begins to hear the same information. Throughout the interviews, similar responses recurred, thus convincing the researcher that common themes were emerging from the participants.

All participants signed an interview agreement (Appendix A) that outlined the responsibilities of both the researcher and the participants. It also was used to inform the participants that their names and the identities of their institutions would not be revealed
in the research report. To ensure that the interview subjects would feel free to speak openly, they were assured that every attempt would be made to protect their identities.

Naturally, in a small state, the issue of confidentiality is critical. Readers may speculate on who the participants were. A careful attempt, however, was made to write the report in such a way that the participants would not be readily recognized or identified. Conjecture about the participants would be just that—conjecture.

Interview Protocol

The interview protocol (Appendix B) was prepared to include the three main research questions with sub-categories of questions under each main question. Essentially, the questions centered on the response of the participants to the declining enrollment in public schools of North Dakota, the possible impact of that phenomenon on higher education in the state, and the planning processes or strategies that may be used to address the issue.

Since this was a qualitative study, the interview protocol served as a guide for questioning. However, it was important to allow for information to emerge from the interview and to be able to follow variant paths chosen by the participants that seemed to be generally pertinent to the research question under discussion.

The questions were open-ended and allowed for each participant to formulate answers that intended to describe accurately and adequately his or her experiences and meanings. “An open-ended question ... establishes the territory to be explored while allowing the participant to take any direction he or she wants. It does not presume an
answer" (Seidman, 1998, p. 69). As such, open-ended questions were designed to help the participants to reconstruct their experiences and realities.

Data Collection

As the first step in the research process, a research proposal was prepared. The proposal for this study then was approved by the researcher’s doctoral advisory committee and by the Institutional Review Board of the University of North Dakota.

Those in selected educational leadership positions were identified and the participants were contacted by telephone to ask for their participation in the study. In each telephone conversation, a description of the study was provided and assurance given of confidentiality. Each interview subject was asked to participate in an approximately one and one-half hour interview to discuss the research topic. In all but two cases, the interviews were conducted in a single interview session. A total of 19 people participated in interviews for the study. Most willingly and readily agreed to participate in the study. Only two people expressed some reservations about participating but were willing to do so when assurance of confidentiality was given.

Because of the busy lives of the participants and the many demands on their time, one interview was requested of each person. Even though more than one interview was often recommended in the literature, the powerful positions of many of the people involved in the study and the constraints on their time made this difficult. The decision was made to conduct a longer, single interview which, it was believed, would provide sufficient time for subjects to respond to the questions of the study. Multiple interviews
were generally recommended to validate and verify previous answers from participants. However, it was decided that this was not as critical an issue with this study’s participants as their answers were considered to be unlikely to change over a period of a month or two.

Interviews were arranged and were conducted in each participant’s office or another convenient location mutually agreed upon. Prior to beginning the interview, the researcher reviewed the purpose of the study with each participant and presented each with statistical data (Appendix C) regarding public school enrollment decline. This information was provided so the participants would understand the reason for the study and to provide a basis for initiating the interview protocol. Most participants indicated that they were well aware of the enrollment statistical data prior to being presented with it.

The interview agreement was explained to each participant and each was asked to sign the form. One copy was kept by the interviewee and one was kept by the researcher. Participants were also asked if the interview could be audio-taped for accuracy. All participants signed the consent form and all participants but one agreed to be audio-taped. Detailed written notes were taken during that one interview. The interviews then proceeded.

Interviews with people in positions of power can pose some concerns for an interviewer. Generally, the person conducting the interview is in the power position and the interviewee is in a subordinate position (Kvale, 1996). However, many of the interview subjects for this research study were in powerful positions and accustomed to
being in charge. Also, people in power positions often view issues from a political and public relations standpoint; it is second nature to them. Because this could create an uncomfortable situation for an interviewer who must manage the interview, as the interviews were conducted, care was taken by the researcher to maintain control. Assurances of confidentiality resulted in the interview subjects' stated belief that they could be candid and forthright in their responses. The interview subjects did appear to be open, frank, and unreserved in their comments.

After the interviews, the tapes were transcribed for later analysis. The transcriptions are almost entirely verbatim transcriptions. While a few sections of the transcriptions were summarized because the content was not related to the research topic, this was done rarely. In the final transcription, the pauses, "ums," "uhs," and insignificant word repetitions (e.g., "you know") generally were not included. Wolcott (1994) suggested that such editing of the spoken words provides greater clarity for readers and puts the participants in the best light possible. Therefore, occasional uses of nonstandard English were changed to standard English, in the belief that the participants would wish such changes to be made. All of the participants were educated people who, like everyone, sometimes used imperfect and casual conversational speech that they might not use in formal or informal writing situations. Any such editing was deemed to be minor and to have in no way distorted the message of the participants. Since this was not a linguistic study, some editing was considered necessary and helpful, both for readability and for shielding the participants. Notes regarding laughter and non-verbal expressions were included if deemed necessary or considered to be helpful for meaning.
Data Analysis

It was important to allow the participants to "tell their own stories," to share their understandings, and to explain the meaning that they made of the phenomenon under study. Therefore, the interviews provided the direction for the study. The researcher naturally had some assumptions, viewpoints, and prejudices that were bracketed (Creswell, 1998; Maykut & Morehouse, 1994), or mentally set aside, throughout the process of data collection and analysis. This process enabled the researcher to investigate the phenomenon with an open view, thus allowing the experience to be seen through the eyes of the participants in the study (Maykut & Morehouse, 1994).

The first step in analyzing the interviews was to read them in their entirety several times, writing notes and memos in the margins that would help in further analysis. During the readings, statements deemed to be important were noted and highlighted for future use. The statements of each interview subject thus were analyzed initially to acquire the essence of the interview. Those notes were useful as further analysis was conducted.

The coding process began after reading the interview transcripts. Each transcript was read again and code words were identified for various sections. The overall code words of "response," "impact," and "planning" were used to identify large sections of the data that dealt with those larger issues. More specific code words identified lesser sections. The codes were then entered into a software program designed for the analysis of qualitative research. Once the coded interview transcripts were completed, code
families were developed, again around the three overall codes of response, impact, and planning. These code families helped to distinguish clusters of related meaning units.

Even as the coding process was continuing, the interview transcripts were read by the researcher often so as to be immersed in the data as much as possible. "There is no substitute for total immersion in the data," Seidman (1998, p. 10) stated. Repeated readings led to further highlighting of notable passages and important statements. It also helped to determine if any new codes were required.

When the coding was completed, a list of the codes and code families was generated. The list included the number of occurrences of the codes, a finding which was essential for determining the importance of certain codes over others. In reviewing the codes, it became clear that some codes were very important while others were not. In this way, recurring themes and meaning began to unfold.

The initial coding process produced nearly 140 codes which were far too many to be effective or meaningful. Many codes appeared only once or just a few times and were deemed unimportant for the research. It also became obvious that some codes were very similar in meaning and could be combined. By eliminating some codes and combining others, a more manageable and useful total of 20-25 codes was generated.

The transcription portions of the primary coded sections were then analyzed to help find similarities and divergent views. Themes emerged from the continual analysis of the transcripts and the primary coded sections.

The coding process is an effective way to reduce the amount of data, the vast number of words, into data that are practical and significant in meaning. Initially, codes
were clustered around the three main questions asked of the participants, but continued analysis identified three central themes that encompassed the participants' responses to the phenomenon, its impact, and their planning processes. These three themes centered on change in higher education, the feelings of uncertainty and concern for higher education in North Dakota, and the challenges of dealing with changing demographics. The three themes and their corresponding codes are shown in Figure 1. The three main themes then led to the development of a number of related assertions and sub-assertions which are provided in Figure 2. The assertions, or statements about the themes, were used to present evidentiary material from the interviews. The process of reading, coding, and analysis can be seen to have led to a set of specific primary categories, or codes; three main themes that expressed the essence of the phenomenon; and a set of assertions, or statements, that were made from the data.

In addition to the analysis of the interview data, various planning documents were examined to confirm the participants' statements about planning. In some cases, the documents were supportive of the participants' perceptions and in some cases they were at variance with them.

Issues of Credibility

All research projects require an ethical approach that assures, insofar as possible, that the research is accurate and credible. As explained earlier, reliability and validity issues are somewhat different for qualitative research. Trustworthiness is a more useful concept for judging the credibility of qualitative research.
### THEMES AND CODES

**Change in Higher Education**
- Competition
- Access to Education
- Distance Education
- Technology
- Lifelong Learning
- Workforce Training
- Special Programs
- Enrollment

**Uncertainty and Concern for Higher Education**
- Mission
- Vision
- Niche
- Planning
- Economic Development
- Downsizing
- Denial

**Meeting the Challenge**
- Leadership
- Quality
- Standards
- Creativity
- Out of State
- Innovation
- Enrollment
- Recruiting

*Figure 1*. Themes and codes derived from the data analysis.
Theme: Change in higher education

Assertion 1: Higher education is undergoing many changes, both statewide and nationwide.
   Sub-assertion 1a: Higher education is more competitive.
   Sub-assertion 1b: Different types of students with many kinds of needs are being served in higher education.

Assertion 2: The student demographics of North Dakota will impact differently on the state's higher education institutions.

Assertion 3: To avoid institutional decline, North Dakota colleges and universities are initiating educational changes.
   Sub-assertion 3a: There is ambivalence in regard to increasing use of technology and distance delivery of courses and programs.
   Sub-assertion 3b: Recruiting and marketing are increasingly important.
   Sub-assertion 3c: Lifelong learning and workforce training are important educational components.
   Sub-assertion 3d: Enrollment management is necessary.

Theme: Uncertainty and concern for higher education in North Dakota

Assertion 1: There are varying degrees of concern about the impact of declining school enrollments on higher education.
Assertion 2: Defined and clarified missions and vision are needed for the institutions and the North Dakota University System.
Assertion 3: Planning is not always well-defined or understood.
   Sub-assertion 3a: Planning lacks cohesiveness and unity.
Assertion 4: The future of North Dakota higher education and the future of North Dakota are linked.
Assertion 5: There are differing opinions about the need to downsize the university system.

Theme: Confronting the challenge

Assertion 1: Leadership is critical in addressing educational changes.
Assertion 2: Creativity and innovation are needed to mitigate the impact of demographic changes in North Dakota.
Assertion 3: New student markets need to be developed.
Assertion 4: Educational quality and standards need to be maintained.

Figure 2. Assertions and sub-assertions derived from the themes and codes.
Several things were done to ensure an accurate and trustworthy research project. The interviews resulted in nearly 400 pages of detailed answers to questions and other responses by the participants. The participants had much to share, thus they provided thick descriptions, an essential for qualitative research. Thick descriptions go beyond surface appearances; they show emotions and feelings. It is from these thick descriptions that meaning and interpretation unfold (Patton, 1990).

The time from the start of the research to its completion was long enough to allow careful thought and analysis of the data. The opportunity to live with the data, to let it become a part of the researcher, was important to the understanding of the interviewees’ perspectives.

Documentary evidence from planning publications helped to confirm or question the participants’ responses. In addition, the interviewees were asked sometimes to reiterate explanations to make sure that their perceptions were stated accurately. This was done when answers to questions seemed vague or off-topic.

While common themes were sought, it was also necessary to uncover divergent views. Both the common themes and contradictory opinions were important in understanding the viewpoints. Direct quotations of the participants were used often to present their perspectives as objectively as possible.

Analysis was helped by being able to quantify occurrences of codes, thus making it easier to identify accurately the important ideas and themes. The analysis of qualitative data is an artistic endeavor to some extent. Nevertheless, care and attention were given to the data to advance as accurate and authentic a representation of the findings as possible.
CHAPTER IV

ANALYSIS OF THE DATA

The findings of the study are presented and described in this chapter. These findings are based primarily on interviews with a variety of educational leaders in North Dakota and, in addition, on relevant planning documents. The data from the study were analyzed to determine the perceptions of the interview subjects regarding the declining K-12 enrollment in North Dakota schools and its potential impact on higher education in the state. The planning processes and strategies that were or may be used by educational leaders to counteract negative consequences of a declining pool of potential students formed the third component of the data analysis.

The chapter is organized around three main themes that were discerned primarily from the interview data. The three themes that emerged as most significant are change in higher education, uncertainty and concern for higher education in North Dakota, and confronting the challenge of changing demographics. The major themes are divided into assertions which, in some cases, are clarified by sub-assertions. The themes, assertions, and sub-assertions are supported by data from the interviews and from the planning documents.
Theme: Change in Higher Education

This study was motivated by a desire to understand how people in leadership positions in North Dakota higher education view and understand the changing demographics of the state’s youth population and of its school enrollment. The perceptions of the participants regarding declining enrollment and its impact on higher education in North Dakota were a main focus of the interviews. Emphasis was on the subjects’ thoughts about the issue, on the possible changes that could occur because of the enrollment declines, and on what they perceived to be possible strategies for them to employ to address such changes.

The participants were cognizant that they live in times of fast and ever-present change. The proliferation of information has impacted modern life, thus requiring new ways to solve problems. Not surprisingly, they were aware of the impact of change on higher education.

Assertion 1: Higher education is undergoing many changes, both statewide and nationwide.

The awareness of change in higher education was a conspicuous theme throughout the interviews. Often, the realization of change was openly expressed by the subjects. But, perhaps more importantly, change was a dominant subtext that seemed to undergird and provide a foundation for other perceptions, beliefs, and viewpoints. The interviewees referred to the fact that higher education has changed in the past, is currently undergoing tremendous change, and needs to continue to change in the years ahead. Past, present, and future—the watchword was change.
Several participants remarked that the changes that have occurred in higher education in the last 10 to 15 years have been greater than at any other time in history. "In the last few years," one participant stated, "we've probably seen more changes than we've seen in two or three decades."

In addition to the dramatic changes of the recent past, most participants noted that change is occurring at a rapid rate at the present time. One college president remarked that change is occurring at the "speed of blur" and is going to continue that way into the future.

Even with the changes of the past, and present day changes, most participants indicated that change will not only continue but that, in fact, the educational community needs to foster and encourage even greater change for its survival, its reputation, or for its future growth.

Sub-assertion 1a: Higher education is more competitive. Most of the interview subjects viewed higher education as being much more competitive than in the past. This was regarded as being true across the country and was considered to be evidenced by the emergence of institutions specializing in distance education, of corporate training centers, and of private, for-profit institutions. The higher education world has opened up to students who now have many more and varied opportunities for getting an education. The educational leaders suggested that they could no longer completely count on getting the bulk of student enrollment from their traditional, albeit unofficial, service regions, and, therefore, that students need to be attracted from other areas of the state and the nation.
The university president believed that his institution's competition was not from smaller schools in North Dakota but from other universities and colleges in the region and even nationwide. Competition has broadened for the university's traditional applicant pool to include many institutions beyond the state's borders.

Even though most of the interview subjects reported that competition had increased, they did not necessarily perceive competition as a bad thing or something to be feared. Some of them did express concern about statewide competition and two considered that to be "cut-throat." Others commented that "they are recruiting from our territory" or "the colleges in the areas of the state where there's greater declines are going to come after our pool [of potential students] more aggressively than they are now." The presence of advertising in a particular community by another institution was viewed by a few as marketing outside its region, as if there were, or should be, boundaries defining the institutions' recruitment areas.

In general, most of the respondents noted that competition was not bad, and was, in fact, healthy—a condition that would make everyone work harder to provide high quality education. One of the policy makers stated,

I don't view competition as a bad thing because, if competition forces institutions to look at different ways of offering their services or improving the quality of their services, that's just fine. And, we're going to have to do that anyway because competition is not just from within the state's borders. It's from outside the state's borders.

Another stated, "it [competition] forces you to provide quality, and it forces you to look at those issues that you ought to address in terms of relevant programs." New and dynamic programs were considered to be essential for remaining competitive.
Obvious to the interviewees was the fact that technology had certainly increased the competitive environment of present-day higher education. When students can take courses through distance delivery mechanisms from any of hundreds of educational institutions, clearly they are consumers in a competitive marketplace. As one of the educational leaders declared,

we’re not creating that competition. It’s there. And either we’re going to play in that arena or we’re going to be left sitting on the sidelines and others will snap it up. And the competition for our students is greater. Students can take courses or full academic programs from institutions throughout the world.

Sub-assertion 1b: Different types of students with many kinds of needs are being served in higher education. The traditional-aged student has been joined by increasing numbers of non-traditional students. Minority students, international students, women, part-time students, older students, and students with disabilities have been entering higher education to varying degrees for many years. In North Dakota, those students have helped to boost college attendance figures.

The non-traditional students have changed the face of higher education in the United States and in North Dakota. The university president spoke at length about the need to “get some understanding of the redefinition of ‘student.’” A focus on the traditional student, he suggested, is not possible any longer. “We, as an institution, have to transform ourselves to serve that other population and that’s a challenge.” He further stated, “We’re accustomed to serving the traditional student in traditional ways, so we have the challenge of transforming ourselves in order to be able to do that [serve non-traditional students].”
For the leaders of universities and other educational institutions that have historically served traditional-aged students, the increasing numbers of non-traditional students create new challenges and, at the same time, make some educational leaders question their role in the educational community. While some subjects expressed the desire to continue to focus on traditional-aged students, most reported that doing so may not be a viable option.

Differing kinds of students bring a wider variety of needs to their educational journeys. Non-traditional students are more likely to be part-time students with jobs and family responsibilities and therefore are perceived to need to be able to take classes at more convenient times and locations. They may also need different kinds of student services or services that may require adjustments in traditional hours of operation.

Many non-traditional students are drawn to education because technology and distance education offer opportunities to take college courses in a more convenient manner. The status of access as a North Dakota value was mentioned by many of the interviewees. “There is a tremendous commitment to access” in North Dakota, one person stated. This was evidenced by the number of public colleges and universities in the state. However, geographic access was perceived to be less critical in a technological age. It was further suggested that students who need both convenience and an education can be served now through different kinds of access.

Assertion 2: The student demographics of North Dakota will impact differently on the state’s higher education institutions.

Most of the educational leaders expressed the perception that the changing K-12
student demographics will have different impacts on different institutions. Colleges in smaller communities and/or in more rural areas were considered to be threatened more seriously by declining numbers of high school graduates. Being located in a larger community was deemed to be an advantage in attracting students.

After looking at the statistics of declining enrollment in North Dakota school districts, the two-year college faculty leader observed, “I don’t think we’re going to see the exact same severe pattern here at our institution or in our area.” That sentiment was echoed by others on the same campus. The university leaders, as well, mentioned that their institution was in a better position than other institutions in the state, partly because of their location and partly because of the varied and comprehensive nature of their program offerings.

When asked how he envisioned colleges in the future, the vice president of student affairs at the four-year regional university remarked,

I have a different vision for what they’re going to look like in North Dakota. I think there are population centers where college campuses are still going to thrive. I still think there will be a resident student body and I think they will look very similar to what they’ve looked like in the last 50 years for quite some time, but I’m a little concerned about what they’re going to look like in the kind of environment we’re at here in rural North Dakota.

Similarly, a colleague of his agreed that public school enrollments are decreasing more rapidly in the rural areas of the state as the population shifts to larger cities. The surrounding rural area that has been the institution’s major recruitment area will “start to dry up.” “Probably the larger cities in North Dakota are going to see a little less impact because their populations have been growing continually.”
Assertion 3: To avoid institutional decline, leaders in North Dakota colleges and universities are initiating educational changes.

The loss of student population directly impacts an institution’s budget, the effects of which can result in the decline of the institution. Whether as a possible preventative for enrollment losses or as a response to the competitive and changing nature of higher education, officials in colleges and universities in the state have initiated numerous changes. Those changes have been occurring for some time and will continue into the future.

Sub-assertion 3a: There is ambivalence in regard to increasing use of technology and distance delivery of courses and programs. All of the interview subjects recognized the impact of technology on higher education and of the necessity to utilize technology. The regional university in particular had expanded into technology in a major way and its leaders saw technology as setting them apart from other institutions. Their embrace of technology was seen as a key to attracting students and in helping students to succeed in a technological society.

One of the most controversial aspects of technology is that of distance education. On this topic, there was a tremendous variety of opinion among the study’s participants. Several were very much in favor of increasing distance delivery of higher education courses and programs but most expressed a mix of reservations and enthusiasm for it.

Positive aspects of distance education, cited by participants, were the convenience, accessibility, the possibility of importing curriculum, and the opportunity to reach a new market or pool of students. One person mentioned that distance education
may even increase on-campus enrollment. The number of online courses, in particular, had increased at several campuses and such offerings were strongly supported by some of the educational leaders. There was much ambivalence, however, about the quality of the learning, even though some subjects suggested that the research showed no difference in traditional versus distance education courses. Simply transferring a traditional course to an online offering was not seen as a quality educational method, unless the course was designed or modified specifically for distance delivery.

Lack of personal contact, difficulty in providing services for distance education students, other logistical problems of distance delivery, and expense were all seen as concerns in regard to provision of coursework to distant students. One faculty member was adamant about the need for personal contact in higher education. She stated that educators should encourage human contact and market that as a plus. "I really don’t know why we’re encouraging not to have face-to-face personal contact as part of the educational experience," she argued.

Several leaders commented on the expense of offering distance education courses. "It’s enormously expensive," one vice president stated. "We’d be in a marketplace competing with other schools who have deeper pockets."

Several subjects suggested that offering courses via distance education would not make up for declining numbers of students and should not be seen as a panacea for enrollment concerns. However, others stated that distance education could counteract the decline in the pool of traditional-aged applicants.
Even though the comments about distance education were quite mixed and uncertain for many of the interviewees, there was a sense of inevitability regarding the need to pursue distance education opportunities. With so many players in the distance education market, the participants seemed to feel that they must join in or be left behind. As one of the enrollment specialists stated, “We’re getting geared up now to get into distance learning and online courses. But as far as what’s happening in the world, we’re already behind schedule a little bit with that.”

Sub-assertion 3b: Recruiting and marketing are increasingly important. The competitive marketplace has made the marketing of institutions of higher education and the recruiting of students increasingly important, according to the study’s subjects. One of the board members declared that marketing is “the name of the game now.” Another stated that “they [the institutions] have to get very aggressive” in marketing.

One of the respondents stated that the colleges and universities had not needed to market seriously in the past; students simply showed up to enroll. “College marketing is serious business these days. It didn’t used to be serious business,” she said. “We have to invest more money in identifying and recruiting qualified students,” one of her colleagues stated.

For some institutions, marketing is hampered by lack of funds. One of the leaders from the four-year regional university voiced frustration with the situation. He mentioned that one university in the state would have a $250,000 marketing budget for the following year. “That’s the thing we dread the most. As these [K-12 enrollment] numbers go down,
we are not going to be able to compete with resources.” He went on to say, “that calls for
the university system leadership to say, ‘Hey, why are we competing with each other?’ ”

Leaders from the institutions with smaller marketing budgets indicated that they
were unable to do much marketing and recruiting. They had a smaller number of staff and
were able only to do the simplest of recruiting efforts, such as letter writing, mailing
brochures, visiting high schools, and attending college and career fairs.

One of the board members recognized the fact that institutions with larger
marketing budgets were able to market more vigorously. “Those in the areas [of the state]
where there’s more money can get more money and advertise better than those in the
smaller areas where they can’t. And so the advantage just keeps getting wider and
wider.” The other board member, when asked about the possibility of providing
additional resources to schools with limited marketing budgets, said, “maybe we as a
board need to look at that more seriously.”

Sub-assertion 3c: Lifelong learning and workforce training are important
educational components. Of the 12 people who discussed the issue of workforce training
and/or lifelong learning, most perceived those to be important components of higher
education. The pace of change and technological advances were reported to be requiring
more and more training and education for those already employed in the workforce.
“There are a lot of people around here who desperately need more knowledge and skills
in order to be successful,” the regional university president mentioned. Those educational
needs afford opportunities for colleges and universities in the state.
A current workforce training initiative to help the two-year colleges address the needs of workers for additional education was seen by most as a way to provide needed education and as a way to compensate for the loss of traditional-aged students. It was described as a future for higher education. That understanding, it was suggested, must be grasped by the leaders of public institutions or they must face losing that market to private educational institutions, or to corporations and other businesses. A university system official stated emphatically, “There are many out there who argue that higher education can’t respond, has shown its inability to respond, and that it’s going to be IBM University, Microsoft University, McDonald’s University. Frankly ... I think we can and will respond and I believe that, in the long run, that will be best for students.”

Most subjects agreed that a finite number of high school graduates exists but that there is not a finite number of people needing training and retraining. It was suggested that the door is open for higher education to contract with business and industry for training and to provide for the citizenry’s need for lifelong learning.

Only 2 of the 12 people who discussed the issues expressed doubts about lifelong learning and workforce training. One of those, a faculty leader, did not believe that the state’s population was large enough to produce enough lifelong learners for institutions to compensate for the loss of traditional-aged students. While he supported the concept of lifelong learning and said he believed that lifelong learners should be encouraged, he was skeptical that lifelong learning could positively affect the predicted losses of traditional students. The other dissenter was from the university and expressed reservations about workforce training in the more rural parts of the state. His stated belief was that those
institutions did not have an adequate number of businesses available in those areas to partner effectively with the college in workforce training endeavors. However, the majority belief of the interview subjects was that lifelong learning and workforce training offer opportunities for higher education institutions and may be the salvation for some.

Sub-assertion 3d: Enrollment management is necessary. Enrollment concerns were expressed by many of the study's participants. Some expressed concern from a statewide perspective, while noting that enrollment issues impact some colleges and universities more than others. However, only the interview subjects from the university and the four-year regional university expressed fairly serious concerns about enrollment at their institutions. “It’s brutal ... the enrollment here. Most of us who are involved in it lie awake at night. ... Enrollment ... just haunts us.” In both institutions, steps had been undertaken to address those concerns through greater emphasis on enrollment management planning, enrollment management task forces, and acquisition of additional staff to assist in enrollment management processes.

“We've got to have a very strong enrollment program,” the university president stated. Another participant from the university observed that enrollment management has many components and that emphasis cannot be put on one or two areas. Therefore, the enrollment program needs to be broad-based and multi-faceted. The student affairs professional said that, although enrollment management is being done, it has been difficult because of administrative changes and a lack of strategic enrollment management planning. As a result, most such activities have been short-term and reactive. “We really don't have a plan, we don't have a direction, we don't have a strategic way to
build institution-wide support for this [enrollment management] either, so it's happening kind of by accident.” On the other hand, she was able to provide a detailed marketing plan which did outline enrollment plans and objectives.

Those interviewed from the four-year regional institution expressed similar concerns about enrollment and had created a management team and hired additional people to address issues of enrollment. The two-year college officials expressed less concern about enrollment statistics.

Theme: Uncertainty and Concern for Higher Education in North Dakota

A second important theme supported by the data is that there is a considerable amount of concern about higher education in the North Dakota. The concern is manifested because of the changes in higher education nationally and because of the specific changes taking place in the state. The uncertainty that many people expressed about the direction of higher education and its future feeds the concern. The uncertainty and concern centered on five assertions that deal with the impact of declining enrollments, definition of mission, planning, the future, and downsizing the university system.

Assertion 1: There are varying degrees of concern about the impact of declining school enrollments on higher education.

All participants were asked for responses about how they felt about the declining number of high school graduates in the state. When asked to provide a one-word response to the phenomenon, the subjects’ responses ranged from optimistic to pessimistic. The
word most frequently used was that of “challenge.” Other one-word responses included “important,” “sanguine,” “innovate,” “vision,” “concern,” “dramatic,” “dynamic,” “caution,” “change,” “inevitable,” and “perplexed.”

Most of the interview subjects expressed some concern about the phenomenon of population decline, but the level of concern varied from being quite threatened to being relatively secure about the demographic issues. If the enrollment statistics were borne out and little was done at the colleges and universities to address them, a number of negative impacts were mentioned as possibilities. Those possibilities include elimination of special programs, reduction of student services, loss of faculty and staff, budget reductions, increased use of adjunct faculty, and the chance of “watered down” courses and programs.

A number of the interviewees expressed frustration with a certain level of denial that they perceived to be prevalent in the state about the issue of declining K-12 enrollment. Two of the respondents stated that they had watched the trend of public school decline for decades but felt that it was only in the previous few years that people had begun to grasp the reality of the situation. They intimated that, to some extent, denial was still present. “This is old stuff,” one of the vice presidents stated, as he pointed to the high school graduate statistics, “but the reason it is news is because we’re incredibly capable of denying things like this.”

**Assertion 2: Defined and clarified missions and vision are needed for the institutions and the North Dakota University System.**

Two of the topics that generated considerable concern were those of vision, both
for the individual institutions and for the university system, and of missions. Fifteen of
the 19 people interviewed admitted being disturbed by a lack of vision and the uncertainty
of institutional missions. Those sentiments were expressed by board members, system
officials, and institutional representatives alike.

Several people mentioned the need to develop a vision, either as a system or at
individual institutions, which encompasses taking a broad view and looking carefully at
the future. Once a vision was established, those subjects suggested, strategies could be
put in place to accomplish the vision. Visionary leadership was considered to be essential.

The need for the leaders of the university system itself to develop a vision and a
shared sense of purpose was considered critical by several of the educators. They noted
that the lack of a “clearly articulated vision” for the university system had sometimes
created uncertainty and frustration for institutional leaders. As a result of the lack of
clarity concerning the university system mission, the institutional leaders expressed the
need for a better understanding of the missions of the individual institutions. The two-
year college leaders and the four-year regional university leaders seemed quite confident
about their own institutional missions; the university officials seemed more ambivalent
about their mission. However, it was frequently mentioned that it was important to define
the missions of all of the institutions in the system. Some criticism was aimed at the
university system leaders by those who perceived that they had acted as a “leveler of
institutions” and had attempted to “homogenize” them. It was suggested that more clearly
defined roles and missions would help to change that perception. Representative
comments about the need for clarified missions included the following:
"We don't have properly focused missions for the institutions."

"If we could get a good handle on schools' identities and who they are and what they're expected to be it would be wonderful."

"I think one of the things the system could do for us is more clearly demarcate and define the separate missions of the institutions."

"Another major factor probably is continuing to take a look and watch closely the missions of all the universities."

"I think the institutions should concentrate on their missions, but I don't think those missions should be frozen, that we should set them in concrete."

"We need to find a role for the institutions that are going to be here."

"We've got to all have this shared vision. And to have more thoughtfully focused missions."

Related to the need for defined missions and a sense of vision is the idea of developing niches, or areas in which institutions can specialize. It was considered important by many of the participants to each have a special niche that would attract students to their respective institutions. For some institutions, this might involve unique programs, an emphasis on technology, a focus on traditional-aged students, workforce training, or an emphasis on the liberal arts. To counter enrollment declines, the subjects suggested that new niches need to be found. "The universities are going to have to carve out their niches and going to have to find a role for themselves." Some perceived that institutions can no longer strive to be all things for all students.
Assertion 3: Planning is not always well-defined or understood.

It was on the subject of planning that the participants' responses were most varied and diverse. When asked what kinds of planning processes were present on each campus, specifically to address enrollment concerns, a variety of answers was given.

The presidents of the institutions generally held broad views of planning and discussed the process of strategic or long-range planning on their respective campuses. The other campus members who were interviewed sometimes were not aware of planning processes at all or discussed a more limited focus of planning, such as the development of an enrollment task force. Even representatives of the same institution had quite different perceptions of the planning undertaken on their campus. The three faculty members, in particular, were unaware of what kinds of planning had occurred or were occurring on their campuses. One said, “I don’t know of any specific planning, but we are reminded frequently of the statistics and the projections that are coming down. So we know that we need to be doing something.”

The people working in enrollment management and student services spoke of having enrollment management teams or task forces. One person spoke in detail of the enrollment management planning process which involved realignment and unification of departments and services, but noted that, after a year the unified approach was abandoned, departments again were reorganized, and the enrollment planning process “sort of fell apart.” She stated that her institution’s enrollment management approach since then has “not been planning, it’s been very reactive, not proactive.”
One of the people involved in recruiting at the four-year regional institution described the implementation of an enrollment management team that met regularly to discuss enrollment issues. The team members involved themselves with looking at the future, ranking important issues, prioritizing them, and setting up methods for how to deal with the priorities. "We have a fair knowledge of where we see ourselves as a university," he stated.

Even though there were many different perceptions about planning, it was seen as important, and most interviewees expressed a need for planning. "If you want to see where you're going you've got to have a pretty good sense of where you've been and where you are now. It takes some sort of clearheaded planning to do that."

Sub-assertion 3a: Planning lacks cohesiveness and unity. Because of the variety of ideas about what constitutes planning, it is probably natural for subjects to perceive that planning processes and activities lacked some cohesion and unity. On the college campuses, there seemed to be a variety of perceptions about how planning was done, how much was done, or even whether it was done. People expressed the need to understand the mission of the institution, or of the university system, so that appropriate planning could be centered on the mission. Others remarked that an enrollment management plan needed to be aligned with a strategic plan.

Subjects noted that the university system could lead the way in unifying institutional planning efforts. A university system official commented on the need for good information regarding demographics and the need to work with other state agencies
to address enrollment concerns. A board member, too, commented on the necessity of working together in planning, particularly with the K-12 community.

It is not possible to say that planning was not occurring on campuses or throughout the university system. Each college president, as well as board members and system officials, spoke of long-range planning and had documents outlining such plans. Other subjects’ responses, however, suggest that not everyone was aware of planning activities. In talking with the participants, planning was described as a fragmented activity that did not engage or include everyone.

A review of planning documents showed that institutional leaders had addressed the issues of enrollment and demographics by recognizing the changing and competitive educational marketplace, the new student populations, and the need for more active recruitment of students.

In the statewide university system plan, *Pathways to the Future* (North Dakota University System, 1994), the issue of changing North Dakota demographics was considered, particularly the continuation of out-migration and the projection of declining numbers of high school graduates. The plan recognized the need for a method of predicting future higher education enrollments.

The most recent document, *Strategic Plan 1998-2004* (North Dakota University System, 1998), continues a consideration of the enrollment issue in more detail. Factors that were related to enrollment and listed in the report included the following.

- The numbers of high school graduates are expected to decline after 2000.
- The population is shifting from rural to urban centers.
Students will be able to access many education providers other than public institutions.

- Competition to provide higher education is increasing.
- There will be a need for lifelong learning.
- There is a need to develop a six-year marketing plan.

Even though the most recent strategic plan included more emphasis on demographically related issues, one administrator was critical of the plan "because this plan is based on growth, based on increasing amounts of dollars from the legislature, neither of which, when you take a step back, seems to me to be realistic projections." She went on, "We are not taking a realistic look at and planning for, as a university system, this dramatic drop [in high school graduates]."

As noted previously, perceptions about planning varied quite substantially among the interviewees and awareness of planning was uneven. Planning was perceived to be a matter of concern for those in top administrative positions and was not always seen as a unified effort or experience throughout the system or even throughout a single campus. Even when there was evidence that a campus had undergone a rather extensive planning process involving many people, some of the people interviewed had either forgotten that or perhaps never really knew much about the process.

Assertion 4: The future of North Dakota higher education and the future of North Dakota are linked.

For many of the interviewees, the future of North Dakota higher education was perceived to be inextricably linked with the future of North Dakota. Higher education was
seen as dependent on the state and as providing a benefit to North Dakota as well. It was noted that the state of North Dakota and higher education could help each other.

Economic development was viewed as crucial for the development of good jobs that would encourage young people to remain in the state. Workforce training was seen as a positive factor in that regard, providing a well-educated workforce. The economy of North Dakota was considered a critical piece in the development of the state and of higher education. Higher education, on the other hand, could help the economy grow and help encourage new residents. “North Dakota needs to look at alternative ways to attract people to the state, and I think that higher education is probably one of the best opportunities they have,” one man remarked. Others also recognized that North Dakota has “immense potential” that needs to be publicized.

The system of higher education was seen by most subjects as an asset for the state. “We need to trumpet the idea that the state’s institutions of higher learning hold for us a great opportunity and great potential and with everything else that is happening to us economically, maybe we should pay attention to the gifts we already have right here in our laps,” said a faculty leader. “We need to have a viable, vibrant higher education system for this state to forge an economic future,” a system official said.

By working with economic development officials and with the legislature, subjects suggested, higher education can grow and help the state. “If the people involved in the legislature and government can begin to see higher education as an opportunity to use for the growth of the economy, these kids will come in here and spend their money,”
a faculty member stated. However, there was a sense of uncertainty about how to work together for change and what the various entities would be able to do.

One educational leader spoke vehemently about the need for North Dakota to know where it is headed. "There needs to be an agreement among the state's political leadership on where the state's headed," he declared. "In other words, what are the goals for the state of North Dakota? And then the university system and its entities should become part of the solution to achieving the state's goals." He also noted that,

- if the state goal is to grow North Dakota and if to grow North Dakota is to increase the population of the state, then the university system is one of the strategies for that. It attracts students here. It must be involved with economic development bodies when they're trying to get businesses to locate here or expand existing businesses. All kinds of strategies fall out for us if that's what growing North Dakota means.

One of the presidents summed up the prevailing feeling with the statement, "I'm not pessimistic about the future of higher education in light of declining youth. I'm pessimistic about the future of North Dakota unless we decide to do something about declining youth." The number of young people is a problem for North Dakota, she suggested, not for higher education per se. One of the interview subjects stated that North Dakota is at a crossroads. Many people want to "shut out the lights on the state" but he perceived that, by taking some risks, North Dakota can have a good future. "North Dakota's destiny is in its hands," he stated.

**Assertion 5: There are differing opinions about the need to downsize the university system.**

The definition of downsizing was not universal among the participants in the
study. For some, downsizing meant closing colleges, for others it meant reducing or eliminating programs, perhaps by eliminating duplication.

Most respondents were careful not to say that colleges should be closed, although several suggested such action would be necessary in the future. "I think there will be great pressure to close institutions if things get really bad," a faculty member remarked. Several subjects said that closings will occur simply because the student populations at some colleges would eventually dwindle to a point where closure would be inevitable. As a board member remarked, when "you have 300 or 400 people, you can't afford to have a university there any more." "It seems to me that they're just going to die. It's just going to happen," remarked a student services vice president. Another interview subject supported the idea that students will make the decision "whether this state decides to close campuses or not." A few people suggested that there should be or would be some forced closings in the future, as a result of board of higher education or legislative action or because of an initiated measure.

One of the respondents mentioned that the institutions would see changes in the use of facilities. As an example, it was noted that dormitories will be less needed, which will mean a kind of downsizing for residential colleges. A board member indicated a belief that there won't be as many traditional colleges and universities. "There won't be any need for the four walls." Others predicted different missions for some institutions which may result in a certain amount of downsizing.

Downsizing was described as a volatile issue and one for which no one had a good solution. Closing a college is an issue which the state's political leadership needs to
address, explained a system official. “The people of the state created all these institutions. We created these institutions based on political considerations. They weren’t created on educational considerations.” Another person stated that

the people have said they want these schools to stay here. I think the legislators, the people in government, would do themselves a favor if they would find the justification, if they would find the rhetoric for helping those schools not only succeed but grow and develop. These are like the crown jewels of the state.

One of the university interviewees suggested that, if downsizing or closing schools was necessary, the state needs to help an institution with the process. “You can provide them with temporary resources for five years to help them get through it so it’s not an all or nothing kind of thing. They can have money to buy out people’s contracts, or engage in some outplace services, or help the community deal with it.” Another person discussed the possibility of finding businesses to move into a closed college facility, an action which would help the community survive the loss of the higher education institution.

Theme: Confronting the Challenge

The participants in the study expressed concern and apprehension about the status of higher education in the state. They described their uncertainty about the direction of higher education. However, except in rare instances, most of the interviewees were reasonably confident that needed changes can be made in North Dakota to build a positive future. Nearly all, though, talked about the challenge of doing so. They demonstrated awareness that building a positive future for higher education would require addressing
challenges, working hard, and trying new things. "What must happen here, and it may already be a little too late, it should have happened here 10 years ago and been consistent, would be to face the monster," a president stated.

They saw several factors as critical to success in confronting the challenge: providing strong leadership in the university system and in individual institutions, encouraging creativity and innovative thinking, and developing new markets. Combined with those challenges was the stated need to maintain quality and standards in educational programs and institutions.

Assertion 1: Leadership is critical in addressing educational change.

Leadership is always important, but in difficult and challenging times good leadership is essential. Facing the possibility of student losses in higher education, the interview subjects were clear in their belief in the importance of strong and courageous leaders.

The predominant view of leadership provided by the interview subjects is that leaders need to help effect change and, in the process, need to help people change and think differently. "The biggest part of the leadership challenge for me is helping people change and helping the institution change," one of the institution presidents commented. A vice-president stated, "Part of my leadership is [that] it's okay to think about our work differently. We have to work differently."

This stated realization that leadership is about change requires that leaders take a broad and visionary view and, often, must become actively involved in the change processes. The university president expressed it aptly when he said, "You take the broad
leadership responsibility, you take the operational leadership responsibility, but then you also have to do the hands-on ... things." Setting direction and being directly involved were seen as important aspects of leadership.

Raising awareness, working together, and developing strategies were cited as important factors. "Leadership is developing a vision, and then putting the strategies in place and empowering people to do the best job." Related to that subject's statement was the responsibility of a leader to create an environment that allows people to discuss problems, like declining enrollment, and to develop strategies to face them.

Leaders, according to one president, help to "shape the future as opposed to being shaped by it." She went on to note, "I really believe in terms of educational leadership, you're not only changing the future of the college, you're helping to build a future for the community you serve." Her notion was that if you don't try to shape the future, "you are like a raft floating down a river and it's going to go wherever the current takes you and you're not providing any leadership." The idea of developing a sense of community was cited as important because it involves a much broader sense of citizenship. One vice-president emphasized that values are important in a leader because leaders are emulated on a campus. The need to be agents of change, to be proactive, and to help people change was echoed by a majority of the respondents who discussed the issue of leadership.

Assertion 2: Creativity and innovation are needed to mitigate the impact of demographic changes in North Dakota.

Being willing to take a chance and to risk new ideas was valued by many of the interview subjects. There was a sense among them that serious problems need to be
addressed in creative, innovative, and even “off-the-wall” ways. Creativity and commitment to a cause were said to work wonders. One of the institution presidents remarked that he was not particularly worried about the future of higher education because he firmly believed that creative and committed people could fashion a good future for higher education in the state. “We have to be very creative in everything we do,” the vice-president of the two-year college stated. That sentiment was reflected in the comments of other educational leaders.

“You can’t sit back and watch the world go by,” one man asserted. “You need to stick your neck out there once in awhile and go places.” He noted that could be done by looking at the bigger picture to see other ways of accomplishing things.

Subjects said that innovation and risk must be rewarded—even if a risk did not work out as anticipated. A climate of innovation was seen as needing to be fostered so that risks would be taken. One academic vice-president said, “Let’s foster this wild, innovative work.”

Interestingly, the only institution at which every person interviewed spoke strongly about the need for innovation was at the four-year regional university. They spoke more specifically there about the new and innovative changes they had initiated than did other interviewees at the other campuses.

**Assertion 3: New student markets need to be cultivated.**

A reliance on North Dakota traditional-aged students was regarded as an impossibility for the future. Except for a few who believed in the traditional role of colleges, most of those interviewed spoke of the need for broadening the student base.
Some noted that the institutions had been enrolling non-traditional students for a number of years, an effect which had helped to increase or maintain college enrollments. However, as the traditional-aged student market diminishes, subjects anticipated a greater need to replace that student loss with other student markets. Non-traditional students, nearly everyone predicted, would constitute a bigger share of the enrollment pie in the future. Lifelong learning, continuing education, short-term certificate programs, and distance education were suggested to attract older students who are perceived to have needs for special programs and convenient access to educational opportunities.

The recruitment of out-of-state students was discussed to some degree by 16 of the 19 participants in the study. While out-of-state recruitment was a significant topic of the study, the opinions were quite mixed on the effectiveness and efficacy of recruiting out-of-state students. Several of the respondents who mentioned the need to recruit out-of-state students were pleased that North Dakota had opportunities to recruit students from other states through the Western Interstate Commission for Higher Education (WICHE), the Western Undergraduate Exchange (WUE), and other consortia. Those consortia were seen as effective and powerful tools through which North Dakota colleges and universities could more easily attract students from beyond the state’s borders.

Other factors, such as safety, clean air, a good environment, and human values were seen as positive features of life in North Dakota that could be marketed to out-of-state students, and to their parents. “We could market by stressing some of the quality of life things and some of the old-fashioned qualities about the institution, about the values that form the citizenry here, the work ethic, stable families, low crime, all those things,”
remarked one participant. The issue of safety, in particular, was often mentioned as an important selling point. Tuition costs, too, were described as often lower for out-of-state students in North Dakota than was the tuition in their home states. This was considered to be a powerful recruiting message. “North Dakota is an attractive educational environment and people are going to begin to notice it more,” according to a university system official.

Even though many interview subjects talked about the necessity of trying to recruit out-of-state students, there was disagreement on the value of doing so. According to one participant, students will usually travel to a college no more than five hours from home, unless they are going to attend a very prestigious institution or are enrolling in a unique and specialized program. Hence, an institution with a special niche was seen as having an advantage in recruiting out-of-state students.

Several people expressed doubt about whether the recruiting of out-of-state students, either for resident programs or as distance education students, could make up for the predicted loss of traditional students. As a cited example, students leaving Arizona to go to college have many places to stop along the way and enroll in college. Why, asked many of the leaders, would they come here? “To lure people to [any city], North Dakota is a tough sell. It doesn’t set off a lot of fireworks for people who are in larger metropolitan areas,” said one individual. “Why would a kid who grows up in Tucson want to move to a town ... with a bad climate and 45,000 people?” asked a vice-president.

Clearly, while many perceived that out-of-state students represented a potential applicant pool for North Dakota institutions, especially as leaders planned to market to
alumni of their institutions, several noted that, realistically, it was unlikely that the out-of-state market would be big enough to offset traditional-aged student losses.

Nevertheless, the interview subjects noted in various ways that they were pleased to have tools with which to work for out-of-state student recruitment and believed that this was a market that they needed to attempt to reach. It was suggested that North Dakota higher education officials must reach out to every possible student market. A vice-president of student services stated that,

unless there is an increase in the number of high school graduate aged students, and I wish to keep enrollments at a certain level, I really only have two choices. I either have to take a larger share of those graduates from other institutions in the state or I have to recruit out-of-state students. I don’t know of any other way.

Several interviewees mentioned a possibility of recruiting education majors from other states, especially those that are experiencing growth, since North Dakota has a number of institutions that offer teacher education degrees. An anticipated shortage of teachers was noted, and many states will begin to experience a heavy demand for graduates of education programs. Innovative ideas such as having growth states pay a portion of tuition for their students to attend a North Dakota college were discussed. The growth states’ leaders could be spared the expense of building more college facilities and hiring more faculty, would be able to educate their future teachers at a reasonable cost, and could better ensure an adequate supply of teachers for their states. This and similar suggestions were made by several respondents.

Offering students a chance to participate in extracurricular activities such as athletics, theater, and/or music was suggested as another way to recruit students from
places where such opportunities would be limited. Other possibilities included recruiting
more international students, an action which a few institutions in North Dakota had done
with some success.

Recruiting out-of-state and international students was noted as a difficult task,
especially according to those who were directly engaged in marketing and recruiting. Not
only was it seen as difficult, but it was also expensive. However, as one person stated,
“you’ve got to look outside of North Dakota to other parts of the country and other parts
of the world in order to be able to offer our institution, which has a lot to offer [to
students].” The vice-president of instruction at one institution seconded this idea by
stating, “If we were to limit our recruiting efforts and design programs only to attract
North Dakota high school graduates, we would be a prescription for decline.”

Assertion 4: Educational quality and standards need to be maintained.

Maintaining quality and standards was described as difficult in times of change
and in the presence of enrollment concerns. “We can’t lower our standards to get warm
bodies,” one person stated. Quality programs and dynamic curriculums were seen as
needed to attract quality students, and a lessening of quality and standards was seen as
detrimental to the health of the university system. As noted by the interview subjects,
programs that students want are essential; technology, as an example, may capture
interest momentarily but what keeps student interest is quality programs in which they
want to enroll. The emphasis on distance education had, for some of the participants,
raised apprehensions about quality. For some, the move to distance education was seen as
a threat to high educational standards.
Most of the participants remarked on the fact that North Dakota policy makers had worked hard to develop a higher education system of high quality. They were proud of that and wanted to ensure that it continued. "The quality of our faculty and our institutions and the quality of the product that they are producing is something that we can be very, very proud of," stated one of the interviewees. However, several people worried that a loss of students will mean reduced budgets and the loss of good faculty. Improving faculty salaries was mentioned as an important concern for maintaining high quality colleges and universities. To meet the enrollment challenge, it was noted that people must perceive that the North Dakota higher education system is rigorous and of high caliber.

Summary

Chapter IV has been used to report the data analysis. The three themes and assertions and sub-assertions reflect those issues most often discussed by the participants of the study. The views of the majority are provided, as are dissenting views, to portray a complete picture of the participants' perceptions of the phenomenon.

The theme of change in higher education reflects the importance of changing conditions as perceived by the education leaders. The student demographics of the state will impact the colleges and universities in different ways and will necessitate changes.

The competitive nature of higher education, the different types of students, and changing student needs have forced college and university officials to make changes through technology and distance education delivery, through the more intense use of
marketing and recruiting, by providing lifelong learning, and by instituting enrollment management plans and techniques.

Uncertainty and concern for higher education is the second theme of the study. This theme deals with issues of defining missions, planning for enrollment changes, and the possibility of downsizing in the university system. Also encompassed in the theme of uncertainty and concern is how officials of the state of North Dakota and North Dakota higher education can work together for a brighter future.

The last theme, confronting the challenge, explores methods of dealing with challenges that are the result of demographic changes. This theme focused on issues of leadership, educational quality, creativity and innovation, and the development of new student markets.
CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND COMMENTARY

This chapter is comprised of four sections that present an overview of the research study. The first section includes a summary of the problem to be investigated, the research questions, the data collection and analysis, and the findings of the research. Conclusions and recommendations supported by the findings are included in the following sections. The final part of the chapter includes a commentary by the researcher.

Summary

Declining numbers of youth in North Dakota have provoked concern among many segments of the state’s population, but few are more directly affected than the educational system, both the K-12 component and higher education. A reduced number of students graduating from North Dakota’s high schools translates into a smaller pool of young people available to enroll in the colleges and universities in the state. Therefore, the purpose of this study was to discover how a variety of higher education leaders in North Dakota perceive the impact of a decreasing number of high school graduates on higher education institutions in the state.
Interviews were conducted with 19 people who occupied positions of leadership in higher education in the state. Fifteen of the subjects were from three publicly supported institutions and four were leaders for the North Dakota University System. The institutional leaders included presidents, vice-presidents, student services administrators, faculty leaders, and admissions directors. A variety of institutions and educational leaders were chosen to get a broad perspective of beliefs and responses. In this way, common themes and areas of contrast could be identified.

The questions posed to the study’s participants were asked to ascertain a response to the phenomenon of enrollment declines, the impact that such decline may have on North Dakota higher education institutions, and the planning processes and other strategies that may be used to moderate the impact. The questions were open-ended, thus encouraging the participants to explain fully their beliefs and perspectives.

Data were gathered through interviews with the participants who, in most cases, provided rich and detailed responses to the questions. The interviews were 1-1½ hours in length and, in all but one case, were audiotaped. Each interview subject signed an interview agreement which outlined the details of their participation in the study and provided assurance of confidentiality. One copy of the agreement was retained by the researcher and one was kept by the interview subject.

The interview tapes were transcribed and coded using a computer software program designed to help in the analysis of qualitative research. The computer helped to form connections among the data, identify themes, and distinguish meaning units.
The transcripts were read many times and important elements were noted. The codes were counted and the most critical and frequently recurring codes helped to identify the three themes that eventually emerged from the analysis of the data: change in higher education, feelings of uncertainty and concern for higher education in North Dakota, and the challenges of dealing with changing student demographics in the state. From the themes, sets of assertions and sub-assertions were derived that expressed specifically focused beliefs about the themes.

The theme of change in higher education consists of three main assertions. One is that higher education is undergoing numerous changes. This is true across the country and in North Dakota. In general, the study’s participants expressed the belief that higher education is more competitive at the present than it has been in the past. The definition of student has changed also as more and more non-traditional students enter college. The variety of students has resulted in an abundance of needs that higher education must address.

The result of declining numbers of high school graduates will impact higher education institutions but most of the educational leaders believed that the impact would be felt unevenly among the state’s colleges and universities. Some institutions can expect a loss of student population while others will maintain their populations or enjoy growth in student enrollments.

Leaders of North Dakota colleges and universities have begun to initiate many educational changes to prevent institutional decline. The use of technology is important and various forms of distance education delivery have been, and will continue to be, put
in place. There is an increasing emphasis on recruiting, marketing, and enrollment management. In addition, the education officials are strongly promoting lifelong learning, workforce training, customized learning, and similar approaches as methods of increasing enrollment.

The second theme focuses on the feelings of uncertainty and concern for North Dakota higher education. The feelings of uncertainty and concern varied in intensity among the subjects. Some of the participants expressed feelings of being quite threatened by the statistics while others expressed less concern. The respondents often spoke of the need to define and clarify the missions of the individual institutions in the university system. There was anxiety about institutional roles. An inconsistency of understanding about planning was obvious among the participants. Many definitions of planning seem to exist and planning lacks unity on campuses as most of the interviewees' responses varied substantially in regard to what types of planning existed and, indeed, if planning existed at all.

Many participants noted that the futures of North Dakota and of North Dakota higher education are closely linked. The higher education system is seen by many to be a plus for the state and a vehicle that can help the state grow. Others believed that the North Dakota economy must be strong in order to help higher education grow.

There is ambivalence about downsizing the university system with some participants believing that downsizing must and will occur. This could result in eliminating programs, shutting down certain facilities, consolidating institutions, or closing colleges or universities.
The final theme, that of confronting the challenge, explored the participants’ beliefs about what North Dakota colleges and universities must do to meet the challenges that enrollment declines may bring. Educational quality was an issue for many who believed that North Dakota has an excellent higher education system which must not be sacrificed in an effort to attract students. Leadership, creativity, and innovation are critical components in meeting the challenge. In addition, the participants believed that new student markets need to be identified and recruited so that North Dakota higher education can continue in its tradition of growth and quality.

Conclusions

1. Educational leaders have had to adapt to many changes in higher education in recent years, some of which have created pressure on them and on their institutions. The definition of student has changed to include many kinds of non-traditional students. Those students come to higher education with a multitude of varying educational and personal needs that have resulted in varied impact on educational leaders as they have tried to address those needs.

Just as competition is increasing in higher education across the country (Albright, 1999; Bell et al., 1988; Blustain et al., 1998; Phelan, 1991), competition is a fact of life at the colleges and universities in the state. Not only is there competition from other institutions in North Dakota, but there is competition from regional institutions and from institutions around the country that have broken down the geographic barriers through distance learning methods. Competition may have a particularly strong impact in a state
where the potential exists for a loss of traditional-aged students. If all colleges are experiencing the effects of increased competition, imagine what college and university administrators must feel when factoring in a diminishing supply of high school graduates. Higher education has increasingly taken on business overtones. Marketing, planning, competition, recruiting, and mission are concepts that have come from the business sector and which signal to many in higher education a philosophical and value change from the traditional roles of higher education in the past. These changes have added to the pressures with which higher education leaders must deal as they attempt to meld established ideals and roles with new values.

2. Higher education leaders in North Dakota believe that declines in the youth population of the state present numerous challenges. To meet the challenges of a diminishing pool of traditional-aged students, educational leaders have turned to a greater use of technology and distance education delivery systems. Online courses and interactive television have changed the meaning of access and have allowed educational opportunities to reach previously underserved students. Marketing of the state’s institutions is extremely important and the participants recognized the need for increased emphasis on recruiting and enrollment management. Encouraging lifelong learning and instituting such things as workforce training and customized learning were seen as ways to increase the number of non-traditional students. Developing new student markets presents a major challenge which educational leaders are trying to accomplish by seeking out-of-state students and, possibly, international students.
3. Higher education leaders in North Dakota believe that vision and clearly defined missions for each of the state’s higher education institutions are essential. The vast majority of the interview subjects reported that a sense of vision is critical for the North Dakota University System and the individual institutions. While many of the participants in the study appeared to be secure in regard to their own institutional missions, most agreed that missions for the higher education institutions in the state were not well defined. Since a lack of vision and mission clarity lead to uncertainty and frustration, a clear sense of direction was considered to be important. Several of the participants in the study suggested that developing unique niches for the institutions could help to clarify mission, attract students, and provide a unique focus for each of the institutions. Possessing a unique niche can help colleges and universities survive (Cameron, 1984).

4. There is little agreement among educational leaders regarding the nature and scope of planning in North Dakota higher education. It seemed clear that there were many and varied conceptions of planning and what planning entailed. The interview subjects provided a variety of descriptions and understandings of planning, not unlike the blind men in the Indian parable trying to picture an elephant by examining its shape and coming up with vastly different definitions and explanations of what an elephant is. Planning seemed to mean something different to each participant, just as the elephant was different for each blind man as he examined a different part of the animal. Perhaps understandably, some viewed planning through the narrow lens of their own areas of expertise and
responsibility. Others held a broader view, while still others seemed to understand planning only in terms of the strategies developed to deal with enrollment issues.

Top officials tended to hold the most comprehensive and broad views of planning and could point to specific planning documents and long-range planning processes employed in the institutions. Other educational leaders were aware of planning only superficially or not at all. Some identified strategies that may more accurately be the results of planning rather than an identification of planning procedures. Some interview subjects were apparently uninvolved in long-range planning processes or were unaware of planning activities. Some participants spoke of more narrowly focused planning that had occurred on the departmental or divisional level. From the participants' responses to questions, it seemed clear that, at the very least, planning should involve a wider range of people, as expressed by Keller (1983), and that the results of planning efforts should be more widely communicated to everyone in the institution (Dolence et al., 1997).

5. There is no clear consensus regarding the issue of downsizing the university system. The opinions of the participants were mixed on this issue and many different conceptions of downsizing were expressed. Definitions of downsizing ranged from eliminating special programs to closing entire campuses. Some people felt that, inevitably, some colleges would be closed due to low enrollments. Much of what has been done in North Dakota higher education was perceived to have been done to preserve institutions, including such things as the initiation of workforce training, dual credit, and transferability of credits. However, the participants were ambivalent about whether
preserving institutions should continue to be the course of action or whether downsizing may have to be considered.

6. The State of North Dakota and North Dakota higher education are dependent on each other for achieving future growth. Keeping young people in North Dakota and attracting young people to the state are essential for the viability of the state. Higher education was seen by many of the interviewees as a way of helping North Dakota to grow by attracting young people to an excellent educational system. On the other hand, North Dakota leaders must develop ways of keeping young people in the state by ensuring the availability of good jobs. The growth of the state can help higher education just as higher education is seen as a vehicle for helping the state to grow.

Recommendations

Recommendations for Administrative Policies and Practice

1. Educational leaders must continue to adapt to change and to foster change to meet the challenges of a declining youth population. For many people, change is fearful and can be overwhelming. Higher education leaders must use their positions to help people to adapt to the changes that have occurred. They also must foster and adopt appropriate changes that can help the state’s higher education institutions and the students enrolled in them. In North Dakota, the fast pace of change is complicated by dwindling numbers of young people, thus, adding increased pressure to initiate effective change strategies. Identifying institutional changes that can maintain enrollment and improve
educational quality present extraordinary challenges for the state’s higher education leaders.

2. The missions of the colleges and universities in North Dakota need to be defined and communicated broadly. Uncertainty about the roles and missions of the colleges and universities in the North Dakota University System was shared by a majority of the participants in the study. Related to that concern was the desire for a vision to be defined for the university system. It may be that the roles and missions have been clearly delineated by leaders but have not been communicated to those who work in higher education, or to the general population of the state for that matter. A vision for higher education in North Dakota and well-conceived and publicized institutional missions would lead to a clearer sense of direction for the state’s higher education system.

3. Planning processes in North Dakota higher education need to be more inclusive and more effectively communicated to the stakeholders. The confusion surrounding planning in higher education suggests that more people in the system as a whole and on individual campuses need to be directly involved in long-range planning processes. Planning needs to be done in such a way that those involved can see the connections from their departments to the whole institution or system. A valuable aspect of strategic planning, stated Shirley (1988), is the increase of certainty among institution members. When they are not involved, people don’t realize that planning is being done, thus fostering unease regarding the direction of higher education or of their institutions. Planning processes and activities need to be ongoing, especially in the light of rapid
change. The planning process and resulting plans need to be communicated well and often to all involved in higher education.

4. Creativity and innovation need to be fostered and rewarded. Threatening conditions, such as the potential loss of students, need to be confronted by creative and innovative approaches. Leaders in higher education must encourage unusual ideas that have potential for increasing college enrollments. This study found that a majority of the participants believe that creativity is important for the future of North Dakota higher education. Emphasis needs to be put on innovation and, to do that, people and institutions must be rewarded for it.

5. Leaders of the State of North Dakota and in North Dakota higher education need to work together more closely to improve both economic and educational opportunities. Neither the state nor its higher education system exists in a vacuum. The state leaders must encourage growth through economic development and provide incentives to higher education for contributing to growth. The higher education community must be willing to play a part in that effort by providing high quality education, furnishing workforce training, and attracting new students to the state. To work together, lines of communication must be open and efforts must be made to listen to the views of everyone involved. Higher education leaders need to take active roles in legislative and governmental activities, showing what higher education can do to help North Dakota prosper. In the same way, North Dakota legislative and governmental officials must be open to the views of those in higher education. It is hoped that, by
closely working together, solutions may be found for enrollment and demographic problems in order to foster the growth of North Dakota.

**Recommendations for Further Study**

1. The views of North Dakota citizens need to be ascertained regarding the state's university system. This study was focused on the views of education leaders as it was believed that they will be most responsible for enacting and initiating change in higher education. This limitation to the study necessarily means that a cross-section of North Dakota citizens outside of higher education was not selected or interviewed to identify the full range of opinions and beliefs. The views of such residents would likely shed a different light on educational issues and provide other perspectives that could be helpful for education decision-makers. A study conducted with a set of interview subjects from the populace outside of academe would very likely yield an understanding of those different viewpoints and thus facilitate improvements in higher education and solutions to enrollment concerns.

2. There should be further study on the need to downsize, realign, or restructure higher education in North Dakota. The participants' responses about downsizing the higher education system were quite mixed. There was a sense that individual institutions cannot be all things to all people. This belief would indicate that some form of downsizing, realignment, or restructuring may be in order. Studying the issue would not necessarily mean that downsizing should or will occur, but careful consideration and review may lead to greater knowledge of the state's higher education institutions, a better sense of direction for higher education, and overall improvement of the system.
3. Funding higher education in North Dakota has always been an issue of concern to educational leaders and other educational stakeholders. The participants of this study did not discuss funding to much extent and, as such, funding issues did not emerge as a critical theme. However, a research study that fully explores higher education funding in North Dakota would be valuable to higher education leaders and state policymakers. Such a study could provide a foundation for understanding funding processes and could provoke a beneficial discussion for possible funding changes and improvements.

Commentary

Interviews with 19 leaders of higher education in North Dakota regarding the future of higher education cannot help but convince one of the deep level of caring, concern, and commitment of those educational leaders. Throughout the interviews, the leaders expressed a great depth of feeling for North Dakota higher education and for North Dakota itself.

A few of those interviewed were obviously distressed about the loss of young people and the other changes that have assailed North Dakota. One man poignantly expressed his sorrow about the statistical data and considered it tragic that so little had been done to better address the demographic issues years ago. Without a doubt, those interview subjects exhibited thoughtfulness, genuine concern, and, often, considerable love for the state of North Dakota. They were aware of the tremendous pressures that face higher education in North Dakota and showed willingness to work hard and creatively to
solve problems. There was no shortage of commitment, even as the interview subjects were realistically cognizant of the challenges.

Caring and commitment on the part of higher education officials, as wonderful as that is, must be bolstered by innovative ideas, perceptive wisdom about future directions and change, courage and fearlessness to make hard choices, and bulldog tenacity to follow through on the best course of action. Addressing issues of potential declines in North Dakota higher education will require the best leadership available. Those who step into leadership roles in North Dakota will need to possess extraordinary abilities.

Developing and communicating a vision for the future, encouraging originality and creativity, and helping people to accept change are necessary attributes for an innovative leader. Leaders in North Dakota higher education must be learning constantly about the world around them, considering trends, and identifying how changing conditions will impact on the state’s colleges and universities. Leaders need to effect change and develop a vision for an institution or system. They must help people accept change and they must be agents of change. Transformative change, as described by Lippitt (1982) can be reactive or proactive. The demographics of North Dakota require proactive change that comes from mindful action which can set higher education in new directions.

Knowing the direction to follow is, of course, often difficult, but clear missions and goals are crucial for charting a course. Determining direction depends, to a great extent, on knowledge—of North Dakota, of its higher education institutions, and of the needs of the state’s citizens. A process of planning helps those in higher education gain awareness of what their institutions are about, what their goals are, and what their
missions are or should become. Through planning, particularly strategic planning, a vision for institutions should be developed. The need for mission was critical according to Paris (1997), Rowley et al., (1997), Schmidtlein (1990), Shirley (1988), and Steeples (1988) and was stressed by the majority of the interview subjects. As North Dakota faces the challenges of population changes, higher education leaders will need to formulate plans and actions for the state’s colleges and universities. The decision to do nothing, or to simply react, is not an option that is in the best interests of students, institutions, and the citizenry of the state. The idea of letting “nature take its course” or just letting events occur is neither good planning nor good leadership.

Obviously, determining goals and future direction must be an ongoing process. The rapidity of change (Laing, 1967) does not permit stagnation. Educational leaders must do more than keep a watchful eye on potential changes. They must actively encourage, both in the system and in individual institutions, the active participation of everyone in higher education to promote and adapt to change. However, it is not enough nor is it fair to put the entire burden on those in higher education leadership positions. Everyone working in higher education must be willing to help with planning, making changes, and moving higher education in a positive direction. In addition, state leaders and the general population can help provide support, resources, and a sense of direction for North Dakota colleges and universities.

Population statistics in North Dakota pose a threat for every aspect of the state’s society. The loss of young people is a serious handicap to a state’s well-being and, in the long run, will be detrimental to higher education. The loss of young people, if not
reversed, will create a downward spiral of fewer young families, fewer children, and fewer students in the educational system.

Encouraging actions to serve non-traditional students and to enhance lifelong learning are positive steps but, as a state's population gradually becomes older, it appears inevitable that there will be fewer adults who need to take advantage of lifelong learning opportunities. Retirees and senior citizens will have relatively few needs for workforce training. New and creative ideas for North Dakota and North Dakota higher education are needed to change those demographics. However, conservatism and self-protection is often the response of educational leaders when decline threatens, as the research of Cameron (1983) demonstrated. Understandable as it may be, conservative approaches are counterproductive.

What is needed most is a willingness to take a calculated risk on innovation. Shaping a future through innovation and creativity is essential during changing and challenging times. Education leaders must be given the means to be innovators and they must be rewarded for innovation. More importantly, perhaps, they should not be penalized for innovative ideas that do not work out as well as expected. It is only through trying creative ideas that positive results can be attained. The Dec. 9, 1999 editorial in The Bismarck Tribune ("Even More," 1999) made the case for change and innovative ideas "because what we are seeing in the school numbers is that the close of the good 1990s finds us even closer to a demographic abyss than we were at the close of the bad 1980s" (p. A4). Innovative leadership in higher education is a critical component in meeting the challenges of demographic change.
Leading people through times of change and turbulence requires courage and a certain fearlessness from education leaders. Difficult decisions and tough choices may have to be made. These decisions and choices have the prospect of bringing about positive results but may also be likely to harm some institutions or people as well. It is impossible to make decisions that will be universally accepted or liked. Nevertheless, those in leadership positions will be responsible for making the hard choices.

North Dakota higher education leaders have demonstrated their courage in the past through various legislative actions, in some restructuring of higher education, and by developing new programs and initiatives. If the state’s youth population and high school graduation rates decline as predicted, even tougher choices may face higher education leaders. Even more courage and determination will be required to follow a demanding course of action that may eventually result in more positive outcomes in the long run. As one of the interview subjects remarked, “The old way of doing business will not survive into the 21st century and the sooner we realize that and come to grips with it the better off we’ll be.”

It seems certain that changes in North Dakota will impact higher education. Concern and commitment on the part of educational leaders can do much to bring higher education through potentially difficult times ahead. But, concern and commitment alone are not enough. They must be combined with institutional knowledge, clear missions, thoughtful planning and action, courageous leadership, and innovative ideas. One of the institution presidents stated that demographics and enrollment issues present “a problem to be solved, not a monster to be feared.” Armed with commitment, knowledge, planning,
courage, and creative ideas, higher education leaders will possess the weapons they need to meet the challenge and face the monster.
APPENDIX A: INTERVIEW AGREEMENT
Interview Agreement

The purpose of this research study is to identify the perceptions of North Dakota higher education leaders to decreasing public school enrollment in North Dakota. It will also study the planning efforts, methods, and strategies that institutions of higher education, state agencies, and governing boards may employ to address the impact of declining numbers of high school graduates which form a substantial student pool for North Dakota higher education institutions. The study will involve interviews of educational leaders and the review of pertinent planning documents.

You are invited to participate in this study because of your educational position, leadership abilities, and specialized knowledge about higher education. By signing this form you are agreeing to meet with the research interviewer for an in-depth interview of approximately 1-1½ hours. A later follow-up telephone interview may be conducted for clarification and verification of the data obtained in the initial interview. The intent of the interview is to obtain information and gain insight into your leadership perspective regarding the research topic. Under this agreement, you have the right to review interview transcripts and the final report. You also have the right to withdraw from this study at any time.

The study is being conducted by Jane Schulz, a doctoral student in the Department of Educational Leadership of the University of North Dakota as a part of the researcher’s dissertation which is under the supervision of Dr. Gerald Bass. Any questions or comments concerning this research study should be directed to Jane Schulz at 701-258-0935 or to Dr. Bass at 701-777-3577.

To reduce risk to the study participants, information that is obtained in connection with this study and that can be identified with you will be kept confidential and will be disclosed only with your permission.

I have read the above statements and willingly agree to participate in this study.

Participant ______________________________

Signature of Researcher ______________________________

Date ___________
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the perceptions of higher education leaders, college and university administrators, and other officials to the declining public school enrollment and declining number of high school graduates in North Dakota?</td>
<td>Do you believe that the declining number of public school students and ND high school graduates projected for the future poses a threat to ND higher education?</td>
</tr>
<tr>
<td></td>
<td>If yes, how serious a threat do you perceive this to be?</td>
</tr>
<tr>
<td>What is the perceived impact that the declining number of high school graduates may have on higher education in North Dakota, generally, and specifically for the institutions involved in the study?</td>
<td>What will be the effects of these declining numbers on higher education in ND overall?</td>
</tr>
<tr>
<td></td>
<td>What effects do you believe will occur on your campus because of these demographic changes?</td>
</tr>
<tr>
<td></td>
<td>How will the curriculum be changed as a result of these student numbers?</td>
</tr>
<tr>
<td></td>
<td>Program losses or changes?</td>
</tr>
<tr>
<td></td>
<td>How will quality of education be affected?</td>
</tr>
<tr>
<td></td>
<td>Larger classes?</td>
</tr>
<tr>
<td></td>
<td>How will funding, staffing, building, etc. be affected?</td>
</tr>
<tr>
<td></td>
<td>How will services to students be affected?</td>
</tr>
<tr>
<td></td>
<td>What instructional delivery changes may occur?</td>
</tr>
<tr>
<td></td>
<td>Compressed classes?</td>
</tr>
<tr>
<td></td>
<td>Distance education?</td>
</tr>
<tr>
<td></td>
<td>Online courses?</td>
</tr>
</tbody>
</table>
What planning processes, methods, techniques, or strategies may be used to address the possible loss of students to higher education institutions?

What suggestions do you have that may help higher education institutions cope with these demographic changes?

What plans could higher education officials make to reduce the negative effects of the declining numbers?

What plans are being made on your campus to address the impact the decline may have on your institution?

What recruiting efforts may be attempted to address the demographic changes?

Are there marketing procedures that could be used?

What markets could be recruited for ND higher education institutions?
- Non-traditional students?
- Minorities?
- Out-of-state?
APPENDIX C: K-12 ENROLLMENT STATISTICS
Statistics show a decline in the number of students that will be enrolled in North Dakota public schools in the future. This decrease will ultimately impact on higher education institutions since there will be fewer of the primary student population (18-21 years of age) available to enter the state’s colleges and universities. “Population forecasts predict that high school graduates in North Dakota will fall 13 percent by 2005-06, and by 19 percent by 2009” (Bismarck Tribune, Aug. 17, 1998). The following chart provides a review of past and projected public school enrollments in North Dakota, according to figures from the Department of Public Instruction:

<table>
<thead>
<tr>
<th>School Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991-1992</td>
<td>117,723</td>
</tr>
<tr>
<td>1992-1993</td>
<td>118,097</td>
</tr>
<tr>
<td>1993-1994</td>
<td>118,512</td>
</tr>
<tr>
<td>1994-1995</td>
<td>118,649</td>
</tr>
<tr>
<td>1995-1996</td>
<td>118,549</td>
</tr>
<tr>
<td>1996-1997</td>
<td>117,816</td>
</tr>
<tr>
<td>1997-1998</td>
<td>116,103</td>
</tr>
<tr>
<td>1998-1999</td>
<td>114,521</td>
</tr>
<tr>
<td>1999-2000</td>
<td>112,605</td>
</tr>
<tr>
<td>2000-2001</td>
<td>110,400</td>
</tr>
<tr>
<td>2001-2002</td>
<td>108,321</td>
</tr>
<tr>
<td>2002-2003</td>
<td>106,298</td>
</tr>
<tr>
<td>Year</td>
<td>Number</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>1980</td>
<td>10,835</td>
</tr>
<tr>
<td>1981</td>
<td>10,775</td>
</tr>
<tr>
<td>1982</td>
<td>10,306</td>
</tr>
<tr>
<td>1983</td>
<td>9,607</td>
</tr>
<tr>
<td>1984</td>
<td>9,191</td>
</tr>
<tr>
<td>1985</td>
<td>8,742</td>
</tr>
<tr>
<td>1986</td>
<td>8,149</td>
</tr>
<tr>
<td>1987</td>
<td>8,332</td>
</tr>
<tr>
<td>1988</td>
<td>8,926</td>
</tr>
<tr>
<td>1989</td>
<td>8,600</td>
</tr>
<tr>
<td>1990</td>
<td>8,174</td>
</tr>
<tr>
<td>1991</td>
<td>8,013</td>
</tr>
<tr>
<td>1992</td>
<td>7,839</td>
</tr>
<tr>
<td>1993</td>
<td>7,962</td>
</tr>
<tr>
<td>1994</td>
<td>7,895</td>
</tr>
<tr>
<td>1995</td>
<td>8,562</td>
</tr>
<tr>
<td>1996</td>
<td>8,503</td>
</tr>
<tr>
<td>1997</td>
<td>8,611</td>
</tr>
<tr>
<td>1998</td>
<td>8,842</td>
</tr>
<tr>
<td>1999</td>
<td>9,102</td>
</tr>
<tr>
<td>2000</td>
<td>9,115</td>
</tr>
<tr>
<td>2001</td>
<td>8,976</td>
</tr>
<tr>
<td>2002</td>
<td>8,598</td>
</tr>
<tr>
<td>2003</td>
<td>8,515</td>
</tr>
<tr>
<td>2004</td>
<td>8,054</td>
</tr>
<tr>
<td>2005</td>
<td>7,515</td>
</tr>
<tr>
<td>2006</td>
<td>7,370</td>
</tr>
<tr>
<td>2007</td>
<td>6,982</td>
</tr>
<tr>
<td>2008</td>
<td>6,748</td>
</tr>
<tr>
<td>2009</td>
<td>6,614</td>
</tr>
</tbody>
</table>

Source of data:
1980-1994, actual: ND Department of Public Instruction
1995-2009, projected: Western Interstate Commission for Higher Education

nb!062295!]IO:project
REFERENCES


